Data S1. Search strategy and PubMed query provenance

Executed NCBI PubMed E-utilities search, 18 October 2026. This appendix documents six thematic queries (P01–P06) and an additional identifier query (ID01).

The six thematic searches yielded 801 query memberships and 734 unique PMIDs. Query-specific hit counts are preserved below. The separate DOI-based ID01 verification is excluded from thematic totals. The earlier literature collection cannot be retrospectively reconstructed as a systematic review; this appendix documents the revision-stage search exactly as recorded.

P01. Breast-cancer small RNA and mitochondria
Date and interface: 2026-10-18
Query interface: NCBI PubMed E-utilities ESearch / EFetch
Database hits: 161
PMIDs exported: 161
Restrictions: Language: None; Publication type: None at retrieval; Date: Publication date 1900-01-01 to 2026-10-18 inclusive
Exact executed query
(("Breast Neoplasms"[MeSH Terms] OR "breast cancer"[Title/Abstract] OR "breast carcinoma"[Title/Abstract] OR "mammary cancer"[Title/Abstract] OR "mammary carcinoma"[Title/Abstract] OR TNBC[Title/Abstract]) AND ("MicroRNAs"[MeSH Terms] OR microRNA*[Title/Abstract] OR miRNA*[Title/Abstract] OR mitomiR*[Title/Abstract] OR "small RNA"[Title/Abstract] OR "small RNAs"[Title/Abstract] OR "tRNA-derived"[Title/Abstract] OR "tRNA fragment"[Title/Abstract] OR "tRNA fragments"[Title/Abstract] OR mt-tRF*[Title/Abstract] OR tRF*[Title/Abstract]) AND ("Mitochondria"[MeSH Terms] OR mitochondri*[Title/Abstract])) AND ("1900/01/01"[Date - Publication] : "2026/10/18"[Date - Publication])
PubMed query translation
("Breast Neoplasms"[MeSH Terms] OR "breast cancer"[Title/Abstract] OR "breast carcinoma"[Title/Abstract] OR "mammary cancer"[Title/Abstract] OR "mammary carcinoma"[Title/Abstract] OR "TNBC"[Title/Abstract]) AND ("MicroRNAs"[MeSH Terms] OR "microrna*"[Title/Abstract] OR "mirna*"[Title/Abstract] OR "mitomir*"[Title/Abstract] OR "small RNA"[Title/Abstract] OR "small RNAs"[Title/Abstract] OR "tRNA-derived"[Title/Abstract] OR "tRNA fragment"[Title/Abstract] OR "tRNA fragments"[Title/Abstract] OR "mt trf*"[Title/Abstract] OR "trf"[Title/Abstract]) AND ("Mitochondria"[MeSH Terms] OR "mitochondri*"[Title/Abstract]) AND 1900/01/01:2026/10/18[Date - Publication]
Executed URL
https://eutils.ncbi.nlm.nih.gov/entrez/eutils/esearch.fcgi?db=pubmed&term=%28%28%22Breast+Neoplasms%22%5BMeSH+Terms%5D+OR+%22breast+cancer%22%5BTitle%2FAbstract%5D+OR+%22breast+carcinoma%22%5BTitle%2FAbstract%5D+OR+%22mammary+cancer%22%5BTitle%2FAbstract%5D+OR+%22mammary+carcinoma%22%5BTitle%2FAbstract%5D+OR+TNBC%5BTitle%2FAbstract%5D%29+AND+%28%22MicroRNAs%22%5BMeSH+Terms%5D+OR+microRNA%2A%5BTitle%2FAbstract%5D+OR+miRNA%2A%5BTitle%2FAbstract%5D+OR+mitomiR%2A%5BTitle%2FAbstract%5D+OR+%22small+RNA%22%5BTitle%2FAbstract%5D+OR+%22small+RNAs%22%5BTitle%2FAbstract%5D+OR+%22tRNA-derived%22%5BTitle%2FAbstract%5D+OR+%22tRNA+fragment%22%5BTitle%2FAbstract%5D+OR+%22tRNA+fragments%22%5BTitle%2FAbstract%5D+OR+mt-tRF%2A%5BTitle%2FAbstract%5D+OR+tRF%2A%5BTitle%2FAbstract%5D%29+AND+%28%22Mitochondria%22%5BMeSH+Terms%5D+OR+mitochondri%2A%5BTitle%2FAbstract%5D%29%29+AND+%28%221900%2F01%2F01%22%5BDate+-+Publication%5D+%3A+%222026%2F10%2F18%22%5BDate+-+Publication%5D%29&retmode=json&retmax=9999&sort=pub+date

P02. Breast-cancer small RNA and ferroptosis
Date and interface: 2026-10-18
Query interface: NCBI PubMed E-utilities ESearch / EFetch
Database hits: 50
PMIDs exported: 50
Restrictions: Language: None; Publication type: None at retrieval; Date: Publication date 1900-01-01 to 2026-10-18 inclusive
Exact executed query
(("Breast Neoplasms"[MeSH Terms] OR "breast cancer"[Title/Abstract] OR "breast carcinoma"[Title/Abstract] OR "mammary cancer"[Title/Abstract] OR "mammary carcinoma"[Title/Abstract] OR TNBC[Title/Abstract]) AND ("MicroRNAs"[MeSH Terms] OR microRNA*[Title/Abstract] OR miRNA*[Title/Abstract] OR

mitomiR*[Title/Abstract] OR "small RNA"[Title/Abstract] OR "small RNAs"[Title/Abstract] OR "tRNA-derived"[Title/Abstract] OR "tRNA fragment"[Title/Abstract] OR "tRNA fragments"[Title/Abstract] OR mt-tRF*[Title/Abstract] OR tRF*[Title/Abstract]) AND ferroptos*[Title/Abstract]) AND ("1900/01/01"[Date - Publication] : "2026/10/18"[Date - Publication])

PubMed query translation

("Breast Neoplasms"[MeSH Terms] OR "breast cancer"[Title/Abstract] OR "breast carcinoma"[Title/Abstract] OR "mammary cancer"[Title/Abstract] OR "mammary carcinoma"[Title/Abstract] OR "TNBC"[Title/Abstract]) AND ("MicroRNAs"[MeSH Terms] OR "microrna*"[Title/Abstract] OR "mirna*"[Title/Abstract] OR "mitomir*"[Title/Abstract] OR "small RNA"[Title/Abstract] OR "small RNAs"[Title/Abstract] OR "tRNA-derived"[Title/Abstract] OR "tRNA fragment"[Title/Abstract] OR "tRNA fragments"[Title/Abstract] OR "mt trf*"[Title/Abstract] OR "trf"[Title/Abstract]) AND "ferroptos*"[Title/Abstract] AND 1900/01/01:2026/10/18[Date - Publication]

Executed URL

https://eutils.ncbi.nlm.nih.gov/entrez/eutils/esearch.fcgi?db=pubmed&term=%28%28%22Breast+Neoplasms%22%5BMeSH+Terms%5D+OR+%22breast+cancer%22%5BTitle%2FAbstract%5D+OR+%22breast+carcinoma%22%5BTitle%2FAbstract%5D+OR+%22mammary+cancer%22%5BTitle%2FAbstract%5D+OR+%22mammary+carcinoma%22%5BTitle%2FAbstract%5D+OR+TNBC%5BTitle%2FAbstract%5D%29+AND+%28%22MicroRNAs%22%5BMeSH+Terms%5D+OR+microRNA%2A%5BTitle%2FAbstract%5D+OR+miRNA%2A%5BTitle%2FAbstract%5D+OR+mitomiR%2A%5BTitle%2FAbstract%5D+OR+%22small+RNA%22%5BTitle%2FAbstract%5D+OR+%22small+RNAs%22%5BTitle%2FAbstract%5D+OR+%22tRNA-derived%22%5BTitle%2FAbstract%5D+OR+%22tRNA+fragment%22%5BTitle%2FAbstract%5D+OR+%22tRNA+fragments%22%5BTitle%2FAbstract%5D+OR+mt-tRF%2A%5BTitle%2FAbstract%5D+OR+tRF%2A%5BTitle%2FAbstract%5D%29+AND+ferroptos%2A%5BTitle%2FAbstract%5D%29+AND+%28%221900%2F01%2F01%22%5BDate+-+Publication%5D+%3A+%222026%2F10%2F18%22%5BDate+-+Publication%5D%29&retmode=json&retmax=9999&sort=pub+date

P03. Extracellular small-RNA relay with metabolic, immune or therapy endpoints

Date and interface: 2026-10-18

Query interface: NCBI PubMed E-utilities ESearch / EFetch

Database hits: 424

PMIDs exported: 424

Restrictions: Language: None; Publication type: None at retrieval; Date: Publication date 1900-01-01 to 2026-10-18 inclusive

Exact executed query

(("Breast Neoplasms"[MeSH Terms] OR "breast cancer"[Title/Abstract] OR "breast carcinoma"[Title/Abstract] OR "mammary cancer"[Title/Abstract] OR "mammary carcinoma"[Title/Abstract] OR TNBC[Title/Abstract]) AND ("MicroRNAs"[MeSH Terms] OR microRNA*[Title/Abstract] OR miRNA*[Title/Abstract] OR mitomiR*[Title/Abstract] OR "small RNA"[Title/Abstract] OR "small RNAs"[Title/Abstract] OR "tRNA-derived"[Title/Abstract] OR "tRNA fragment"[Title/Abstract] OR "tRNA fragments"[Title/Abstract] OR mt-tRF*[Title/Abstract] OR tRF*[Title/Abstract]) AND ("Extracellular Vesicles"[MeSH Terms] OR exosom*[Title/Abstract] OR "extracellular vesicle"[Title/Abstract] OR "extracellular vesicles"[Title/Abstract]) AND (mitochondri*[Title/Abstract] OR metaboli*[Title/Abstract] OR glycoly*[Title/Abstract] OR immune*[Title/Abstract] OR immun*[Title/Abstract] OR "T cell"[Title/Abstract] OR "T cells"[Title/Abstract] OR CD8[Title/Abstract] OR angiogen*[Title/Abstract] OR resistan*[Title/Abstract])) AND ("1900/01/01"[Date - Publication] : "2026/10/18"[Date - Publication])

PubMed query translation

("Breast Neoplasms"[MeSH Terms] OR "breast cancer"[Title/Abstract] OR "breast carcinoma"[Title/Abstract] OR "mammary cancer"[Title/Abstract] OR "mammary carcinoma"[Title/Abstract] OR "TNBC"[Title/Abstract]) AND ("MicroRNAs"[MeSH Terms] OR "microrna*"[Title/Abstract] OR "mirna*"[Title/Abstract] OR "mitomir*"[Title/Abstract] OR "small RNA"[Title/Abstract] OR "small RNAs"[Title/Abstract] OR "tRNA-derived"[Title/Abstract] OR "tRNA fragment"[Title/Abstract] OR "tRNA fragments"[Title/Abstract] OR "mt trf*"[Title/Abstract] OR "trf"[Title/Abstract]) AND ("Extracellular Vesicles"[MeSH Terms] OR "exosom*"[Title/Abstract] OR "extracellular vesicle"[Title/Abstract] OR "Extracellular Vesicles"[Title/Abstract]) AND ("mitochondri*"[Title/Abstract] OR "metaboli*"[Title/Abstract] OR "glycoly*"[Title/Abstract] OR "immune*"[Title/Abstract] OR "immun*"[Title/Abstract] OR "T cell"[Title/Abstract] OR "T cells"[Title/Abstract] OR "CD8"[Title/Abstract] OR "angiogen*"[Title/Abstract] OR "resistan*"[Title/Abstract]) AND 1900/01/01:2026/10/18[Date - Publication]

Executed URL
https://eutils.ncbi.nlm.nih.gov/entrez/eutils/esearch.fcgi?db=pubmed&term=%28%28%22Breast+Neoplasms%22%5BMeSH+Terms%5D+OR+%22breast+cancer%22%5BTitle%2FAbstract%5D+OR+%22breast+carcinoma%22%5BTitle%2FAbstract%5D+OR+%22mammary+cancer%22%5BTitle%2FAbstract%5D+OR+%22mammary+carcinoma%22%5BTitle%2FAbstract%5D+OR+TNBC%5BTitle%2FAbstract%5D%29+AND+%28%22MicroRNAs%22%5BMeSH+Terms%5D+OR+microRNA%2A%5BTitle%2FAbstract%5D+OR+miRNA%2A%5BTitle%2FAbstract%5D+OR+mitomiR%2A%5BTitle%2FAbstract%5D+OR+%22small+RNA%22%5BTitle%2FAbstract%5D+OR+%22small+RNAs%22%5BTitle%2FAbstract%5D+OR+%22tRNA-derived%22%5BTitle%2FAbstract%5D+OR+%22tRNA+fragment%22%5BTitle%2FAbstract%5D+OR+%22tRNA+fragments%22%5BTitle%2FAbstract%5D+OR+mt-tRF%2A%5BTitle%2FAbstract%5D+OR+tRF%2A%5BTitle%2FAbstract%5D%29+AND+%28%22Extracellular+Vesicles%22%5BMeSH+Terms%5D+OR+exosom%2A%5BTitle%2FAbstract%5D+OR+%22extracellular+vesicle%22%5BTitle%2FAbstract%5D+OR+%22extracellular+vesicles%22%5BTitle%2FAbstract%5D%29+AND+%28mitochondri%2A%5BTitle%2FAbstract%5D+OR+metaboli%2A%5BTitle%2FAbstract%5D+OR+glycoly%2A%5BTitle%2FAbstract%5D+OR+immune%2A%5BTitle%2FAbstract%5D+OR+immun%2A%5BTitle%2FAbstract%5D+OR+%22T+cell%22%5BTitle%2FAbstract%5D+OR+%22T+cells%22%5BTitle%2FAbstract%5D+OR+CD8%5BTitle%2FAbstract%5D+OR+angiogen%2A%5BTitle%2FAbstract%5D+OR+resistan%2A%5BTitle%2FAbstract%5D%29%29+AND+%28%221900%2F01%2F01%22%5BDate+-+Publication%5D+%3A+%222026%2F10%2F18%22%5BDate+-+Publication%5D%29&retmode=json&retmax=9999&sort=pub+date

P04. Mitochondrial nucleic-acid release and immune sensing in breast cancer
Date and interface: 2026-10-18
Query interface: NCBI PubMed E-utilities ESearch / EFetch
Database hits: 76
PMIDs exported: 76
Restrictions: Language: None; Publication type: None at retrieval; Date: Publication date 1900-01-01 to 2026-10-18 inclusive
Exact executed query
(("Breast Neoplasms"[MeSH Terms] OR "breast cancer"[Title/Abstract] OR "breast carcinoma"[Title/Abstract] OR "mammary cancer"[Title/Abstract] OR "mammary carcinoma"[Title/Abstract] OR TNBC[Title/Abstract]) AND (mtDNA[Title/Abstract] OR "mitochondrial DNA"[Title/Abstract] OR mtRNA[Title/Abstract] OR mtdsRNA[Title/Abstract] OR "mitochondrial RNA"[Title/Abstract] OR "mitochondrial double-stranded RNA"[Title/Abstract]) AND (immun*[Title/Abstract] OR interferon*[Title/Abstract] OR cGAS[Title/Abstract] OR STING[Title/Abstract] OR MDA5[Title/Abstract] OR MAVS[Title/Abstract] OR RIG-I[Title/Abstract])) AND ("1900/01/01"[Date - Publication] : "2026/10/18"[Date - Publication])
PubMed query translation
("Breast Neoplasms"[MeSH Terms] OR "breast cancer"[Title/Abstract] OR "breast carcinoma"[Title/Abstract] OR "mammary cancer"[Title/Abstract] OR "mammary carcinoma"[Title/Abstract] OR "TNBC"[Title/Abstract]) AND ("mtDNA"[Title/Abstract] OR "mitochondrial DNA"[Title/Abstract] OR "mtRNA"[Title/Abstract] OR "mtdsRNA"[Title/Abstract] OR "mitochondrial RNA"[Title/Abstract] OR "mitochondrial double-stranded RNA"[Title/Abstract]) AND ("immun*"[Title/Abstract] OR "interferon*"[Title/Abstract] OR "cGAS"[Title/Abstract] OR "STING"[Title/Abstract] OR "MDA5"[Title/Abstract] OR "MAVS"[Title/Abstract] OR "RIG-I"[Title/Abstract]) AND 1900/01/01:2026/10/18[Date - Publication]
Executed URL
https://eutils.ncbi.nlm.nih.gov/entrez/eutils/esearch.fcgi?db=pubmed&term=%28%28%22Breast+Neoplasms%22%5BMeSH+Terms%5D+OR+%22breast+cancer%22%5BTitle%2FAbstract%5D+OR+%22breast+carcinoma%22%5BTitle%2FAbstract%5D+OR+%22mammary+cancer%22%5BTitle%2FAbstract%5D+OR+%22mammary+carcinoma%22%5BTitle%2FAbstract%5D+OR+TNBC%5BTitle%2FAbstract%5D%29+AND+%28mtDNA%5BTitle%2FAbstract%5D+OR+%22mitochondrial+DNA%22%5BTitle%2FAbstract%5D+OR+mtRNA%5BTitle%2FAbstract%5D+OR+mtdsRNA%5BTitle%2FAbstract%5D+OR+%22mitochondrial+RNA%22%5BTitle%2FAbstract%5D+OR+%22mitochondrial+double-stranded+RNA%22%5BTitle%2FAbstract%5D%29+AND+%28immun%2A%5BTitle%2FAbstract%5D+OR+interferon%2A%5BTitle%2FAbstract%5D+OR+cGAS%5BTitle%2FAbstract%5D+OR+STING%5BTitle%2FAbstract%5D+OR+MDA5%5BTitle%2FAbstract%5D+OR+MAVS%5BTitle%2FAbstract%5D+OR+RIG-I%5BTitle%2FAbstract%5D%29%29+AND+%28%221900%2F01%2F01%22%5BDate+-+Publication%5D+%3A+%222026%2F10%2F18%22%5BDate+-+Publication%5D%29&retmode=json&retmax=9999&sort=pub+date

P05. Intercellular mitochondrial transfer in breast cancer
Date and interface: 2026-10-18
Query interface: NCBI PubMed E-utilities ESearch / EFetch
Database hits: 26
PMIDs exported: 26
Restrictions: Language: None; Publication type: None at retrieval; Date: Publication date 1900-01-01 to 2026-10-18 inclusive
Exact executed query
(("Breast Neoplasms"[MeSH Terms] OR "breast cancer"[Title/Abstract] OR "breast carcinoma"[Title/Abstract] OR "mammary cancer"[Title/Abstract] OR "mammary carcinoma"[Title/Abstract] OR TNBC[Title/Abstract]) AND ("mitochondrial transfer"[Title/Abstract] OR "mitochondria transfer"[Title/Abstract] OR "mitochondrial transplantation"[Title/Abstract] OR "mitochondria transplantation"[Title/Abstract] OR (mitochondri*[Title/Abstract] AND ("tunneling nanotubes"[Title/Abstract] OR "tunnelling nanotubes"[Title/Abstract])))) AND ("1900/01/01"[Date - Publication] : "2026/10/18"[Date - Publication])
PubMed query translation
("Breast Neoplasms"[MeSH Terms] OR "breast cancer"[Title/Abstract] OR "breast carcinoma"[Title/Abstract] OR "mammary cancer"[Title/Abstract] OR "mammary carcinoma"[Title/Abstract] OR "TNBC"[Title/Abstract]) AND ("mitochondrial transfer"[Title/Abstract] OR "mitochondria transfer"[Title/Abstract] OR "mitochondrial transplantation"[Title/Abstract] OR "mitochondria transplantation"[Title/Abstract] OR ("mitochondri*"[Title/Abstract] AND ("tunneling nanotubes"[Title/Abstract] OR "tunnelling nanotubes"[Title/Abstract]))) AND 1900/01/01:2026/10/18[Date - Publication]
Executed URL
https://eutils.ncbi.nlm.nih.gov/entrez/eutils/esearch.fcgi?db=pubmed&term=%28%28%22Breast+Neoplasms%22%5BMeSH+Terms%5D+OR+%22breast+cancer%22%5BTitle%2FAbstract%5D+OR+%22breast+carcinoma%22%5BTitle%2FAbstract%5D+OR+%22mammary+cancer%22%5BTitle%2FAbstract%5D+OR+%22mammary+carcinoma%22%5BTitle%2FAbstract%5D+OR+TNBC%5BTitle%2FAbstract%5D%29+AND+%28%22mitochondrial+transfer%22%5BTitle%2FAbstract%5D+OR+%22mitochondria+transfer%22%5BTitle%2FAbstract%5D+OR+%22mitochondrial+transplantation%22%5BTitle%2FAbstract%5D+OR+%22mitochondria+transplantation%22%5BTitle%2FAbstract%5D+OR+%28mitochondri%2A%5BTitle%2FAbstract%5D+AND+%28%22tunneling+nanotubes%22%5BTitle%2FAbstract%5D+OR+%22tunnelling+nanotubes%22%5BTitle%2FAbstract%5D%29%29%29%29+AND+%28%221900%2F01%2F01%22%5BDate+-+Publication%5D+%3A+%222026%2F10%2F18%22%5BDate+-+Publication%5D%29&retmode=json&retmax=9999&sort=pub+date

P06. Complementary mitochondrial-function terminology for small-RNA studies
Date and interface: 2026-10-18
Query interface: NCBI PubMed E-utilities ESearch / EFetch
Database hits: 64
PMIDs exported: 64
Restrictions: Language: None; Publication type: None at retrieval; Date: Publication date 1900-01-01 to 2026-10-18 inclusive
Exact executed query
(("Breast Neoplasms"[MeSH Terms] OR "breast cancer"[Title/Abstract] OR "breast carcinoma"[Title/Abstract] OR "mammary cancer"[Title/Abstract] OR "mammary carcinoma"[Title/Abstract] OR TNBC[Title/Abstract]) AND ("MicroRNAs"[MeSH Terms] OR microRNA*[Title/Abstract] OR miRNA*[Title/Abstract] OR mitomiR*[Title/Abstract] OR "small RNA"[Title/Abstract] OR "small RNAs"[Title/Abstract] OR "tRNA-derived"[Title/Abstract] OR "tRNA fragment"[Title/Abstract] OR "tRNA fragments"[Title/Abstract] OR mt-tRF*[Title/Abstract] OR tRF*[Title/Abstract]) AND ("oxidative phosphorylation"[Title/Abstract] OR OXPHOS[Title/Abstract] OR "fatty acid oxidation"[Title/Abstract] OR mitophag*[Title/Abstract] OR "mitochondrial fission"[Title/Abstract] OR "mitochondrial fusion"[Title/Abstract] OR TFAM[Title/Abstract] OR MFN2[Title/Abstract] OR VDAC1[Title/Abstract] OR PCK2[Title/Abstract] OR PDHX[Title/Abstract] OR CPT1A[Title/Abstract] OR "PGC-1alpha"[Title/Abstract] OR "PGC-1α"[Title/Abstract])) AND ("1900/01/01"[Date - Publication] : "2026/10/18"[Date - Publication])
PubMed query translation
("Breast Neoplasms"[MeSH Terms] OR "breast cancer"[Title/Abstract] OR "breast carcinoma"[Title/Abstract] OR "mammary cancer"[Title/Abstract] OR "mammary carcinoma"[Title/Abstract] OR "TNBC"[Title/Abstract]) AND ("MicroRNAs"[MeSH Terms] OR "microrna*"[Title/Abstract] OR "mirna*"[Title/Abstract] OR "mitomir*"[Title/Abstract] OR "small RNA"[Title/Abstract] OR "small RNAs"[Title/Abstract] OR "tRNA-

derived"[Title/Abstract] OR "tRNA fragment"[Title/Abstract] OR "tRNA fragments"[Title/Abstract] OR "mt trf*"[Title/Abstract] OR "trf"[Title/Abstract]) AND ("oxidative phosphorylation"[Title/Abstract] OR "OXPHOS"[Title/Abstract] OR "fatty acid oxidation"[Title/Abstract] OR "mitophag*"[Title/Abstract] OR "mitochondrial fission"[Title/Abstract] OR "mitochondrial fusion"[Title/Abstract] OR "TFAM"[Title/Abstract] OR "MFN2"[Title/Abstract] OR "VDAC1"[Title/Abstract] OR "PCK2"[Title/Abstract] OR "PDHX"[Title/Abstract] OR "CPT1A"[Title/Abstract] OR "PGC-1alpha"[Title/Abstract] OR "PGC-1alpha"[Title/Abstract]) AND 1900/01/01:2026/10/18[Date - Publication]

Executed URL

https://eutils.ncbi.nlm.nih.gov/entrez/eutils/esearch.fcgi?db=pubmed&term=%28%28%22Breast+Neoplasms%22%5BMeSH+Terms%5D+OR+%22breast+cancer%22%5BTitle%2FAbstract%5D+OR+%22breast+carcinoma%22%5BTitle%2FAbstract%5D+OR+%22mammary+cancer%22%5BTitle%2FAbstract%5D+OR+%22mammary+carcinoma%22%5BTitle%2FAbstract%5D+OR+TNBC%5BTitle%2FAbstract%5D%29+AND+%28%22MicroRNAs%22%5BMeSH+Terms%5D+OR+microRNA%2A%5BTitle%2FAbstract%5D+OR+miRNA%2A%5BTitle%2FAbstract%5D+OR+mitomiR%2A%5BTitle%2FAbstract%5D+OR+%22small+RNA%22%5BTitle%2FAbstract%5D+OR+%22small+RNAs%22%5BTitle%2FAbstract%5D+OR+%22tRNA-derived%22%5BTitle%2FAbstract%5D+OR+%22tRNA+fragment%22%5BTitle%2FAbstract%5D+OR+%22tRNA+fragments%22%5BTitle%2FAbstract%5D+OR+mt-tRF%2A%5BTitle%2FAbstract%5D+OR+tRF%2A%5BTitle%2FAbstract%5D%29+AND+%28%22oxidative+phosphorylation%22%5BTitle%2FAbstract%5D+OR+OXPHOS%5BTitle%2FAbstract%5D+OR+%22fatty+acid+oxidation%22%5BTitle%2FAbstract%5D+OR+mitophag%2A%5BTitle%2FAbstract%5D+OR+%22mitochondrial+fission%22%5BTitle%2FAbstract%5D+OR+%22mitochondrial+fusion%22%5BTitle%2FAbstract%5D+OR+TFAM%5BTitle%2FAbstract%5D+OR+MFN2%5BTitle%2FAbstract%5D+OR+VDAC1%5BTitle%2FAbstract%5D+OR+PCK2%5BTitle%2FAbstract%5D+OR+PDHX%5BTitle%2FAbstract%5D+OR+CPT1A%5BTitle%2FAbstract%5D+OR+%22PGC-1alpha%22%5BTitle%2FAbstract%5D+OR+%22PGC-1%CE%B1%22%5BTitle%2FAbstract%5D%29%29+AND+%28%221900%2F01%2F01%22%5BDate+-+Publication%5D+%3A+%222026%2F10%2F18%22%5BDate+-+Publication%5D%29&retmode=json&retmax=9999&sort=pub+date

ID01. Identifier verification for existing panel sources; separate from thematic search

Date and interface: 2026-10-18

Query interface: NCBI PubMed E-utilities ESearch / EFetch

Database hits: 35

PMIDs exported: 35

Restrictions: Language: None; Publication type: None; Date: None (identifier verification)

Exact executed query

"10.1016/j.freeradbiomed.2025.04.019"[Article Identifier] OR "10.1186/s12935-021-02339-3"[Article Identifier] OR "10.1007/s00109-017-1517-5"[Article Identifier] OR "10.1158/0008-5472.CAN-18-2505"[Article Identifier] OR "10.1007/s10549-025-07682-x"[Article Identifier] OR "10.1152/ajpcell.00588.2024"[Article Identifier] OR "10.1016/j.biopha.2017.01.058"[Article Identifier] OR "10.1002/biof.1702"[Article Identifier] OR "10.1186/s12943-018-0851-8"[Article Identifier] OR "10.1038/s41420-024-01914-7"[Article Identifier] OR "10.1016/j.canlet.2021.09.033"[Article Identifier] OR "10.1002/advs.75818"[Article Identifier] OR "10.1080/15476286.2019.1600999"[Article Identifier] OR "10.1007/s13258-025-01669-0"[Article Identifier] OR "10.1038/s41420-021-00492-2"[Article Identifier] OR "10.1111/cas.16036"[Article Identifier] OR "10.1186/s13578-023-01151-y"[Article Identifier] OR "10.1186/s13046-024-03087-8"[Article Identifier] OR "10.1242/jcs.260419"[Article Identifier] OR "10.1038/s41388-020-01514-6"[Article Identifier] OR "10.1016/j.cmet.2021.02.015"[Article Identifier] OR "10.1016/j.immuni.2021.05.003"[Article Identifier] OR "10.1038/s41565-021-01000-4"[Article Identifier] OR "10.1038/s41586-025-09176-8"[Article Identifier] OR "10.1021/acsnano.6c02310"[Article Identifier] OR "10.1038/s41590-020-0751-0"[Article Identifier] OR "10.1158/0008-5472.CAN-23-1788"[Article Identifier] OR "10.1038/s41467-023-39607-x"[Article Identifier] OR "10.1016/j.celrep.2025.115605"[Article Identifier] OR "10.1002/advs.202206737"[Article Identifier] OR "10.1016/j.immuni.2025.03.005"[Article Identifier] OR "10.1038/s41586-018-0363-0"[Article Identifier] OR "10.1038/s41467-022-31218-2"[Article Identifier] OR "10.1038/s41423-020-0456-1"[Article Identifier] OR "10.1038/s41586-024-08439-0"[Article Identifier]

PubMed query translation

"10.1016/j.freeradbiomed.2025.04.019"[All Fields] OR "10.1186/s12935-021-02339-3"[All Fields] OR "10.1007/s00109-017-1517-5"[All Fields] OR "10.1158/0008-5472.CAN-18-2505"[All Fields] OR "10.1007/s10549-025-07682-x"[All Fields] OR "10.1152/ajpcell.00588.2024"[All Fields] OR "10.1016/j.biopha.2017.01.058"[All Fields] OR "10.1002/biof.1702"[All Fields] OR "10.1186/s12943-018-

0851-8"[All Fields] OR "10.1038/s41420-024-01914-7"[All Fields] OR "10.1016/j.canlet.2021.09.033"[All Fields] OR "10.1002/advs.75818"[All Fields] OR "10.1080/15476286.2019.1600999"[All Fields] OR "10.1007/s13258-025-01669-0"[All Fields] OR "10.1038/s41420-021-00492-2"[All Fields] OR "10.1111/cas.16036"[All Fields] OR "10.1186/s13578-023-01151-y"[All Fields] OR "10.1186/s13046-024-03087-8"[All Fields] OR "10.1242/jcs.260419"[All Fields] OR "10.1038/s41388-020-01514-6"[All Fields] OR "10.1016/j.cmet.2021.02.015"[All Fields] OR "10.1016/j.immuni.2021.05.003"[All Fields] OR "10.1038/s41565-021-01000-4"[All Fields] OR "10.1038/s41586-025-09176-8"[All Fields] OR "10.1021/acsnano.6c02310"[All Fields] OR "10.1038/s41590-020-0751-0"[All Fields] OR "10.1158/0008-5472.CAN-23-1788"[All Fields] OR "10.1038/s41467-023-39607-x"[All Fields] OR "10.1016/j.celrep.2025.115605"[All Fields] OR "10.1002/advs.202206737"[All Fields] OR "10.1016/j.immuni.2025.03.005"[All Fields] OR "10.1038/s41586-018-0363-0"[All Fields] OR "10.1038/s41467-022-31218-2"[All Fields] OR "10.1038/s41423-020-0456-1"[All Fields] OR "10.1038/s41586-024-08439-0"[All Fields]

Executed URL

https://eutils.ncbi.nlm.nih.gov/entrez/eutils/esearch.fcgi?db=pubmed&term=%2210.1016%2Fj.freeradbiomed.2025.04.019%22%5BArticle+Identifier%5D+OR+%2210.1186%2Fs12935-021-02339-3%22%5BArticle+Identifier%5D+OR+%2210.1007%2Fs00109-017-1517-5%22%5BArticle+Identifier%5D+OR+%2210.1158%2F0008-5472.CAN-18-2505%22%5BArticle+Identifier%5D+OR+%2210.1007%2Fs10549-025-07682-x%22%5BArticle+Identifier%5D+OR+%2210.1152%2Fajpcell.00588.2024%22%5BArticle+Identifier%5D+OR+%2210.1016%2Fj.biopha.2017.01.058%22%5BArticle+Identifier%5D+OR+%2210.1002%2Fbiof.1702%22%5BArticle+Identifier%5D+OR+%2210.1186%2Fs12943-018-0851-8%22%5BArticle+Identifier%5D+OR+%2210.1038%2Fs41420-024-01914-7%22%5BArticle+Identifier%5D+OR+%2210.1016%2Fj.canlet.2021.09.033%22%5BArticle+Identifier%5D+OR+%2210.1002%2Fadvs.75818%22%5BArticle+Identifier%5D+OR+%2210.1080%2F15476286.2019.1600999%22%5BArticle+Identifier%5D+OR+%2210.1007%2Fs13258-025-01669-0%22%5BArticle+Identifier%5D+OR+%2210.1038%2Fs41420-021-00492-2%22%5BArticle+Identifier%5D+OR+%2210.1111%2Fcas.16036%22%5BArticle+Identifier%5D+OR+%2210.1186%2Fs13578-023-01151-y%22%5BArticle+Identifier%5D+OR+%2210.1186%2Fs13046-024-03087-8%22%5BArticle+Identifier%5D+OR+%2210.1242%2Fjcs.260419%22%5BArticle+Identifier%5D+OR+%2210.1038%2Fs41388-020-01514-6%22%5BArticle+Identifier%5D+OR+%2210.1016%2Fj.cmet.2021.02.015%22%5BArticle+Identifier%5D+OR+%2210.1016%2Fj.immuni.2021.05.003%22%5BArticle+Identifier%5D+OR+%2210.1038%2Fs41565-021-01000-4%22%5BArticle+Identifier%5D+OR+%2210.1038%2Fs41586-025-09176-8%22%5BArticle+Identifier%5D+OR+%2210.1021%2Facsnano.6c02310%22%5BArticle+Identifier%5D+OR+%2210.1038%2Fs41590-020-0751-0%22%5BArticle+Identifier%5D+OR+%2210.1158%2F0008-5472.CAN-23-1788%22%5BArticle+Identifier%5D+OR+%2210.1038%2Fs41467-023-39607-x%22%5BArticle+Identifier%5D+OR+%2210.1016%2Fj.celrep.2025.115605%22%5BArticle+Identifier%5D+OR+%2210.1002%2Fadvs.202206737%22%5BArticle+Identifier%5D+OR+%2210.1016%2Fj.immuni.2025.03.005%22%5BArticle+Identifier%5D+OR+%2210.1038%2Fs41586-018-0363-0%22%5BArticle+Identifier%5D+OR+%2210.1038%2Fs41467-022-31218-2%22%5BArticle+Identifier%5D+OR+%2210.1038%2Fs41423-020-0456-1%22%5BArticle+Identifier%5D+OR+%2210.1038%2Fs41586-024-08439-0%22%5BArticle+Identifier%5D&retmode=json&retmax=100

The original ESearch/EFetch responses and checksum manifest are retained by the authors for source-provenance verification. The complete deduplicated PMID list and title-level screening decisions are reproduced in Data S2; claim-selection crosswalks are in Data S3.

Data S2. PubMed retrieved-record inventory

Complete title- and metadata-level register for 734 deduplicated PubMed PMIDs, with query memberships and recorded screening decisions.

Record IDs, query memberships, bibliographic metadata, DOI and PubMed links, screening dispositions and scope notes are reproduced from the revision-stage retrieval log. Inclusion in this appendix does not mean that a full text or supplementary files were assessed. The 38 selected claim records are described separately in Data S3.

S001 · PMID 42882513 · P03 · 2026-Oct-05 · Secondary or non-primary literature

Title: Aberrant Transcription-Factor Expression and Regulatory microRNAs in Metastatic Breast Cancer.

DOI: 10.3390/cells15191815; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/42882513/; Search date: 2026-10-18

S002 · PMID 42864691 · P03 · 2026-Oct-12 · Secondary or non-primary literature

Title: Cancer-Associated Fibroblast Exosomes in Breast Cancer: Mechanisms of Tumor-Stroma Crosstalk and Clinical Implications.

DOI: 10.1080/07357907.2026.2746413; PMCID: not listed; Publication type: Journal Article;Review; Claim **ID:** not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/42864691/; Search date: 2026-10-18

S003 · PMID 42854996 · P01 · 2026-Oct-09 · Secondary or non-primary literature

Title: Circular RNAs in Breast Cancer Immunometabolism: Mechanisms of Immune Regulation and Metabolic Reprogramming.

DOI: 10.1016/j.critrevonc.2026.105645; PMCID: not listed; Publication type: Journal Article;Review; Claim **ID:** not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/42854996/; Search date: 2026-10-18

S004 · PMID 42842155 · P02 · 2026-Oct-07 · Secondary or non-primary literature

Title: Circular RNAs in ferroptosis regulation and tumor progression of gynecological and breast cancers: molecular mechanisms and therapeutic potential.

DOI: 10.1007/s12094-026-04577-1; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/42842155/; Search date: 2026-10-18

S005 · PMID 42836503 · P03 · 2026 · Secondary or non-primary literature

Title: The Role of Exosomal Biomarkers in the Monitoring of Bioactivation and Metabolite Clearance of Chemotherapeutics in Cancer Patients.

DOI: 10.2174/0113892002399475260223055432; PMCID: not listed; Publication type: Journal Article;Review; **Claim ID:** not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/42836503/; Search date: 2026-10-18

S006 · PMID 42834743 · P04 · 2026-Oct-05 · Additional mitochondrial immune/stress context

Title: A Dual-Enzyme Delivery System Targeting Lactate Depletion to Induce Disulfidptosis and Activate STING Pathway for Inhibiting Breast Cancer Metastasis.

DOI: 10.1002/adhm.71801; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/42834743/; Search date: 2026-10-18

S007 · PMID 42821374 · P03 · 2026-Oct · Broader EV/cancer evidence

Title: Heat-preconditioned MSC-derived exosomal miR-486-5p reverses doxorubicin resistance in breast cancer.

DOI: 10.1080/17435889.2026.2739511; PMCID: PMC13671463; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42821374/; Search date: 2026-10-18
S008 · PMID 42814771 · P03 · 2026-Oct · Engineered delivery or composite intervention
Title: Dual-Targeted M1 Macrophage Extracellular Vesicles Reprogram the Tumor Microenvironment and Enhance Natural Killer Cell Immunotherapy in Breast Cancer.
DOI: 10.1002/jev2.70379; PMCID: PMC13626480; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42814771/; Search date: 2026-10-18
S009 · PMID 42795001 · P03 · 2026-Sep-18 · Secondary or non-primary literature
Title: Circulating microRNAs at the Interface of Obesity and Breast Cancer: From Molecular Machinery, Diagnostic Potential, and Therapeutic Perspectives.
DOI: 10.3390/cancers18183035; PMCID: PMC13605481; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42795001/; Search date: 2026-10-18
S010 · PMID 42788345 · P03 · 2026-Dec-31 · Broader EV/cancer evidence
Title: Elevated miR-103b in exosomes derived from brain-metastatic triple-negative breast cancer cells remodels the brain pre-metastatic niche (PMN).
DOI: 10.1080/15384047.2026.2725357; PMCID: PMC13618856; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42788345/; Search date: 2026-10-18
S011 · PMID 42764101 · P04 · 2026-Sep-20 · Secondary or non-primary literature
Title: Biomaterial-based mitochondria-targeted nanomedicine for remodeling the breast cancer tumor microenvironment and overcoming therapy resistance.
DOI: 10.1016/j.critrevonc.2026.105612; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42764101/; Search date: 2026-10-18
S012 · PMID 42762845 · P04 · 2026-Sep-19 · Additional mitochondrial immune/stress context
Title: Two-photon photodynamic induction of PANoptosis and immunogenic cell death for precision tumor eradication using a dual-organelle-targeted STING agonist.
DOI: 10.1016/j.actbio.2026.09.034; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42762845/; Search date: 2026-10-18
S013 · PMID 42743866 · P04 · 2026-Sep-10 · Additional mitochondrial immune/stress context
Title: Baicalein-loaded rhamnolipid nanomicelles target mitochondrial dysfunction and activate the cGAS-STING pathway for triple-negative breast cancer therapy.
DOI: 10.1016/j.colsurfb.2026.116173; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42743866/; Search date: 2026-10-18

S014 · PMID 42684565 · P03 · 2026-Sep-02 · Secondary or non-primary literature
Title: Integrated roles of miR-125b, miR-375, and miR-451 in breast cancer chemoresistance: mechanistic insights and translational implications.
DOI: 10.1007/s11033-026-12426-1; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42684565/; Search date: 2026-10-18
S015 · PMID 42676387 · P02 · 2026-Aug · Association, profiling or analytical method
Title: Multi-Omics Integration Identifies Ferroptosis-Related miRNA-mRNA Networks and Independent Prognostic miRNAs in Triple-Negative Breast Cancer.
DOI: 10.14744/cpr.2026.70711; PMCID: PMC13526769; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42676387/; Search date: 2026-10-18
S016 · PMID 42663506 · P02 · 2026 · Additional RNA/ferroptosis Rewiring evidence
Title: Inhibition of miR-301a-3p Expression Promotes Ferroptosis: A New Target for Ferroptosis Treatment in TNBC.
DOI: 10.1155/tbj/9941495; PMCID: PMC13523726; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and complete abstract; Reason: TNBC miR-301a-3p gain/loss and ferroptosis-modulator experiments. Adds cytosolic ferroptosis evidence; no mitochondrial-small-RNA immune chain reported.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42663506/; Search date: 2026-10-18
S017 · PMID 42651883 · P03 · 2026-Aug-10 · Secondary or non-primary literature
Title: Extracellular Vesicles as Emerging Tools in Canine Mammary Tumors: Potential Applications and Perspectives.
DOI: 10.3390/ani16162478; PMCID: PMC13508895; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42651883/; Search date: 2026-10-18
S018 · PMID 42645228 · P04;P05 · 2026-Aug-20 · Secondary or non-primary literature
Title: Emerging Roles of Extracellular Vesicle-Mediated Transfer of Mitochondrial and Mitochondrial Components in Cancer.
DOI: 10.3390/cells15161502; PMCID: PMC13510603; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42645228/; Search date: 2026-10-18
S019 · PMID 42637735 · P03;P06 · 2026-Aug-25 · Secondary or non-primary literature
Title: Cancer-associated adipocytes: metabolic reprogramming, crosstalk and therapeutic implications in tumor progression.
DOI: 10.1038/s41392-026-02820-3; PMCID: PMC13503891; Publication type: Journal Article;Review;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42637735/; Search date: 2026-10-18
S020 · PMID 42631761 · P03 · 2026-Aug-22 · Association, profiling or analytical method
Title: Autophagy-associated exosomal microRNAs in triple-negative breast cancer: a discovery-phase study.
DOI: 10.1007/s11033-026-12645-6; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42631761/; Search date: 2026-10-18

S021 · PMID 42631721 · P03 · 2026 · Secondary or non-primary literature
Title: Exploring the Clinical Transformation of circRNA as a Biomarker in Breast Cancer.
DOI: 10.1177/10732748261481227; PMCID: PMC13500992; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42631721/; Search date: 2026-10-18
S022 · PMID 42618562 · P03 · 2026-Aug-20 · Additional immune Relay candidate
Title: Single-cell multiomics reveals exosome-mediated reprogramming and clonotypic remodeling of T cells in triple-negative breast cancer.
DOI: 10.1038/s41392-026-02784-4; PMCID: PMC13490488; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated immune-cell or immune-response study. Relevant to recipient context; mitochondrial source or mediator is not inferred from immune activity.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42618562/; Search date: 2026-10-18
S023 · PMID 42617752 · P03 · 2026-Aug-19 · Secondary or non-primary literature
Title: The regulatory role of non-coding RNAs in taxane resistance of breast cancer.
DOI: 10.1016/j.bcp.2026.118371; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42617752/; Search date: 2026-10-18
S024 · PMID 42616180 · P05 · 2026-Aug-19 · Secondary or non-primary literature
Title: Platelet-derived mitochondrial transfer in cancer metastasis: mechanisms, functional consequences, and translational opportunities.
DOI: 10.1007/s10585-026-10424-y; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42616180/; Search date: 2026-10-18
S025 · PMID 42606075 · P04 · 2026-Aug-17 · Additional mitochondrial immune/stress context
Title: Dual Role of Tamoxifen in Enhancing STING and CEACAM1 Expression to Prime a Favorable Tumor Microenvironment for Anti-TIM3 Immunotherapy.
DOI: 10.1002/advs.202503303; PMCID: PMC13479595; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42606075/; Search date: 2026-10-18
S026 · PMID 42577572 · P05 · 2026 · Secondary or non-primary literature
Title: Neural regulation of immune evasion in breast cancer: a multiscale neuro-immune framework.
DOI: 10.3389/fimmu.2026.1859845; PMCID: PMC13454536; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42577572/; Search date: 2026-10-18
S027 · PMID 42576488 · P02 · 2026-Aug-20 · Additional small-RNA Rewiring candidate
Title: [Overexpression of miR-183-5p enhances malignant phenotype and inhibits ferroptosis of triple-negative breast cancer cells by negatively regulating KLHL24].
DOI: 10.12122/j.issn.1673-4254.2026.08.07; PMCID: PMC13458494; Publication type: English Abstract;Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42576488/; Search date: 2026-10-18

S028 · PMID 42572061 · P01 · 2026-Aug-10 · Additional small-RNA Rewiring candidate
Title: A dual role for miR-210-3p in hypoxia-driven signaling and mitotic regulation in cancer.
DOI: 10.1186/s43556-026-00530-4; PMCID: PMC13454091; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42572061/; Search date: 2026-10-18
S029 · PMID 42559282 · P04 · 2026 · Additional mitochondrial immune/stress context
Title: Metabolic-Immune Reprogramming via CuZnS@BSA Nanoregulators to Overcome Resistance in Triple-Negative Breast Cancer.
DOI: 10.7150/thno.134131; PMCID: PMC13440635; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42559282/; Search date: 2026-10-18
S030 · PMID 42558552 · P04;P05 · 2026 · Secondary or non-primary literature
Title: Mitochondrial transfer-mediated metabolic reprogramming and drug resistance in bone metastasis: mechanisms and therapeutic strategies.
DOI: 10.3389/fimmu.2026.1863593; PMCID: PMC13437970; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42558552/; Search date: 2026-10-18
S031 · PMID 42540602 · P03 · 2026 · Broader EV/cancer evidence
Title: Exosomal miR-21 Derived from Paclitaxel-Resistant Breast Cancer Cells Promotes Chemoresistance in Breast Cancer via p53/PI3K/AKT/mTOR Signaling.
DOI: 10.2147/BCTT.S615413; PMCID: PMC13426359; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42540602/; Search date: 2026-10-18
S032 · PMID 42533462 · P03 · 2026-Jun · Additional vascular Relay candidate
Title: Exosomal microRNA-143-3P and its effect on biological behavior and angiogenesis in breast cancer.
DOI: 10.26402/jpp.2026.3.10; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV/miRNA-associated angiogenesis or vascular endpoint. Mitochondrial control of loading or recipient function is not established by this bibliographic triage.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42533462/; Search date: 2026-10-18
S033 · PMID 42519478 · P04 · 2026-Aug · Additional mitochondrial immune/stress context
Title: GPAT4 regulates antitumor immune response through activating the mtDNA-cGAS axis in cancer cells.
DOI: 10.1016/j.cellin.2026.100343; PMCID: PMC13382030; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42519478/; Search date: 2026-10-18
S034 · PMID 42500570 · P03 · 2026 · Additional vascular Relay candidate
Title: Breast Cancer Cell-Derived Exosomal miR-92b-3p Promotes Tumor Angiogenesis and Metastasis by Suppressing PTEN in Vascular Endothelial Cells.
DOI: 10.32604/or.2026.083563; PMCID: PMC13397346; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV/miRNA-associated angiogenesis or vascular endpoint. Mitochondrial control of loading or recipient function is not established by this bibliographic triage.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42500570/; Search date: 2026-10-18

S035 · PMID 42491207 · P03 · 2026 · Engineered delivery or composite intervention
Title: Photoactivated Hypericum perforatum-Derived Exosome Nanovesicles Suppress Breast Cancer via miR-172f/CD24-Siglec-G/10-Driven Macrophage Reprogramming.
DOI: 10.34133/bmr.0393; PMCID: PMC13376378; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42491207/; Search date: 2026-10-18
S036 · PMID 42472836 · P02;P03 · 2026-Jul-20 · Secondary or non-primary literature
Title: Non-coding RNA-mediated ferroptosis reprogramming in doxorubicin-resistant breast cancer: mechanistic evidence, subtype vulnerabilities, and translational strategies.
DOI: 10.1186/s12957-026-04507-z; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42472836/; Search date: 2026-10-18
S037 · PMID 42468635 · P05 · 2026-Nov · Secondary or non-primary literature
Title: The RAC1 tripartite hub: coupling metabolic plasticity and immune evasion to dictate breast cancer cell fate.
DOI: 10.1016/j.bcp.2026.118269; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42468635/; Search date: 2026-10-18
S038 · PMID 42409091 · P04 · 2026-Sep-01 · Additional mitochondrial immune/stress context
Title: The novel PARP-1 inhibitor BMMP-TSC bridges mitochondrial dysfunction and innate immunity via mtDNA leakage and cGAS-STING to suppress breast cancer.
DOI: 10.1016/j.cbi.2026.112247; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42409091/; Search date: 2026-10-18
S039 · PMID 42394699 · P03 · 2026 · Secondary or non-primary literature
Title: Exercise-responsive microRNA networks and extracellular vesicle-mediated microRNA signaling in breast cancer: linking tumor signaling, systemic crosstalk, and clinical relevance.
DOI: 10.3389/fonc.2026.1849217; PMCID: PMC13322819; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42394699/; Search date: 2026-10-18
S040 · PMID 42382717 · P04 · 2026-Aug · Additional mitochondrial immune/stress context
Title: Programming Mn(II) coordination in self-assembling peptides amplifies mtDNA-driven STING signaling for potent antitumor immunity.
DOI: 10.1016/j.mtbio.2026.103373; PMCID: PMC13315962; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42382717/; Search date: 2026-10-18
S041 · PMID 42334747 · P03 · 2026-Jun-23 · Secondary or non-primary literature
Title: The functional dichotomy of exosomal microRNAs in TNBC: implications for chemoresistance and integrated theranostics.
DOI: 10.1007/s11033-026-12181-3; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42334747/; Search date: 2026-10-18

S042 · PMID 42308796 · P03 · 2026-Sep-15 · Additional noncoding-RNA Relay network
Title: Exosomal circ_0005397 promotes TNBC progression by inducing M2 macrophage polarization via the miR-204-5p/STAT6 axis.
DOI: 10.1016/j.intimp.2026.117040; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42308796/; Search date: 2026-10-18
S043 · PMID 42299841 · P03 · 2026-Oct · Broader EV/cancer evidence
Title: Tumor-Derived Exosomal piR-hsa-28212 Promotes Lymphatic Metastasis in Breast Cancer.
DOI: 10.1111/cas.70450; PMCID: PMC13394147; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42299841/; Search date: 2026-10-18
S044 · PMID 42259464 · P03 · 2026-Oct · Additional noncoding-RNA Relay network
Title: BMP9 promotes osteogenic differentiation of BMSCs via the lncRNA SNHG3/miR-619-5p axis in a breast cancer bone metastatic microenvironment.
DOI: 10.1016/j.cellsig.2026.112660; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42259464/; Search date: 2026-10-18
S045 · PMID 42246518 · P04 · 2026-Jun-23 · Additional mitochondrial immune/stress context
Title: An Engineered Microbial Nanohybrid for Enhanced Ferroptosis Immunotherapy via Hypoxia-Responsive Hydrogen Sulfide Generation and Mitophagy Inhibition.
DOI: 10.1021/acsnano.6c06383; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42246518/; Search date: 2026-10-18
S046 · PMID 42238600 · P02 · 2026 · Additional small-RNA Rewiring candidate
Title: An integrated analysis of SLC7A11 as a pan-cancer immunotherapeutic biomarker with experimental validation of its regulation by miR-148b-3p in breast cancer.
DOI: 10.3389/fimmu.2026.1752767; PMCID: PMC13226593; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42238600/; Search date: 2026-10-18
S047 · PMID 42220423 · P03 · 2026 · Secondary or non-primary literature
Title: Long Non-Coding RNAs in HER2-Positive Breast Cancer: From Resistance Mechanisms to Translational Potential.
DOI: 10.32604/or.2026.075346; PMCID: PMC13220078; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42220423/; Search date: 2026-10-18
S048 · PMID 42217688 · P02 · 2026-Oct-10 · Secondary or non-primary literature
Title: Circular RNA-centered regulatory networks in breast cancer: From ceRNA crosstalk to immune microenvironment reprogramming.
DOI: 10.1016/j.gene.2026.150236; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/42217688/; Search date: 2026-10-18

S049 · PMID 42208227 · P04 · 2026-Oct · Additional mitochondrial immune/stress context

Title: Baicalein suppresses mitochondrial biogenesis via the RBM43/PGC-1α axis in triple-negative breast cancer cells.

DOI: 10.1016/j.tice.2026.103627; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/42208227/; Search date: 2026-10-18

S050 · PMID 42203136 · P02 · 2026-Aug · Additional RNA/ferroptosis Rewiring evidence

Title: MiR-144-3p enhances cisplatin sensitivity in triple-negative breast cancer by targeting SLC7A11 to induce ferroptosis.

DOI: 10.1016/j.abb.2026.110882; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and complete abstract; Reason: TNBC miR-144-3p/SLC7A11 cisplatin sensitivity with abstract-reported partial rescue. Reinforces cytosolic ferroptosis control; no mitochondrial residency or immune Release claim.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/42203136/; Search date: 2026-10-18

S051 · PMID 42194032 · P03 · 2026-May-05 · Secondary or non-primary literature

Title: Exosomal MicroRNAs as Drivers of Desmoplasia and Treatment Resistance in Breast Cancer: Mechanisms, Biomarker Potential, and Therapeutic Opportunities.

DOI: 10.3390/biom16050682; PMCID: PMC13204934; Publication type: Journal Article;Review; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/42194032/; Search date: 2026-10-18

S052 · PMID 42183022 · P02 · 2026-Aug · Secondary or non-primary literature

Title: Targeting non-coding RNAs in the ferroptosis system: Molecular mechanisms and clinical translation for reversing doxorubicin resistance in breast cancer.

DOI: 10.1016/j.ncrna.2026.04.003; PMCID: PMC13195280; Publication type: Journal Article;Review; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/42183022/; Search date: 2026-10-18

S053 · PMID 42169152 · P03 · 2026-May-21 · Broader EV/cancer evidence

Title: Tamoxifen-pretreated MSC exosomes promote endocrine resistance in ER-positive breast cancer cells through the miR-137/Serpina3 axis: a mechanistic study.

DOI: 10.1186/s13058-026-02306-8; PMCID: PMC13647704; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/42169152/; Search date: 2026-10-18

S054 · PMID 42167849 · P03 · 2026 · Secondary or non-primary literature

Title: Biomarkers for targeted therapy and treatment decision making.

DOI: 10.1016/bs.acr.2025.12.009; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/42167849/; Search date: 2026-10-18

S055 · PMID 42167847 · P03 · 2026 · Secondary or non-primary literature

Title: Future perspectives and challenges for identification and recognition of clinically significant cancer biomarkers.

DOI: 10.1016/bs.acr.2026.01.012; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/42167847/; Search date: 2026-10-18

S056 · PMID 42146389 · P04 · 2026-May-05 · Preprint: separate report
Title: CPT1A loss promotes lung metastasis in immune-competent mice via a mechanism of mtDNA release and chronic activation of STING pathway.
DOI: 10.64898/2026.05.01.722261; PMCID: PMC13174484; Publication type: Journal Article;Preprint; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Not added as a separately counted published mechanistic source. A later journal report, where identified, is preferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42146389/; Search date: 2026-10-18
S057 · PMID 42129220 · P04 · 2026-May-13 · Additional mitochondrial immune/stress context
Title: Mechano-metabolic feedback connects tissue fluidity to mitochondrial DNA-dependent immunity in breast cancer.
DOI: 10.1038/s41467-026-71795-0; PMCID: PMC13377117; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42129220/; Search date: 2026-10-18
S058 · PMID 42123574 · P03 · 2026-Apr-29 · Secondary or non-primary literature
Title: MicroRNA-Directed Biomarkers and Breast Cancer Therapeutics-Potential to Advance Personalised Approaches in Clinical Trials.
DOI: 10.3390/ijms27093996; PMCID: PMC13163586; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42123574/; Search date: 2026-10-18
S059 · PMID 42100959 · P03 · 2026-May · Secondary or non-primary literature
Title: Flavonol-mediated modulation of angiogenesis-related microRNAs in breast cancer: a narrative synthesis of current evidence and knowledge gaps.
DOI: 10.1080/14796694.2026.2665816; PMCID: PMC13203010; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42100959/; Search date: 2026-10-18
S060 · PMID 42074090 · P02 · 2026-Apr-12 · Association, profiling or analytical method
Title: Subtype-Consistent Upregulation of Ferroptosis-Associated Pathways in Breast Cancer with Heterogeneous Prognostic Implications and Systemic Response to Cryoablation.
DOI: 10.3390/ijms27083446; PMCID: PMC13115818; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42074090/; Search date: 2026-10-18
S061 · PMID 42042028 · P03 · 2026-Apr-01 · Engineered delivery or composite intervention
Title: Treatment of Mesenchymal Stem Cell-Derived Extracellular Vesicles with Extract of Cultured Lentinula edodes Modulates Breast Cancer Stem Cells and MicroRNA Reprogramming.
DOI: 10.3390/cimb48040368; PMCID: PMC13114336; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42042028/; Search date: 2026-10-18
S062 · PMID 42035102 · P04 · 2026-Apr-25 · Additional mitochondrial immune/stress context
Title: Gold nanozyme-decorated Cu/Mn MOFs simultaneously enhances immunogenicity and alleviates immunosuppression in triple-negative breast cancer.
DOI: 10.1186/s12951-026-04482-3; PMCID: PMC13274088; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42035102/; Search date: 2026-10-18
S063 · PMID 42030227 · P01;P02;P03 · 2026-May-05 · Existing panel source
Title: A Bioinspired Exosomal Nanoplatform for Coordinated Sorafenib and MicroRNA Delivery to Sensitize Ferroptosis and Induce Immunoactivation in Triple-Negative Breast Cancer.
DOI: 10.1021/acsnano.6c02310; PMCID: not listed; Publication type: Journal Article; Claim ID: R23
Screening basis: PubMed title and relevant abstract passages; Reason: Engineered plant-EV/RNA/drug composite illustrates imposed delivery and component-attribution limits.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42030227/; Search date: 2026-10-18
S064 · PMID 42027810 · P03 · 2026-Sep · Engineered delivery or composite intervention
Title: Intelligent plant exosomes synergize miRNAs and cisplatin for spatiotemporally precise multimodal treatment for TNBC with high safety.
DOI: 10.1016/j.bioactmat.2026.02.013; PMCID: PMC13099513; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42027810/; Search date: 2026-10-18
S065 · PMID 42005442 · P03 · 2026 · Engineered delivery or composite intervention
Title: Synergistic Inhibition of Angiogenesis and Tumor Progression by CD73 Inhibitor and Menstrual Blood Stem Cell-Derived Exosomes via miR-422a Upregulation in HER2-Positive Breast Cancer.
DOI: 10.2147/CMAR.S581878; PMCID: PMC13088987; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/42005442/; Search date: 2026-10-18
S066 · PMID 41977380 · P03 · 2026-Mar-31 · Broader EV/cancer evidence
Title: Breast Cancer-Derived Extracellular Vesicle miR-425-5p (miR-425) Promotes Brain Metastasis via Activating Astrocytes Through the Novel miR-425-ZNF24-CCL8 Signaling Axis.
DOI: 10.3390/ijms27073197; PMCID: PMC13073527; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: UpdateOf:40661472
PubMed: https://pubmed.ncbi.nlm.nih.gov/41977380/; Search date: 2026-10-18
S067 · PMID 41946306 · P03 · 2026 · Secondary or non-primary literature
Title: miR-155 and the orchestration of cell-death evasion and chemoresistance in cancer: Isoform-specific mechanisms and therapeutic opportunities.
DOI: 10.1016/j.ctarc.2026.101198; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41946306/; Search date: 2026-10-18
S068 · PMID 41939911 · P03 · 2026 · Secondary or non-primary literature
Title: Pancreatic cancer immunotherapy biomarkers: from traditional markers to multimodal integration and dynamic monitoring.
DOI: 10.3389/fimmu.2026.1686658; PMCID: PMC13044031; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41939911/; Search date: 2026-10-18
S069 · PMID 41936016 · P02;P03 · 2026-Apr-05 · Additional RNA/ferroptosis Relay evidence
Title: Exosomal miR-4443 confers cisplatin resistance in breast cancer by inhibiting ferroptosis.
DOI: 10.1007/s12672-026-04912-6; PMCID: PMC13199507; Publication type: Journal Article; Claim ID: not assigned

Screening basis: Primary main text and figure captions; PubMed record; Reason: Breast-cancer EV miR-4443 and cisplatin/ferroptosis phenotypes. The main text reports FSP1 reporter repression alongside increased endogenous FSP1; target direction requires resolution before a direct-target grade.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41936016/; Search date: 2026-10-18
S070 · PMID 41933680 · P03 · 2026-Jun-01 · Secondary or non-primary literature
Title: Small extracellular vesicles as biomarkers and therapeutic targets in breast Cancer.
DOI: 10.1016/j.cca.2026.120989; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41933680/; Search date: 2026-10-18
S071 · PMID 41929771 · P01 · 2026 · Protein, drug or EV intervention context
Title: Salvia pratensis exhibits in vitro anti-cancer effects in triple-negative breast cancer through miR-34a-5p signaling.
DOI: 10.3389/fnut.2026.1786148; PMCID: PMC13038989; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The intervention principally concerns a protein, compound or composite EV exposure; associated miRNA expression alone is not treated as RNA-specific causal evidence.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41929771/; Search date: 2026-10-18
S072 · PMID 41900803 · P03 · 2026-Mar-02 · Broader EV/cancer evidence
Title: Extracellular Vesicles from Osteotropic Triple-Negative Breast Cancer Cells Transfer miRNAs to Bone Cells Reducing Collagen Expression and Bone Matrix Mineralisation.
DOI: 10.3390/pharmaceutics18030317; PMCID: PMC13029622; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41900803/; Search date: 2026-10-18
S073 · PMID 41899505 · P03 · 2026-Mar-11 · Secondary or non-primary literature
Title: Circulating MicroRNA in Breast Cancer.
DOI: 10.3390/cancers18060900; PMCID: PMC13024378; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41899505/; Search date: 2026-10-18
S074 · PMID 41881881 · P03 · 2026-Apr · Secondary or non-primary literature
Title: Multidimensional Regulatory Mechanisms of Extracellular Matrix Stiffness in Breast Cancer and Its Prospects for Clinical Translation.
DOI: 10.1016/j.clbc.2026.02.017; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41881881/; Search date: 2026-10-18
S075 · PMID 41868675 · P02 · 2026 · Secondary or non-primary literature
Title: Epigenetic modifications in ferroptosis regulation of breast cancer.
DOI: 10.62347/IUOL3997; PMCID: PMC13000150; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41868675/; Search date: 2026-10-18
S076 · PMID 41858526 · P03 · 2026 · Secondary or non-primary literature
Title: Emerging Targeted and Multimodal Therapeutic Strategies in Breast Cancer: A Comprehensive Review.
DOI: 10.2147/BCTT.S575936; PMCID: PMC12997124; Publication type: Journal Article;Review; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41858526/; Search date: 2026-10-18

S077 · PMID 41822558 · P03 · 2026-May · Secondary or non-primary literature
Title: Orchestrating organotropism: miRNA-driven mechanisms of site-specific metastasis in triple-negative breast cancer (Review).
DOI: 10.3892/ol.2026.15504; PMCID: PMC12977313; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41822558/; Search date: 2026-10-18

S078 · PMID 41821073 · P01 · 2026-Mar-12 · Additional small-RNA Rewiring candidate
Title: Isoimperatorin suppresses triple-negative breast cancer by modulating miR-874-3p/POU2F1 axis: a new avenue for metabolic and redox intervention.
DOI: 10.1186/s40659-026-00678-x; PMCID: PMC13097874; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41821073/; Search date: 2026-10-18

S079 · PMID 41808825 · P03 · 2026 · Secondary or non-primary literature
Title: MiRNAs: a call to arms that shapes the plasticity of tumor associated macrophages in breast cancer.
DOI: 10.3389/fimmu.2026.1792965; PMCID: PMC12969986; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41808825/; Search date: 2026-10-18

S080 · PMID 41807051 · P03 · 2026-Apr · Secondary or non-primary literature
Title: Non-coding RNAs regulation in breast cancer pathogenesis.
DOI: 10.1080/17501911.2026.2642583; PMCID: PMC13166202; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41807051/; Search date: 2026-10-18

S081 · PMID 41724457 · P03 · 2026-Apr-15 · Secondary or non-primary literature
Title: Umbilical cord mesenchymal stem cell exosomes in breast cancer. False hope or a real solution?
DOI: 10.1016/j.cca.2026.120915; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41724457/; Search date: 2026-10-18

S082 · PMID 41711594 · P03 · 2026-Feb · Engineered delivery or composite intervention
Title: M1 Macrophage-Derived Small Extracellular Vesicles as Synergistic Nanotherapeutics: Harnessing Intrinsic Anticancer Activity and Drug Delivery Capacity.
DOI: 10.1002/jev2.70242; PMCID: PMC12919367; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: UpdateOf:41279026
PubMed: https://pubmed.ncbi.nlm.nih.gov/41711594/; Search date: 2026-10-18

S083 · PMID 41614405 · P03 · 2026-Apr · Secondary or non-primary literature
Title: Advances in the study of the breast carcinoma exosomal microRNAs: From basic mechanisms to clinical applications (Review).
DOI: 10.3892/ijo.2026.5851; PMCID: PMC12920014; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41614405/; Search date: 2026-10-18

S084 · PMID 41604098 · P03 · 2026-Jan-28 · Secondary or non-primary literature
Title: MicroRNA-mediated modulation of cancer-associated fibroblasts in HER2-positive breast tumor microenvironment: a comprehensive review.
DOI: 10.1007/s12672-026-04469-4; PMCID: PMC12923699; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41604098/; Search date: 2026-10-18
S085 · PMID 41602389 · P03 · 2025 · Secondary or non-primary literature
Title: Liquid biopsy in triple-negative breast cancer: a promising tool for diagnosis, prognosis, and treatment monitoring.
DOI: 10.3389/fonc.2025.1642521; PMCID: PMC12832448; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41602389/; Search date: 2026-10-18
S086 · PMID 41599765 · P03 · 2026-Jan-17 · Secondary or non-primary literature
Title: Therapeutic Potential of Bovine Colostrum- and Milk-Derived Exosomes in Cancer Prevention and Treatment: Mechanisms, Evidence, and Future Perspectives.
DOI: 10.3390/ph19010168; PMCID: PMC12845320; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41599765/; Search date: 2026-10-18
S087 · PMID 41595551 · P03 · 2025-Dec-20 · Association, profiling or analytical method
Title: Pentraxin 3 as a Modulator of miRNAs and Extracellular Vesicles Release in Triple-Negative Breast Cancer Cells.
DOI: 10.3390/biomedicines14010014; PMCID: PMC12838261; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41595551/; Search date: 2026-10-18
S088 · PMID 41553248 · P04 · 2025-Sep-30 · Additional mitochondrial immune/stress context
Title: Igniting the Tumor: Targeting Mitochondrial Stress to Prime Breast Cancer for Immunotherapy.
DOI: 10.1684/ecn.2025.0504; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41553248/; Search date: 2026-10-18
S089 · PMID 41547433 · P03 · 2026-Mar · Secondary or non-primary literature
Title: Bidirectional effect of intestinal microbiome and host in circadian rhythm disruption: Environmental factors and breast cancer development.
DOI: 10.1016/j.etap.2026.104939; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41547433/; Search date: 2026-10-18
S090 · PMID 41539176 · P03 · 2026 · Secondary or non-primary literature
Title: Non-Coding RNAs in breast cancer bone metastasis: Regulators and novel therapeutic targets.
DOI: 10.1016/j.ctarc.2026.101100; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41539176/; Search date: 2026-10-18
S091 · PMID 41502518 · P01;P02 · 2025 · Outside breast-cancer experimental scope
Title: miR-512-3p/RPS6KA2 Axis Regulates Cisplatin Resistance in Ovarian Cancer via Autophagy and Ferroptosis.

DOI: 10.32604/or.2025.070542; PMCID: PMC12774563; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Primary study addresses another disease, non-breast tumor or non-tumor toxicity context. Retained as retrieval record; not assigned a breast-cancer RNA-causal tier.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41502518/; Search date: 2026-10-18
S092 · PMID 41492185 · P04 · 2026-Jan · Secondary or non-primary literature
Title: Stimulator of interferon genes (STING)-activating nanomedicines: Translating innate immune modulation into effective therapy for triple-negative breast cancer.
DOI: 10.1002/ctm2.70580; PMCID: PMC12771609; Publication type: Journal Article;Review;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41492185/; Search date: 2026-10-18
S093 · PMID 41462674 · P02;P03 · 2025-Dec-08 · Secondary or non-primary literature
Title: The Redox-Adhesion-Exosome (RAX) Hub in Cancer: Lipid Peroxidation-Driven EMT Plasticity and Ferroptosis Defense with HNE/MDA Signaling and Lipidomic Perspectives.
DOI: 10.3390/antiox14121474; PMCID: PMC12729738; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41462674/; Search date: 2026-10-18
S094 · PMID 41430270 · P04 · 2025-Dec-22 · Additional mitochondrial immune/stress context
Title: Activation of the cGAS-STING pathway by clofoctol through mitochondrial damage in triple-negative breast cancer.
DOI: 10.1186/s12967-025-07592-y; PMCID: PMC12801497; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41430270/; Search date: 2026-10-18
S095 · PMID 41427575 · P05 · 2026-Jan-13 · Association, profiling or analytical method
Title: New insight into the risk stratification and treatment priority of breast cancer: TMT scoring system.
DOI: 10.1097/JS9.0000000000004615; PMCID: PMC13105721; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41427575/; Search date: 2026-10-18
S096 · PMID 41421413 · P03 · 2026-Jan-20 · Additional engineered immune Relay evidence
Title: Therapeutic potential of microRNA let-7a-enriched exosomes in modulating macrophage plasticity (M1) and inhibiting malignant tendencies in breast cancer.
DOI: 10.1016/j.ejphar.2025.178501; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and complete abstract; Reason: Let-7a was electroporated into tumor exosomes before macrophage exposure. Treat as imposed delivery, not endogenous mitochondrial-small-RNA trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41421413/; Search date: 2026-10-18
S097 · PMID 41418387 · P04 · 2026-Jan · Additional mitochondrial immune/stress context
Title: Curcumin-mediated photodynamic action disturbs TOM70-depedent MIC60 import to damage mitonchondria against breast cancer.
DOI: 10.1016/j.jphotobiol.2025.113339; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41418387/; Search date: 2026-10-18

S098 · PMID 41403733 · P03 · 2025-Sep · Broader EV/cancer evidence
Title: Continuous Uptake of MiR-181a-2 Mimetic Induces Constitutive Overexpression of Cellular MiR-181a-2 in MCF-7 Breast Cancer Cells: Links with Progression of Drug Resistance.
DOI: 10.34172/apb.025.43440; PMCID: PMC12703381; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41403733/; Search date: 2026-10-18
S099 · PMID 41389614 · P03 · 2026-Jan-08 · Additional immune Relay candidate
Title: Breast cancer-derived exosomal miR-92a-3p stimulates malignant progression by driving TLR4/NF-κB-mediated macrophage M2 polarization.
DOI: 10.1016/j.bbrc.2025.153124; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated immune-cell or immune-response study. Relevant to recipient context; mitochondrial source or mediator is not inferred from immune activity.; Correction/retraction links: ErratumIn:41423409
PubMed: https://pubmed.ncbi.nlm.nih.gov/41389614/; Search date: 2026-10-18
S100 · PMID 41355665 · P05 · 2025-Dec-01 · Additional organelle-transfer context
Title: FLIM intensity-based image segmentation reveals upregulated energy metabolism and chemotherapy sensitivity in MCF-7 cells.
DOI: 10.1242/jcs.263702; PMCID: PMC12752511; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Whole-organelle transfer or transplantation is relevant to Relay, but does not identify a necessary transferred small-RNA cargo.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41355665/; Search date: 2026-10-18
S101 · PMID 41317936 · P03 · 2026-Mar · Additional immune Relay candidate
Title: MIR4435-2HG promotes breast cancer evolution through miR-205-5p/UBE2N axis and exosome-mediated macrophage M2-like polarization.
DOI: 10.1016/j.cellsig.2025.112287; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated immune-cell or immune-response study. Relevant to recipient context; mitochondrial source or mediator is not inferred from immune activity.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41317936/; Search date: 2026-10-18
S102 · PMID 41301888 · P03 · 2025-Nov-17 · Secondary or non-primary literature
Title: Hypoxia-Induced Extracellular Vesicles and Non-Coding RNAs in Cancer: A Systematic Review of Tumor Dynamics and Therapeutic Implications in Preclinical Animal Models.
DOI: 10.3390/biomedicines13112796; PMCID: PMC12649954; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41301888/; Search date: 2026-10-18
S103 · PMID 41283333 · P03 · 2025-Nov-18 · Secondary or non-primary literature
Title: miRNA and Its Implications in the Treatment Resistance in Breast Cancer-Narrative Review of What Do We Know So Far.
DOI: 10.3390/ncrna11060078; PMCID: PMC12642013; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41283333/; Search date: 2026-10-18
S104 · PMID 41282538 · P02 · 2025-Dec · Association, profiling or analytical method
Title: Evaluation of genes and molecular pathways involved in ferroptosis in breast cancer: A systems biology and bioinformatics approach.
DOI: 10.1016/j.bbrep.2025.102335; PMCID: PMC12639381; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and relevant abstract passages; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41282538/; Search date: 2026-10-18

S105 · PMID 41279026 · P03 · 2025-Oct-22 · Preprint: separate report
Title: M1 Macrophage-Derived Small Extracellular Vesicles as Synergistic Nanotherapeutics: Harnessing Intrinsic Anticancer Activity and Drug Delivery Capacity.
DOI: 10.1101/2025.10.21.683755; PMCID: PMC12633327; Publication type: Journal Article;Preprint; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Not added as a separately counted published mechanistic source. A later journal report, where identified, is preferred.; Correction/retraction links: UpdateIn:41711594
PubMed: https://pubmed.ncbi.nlm.nih.gov/41279026/; Search date: 2026-10-18

S106 · PMID 41272827 · P03 · 2025-Nov-21 · Additional metabolic Relay candidate
Title: Tumor exosomal miR-221-3p induces glycolysis through the LIFR/GLUT1 pathway to destroy the cerebral vascular endothelial cell barrier and promote breast cancer brain metastasis.
DOI: 10.1186/s12967-025-07372-8; PMCID: PMC12639775; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated metabolic communication with a specified recipient or metabolic process. Retained as broader Relay evidence; mitochondrial mediation is not assumed from a metabolic endpoint.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41272827/; Search date: 2026-10-18

S107 · PMID 41254117 · P03 · 2025-Nov-18 · Engineered delivery or composite intervention
Title: Apigenin-loaded exosome-like vesicles suppress triple-negative breast cancer by modulating miR-155/SOCS1/VHL, miR-146a/IRAK1/TRAF6 and reactivating STING/BRCA1 : Department of Biology, QaS.C., Islamic Azad University, Qaemshahr, Iran.
DOI: 10.1038/s41598-025-24447-0; PMCID: PMC12627479; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41254117/; Search date: 2026-10-18

S108 · PMID 41237467 · P03 · 2026-Jan · Additional noncoding-RNA Relay network
Title: Y10 phosphorylation of LDHA promotes the release of extracellular vesicle-derived circSEPT9 to enhance the chemoresistance of triple negative breast cancer cells via modulation of the miR-515-5p/KIAA1429 axis.
DOI: 10.1016/j.drup.2025.101324; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41237467/; Search date: 2026-10-18

S109 · PMID 41186624 · P03 · 2025-Nov-04 · Secondary or non-primary literature
Title: Tumor microenvironment in breast cancer: cellular crosstalk, pathways, and therapeutic insights.
DOI: 10.1007/s11033-025-11231-6; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41186624/; Search date: 2026-10-18

S110 · PMID 41175594 · P01;P06 · 2025-Dec · Secondary or non-primary literature
Title: Circular RNAs as central regulators of metabolic reprogramming and immune responses in the breast cancer microenvironment: A comprehensive review.
DOI: 10.1016/j.biopha.2025.118682; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41175594/; Search date: 2026-10-18

S111 · PMID 41167582 · P03 · 2026-Jan-01 · Additional metabolic Relay candidate
Title: Neutrophils exposed to a cholesterol metabolite secrete extracellular vesicles that promote epithelial-mesenchymal transition and stemness in breast cancer cells.
DOI: 10.1016/j.canlet.2025.218105; PMCID: PMC13000442; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated metabolic communication with a specified recipient or metabolic process. Retained as broader Relay evidence; mitochondrial mediation is not assumed from a metabolic endpoint.; Correction/retraction links: UpdateOf:39131340
PubMed: https://pubmed.ncbi.nlm.nih.gov/41167582/; Search date: 2026-10-18
S112 · PMID 41161440 · P02;P06 · 2025-Dec · Secondary or non-primary literature
Title: LncRNA HCP5: A key regulator of tumor metabolic reprogramming, signaling pathway modulation, and therapeutic resistance.
DOI: 10.1016/j.ijbiomac.2025.148606; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41161440/; Search date: 2026-10-18
S113 · PMID 41107912 · P02 · 2025-Oct-17 · Additional small-RNA Rewiring candidate
Title: miR-4793-3p predicts poor prognosis and regulates ferroptosis and invasiveness of breast cancer via targeting RNF169.
DOI: 10.1186/s12957-025-04036-1; PMCID: PMC12534942; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41107912/; Search date: 2026-10-18
S114 · PMID 41097280 · P03 · 2025-Sep-23 · Secondary or non-primary literature
Title: Exosomal MicroRNA: Diagnostic Potential and Role in Breast Cancer Dissemination.
DOI: 10.3390/molecules30193858; PMCID: PMC12526345; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41097280/; Search date: 2026-10-18
S115 · PMID 41088222 · P03 · 2025-Oct-14 · Engineered delivery or composite intervention
Title: Tumor-derived small extracellular vesicles loaded with functionally active miR-34a mimic can modify the anti-tumor response in 4T1 breast cancer animal model.
DOI: 10.1186/s12935-025-03994-6; PMCID: PMC12523053; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41088222/; Search date: 2026-10-18
S116 · PMID 41083063 · P01;P02 · 2026-Jan-30 · Secondary or non-primary literature
Title: Ailanthone: A multi-targeting Quassinoid from Ailanthus altissima for broad-spectrum cancer therapy - a comprehensive review of mechanisms, pharmacokinetics, and clinical prospects.
DOI: 10.1016/j.jep.2025.120716; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41083063/; Search date: 2026-10-18
S117 · PMID 41059755 · P03 · 2025-Sep · Excluded: retraction status
Title: Retraction Note.
DOI: 10.26355/eurrev_202509_37398; PMCID: not listed; Publication type: Journal Article;Retraction Notice; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: PubMed identifies a retracted publication or retraction notice; not used as positive mechanistic evidence.; Correction/retraction links:

RetractionOf:28338172;RetractionOf:29771404;RetractionOf:30178865;RetractionOf:30338828;RetractionOf:30402833;RetractionOf:30468476;RetractionOf:30468491;RetractionOf:30915743;RetractionOf:31173298;RetractionOf:31210311;RetractionOf:31378910;RetractionOf:31486493;RetractionOf:31486498;RetractionOf:31539133;RetractionOf:31773672;RetractionOf:31799669;RetractionOf:31799676;RetractionOf:31841176;RetractionOf:31841181;RetractionOf:32495906
PubMed: https://pubmed.ncbi.nlm.nih.gov/41059755/; Search date: 2026-10-18
S118 · PMID 41029829 · P03 · 2025-Sep-30 · Additional noncoding-RNA Relay network
Title: Cancer-associated fibroblast promotes tamoxifen resistance in estrogen receptor positive breast cancer via exosomal LncRNA PRKCQ-AS1/miR-200a-3p/MKP1 axis-mediated apoptosis suppression.
DOI: 10.1186/s13046-025-03529-x; PMCID: PMC12487062; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/41029829/; Search date: 2026-10-18
S119 · PMID 40959569 · P01;P06 · 2025 · Additional Rewiring evidence
Title: miR-6126 modulates GRP78 to suppress the Warburg effect and mitochondrial dynamics in triple-negative breast cancer.
DOI: 10.7150/ijms.107240; PMCID: PMC12434812; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and complete abstract; Reason: miR-6126/GRP78 metabolic and mitochondrial-dynamics relationship; discussed in the metabolic-plasticity synthesis without implying a universal mitochondrial direction.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40959569/; Search date: 2026-10-18
S120 · PMID 40947310 · P02 · 2026-Feb · Secondary or non-primary literature
Title: Non-Coding RNAs in Breast Cancer Radioresistance: Mechanisms, Functional Roles and Translational Potentials.
DOI: 10.1111/cpr.70119; PMCID: PMC12877951; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40947310/; Search date: 2026-10-18
S121 · PMID 40922956 · P01 · 2025 · Association, profiling or analytical method
Title: mtDNA copy number/miR663/AATF axis in invasive ductal carcinoma of the breast.
DOI: 10.34172/bi.30792; PMCID: PMC12413981; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40922956/; Search date: 2026-10-18
S122 · PMID 40915108 · P02 · 2025-Oct · Additional host-toxicity Relay evidence
Title: Small extracellular vesicles orchestrated pathological communications between breast cancer cells and cardiomyocytes as a novel mechanism exacerbating anthracycline cardiotoxicity by fueling ferroptosis.
DOI: 10.1016/j.redox.2025.103843; PMCID: PMC12446661; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and complete abstract; Reason: Breast-cancer EV miR-338-3p targets cardiomyocyte anti-ferroptotic genes. Relevant to delivery/selectivity and treatment toxicity; recipient endpoint is cardiotoxicity, not antitumor immune selection.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40915108/; Search date: 2026-10-18
S123 · PMID 40887542 · P02 · 2025-Aug-31 · Secondary or non-primary literature
Title: Ferroptosis and non-coding RNAs in breast cancer: insights into CAF and TAM interactions.
DOI: 10.1007/s12672-025-03507-x; PMCID: PMC12399491; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40887542/; Search date: 2026-10-18
S124 · PMID 40833485 · P02 · 2025-Oct · Existing panel source
Title: Targeting the miR-325-3p/GSTP1 axis overcomes paclitaxel resistance in triple-negative breast cancer by inducing ferroptosis.
DOI: 10.1007/s13258-025-01669-0; PMCID: not listed; Publication type: Journal Article; Claim ID: R19

Screening basis: PubMed title and relevant abstract passages; Reason: GSTP1-linked taxane response and ferroptosis; treatment-specific partial-rescue example.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40833485/; Search date: 2026-10-18
S125 · PMID 40831186 · P03 · 2025 · Secondary or non-primary literature
Title: Advancements in non-invasive biomarkers for detection and monitoring of breast cancer recurrence.
DOI: 10.1177/00368504251362350; PMCID: PMC12368403; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40831186/; Search date: 2026-10-18
S126 · PMID 40825468 · P04 · 2025-Nov-28 · Additional mitochondrial immune/stress context
Title: Inhibition of CPT1A activates the cGAS/STING pathway to enhance neutrophil-mediated tumor abrogation in triple-negative breast cancer.
DOI: 10.1016/j.canlet.2025.217991; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40825468/; Search date: 2026-10-18
S127 · PMID 40819077 · P03 · 2025-Aug-16 · Engineered delivery or composite intervention
Title: Targeting LINC02544/miR-497-5p/CAPRIN1 axis via exosome-based siRNA to overcome immunotherapy resistance in triple-negative breast cancer.
DOI: 10.1186/s10020-025-01336-w; PMCID: PMC12357379; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40819077/; Search date: 2026-10-18
S128 · PMID 40818418 · P03 · 2025-Nov · Secondary or non-primary literature
Title: The impact of extracellular vesicles on breast cancer metastasis and therapeutics: genetic considerations.
DOI: 10.1016/j.cancergen.2025.08.003; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40818418/; Search date: 2026-10-18
S129 · PMID 40772722 · P03 · 2025-Jul · Secondary or non-primary literature
Title: Immunomodulation of the Breast Cancer Microenvironment by Tumor-Derived Exosomes: Implications for Immunotherapy.
DOI: 10.1080/07357907.2025.2529878; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40772722/; Search date: 2026-10-18
S130 · PMID 40763556 · P04 · 2025-Sep · Additional mitochondrial immune/stress context
Title: Dual-mode immunotherapy: ultrasound responsive zinc-based nano-contract agents synergistically activate the GAS-STING pathway for enhanced tumor sono-metalloimmunotherapy.
DOI: 10.1016/j.ultsonch.2025.107494; PMCID: PMC12345331; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40763556/; Search date: 2026-10-18
S131 · PMID 40744188 · P03 · 2025-Sep · Secondary or non-primary literature
Title: The role of microRNAs in breast cancer: Diagnostic and therapeutic implications.
DOI: 10.1016/j.ijbiomac.2025.146386; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/40744188/; Search date: 2026-10-18

S132 · PMID 40730068 · P03 · 2025-Nov-15 · Association, profiling or analytical method

Title: Extracellular vesicle miRNA detection based on membrane fusion and nucleic acid nanostructures.

DOI: 10.1016/j.bios.2025.117763; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/40730068/; Search date: 2026-10-18

S133 · PMID 40730006 · P03 · 2025-Sep · Secondary or non-primary literature

Title: Comprehensive perspective about exosomes in breast cancer: Role in progression, diagnosis, monitoring, and treatment.

DOI: 10.1016/j.biopha.2025.118374; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/40730006/; Search date: 2026-10-18

S134 · PMID 40724972 · P01 · 2025-Jul-13 · Protein, drug or EV intervention context

Title: Long-Chain Fatty Acids Alter Estrogen Receptor Expression in Breast Cancer Cells.

DOI: 10.3390/ijms26146722; PMCID: PMC12294802; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and relevant abstract passages; Reason: The intervention principally concerns a protein, compound or composite EV exposure; associated miRNA expression alone is not treated as RNA-specific causal evidence.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/40724972/; Search date: 2026-10-18

S135 · PMID 40722763 · P03 · 2025-Jul-10 · Secondary or non-primary literature

Title: Targeting Resistance Pathways in Breast Cancer Through Precision Oncology: Nanotechnology and Immune Modulation Approaches.

DOI: 10.3390/biomedicines13071691; PMCID: PMC12292722; Publication type: Journal Article;Review; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/40722763/; Search date: 2026-10-18

S136 · PMID 40721560 · P04 · 2025-Jul-28 · Additional mitochondrial immune/stress context

Title: Inhibition of HDAC6 alters fumarate hydratase activity and mitochondrial structure.

DOI: 10.1038/s41467-025-61897-6; PMCID: PMC12304134; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/40721560/; Search date: 2026-10-18

S137 · PMID 40702719 · P04 · 2025-Aug-05 · Additional mitochondrial immune/stress context

Title: Gelatin Methacryloyl Xerogel Puncture Implants Loaded with Cu0.5Mn2.5O4 Nanoparticles Synergizes Cuproptosis and STING Activation for Enhanced Breast Cancer Immunotherapy.

DOI: 10.1021/acsnano.5c09491; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/40702719/; Search date: 2026-10-18

S138 · PMID 40702555 · P03 · 2025-Jul-23 · Additional noncoding-RNA Relay network

Title: Hypoxic cancer-associated fibroblast exosomal circSTAT3 drives triple negative breast cancer stemness via miR-671-5p/NOTCH1 signaling.

DOI: 10.1186/s12967-025-06794-8; PMCID: PMC12288262; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/40702555/; Search date: 2026-10-18

S139 · PMID 40696096 · P01 · 2025-Jul-23 · Additional noncoding-RNA network evidence
Title: LncRNA NRAD1 regulates the triple-negative breast cancer transcriptome by miRNA biogenesis, localization, and predominately non-ceRNA interactions.
DOI: 10.1038/s41598-025-12415-7; PMCID: PMC12284168; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: RNA network or ceRNA study relevant to metabolic/death regulation. Individual small-RNA, target and endpoint contributions require separate appraisal; no pooled LIFT grade inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40696096/; Search date: 2026-10-18
S140 · PMID 40691627 · P03 · 2025-Jul-21 · Secondary or non-primary literature
Title: "Small extracellular vesicles: messengers at the service of breast cancer agenda in the primary and distant microenvironments".
DOI: 10.1186/s13046-025-03471-y; PMCID: PMC12278669; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40691627/; Search date: 2026-10-18
S141 · PMID 40661472 · P03 · 2025-Jun-09 · Preprint: separate report
Title: Extracellular vesicle-derived miR-425-5p (miR-425) activates astrocytes in the brain to promote breast cancer brain metastasis via the novel miR-425-ZNF24-CCL8 signaling axis.
DOI: 10.1101/2025.06.05.658130; PMCID: PMC12258934; Publication type: Journal Article;Preprint; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Not added as a separately counted published mechanistic source. A later journal report, where identified, is preferred.; Correction/retraction links: UpdateIn:41977380
PubMed: https://pubmed.ncbi.nlm.nih.gov/40661472/; Search date: 2026-10-18
S142 · PMID 40629961 · P04 · 2025-Aug-11 · Additional mitochondrial immune/stress context
Title: Spatiotemporal-Controlled Nanoagonists Triggered STING Activation for Cascade-Amplified Photothermal Metalloimmunotherapy.
DOI: 10.1021/acs.biomac.4c01774; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40629961/; Search date: 2026-10-18
S143 · PMID 40614603 · P03 · 2025-Sep-23 · Broader EV/cancer evidence
Title: Exosomal miR-3529-3p increases the sensitivity of trastuzumab via Wnt/β-catenin signaling pathway by targeting HOOK3.
DOI: 10.1016/j.intimp.2025.115160; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40614603/; Search date: 2026-10-18
S144 · PMID 40603423 · P02 · 2025-Jul-02 · Association, profiling or analytical method
Title: Exploring the molecular mechanisms of comorbidity between thyroid cancer and breast cancer through multi-omics data.
DOI: 10.1038/s41598-025-06566-w; PMCID: PMC12222956; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40603423/; Search date: 2026-10-18
S712 · PMID 40591837 · P06 · 2025-Jul-15 · Association, profiling or analytical method
Title: Cascade DNA Logic Strategy for Profiling the MiRNA-210-Targeted Signaling Pathway in the Warburg Effect of Triple-Negative Breast Cancer.
DOI: 10.1021/acs.analchem.5c02574; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned

Screening basis: PubMed title and relevant abstract passages; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40591837/; Search date: 2026-10-18
S145 · PMID 40582210 · P04 · 2025-Sep · Additional mitochondrial immune/stress context
Title: Cucurbitacin B stimulates PD-1 immunotherapy response in malignant breast cancer by covalent targeting MTCH2.
DOI: 10.1016/j.phymed.2025.157017; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40582210/; Search date: 2026-10-18
S146 · PMID 40565366 · P03 · 2025-Jun-19 · Association, profiling or analytical method
Title: Comparison Bioinformatic Analysis of Extracellular Vesicles-Related Genes and MicroRNAs in Breast Cancer.
DOI: 10.3390/ijms26125906; PMCID: PMC12192915; Publication type: Journal Article;Comparative Study; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40565366/; Search date: 2026-10-18
S147 · PMID 40564894 · P03 · 2025-Jun-06 · Secondary or non-primary literature
Title: Unveiling the Involvement of Extracellular Vesicles in Breast Cancer's Organotrophic Metastasis: Molecular Mechanisms and Translational Prospects.
DOI: 10.3390/ijms26125430; PMCID: PMC12193150; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40564894/; Search date: 2026-10-18
S148 · PMID 40562940 · P05 · 2025-Aug · Existing panel source
Title: Nerve-to-cancer transfer of mitochondria during cancer metastasis.
DOI: 10.1038/s41586-025-09176-8; PMCID: PMC12328229; Publication type: Journal Article;Research Support, N.I.H., Extramural; Claim ID: R22
Screening basis: PubMed title and publication-type metadata; Reason: Nerve-to-cancer mitochondrial trafficking; distinct donor lineage and metastasis endpoint.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40562940/; Search date: 2026-10-18
S149 · PMID 40540981 · P03 · 2025-Aug · Secondary or non-primary literature
Title: Breast cancer exosomes: Managing macrophage polarization and immune regulation in the tumor microenvironment.
DOI: 10.1016/j.seminoncol.2025.152365; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40540981/; Search date: 2026-10-18
S150 · PMID 40530018 · P03 · 2025 · Secondary or non-primary literature
Title: Current trends in theranostic applications of extracellular vesicles in cancer.
DOI: 10.3389/fonc.2025.1592006; PMCID: PMC12170317; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40530018/; Search date: 2026-10-18
S151 · PMID 40513147 · P01 · 2025-Aug-15 · Additional small-RNA Rewiring candidate
Title: miR-24-2 targets Akt and inhibits cell survival, EMT, and tumour growth in triple-negative breast cancer.
DOI: 10.1016/j.bbrc.2025.152182; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared

ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40513147/; Search date: 2026-10-18
S152 · PMID 40501184 · P03 · 2025-Sep · Engineered delivery or composite intervention
Title: Engineered EVs-Mediated miR-222 Targeting PTEN/FN1 Axis Reverses Anthracycline Resistance in HER2-Negative Breast Cancer.
DOI: 10.1111/cas.70118; PMCID: PMC12400054; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40501184/; Search date: 2026-10-18
S153 · PMID 40487183 · P03 · 2025-Jun · Association, profiling or analytical method
Title: Efficient metabolic fingerprinting profiling of extracellular vesicles for precise cancer diagnosis and treatment monitoring.
DOI: 10.1016/j.mtbio.2025.101857; PMCID: PMC12141543; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40487183/; Search date: 2026-10-18
S154 · PMID 40486870 · P03 · 2025 · Secondary or non-primary literature
Title: Effects and mechanisms of exosomes in microenvironment angiogenesis in breast cancer: An updated review.
DOI: 10.32604/or.2024.059113; PMCID: PMC12144631; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40486870/; Search date: 2026-10-18
S155 · PMID 40460389 · P01 · 2025 · Additional small-RNA Rewiring candidate
Title: The Role of FGFR2 on Proliferation, Apoptosis and Glucose Metabolism of Breast Cancer Cells.
DOI: 10.1615/CritRevImmunol.2025054378; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40460389/; Search date: 2026-10-18
S156 · PMID 40457968 · P03 · 2025 · Secondary or non-primary literature
Title: Extracellular Vesicles-Associated tRFs as Emerging Biomarkers in Breast Cancer.
DOI: 10.2174/0115680096388071250527074008; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40457968/; Search date: 2026-10-18
S157 · PMID 40456466 · P03 · 2025-Sep · Additional vascular Relay candidate
Title: Effect of the PTPN4/TRAM/TLR4 Signaling Pathway on Angiogenesis Mediated by Rab27a-regulated miR-17-5p Secretion in Breast Cancer Exosomes.
DOI: 10.1016/j.amjms.2025.05.007; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV/miRNA-associated angiogenesis or vascular endpoint. Mitochondrial control of loading or recipient function is not established by this bibliographic triage.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40456466/; Search date: 2026-10-18
S158 · PMID 40444064 · P03 · 2025 · Secondary or non-primary literature
Title: Exosome-Based Liquid Biopsy in Early Screening and Diagnosis of Cancers.
DOI: 10.1177/15593258251344480; PMCID: PMC12120305; Publication type: Journal Article;Review; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40444064/; Search date: 2026-10-18

S159 · PMID 40419670 · P01 · 2025-May-26 · Additional small-RNA Rewiring candidate
Title: The oncogenic role of TIMM8A in cancer and the mechanistic insights into the function in breast cancer cells.
DOI: 10.1038/s41598-025-03331-x; PMCID: PMC12106670; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40419670/; Search date: 2026-10-18

S160 · PMID 40410734 · P01 · 2025-May-23 · Core example added
Title: The novel tRNA-derived fragment, tiRNA-Met, inhibits the malignant progression of triple-negative breast cancer by regulating RANBP3L via a targeted interaction with SNRPA.
DOI: 10.1186/s11658-025-00738-2; PMCID: PMC12102793; Publication type: Journal Article; Claim ID: R35
Screening basis: Primary main text and figure captions; PubMed record; Reason: Mitochondrial tRNA-Met-derived tiRNA with breast-cancer gain/loss and SNRPA-associated function; cytoplasmic localization does not establish mitochondrial residency.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40410734/; Search date: 2026-10-18

S161 · PMID 40410609 · P01 · 2025-Sep · Secondary or non-primary literature
Title: MAPK signaling mediates tamoxifen resistance in estrogen receptor-positive breast cancer.
DOI: 10.1007/s11010-025-05304-0; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40410609/; Search date: 2026-10-18

S162 · PMID 40405948 · P03 · 2025-Apr-30 · Secondary or non-primary literature
Title: Liquid biopsy in breast cancer: a practical guide for surgeons.
DOI: 10.21037/gs-2025-11; PMCID: PMC12093179; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40405948/; Search date: 2026-10-18

S163 · PMID 40400827 · P01 · 2025-Apr · Secondary or non-primary literature
Title: Effects of Yoga on Gene Expression: A Systematic Review of Randomised Controlled Trials.
DOI: 10.7759/cureus.82690; PMCID: PMC12094062; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40400827/; Search date: 2026-10-18

S164 · PMID 40395519 · P01;P06 · 2024 · Related report of existing mechanism
Title: Combining doxorubicin and miR-218-5p: a new strategy to fight breast cancer?
DOI: 10.1080/27694127.2024.2342129; PMCID: PMC11864642; Publication type: Journal Article; Claim ID: R9
Screening basis: PubMed title and relevant abstract passages; Reason: Short follow-up report on the miR-218-5p/PARKIN/doxorubicin mechanism; not counted as an independent replication of the primary claim.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40395519/; Search date: 2026-10-18

S165 · PMID 40386940 · P04 · 2025-Dec · Additional mitochondrial immune/stress context
Title: Partial mitochondrial involvement in the antiproliferative and immunostimulatory effects of PT-112.
DOI: 10.1080/2162402X.2025.2507245; PMCID: PMC12091903; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40386940/; Search date: 2026-10-18

S166 · PMID 40353728 · P04 · 2025-May-15 · Additional mitochondrial immune/stress context
Title: cGAS/STING-Independent Induction of Type I Interferon by Inhibitors of the Histone Methylase KDM5B.
DOI: 10.1096/fj.202500628R; PMCID: PMC12068183; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40353728/; Search date: 2026-10-18
S167 · PMID 40338368 · P04 · 2025-May-08 · Additional mitochondrial immune/stress context
Title: Transient increase in mitochondrial respiration in blood cells from breast cancer patients following chemo- and radiotherapy.
DOI: 10.1007/s10238-025-01665-4; PMCID: PMC12062163; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40338368/; Search date: 2026-10-18
S168 · PMID 40332177 · P03 · 2025-Apr-11 · Association, profiling or analytical method
Title: Detection of Human Circulating and Extracellular Vesicle-Derived miRNAs in Serum of Humanized Mice Transplanted with Human Breast Cancer (HER2+ and TNBC) Cells-A Proof of Principle Investigation.
DOI: 10.3390/ijms26083629; PMCID: PMC12026515; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40332177/; Search date: 2026-10-18
S169 · PMID 40294811 · P04 · 2025-Jun-01 · Additional mitochondrial immune/stress context
Title: Mitochondria-targeted manganese-based mesoporous silica nanoplatforms trigger cGAS-STING activation and sensitize anti PD-L1 therapy in triple-negative breast cancer.
DOI: 10.1016/j.actbio.2025.04.040; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: ErratumIn:41554653
PubMed: https://pubmed.ncbi.nlm.nih.gov/40294811/; Search date: 2026-10-18
S170 · PMID 40245773 · P04 · 2025-May-16 · Additional mitochondrial-nucleic-acid immune evidence
Title: mtDNA/RNA boosts radiation-induced abscopal effect via M1 macrophage polarization-promoted IFN-β-dependent inflammatory response.
DOI: 10.1016/j.intimp.2025.114673; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and complete abstract; Reason: Radiation-associated mammary-tumor mtDNA/mtRNA and IFN-beta/macrophage responses. No defined mitochondrial small-RNA species in the abstract; an enabling rather than small-RNA-provenance claim.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40245773/; Search date: 2026-10-18
S171 · PMID 40244378 · P03 · 2025-Apr-07 · Secondary or non-primary literature
Title: MicroRNAs as Endocrine Modulators of Breast Cancer.
DOI: 10.3390/ijms26073449; PMCID: PMC11989600; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40244378/; Search date: 2026-10-18
S172 · PMID 40239722 · P01;P02 · 2025-Jul · Existing panel source
Title: Inhibition of mitochondrial genome-encoded mitomiR-3 contributes to ZEB1 mediated GPX4 downregulation and pro-ferroptotic lipid metabolism to induce ferroptosis in breast cancer cells.
DOI: 10.1016/j.freeradbiomed.2025.04.019; PMCID: not listed; Publication type: Journal Article; Claim ID: R1

Screening basis: PubMed title and complete abstract; Reason: Mitochondrial-genome-derived miRNA-like candidate with breast-cancer ferroptosis perturbation; explicit source-limited Function assessment.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40239722/; Search date: 2026-10-18
S173 · PMID 40206797 · P03 · 2025 · Secondary or non-primary literature
Title: Extracellular vesicle-mediated chemoresistance in breast cancer: focus on miRNA cargo.
DOI: 10.20517/evcna.2024.90; PMCID: PMC11977373; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40206797/; Search date: 2026-10-18
S174 · PMID 40206796 · P03 · 2025 · Secondary or non-primary literature
Title: Extracellular vesicles and miRNA-based therapies in triple-negative breast cancer: advances and clinical perspectives.
DOI: 10.20517/evcna.2024.85; PMCID: PMC11977377; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40206796/; Search date: 2026-10-18
S175 · PMID 40172996 · P03 · 2025-Apr-15 · Additional noncoding-RNA Relay network
Title: CAF-derived exosomal LINC01711 promotes breast cancer progression by activating the miR-4510/NELFE axis and enhancing glycolysis.
DOI: 10.1096/fj.202402024RRR; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40172996/; Search date: 2026-10-18
S713 · PMID 40167847 · P06 · 2025-Apr-01 · Additional small-RNA Rewiring candidate
Title: miR-526b enhances glucose metabolism in breast cancer cells, an effect reversed by targeting the COX-2/EP4 pathway.
DOI: 10.1007/s11033-025-10430-5; PMCID: PMC11961499; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40167847/; Search date: 2026-10-18
S176 · PMID 40133988 · P03 · 2025-Jun · Engineered delivery or composite intervention
Title: Utilizing miR-34a-Loaded HER2-Targeting Exosomes to Improve Breast Cancer Treatment: Insights From an Animal Model.
DOI: 10.4048/jbc.2024.0262; PMCID: PMC12230292; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40133988/; Search date: 2026-10-18
S177 · PMID 40130080 · P04 · 2025-Jul · Additional mitochondrial immune/stress context
Title: A self-accelerating 'copper bomb' strategy activated innate and adaptive immune response against triple-negative breast cancer.
DOI: 10.1016/j.bioactmat.2025.02.019; PMCID: PMC11931225; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: ErratumIn:42620859
PubMed: https://pubmed.ncbi.nlm.nih.gov/40130080/; Search date: 2026-10-18
S178 · PMID 40102335 · P01 · 2025-Jun · Existing panel source
Title: Mitochondrial tRNA fragment, mt-tRF-Tyr-GTA-001 (tRF-21-X3OJI8EWB), in breast cancer and its potential clinical implications.

DOI: 10.1007/s10549-025-07682-x; PMCID: not listed; Publication type: Journal Article; Claim ID: R5
Screening basis: PubMed title and relevant abstract passages; Reason: Mitochondrial tRNA-fragment origin with human outcome association; no perturbation-derived Function inference.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40102335/; Search date: 2026-10-18
S179 · PMID 40100465 · P03 · 2025-Mar-18 · Secondary or non-primary literature
Title: Exosomes derived from natural killer cells: transforming immunotherapy for aggressive breast cancer.
DOI: 10.1007/s12032-025-02647-y; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40100465/; Search date: 2026-10-18
S180 · PMID 40047645 · P03 · 2025-Jun-03 · Broader EV/cancer evidence
Title: Insulin Resistance Increases TNBC Aggressiveness and Brain Metastasis via Adipocyte-Derived Exosomes.
DOI: 10.1158/1541-7786.MCR-24-0494; PMCID: PMC12133429; Publication type: Journal Article;Research Support, N.I.H., Extramural; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: UpdateOf:38746141
PubMed: https://pubmed.ncbi.nlm.nih.gov/40047645/; Search date: 2026-10-18
S181 · PMID 40004017 · P04 · 2025-Feb-12 · Association, profiling or analytical method
Title: A Novel Prognostic Signature of Mitophagy-Related E3 Ubiquitin Ligases in Breast Cancer.
DOI: 10.3390/ijms26041551; PMCID: PMC11855622; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/40004017/; Search date: 2026-10-18
S182 · PMID 39994712 · P04 · 2025-Feb-24 · Additional mitochondrial immune/stress context
Title: Zinc-copper bimetallic nanoplatforms trigger photothermal-amplified cuproptosis and cGAS-STING activation for enhancing triple-negative breast cancer immunotherapy.
DOI: 10.1186/s12951-025-03186-4; PMCID: PMC11849371; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39994712/; Search date: 2026-10-18
S183 · PMID 39992914 · P01 · 2025 · Excluded: retraction status
Title: Retraction: A Bmi1-miRNAs cross-talk modulates chemotherapy response to 5-fluorouracil in breast cancer cells.
DOI: 10.1371/journal.pone.0319490; PMCID: PMC11849810; Publication type: Journal Article;Retraction Notice; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: PubMed identifies a retracted publication or retraction notice; not used as positive mechanistic evidence.; Correction/retraction links: RetractionOf:24039897
PubMed: https://pubmed.ncbi.nlm.nih.gov/39992914/; Search date: 2026-10-18
S184 · PMID 39947472 · P03 · 2025-Apr · Broader EV/cancer evidence
Title: BANCR-containing extracellular vesicles enhance breast cancer resistance.
DOI: 10.1016/j.jbc.2025.108304; PMCID: PMC11999273; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39947472/; Search date: 2026-10-18
S185 · PMID 39940718 · P01;P03 · 2025-Jan-23 · Protein, drug or EV intervention context
Title: Small Extracellular Vesicles from Breast Cancer Cells Induce Cardiotoxicity.

DOI: 10.3390/ijms26030945; PMCID: PMC11816698; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The intervention principally concerns a protein, compound or composite EV exposure; associated miRNA expression alone is not treated as RNA-specific causal evidence.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39940718/; Search date: 2026-10-18
S186 · PMID 39934946 · P05 · 2025-May · Additional organelle-transfer context
Title: Intercellular mitochondrial transfer contributes to microenvironmental redirection of cancer cell fate.
DOI: 10.1111/febs.70002; PMCID: PMC12062771; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Whole-organelle transfer or transplantation is relevant to Relay, but does not identify a necessary transferred small-RNA cargo.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39934946/; Search date: 2026-10-18
S187 · PMID 39891771 · P03 · 2025-Feb-01 · Secondary or non-primary literature
Title: The role of exosomal non-coding RNAs in the breast cancer tumor microenvironment.
DOI: 10.1007/s10142-025-01531-2; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39891771/; Search date: 2026-10-18
S188 · PMID 39835731 · P02 · 2025-Jan · Secondary or non-primary literature
Title: Recent Insights Into Wnt-Related tRNA-Derived Fragments (tRFs) in Human Diseases.
DOI: 10.1002/jcb.30702; PMCID: not listed; Publication type: Journal Article;Review;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39835731/; Search date: 2026-10-18
S189 · PMID 39792150 · P01 · 2025-Feb-01 · Existing panel source
Title: The tRF-33/IGF1 axis dysregulates mitochondrial homeostasis in HER2-negative breast cancer.
DOI: 10.1152/ajpcell.00588.2024; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: R6
Screening basis: PubMed title and publication-type metadata; Reason: Nuclear tRNA-fragment perturbation affecting mitochondrial homeostasis; contrasts RNA origin with phenotype.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39792150/; Search date: 2026-10-18
S190 · PMID 39763590 · P02 · 2024 · Secondary or non-primary literature
Title: The impact of ferroptosis and ferroptosis-related non-coding RNAs on breast cancer progression.
DOI: 10.3389/fcell.2024.1506492; PMCID: PMC11701165; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39763590/; Search date: 2026-10-18
S191 · PMID 39740727 · P03 · 2025-Feb-01 · Secondary or non-primary literature
Title: Exploring the role of exosomal lncRNA in cancer immunopathogenesis: Unraveling the immune response and EMT pathways.
DOI: 10.1016/j.yexcr.2024.114401; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39740727/; Search date: 2026-10-18
S192 · PMID 39707465 · P03 · 2024-Dec-20 · Secondary or non-primary literature
Title: Unraveling the interplay of CD8 + T cells and microRNA signaling in cancer: implications for immune dysfunction and therapeutic approaches.
DOI: 10.1186/s12967-024-05963-5; PMCID: PMC11662517; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39707465/; Search date: 2026-10-18

S193 · PMID 39627188 · P03 · 2024-Dec-03 · Additional metabolic Relay candidate
Title: Tumor-derived miR-9-5p-loaded EVs regulate cholesterol homeostasis to promote breast cancer liver metastasis in mice.
DOI: 10.1038/s41467-024-54706-z; PMCID: PMC11615374; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated metabolic communication with a specified recipient or metabolic process. Retained as broader Relay evidence; mitochondrial mediation is not assumed from a metabolic endpoint.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39627188/; Search date: 2026-10-18
S194 · PMID 39608481 · P03 · 2025-Jan-01 · Secondary or non-primary literature
Title: Exosomal noncoding RNA (ncRNA) in breast cancer pathogenesis and therapy; two sides of the same coin.
DOI: 10.1016/j.yexcr.2024.114359; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39608481/; Search date: 2026-10-18
S195 · PMID 39571415 · P01;P06 · 2024-Dec · Additional small-RNA Rewiring candidate
Title: Phytosesquiterpene lactones deregulate mitochondrial activity and phenotypes associated with triple-negative breast cancer metastasis.
DOI: 10.1016/j.phymed.2024.156226; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39571415/; Search date: 2026-10-18
S196 · PMID 39558342 · P03 · 2024-Nov-18 · Engineered delivery or composite intervention
Title: miR-23b-3p, miR-126-3p and GAS5 delivered by extracellular vesicles inhibit breast cancer xenografts in zebrafish.
DOI: 10.1186/s12964-024-01936-9; PMCID: PMC11572517; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39558342/; Search date: 2026-10-18
S197 · PMID 39504926 · P04 · 2024-Dec · Additional mitochondrial immune/stress context
Title: Liposomal chlorin e6-mediated photodynamic therapy induces cell pyroptosis and promotes anti-tumor immune effects in breast cancer.
DOI: 10.1016/j.jphotobiol.2024.113047; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39504926/; Search date: 2026-10-18
S198 · PMID 39484777 · P03 · 2025 · Engineered delivery or composite intervention
Title: Exosomal Delivery of miR-155 Inhibitor can Suppress Migration, Invasion, and Angiogenesis Via PTEN and DUSP14 in Triple-negative Breast Cancer.
DOI: 10.2174/0109298673341499241016110341; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39484777/; Search date: 2026-10-18
S199 · PMID 39479442 · P03 · 2024 · Association, profiling or analytical method
Title: Tumor-derived EV miRNA signatures surpass total EV miRNA in supplementing mammography for precision breast cancer diagnosis.

DOI: 10.7150/thno.99245; PMCID: PMC11519808; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39479442/; Search date: 2026-10-18

S200 · PMID 39474419 · P03 · 2024 · Additional immune Relay candidate
Title: Extracellular vesicles from human breast cancer-resistant cells promote acquired drug resistance and pro-inflammatory macrophage response.
DOI: 10.3389/fimmu.2024.1468229; PMCID: PMC11518763; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated immune-cell or immune-response study. Relevant to recipient context; mitochondrial source or mediator is not inferred from immune activity.; Correction/retraction links: ErratumIn:40308613
PubMed: https://pubmed.ncbi.nlm.nih.gov/39474419/; Search date: 2026-10-18

S201 · PMID 39469816 · P03 · 2024-Dec · Additional noncoding-RNA Relay network
Title: Exosome-transported circ_0001955 as a potent driver of breast cancer by regulating the miR-708-5p/PGK1 axis.
DOI: 10.1111/1759-7714.15479; PMCID: PMC11646694; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39469816/; Search date: 2026-10-18

S202 · PMID 39454476 · P03 · 2024-Nov · Secondary or non-primary literature
Title: In silico analysis and comprehensive review of circular-RNA regulatory roles in breast diseases; a step-toward non-coding RNA precision.
DOI: 10.1016/j.prp.2024.155651; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39454476/; Search date: 2026-10-18

S203 · PMID 39435289 · P01 · 2024 · Protein, drug or EV intervention context
Title: Aronia melanocarpa L. fruit peels show anti-cancer effects in preclinical models of breast carcinoma: The perspectives in the chemoprevention and therapy modulation.
DOI: 10.3389/fonc.2024.1463656; PMCID: PMC11491292; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The intervention principally concerns a protein, compound or composite EV exposure; associated miRNA expression alone is not treated as RNA-specific causal evidence.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39435289/; Search date: 2026-10-18

S204 · PMID 39414799 · P03 · 2024-Oct-16 · Outside breast-cancer experimental scope
Title: Loss of miR-200c-3p promotes resistance to radiation therapy via the DNA repair pathway in prostate cancer.
DOI: 10.1038/s41419-024-07133-3; PMCID: PMC11484813; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Primary study addresses another disease, non-breast tumor or non-tumor toxicity context. Retained as retrieval record; not assigned a breast-cancer RNA-causal tier.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39414799/; Search date: 2026-10-18

S205 · PMID 39373750 · P02;P03 · 2025-Apr · Additional RNA/ferroptosis Relay evidence
Title: Cancer-associated fibroblast-secreted exosomal miR-454-3p inhibits lipid metabolism and ferroptosis in breast cancer by targeting ACSL4.
DOI: 10.1007/s00210-024-03488-8; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned

Screening basis: PubMed title and complete abstract; Reason: CAF EV miR-454-3p/ACSL4 with inhibitor/target-knockdown reversal. Supports recipient lipid/ferroptosis control; no mitochondrial origin or immune endpoint established by the abstract.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39373750/; Search date: 2026-10-18
S206 · PMID 39346711 · P03 · 2024-Oct · Association, profiling or analytical method
Title: Circulating miRNA-373 and Vascular Endothelial Growth Factor as Potential Biomarkers for Early Detection of Breast Cancer.
DOI: 10.1007/s12291-023-01174-9; PMCID: PMC11436544; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39346711/; Search date: 2026-10-18
S207 · PMID 39345743 · P01 · 2024-Oct · Additional small-RNA Rewiring candidate
Title: Upregulation of YPEL3 expression and induction of human breast cancer cell death by microRNAs.
DOI: 10.1007/s43188-024-00251-2; PMCID: PMC11436705; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: ErratumIn:39345738
PubMed: https://pubmed.ncbi.nlm.nih.gov/39345743/; Search date: 2026-10-18
S208 · PMID 39335655 · P03 · 2024-Sep-20 · Engineered delivery or composite intervention
Title: Exosome-like Nanoparticles, High in Trans-δ-Viniferin Derivatives, Produced from Grape Cell Cultures: Preparation, Characterization, and Anticancer Properties.
DOI: 10.3390/biomedicines12092142; PMCID: PMC11428831; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39335655/; Search date: 2026-10-18
S209 · PMID 39298813 · P03 · 2024-Dec-05 · Additional immune Relay candidate
Title: Drug-resistant exosome miR-99b-3p induces macrophage polarization and confers chemoresistance on sensitive cells by targeting PPP2CA.
DOI: 10.1016/j.intimp.2024.113168; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated immune-cell or immune-response study. Relevant to recipient context; mitochondrial source or mediator is not inferred from immune activity.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39298813/; Search date: 2026-10-18
S210 · PMID 39293991 · P05 · 2024-Sep-23 · Additional organelle-transfer context
Title: [Effects of normal mitochondrial transplantation on proliferation, apoptosis and stemness of triple-negative breast cancer cells].
DOI: 10.3760/cma.j.cn112152-20231222-00381; PMCID: not listed; Publication type: English Abstract;Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Whole-organelle transfer or transplantation is relevant to Relay, but does not identify a necessary transferred small-RNA cargo.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39293991/; Search date: 2026-10-18
S211 · PMID 39260692 · P03 · 2024-Oct · Additional metabolic Relay candidate
Title: Cortisol affects macrophage polarization by inducing miR-143/145 cluster to reprogram glucose metabolism and by promoting TCA cycle anaplerosis.
DOI: 10.1016/j.jbc.2024.107753; PMCID: PMC11470657; Publication type: Journal Article;Research Support, N.I.H., Extramural; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated metabolic communication with a specified recipient or metabolic process. Retained as broader Relay evidence; mitochondrial mediation is not assumed from a metabolic endpoint.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39260692/; Search date: 2026-10-18

S212 · PMID 39213248 · P03 · 2024-Aug-30 · Association, profiling or analytical method
Title: Correlative expression of exosomal miRNAs in chemotherapy resistance of triple-negative breast cancer: An observational study.
DOI: 10.1097/MD.0000000000038549; PMCID: PMC11365668; Publication type: Journal Article;Observational Study; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39213248/; Search date: 2026-10-18
S213 · PMID 39205093 · P03 · 2024-Aug-21 · Association, profiling or analytical method
Title: Isolation and Characterization of Exosomes from Cancer Cells Using Antibody-Functionalized Paddle Screw-Type Devices and Detection of Exosomal miRNA Using Piezoelectric Biosensor.
DOI: 10.3390/s24165399; PMCID: PMC11359151; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39205093/; Search date: 2026-10-18
S214 · PMID 39199587 · P03 · 2024-Aug-10 · Secondary or non-primary literature
Title: Role of MicroRNA-204 in Regulating the Hallmarks of Breast Cancer: An Update.
DOI: 10.3390/cancers16162814; PMCID: PMC11352763; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39199587/; Search date: 2026-10-18
S215 · PMID 39198393 · P03 · 2024-Aug-28 · Additional noncoding-RNA Relay network
Title: LncRNA HAGLROS promotes breast cancer evolution through miR-135b-3p/COL10A1 axis and exosome-mediated macrophage M2 polarization.
DOI: 10.1038/s41419-024-07020-x; PMCID: PMC11358487; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39198393/; Search date: 2026-10-18
S216 · PMID 39182549 · P02 · 2024-Nov-15 · Additional small-RNA Rewiring candidate
Title: Dihydroartemisinin enhances the radiosensitivity of breast cancer by targeting ferroptosis signaling pathway through hsa_circ_0001610.
DOI: 10.1016/j.ejphar.2024.176943; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39182549/; Search date: 2026-10-18
S217 · PMID 39165276 · P04 · 2024 · Additional mitochondrial immune/stress context
Title: Shenqi Fuzheng Injection Reduces Cisplatin-Induced Kidney Injury via cGAS/STING Signaling Pathway in Breast Cancer Mice Model.
DOI: 10.2147/BCTT.S475860; PMCID: PMC11335009; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39165276/; Search date: 2026-10-18
S218 · PMID 39155444 · P04 · 2024-Aug-27 · Additional mitochondrial immune/stress context
Title: Metal-Phenolic Vehicles Potentiate Cycle-Cascade Activation of Pyroptosis and cGAS-STING Pathway for Tumor Immunotherapy.
DOI: 10.1021/acsnano.4c08613; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39155444/; Search date: 2026-10-18
S219 · PMID 39131340 · P03 · 2024-Aug-02 · Preprint: separate report
Title: Neutrophils exposed to a cholesterol metabolite secrete extracellular vesicles that promote epithelial-mesenchymal transition and stemness in breast cancer cells.
DOI: 10.1101/2024.08.02.606061; PMCID: PMC11312600; Publication type: Journal Article;Preprint; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Not added as a separately counted published mechanistic source. A later journal report, where identified, is preferred.; Correction/retraction links: UpdateIn:41167582
PubMed: https://pubmed.ncbi.nlm.nih.gov/39131340/; Search date: 2026-10-18
S220 · PMID 39098305 · P01 · 2025-Jan · Engineered delivery or composite intervention
Title: Photoswitchable dynamics and RNAi synergist with tailored interface and controlled release reprogramming tumor immunosuppressive niche.
DOI: 10.1016/j.biomaterials.2024.122712; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39098305/; Search date: 2026-10-18
S221 · PMID 39062471 · P03 · 2024-Jun-25 · Broader EV/cancer evidence
Title: Extracellular Vesicle-Mediated Modulation of Stem-like Phenotype in Breast Cancer Cells under Fluid Shear Stress.
DOI: 10.3390/biom14070757; PMCID: PMC11274421; Publication type: Journal Article;Research Support, Non-U.S. Gov't;Research Support, U.S. Gov't, Non-P.H.S.; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39062471/; Search date: 2026-10-18
S222 · PMID 39054208 · P03 · 2025-Jan · Secondary or non-primary literature
Title: The Predictive Value of Blood-Derived Exosomal miRNAs as Biomarkers in Breast Cancer: A Systematic Review.
DOI: 10.1016/j.clbc.2024.06.016; PMCID: not listed; Publication type: Systematic Review;Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39054208/; Search date: 2026-10-18
S223 · PMID 39051518 · P04 · 2024-Nov · Additional mitochondrial immune/stress context
Title: Self-Oxygenated Hydrogel Enhances Immune Cell Response and Infiltration Via Triggering Dual DNA Damage to Activate cGAS-STING and Inhibiting CAFs.
DOI: 10.1002/smll.202403428; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39051518/; Search date: 2026-10-18
S224 · PMID 39022677 · P02 · 2024-Dec · Secondary or non-primary literature
Title: Ferroptosis contributes to the progression of female-specific neoplasms, from breast cancer to gynecological malignancies in a manner regulated by non-coding RNAs: Mechanistic implications.
DOI: 10.1016/j.ncrna.2024.05.008; PMCID: PMC11250880; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39022677/; Search date: 2026-10-18
S225 · PMID 39000239 · P03 · 2024-Jun-28 · Secondary or non-primary literature
Title: Mesenchymal Stem Cell-Secreted Exosomes and Soluble Signals Regulate Breast Cancer Metastatic Dormancy: Current Progress and Future Outlook.

DOI: 10.3390/ijms25137133; PMCID: PMC11241820; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/39000239/; Search date: 2026-10-18
S226 · PMID 38993979 · P03 · 2024 · Secondary or non-primary literature
Title: Mechanism of action of miR-15a-5p and miR-152-3p in paraquat-induced pulmonary fibrosis through Wnt/β-catenin signaling mediation.
DOI: 10.7717/peerj.17662; PMCID: PMC11238725; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38993979/; Search date: 2026-10-18
S227 · PMID 38969951 · P02 · 2024-Sep · Secondary or non-primary literature
Title: miRNAs that regulate apoptosis in breast cancer and cervical cancer.
DOI: 10.1007/s12013-024-01405-7; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38969951/; Search date: 2026-10-18
S228 · PMID 38963978 · P02 · 2024-Oct-01 · Association, profiling or analytical method
Title: A precise microdissection strategy enabled spatial heterogeneity analysis on the targeted region of formalin-fixed paraffin-embedded tissues.
DOI: 10.1016/j.talanta.2024.126501; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38963978/; Search date: 2026-10-18
S229 · PMID 38963787 · P03 · 2024-Dec · Additional metabolic Relay candidate
Title: Hsa_Circ_002144 Promotes Glycolysis and Immune Escape of Breast Cancer Through miR-326/PKM Axis.
DOI: 10.1089/cbr.2024.0009; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated metabolic communication with a specified recipient or metabolic process. Retained as broader Relay evidence; mitochondrial mediation is not assumed from a metabolic endpoint.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38963787/; Search date: 2026-10-18
S230 · PMID 38940326 · P03 · 2024-Aug · Secondary or non-primary literature
Title: Interplay between Wnt signaling molecules and exosomal miRNAs in breast cancer (Review).
DOI: 10.3892/or.2024.8766; PMCID: PMC11234250; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38940326/; Search date: 2026-10-18
S231 · PMID 38937832 · P04 · 2024-Jun-27 · Additional mitochondrial immune/stress context
Title: Shikonin blocks CAF-induced TNBC metastasis by suppressing mitochondrial biogenesis through GSK-3β/NEDD4-1 mediated phosphorylation-dependent degradation of PGC-1α.
DOI: 10.1186/s13046-024-03101-z; PMCID: PMC11210116; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38937832/; Search date: 2026-10-18
S232 · PMID 38877575 · P05 · 2024-Jun-14 · Existing panel source
Title: Mitochondrial transfer from Adipose stem cells to breast cancer cells drives multi-drug resistance.
DOI: 10.1186/s13046-024-03087-8; PMCID: PMC11177397; Publication type: Journal Article; Claim ID: R14a

Screening basis: PubMed title and publication-type metadata; Reason: Adipose-stromal donor-to-breast-cancer whole-organelle transfer with treatment-resistance endpoints.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38877575/; Search date: 2026-10-18
S233 · PMID 38866351 · P02 · 2024-Sep · Additional small-RNA Rewiring candidate
Title: Loss of ADAR1 induces ferroptosis of breast cancer cells.
DOI: 10.1016/j.cellsig.2024.111258; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38866351/; Search date: 2026-10-18
S234 · PMID 38857425 · P01 · 2024-Jul · Secondary or non-primary literature
Title: The mitochondrial calcium uniporter: Balancing tumourigenic and anti-tumourigenic responses.
DOI: 10.1113/JP285515; PMCID: not listed; Publication type: Journal Article;Review;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38857425/; Search date: 2026-10-18
S235 · PMID 38811525 · P03 · 2024-May-29 · Additional metabolic Relay candidate
Title: Breast cancer cell-secreted miR-199b-5p hijacks neurometabolic coupling to promote brain metastasis.
DOI: 10.1038/s41467-024-48740-0; PMCID: PMC11137082; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated metabolic communication with a specified recipient or metabolic process. Retained as broader Relay evidence; mitochondrial mediation is not assumed from a metabolic endpoint.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38811525/; Search date: 2026-10-18
S236 · PMID 38810840 · P03 · 2024-Aug · Broader EV/cancer evidence
Title: Exosomes regulate doxorubicin resistance in breast cancer via miR-34a-5p/NOTCH1.
DOI: 10.1016/j.mcp.2024.101964; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38810840/; Search date: 2026-10-18
S237 · PMID 38780753 · P03 · 2024-May-23 · Secondary or non-primary literature
Title: Extracellular vesicle-mediated drug delivery in breast cancer theranostics.
DOI: 10.1007/s12672-024-01007-y; PMCID: PMC11116322; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38780753/; Search date: 2026-10-18
S238 · PMID 38754600 · P01 · 2024-Jun · Additional noncoding-RNA network evidence
Title: LINC02535 + miR-30a-5p combination enhances proliferation and inhibits apoptosis in metastatic breast Cancer cells.
DOI: 10.1016/j.tiv.2024.105845; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: RNA network or ceRNA study relevant to metabolic/death regulation. Individual small-RNA, target and endpoint contributions require separate appraisal; no pooled LIFT grade inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38754600/; Search date: 2026-10-18
S239 · PMID 38746141 · P03 · 2024-May-02 · Preprint: separate report
Title: Insulin Resistance Increases TNBC Aggressiveness and Brain Metastasis via Adipocyte-derived Exosomes.
DOI: 10.1101/2024.05.01.592097; PMCID: PMC11092600; Publication type: Preprint;Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Not added as a separately counted published mechanistic source. A later journal report, where identified, is preferred.; Correction/retraction links: UpdateIn:40047645

PubMed: https://pubmed.ncbi.nlm.nih.gov/38746141/; Search date: 2026-10-18

S240 · PMID 38734268 · P02 · 2024-Aug-01 · Additional small-RNA Rewiring candidate

Title: Empagliflozin drives ferroptosis in anoikis-resistant cells by activating miR-128-3p dependent pathway and inhibiting CD98hc in breast cancer.

DOI: 10.1016/j.freeradbiomed.2024.05.018; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/38734268/; Search date: 2026-10-18

S241 · PMID 38691224 · P03 · 2024-May-01 · Secondary or non-primary literature

Title: Drug resistance in breast cancer is based on the mechanism of exocrine non-coding RNA.

DOI: 10.1007/s12672-024-00993-3; PMCID: PMC11063018; Publication type: Journal Article;Review; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/38691224/; Search date: 2026-10-18

S242 · PMID 38663838 · P01 · 2025-Apr · Additional small-RNA Rewiring candidate

Title: Mitochondrial calcium uniporter as biomarker and therapeutic target for breast cancer: Prognostication, immune microenvironment, epigenetic regulation and precision medicine.

DOI: 10.1016/j.jare.2024.04.015; PMCID: PMC11976406; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned

Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/38663838/; Search date: 2026-10-18

S243 · PMID 38645356 · P03 · 2024-Apr-16 · Association, profiling or analytical method

Title: BRCA Mutations and MicroRNA Expression Patterns in the Peripheral Blood of Breast Cancer Patients.

DOI: 10.1021/acsomega.3c10086; PMCID: PMC11025100; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/38645356/; Search date: 2026-10-18

S244 · PMID 38641710 · P04 · 2024-May · Engineered delivery or composite intervention

Title: Synthetic cationic helical polypeptides for the stimulation of antitumour innate immune pathways in antigen-presenting cells.

DOI: 10.1038/s41551-024-01194-7; PMCID: PMC11162332; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/38641710/; Search date: 2026-10-18

S245 · PMID 38634821 · P01;P05 · 2024-Jul · Additional RNA/organelle interaction evidence

Title: Evaluation of Tumorigenic Properties of MDA-MB-231 Cancer Stem Cells Cocultured with Telocytes and Telocyte-Derived Mitochondria Following miR-146a Inhibition.

DOI: 10.1089/dna.2024.0031; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and complete abstract; Reason: Recipient cancer-stem-cell miR-146a inhibition combined with telocytes or isolated donor mitochondria. Does not establish necessity of a small RNA carried within transferred mitochondria.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/38634821/; Search date: 2026-10-18

S246 · PMID 38582395 · P03 · 2024-May-28 · Broader EV/cancer evidence

Title: SOD1-high fibroblasts derived exosomal miR-3960 promotes cisplatin resistance in triple-negative breast cancer by suppressing BRSK2-mediated phosphorylation of PIMREG.

DOI: 10.1016/j.canlet.2024.216842; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38582395/; Search date: 2026-10-18
S247 · PMID 38538285 · P01;P06 · 2024-Mar-13 · Secondary or non-primary literature
Title: The Molecular Mechanisms behind Advanced Breast Cancer Metabolism: Warburg Effect, OXPHOS, and Calcium.
DOI: 10.31083/j.fbl2903099; PMCID: PMC10999756; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38538285/; Search date: 2026-10-18
S248 · PMID 38533493 · P03 · 2024 · Outside breast-cancer experimental scope
Title: Suppressor of cytokine signaling-3 expression and its regulation in relation to inflammation in Chronic Obstructive Pulmonary Disease.
DOI: 10.3389/fimmu.2024.1320077; PMCID: PMC10963451; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Primary study addresses another disease, non-breast tumor or non-tumor toxicity context. Retained as retrieval record; not assigned a breast-cancer RNA-causal tier.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38533493/; Search date: 2026-10-18
S249 · PMID 38529940 · P03 · 2024-Aug · Additional metabolic Relay candidate
Title: Exosome-Derived MicroRNA-221-3p Desensitizes Breast Cancer Cells to Adriamycin by Regulating PIK3r1-Mediated Glycose Metabolism.
DOI: 10.1089/cbr.2023.0123; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated metabolic communication with a specified recipient or metabolic process. Retained as broader Relay evidence; mitochondrial mediation is not assumed from a metabolic endpoint.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38529940/; Search date: 2026-10-18
S250 · PMID 38526324 · P01 · 2024-Mar-22 · Protein, drug or EV intervention context
Title: Identification and validation of DHCR7 as a diagnostic biomarker involved in the proliferation and mitochondrial function of breast cancer.
DOI: 10.18632/aging.205683; PMCID: PMC11042931; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The intervention principally concerns a protein, compound or composite EV exposure; associated miRNA expression alone is not treated as RNA-specific causal evidence.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38526324/; Search date: 2026-10-18
S251 · PMID 38514650 · P01;P06 · 2024-Mar-21 · Existing panel source
Title: miR-218-5p and doxorubicin combination enhances anticancer activity in breast cancer cells through Parkin-dependent mitophagy inhibition.
DOI: 10.1038/s41420-024-01914-7; PMCID: PMC10957887; Publication type: Journal Article; Claim ID: R9
Screening basis: PubMed title and publication-type metadata; Reason: PARKIN/mitophagy-linked chemotherapy phenotype; demonstrates the limit of one-direction perturbation evidence.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38514650/; Search date: 2026-10-18
S252 · PMID 38508310 · P02 · 2024-Apr · Additional small-RNA Rewiring candidate
Title: YAP/TAZ-mediated regulation of laminin 332 is enabled by β4 integrin repression of ZEB1 to promote ferroptosis resistance.
DOI: 10.1016/j.jbc.2024.107202; PMCID: PMC11017052; Publication type: Journal Article;Research Support, Non-U.S. Gov't;Research Support, N.I.H., Extramural; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38508310/; Search date: 2026-10-18
S253 · PMID 38496556 · P04 · 2024-Mar-08 · Preprint: separate report

Title: Post-death Vesicles of Senescent Bone Marrow Mesenchymal Stromal Polyploids Promote Macrophage Aging and Breast Cancer.
DOI: 10.1101/2024.03.06.583755; PMCID: PMC10942423; Publication type: Preprint;Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Not added as a separately counted published mechanistic source. A later journal report, where identified, is preferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38496556/; Search date: 2026-10-18
S254 · PMID 38489056 · P05 · 2024-Oct · Secondary or non-primary literature
Title: The movement of mitochondria in breast cancer: internal motility and intercellular transfer of mitochondria.
DOI: 10.1007/s10585-024-10269-3; PMCID: PMC11499424; Publication type: Journal Article;Review;Research Support, N.I.H., Extramural; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38489056/; Search date: 2026-10-18
S255 · PMID 38480836 · P03 · 2024-Jun · Engineered delivery or composite intervention
Title: Universal STING mimic boosts antitumour immunity via preferential activation of tumour control signalling pathways.
DOI: 10.1038/s41565-024-01624-2; PMCID: PMC11948844; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: ErratumIn:39117909
PubMed: https://pubmed.ncbi.nlm.nih.gov/38480836/; Search date: 2026-10-18
S256 · PMID 38472732 · P03 · 2024-Jun · Broader EV/cancer evidence
Title: Exosomes Derived from Mouse Breast Carcinoma Cells Facilitate Diabetic Wound Healing.
DOI: 10.1007/s13770-024-00629-1; PMCID: PMC11087414; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38472732/; Search date: 2026-10-18
S257 · PMID 38472166 · P03 · 2024-Mar · Broader EV/cancer evidence
Title: Serum exosomal miR-3662 down-regulates the expression of RBMS3 to promote malignant progression and gemcitabine resistance of breast cancer cells.
DOI: 10.1111/cbdd.14488; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38472166/; Search date: 2026-10-18
S258 · PMID 38455764 · P03 · 2024 · Secondary or non-primary literature
Title: Exosomal microRNAs in breast cancer: towards theranostic applications.
DOI: 10.3389/fmolb.2024.1330144; PMCID: PMC10918471; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38455764/; Search date: 2026-10-18
S259 · PMID 38439112 · P03 · 2024-Mar-04 · Additional immune Relay candidate
Title: Docosahexaenoic acid (DHA) impairs hypoxia-induced cellular and exosomal overexpression of immune-checkpoints and immunomodulatory molecules in different subtypes of breast cancer cells.
DOI: 10.1186/s40795-024-00844-y; PMCID: PMC10910708; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated immune-cell or immune-response study. Relevant to recipient context; mitochondrial source or mediator is not inferred from immune activity.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38439112/; Search date: 2026-10-18

S260 · PMID 38429817 · P04 · 2024-Mar-01 · Additional mitochondrial immune/stress context
Title: Zinc finger protein 468 up-regulation of TFAM contributes to the malignant growth and cisplatin resistance of breast cancer cells.
DOI: 10.1186/s13008-024-00113-1; PMCID: PMC10908137; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38429817/; Search date: 2026-10-18
S261 · PMID 38426156 · P03 · 2024-Apr · Association, profiling or analytical method
Title: Exploring miRNA-target gene profiles associated with drug resistance in patients with breast cancer receiving neoadjuvant chemotherapy.
DOI: 10.3892/ol.2024.14291; PMCID: PMC10902752; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38426156/; Search date: 2026-10-18
S262 · PMID 38425422 · P03 · 2024 · Secondary or non-primary literature
Title: Multiplex electrochemical sensing platforms for the detection of breast cancer biomarkers.
DOI: 10.3389/fmedt.2024.1360510; PMCID: PMC10902167; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38425422/; Search date: 2026-10-18
S263 · PMID 38414523 · P01 · 2024 · Engineered delivery or composite intervention
Title: Combined Photosensitive Gene Therapy Effective Against Triple-Negative Breast Cancer in Mice Model.
DOI: 10.2147/IJN.S449042; PMCID: PMC10898360; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38414523/; Search date: 2026-10-18
S264 · PMID 38403110 · P03 · 2024-Apr-28 · Broader EV/cancer evidence
Title: CD63+ cancer-associated fibroblasts confer CDK4/6 inhibitor resistance to breast cancer cells by exosomal miR-20.
DOI: 10.1016/j.canlet.2024.216747; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38403110/; Search date: 2026-10-18
S265 · PMID 38365112 · P03 · 2024-May · Broader EV/cancer evidence
Title: Exosomal miR-122-3p represses the growth and metastasis of MCF-7/ADR cells by targeting GRK4-mediated activation of the Wnt/β-catenin pathway.
DOI: 10.1016/j.cellsig.2024.111101; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38365112/; Search date: 2026-10-18
S266 · PMID 38318853 · P02 · 2024-Feb · Additional noncoding-RNA network evidence
Title: POU2F2-mediated upregulation of lncRNA PTPRG-AS1 inhibits ferroptosis in breast cancer via miR-376c-3p/SLC7A11 axis.
DOI: 10.2217/epi-2023-0100; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: RNA network or ceRNA study relevant to metabolic/death regulation. Individual small-RNA, target and endpoint contributions require separate appraisal; no pooled LIFT grade inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38318853/; Search date: 2026-10-18

S267 · PMID 38295998 · P03 · 2024-Mar · Engineered delivery or composite intervention
Title: Brucea javanica derived exosome-like nanovesicles deliver miRNAs for cancer therapy.
DOI: 10.1016/j.jconrel.2024.01.060; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38295998/; Search date: 2026-10-18
S268 · PMID 38283990 · P05 · 2023 · Additional organelle-transfer context
Title: Impact of platelet-derived mitochondria transfer in the metabolic profiling and progression of metastatic MDA-MB-231 human triple-negative breast cancer cells.
DOI: 10.3389/fcell.2023.1324158; PMCID: PMC10811077; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Whole-organelle transfer or transplantation is relevant to Relay, but does not identify a necessary transferred small-RNA cargo.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38283990/; Search date: 2026-10-18
S269 · PMID 38283199 · P03 · 2024 · Engineered delivery or composite intervention
Title: Engineered Exosomes Carrying miR-588 for Treatment of Triple Negative Breast Cancer Through Remodeling the Immunosuppressive Microenvironment.
DOI: 10.2147/IJN.S440619; PMCID: PMC10821654; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38283199/; Search date: 2026-10-18
S270 · PMID 38279150 · P02 · 2024-Jan-26 · Secondary or non-primary literature
Title: Current evidence regarding the cellular mechanisms associated with cancer progression due to cardiovascular diseases.
DOI: 10.1186/s12967-023-04803-2; PMCID: PMC10811855; Publication type: Journal Article;Review;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38279150/; Search date: 2026-10-18
S271 · PMID 38278522 · P03 · 2024-Feb-06 · Engineered delivery or composite intervention
Title: Synergistic Viro-chemoimmunotherapy in Breast Cancer Enabled by Bioengineered Immunostimulatory Exosomes and Dual-Targeted Coxsackievirus B3.
DOI: 10.1021/acsnano.3c09491; PMCID: PMC10851665; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38278522/; Search date: 2026-10-18
S714 · PMID 38263865 · P06 · 2024-Feb · Additional small-RNA Rewiring candidate
Title: METTL14/miR-29c-3p axis drives aerobic glycolysis to promote triple-negative breast cancer progression though TRIM9-mediated PKM2 ubiquitination.
DOI: 10.1111/jcmm.18112; PMCID: PMC10844685; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38263865/; Search date: 2026-10-18
S272 · PMID 38197195 · P03 · 2024-Jan-31 · Additional noncoding-RNA Relay network
Title: Extracellular vesicles released by hypoxia-induced tumor-associated fibroblasts impart chemoresistance to breast cancer cells via long noncoding RNA H19 delivery.
DOI: 10.1096/fj.202300203R; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or

ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: ErratumIn:38558442
PubMed: https://pubmed.ncbi.nlm.nih.gov/38197195/; Search date: 2026-10-18
S273 · PMID 38195382 · P03 · 2023 · Association, profiling or analytical method
Title: Study of KDM1A and VEGF changes as the responsible genes in the angiogenesis of breast cancer.
DOI: not listed; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38195382/; Search date: 2026-10-18
S274 · PMID 38163254 · P03 · 2024-Jan-10 · Association, profiling or analytical method
Title: Inorganic Nanoparticles Change Cancer-Cell-Derived Extracellular Vesicle Secretion Levels and Cargo Composition, Resulting in Secondary Biological Effects.
DOI: 10.1021/acsami.3c12680; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38163254/; Search date: 2026-10-18
S275 · PMID 38158233 · P03 · 2023 · Association, profiling or analytical method
Title: Investigating changes in the post-transcriptional pattern of VEGF and CD146 genes carrying miR-573 in breast cancer cells treated with tamoxifen.
DOI: 10.48095/ccko2023447; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38158233/; Search date: 2026-10-18
S276 · PMID 38129137 · P03 · 2024-Feb · Existing panel source
Title: Cancer cell-derived exosomal miR-20a-5p inhibits CD8+ T-cell function and confers anti-programmed cell death 1 therapy resistance in triple-negative breast cancer.
DOI: 10.1111/cas.16036; PMCID: PMC10859600; Publication type: Journal Article; Claim ID: R12
Screening basis: PubMed title and publication-type metadata; Reason: Tumor EV-to-CD8 small-RNA relay with functional immune and treatment endpoints; no mitochondrial residency inference.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38129137/; Search date: 2026-10-18
S277 · PMID 38111465 · P03 · 2023 · Secondary or non-primary literature
Title: Mapping knowledge structure and themes trends of cancer-associated fibroblasts: a text-mining study.
DOI: 10.3389/fmolb.2023.1302016; PMCID: PMC10725992; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38111465/; Search date: 2026-10-18
S278 · PMID 38085263 · P05 · 2024-Mar-01 · Additional organelle-transfer context
Title: Mitochondria Transfer by Platelet-Derived Microparticles Regulates Breast Cancer Bioenergetic States and Malignant Features.
DOI: 10.1158/1541-7786.MCR-23-0329; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Whole-organelle transfer or transplantation is relevant to Relay, but does not identify a necessary transferred small-RNA cargo.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38085263/; Search date: 2026-10-18
S715 · PMID 38050961 · P06 · 2024-Mar · Excluded: retraction status
Title: DPM2 serve as novel oncogene and prognostic marker transactivated by ESR1 in breast cancer.
DOI: 10.1002/tox.24059; PMCID: not listed; Publication type: Journal Article;Retracted Publication; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: PubMed identifies a retracted publication or retraction notice; not used as positive mechanistic evidence.; Correction/retraction links: RetractionIn:39584577
PubMed: https://pubmed.ncbi.nlm.nih.gov/38050961/; Search date: 2026-10-18

S279 · PMID 38020289 · P01 · 2023-Dec · Association, profiling or analytical method
Title: Assessment of the expression of microRNAs-221-3p, -146a-5p, -16-5p and BCL2 in oncocytic carcinoma of the breast: A case report.
DOI: 10.3892/ol.2023.14123; PMCID: PMC10655050; Publication type: Case Reports;Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38020289/; Search date: 2026-10-18
S280 · PMID 38020052 · P03 · 2023 · Secondary or non-primary literature
Title: The Emerging Roles of Exosomal miRNAs in Breast Cancer Progression and Potential Clinical Applications.
DOI: 10.2147/BCTT.S432750; PMCID: PMC10658810; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/38020052/; Search date: 2026-10-18
S281 · PMID 37968694 · P03 · 2023-Nov-15 · Additional vascular Relay candidate
Title: Mesenchymal stem cell-derived exosomes enriched with miR-218 reduce the epithelial-mesenchymal transition and angiogenesis in triple-negative breast cancer cells.
DOI: 10.1186/s40001-023-01463-2; PMCID: PMC10647065; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV/miRNA-associated angiogenesis or vascular endpoint. Mitochondrial control of loading or recipient function is not established by this bibliographic triage.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37968694/; Search date: 2026-10-18
S282 · PMID 37941557 · P03 · 2023 · Secondary or non-primary literature
Title: Circulating tumor biomarkers in early-stage breast cancer: characteristics, detection, and clinical developments.
DOI: 10.3389/fonc.2023.1288077; PMCID: PMC10628786; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37941557/; Search date: 2026-10-18
S283 · PMID 37932806 · P03 · 2023-Nov-06 · Existing panel source
Title: MiR-181a targets STING to drive PARP inhibitor resistance in BRCA- mutated triple-negative breast cancer and ovarian cancer.
DOI: 10.1186/s13578-023-01151-y; PMCID: PMC10626784; Publication type: Journal Article; Claim ID: R13
Screening basis: PubMed title and publication-type metadata; Reason: Breast-cancer EV-associated RNA and STING-linked PARP-inhibitor resistance; separates disease-model evidence.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37932806/; Search date: 2026-10-18
S284 · PMID 37929643 · P01;P03;P06 · 2023-Dec-06 · Additional small-RNA Rewiring candidate
Title: Breast adipose tissue-derived extracellular vesicles from obese women alter tumor cell metabolism.
DOI: 10.15252/embr.202357339; PMCID: PMC10702795; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: UpdateOf:36798307
PubMed: https://pubmed.ncbi.nlm.nih.gov/37929643/; Search date: 2026-10-18
S285 · PMID 37848981 · P03 · 2023-Oct-17 · Additional noncoding-RNA Relay network
Title: Exosomal Linc00969 induces trastuzumab resistance in breast cancer by increasing HER-2 protein expression and mRNA stability by binding to HUR.
DOI: 10.1186/s13058-023-01720-6; PMCID: PMC10580635; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37848981/; Search date: 2026-10-18
S286 · PMID 37839359 · P03 · 2023-Nov · Secondary or non-primary literature
Title: Potential roles of the exosome/microRNA axis in breast cancer.
DOI: 10.1016/j.prp.2023.154845; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37839359/; Search date: 2026-10-18
S287 · PMID 37835573 · P03 · 2023-Oct-07 · Secondary or non-primary literature
Title: Extracellular Vesicles in Triple-Negative Breast Cancer: Immune Regulation, Biomarkers, and Immunotherapeutic Potential.
DOI: 10.3390/cancers15194879; PMCID: PMC10571545; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37835573/; Search date: 2026-10-18
S288 · PMID 37819165 · P03 · 2023-Oct-24 · Association, profiling or analytical method
Title: Localized Imaging of Programmed Death-Ligand 1 on Individual Tumor-Derived Extracellular Vesicles for Prediction of Immunotherapy Response.
DOI: 10.1021/acsnano.3c05799; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37819165/; Search date: 2026-10-18
S289 · PMID 37814867 · P03 · 2023-Sep-20 · Additional noncoding-RNA Relay network
Title: [JAG1 affects monocytes-macrophages to reshape the pre-metastatic niche of triple-negative breast cancer through LncRNA MALAT1 in exosomes].
DOI: 10.12122/j.issn.1673-4254.2023.09.10; PMCID: PMC10563097; Publication type: English Abstract;Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37814867/; Search date: 2026-10-18
S290 · PMID 37812578 · P01;P06 · 2023-Dec · Additional noncoding-RNA network evidence
Title: CircANKRD17 promotes glycolysis by inhibiting miR-143 in breast cancer cells.
DOI: 10.1002/jcp.31128; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: RNA network or ceRNA study relevant to metabolic/death regulation. Individual small-RNA, target and endpoint contributions require separate appraisal; no pooled LIFT grade inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37812578/; Search date: 2026-10-18
S291 · PMID 37806095 · P01 · 2023-Dec · Additional small-RNA Rewiring candidate
Title: Inhibiting mir-34a-5p regulates doxorubicin-induced autophagy disorder and alleviates myocardial pyroptosis by targeting Sirt3-AMPK pathway.
DOI: 10.1016/j.biopha.2023.115654; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37806095/; Search date: 2026-10-18
S292 · PMID 37775001 · P03 · 2023-Dec-15 · Additional noncoding-RNA Relay network
Title: Adipocyte-derived exosomes promote the progression of triple-negative breast cancer through circCRIM1-dependent OGA activation.

DOI: 10.1016/j.envres.2023.117266; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37775001/; Search date: 2026-10-18
S293 · PMID 37769396 · P03 · 2023-Oct · Secondary or non-primary literature
Title: Revolutionizing treatment for triple-negative breast cancer: Harnessing the power of exosomal miRNAs for targeted therapy.
DOI: 10.1016/j.prp.2023.154825; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37769396/; Search date: 2026-10-18
S294 · PMID 37739016 · P03 · 2023-Nov · Engineered delivery or composite intervention
Title: Engineered mesenchymal stem cell-derived extracellular vesicles constitute a versatile platform for targeted drug delivery.
DOI: 10.1016/j.jconrel.2023.09.037; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37739016/; Search date: 2026-10-18
S295 · PMID 37736901 · P03 · 2023-Sep-16 · Secondary or non-primary literature
Title: Novel Insights into Circular RNAs in Metastasis in Breast Cancer: An Update.
DOI: 10.3390/ncrna9050055; PMCID: PMC10514845; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37736901/; Search date: 2026-10-18
S296 · PMID 37728084 · P03 · 2023 · Secondary or non-primary literature
Title: Exosomal miRNAs as Next-generation Therapy Vehicles in Breast Cancer.
DOI: 10.2174/1566523223666230215103524; PMCID: not listed; Publication type: Review;Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37728084/; Search date: 2026-10-18
S297 · PMID 37700851 · P02 · 2023-Sep · Additional small-RNA Rewiring candidate
Title: TMEM189 as a target gene of MiR-499a-5p regulates breast cancer progression through the ferroptosis pathway.
DOI: 10.3164/jcbn.22-130; PMCID: PMC10493215; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37700851/; Search date: 2026-10-18
S298 · PMID 37691919 · P03 · 2023 · Secondary or non-primary literature
Title: Facts and prospects of peptide in targeted therapy and immune regulation against triple-negative breast cancer.
DOI: 10.3389/fimmu.2023.1255820; PMCID: PMC10485606; Publication type: Journal Article;Review;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37691919/; Search date: 2026-10-18
S299 · PMID 37686605 · P01;P03 · 2023-Aug-30 · Association, profiling or analytical method
Title: Extracellular Vesicles-A Source of RNA Biomarkers for the Detection of Breast Cancer in Liquid Biopsies.

DOI: 10.3390/cancers15174329; PMCID: PMC10487078; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37686605/; Search date: 2026-10-18
S300 · PMID 37674256 · P01 · 2023-Sep-19 · Engineered delivery or composite intervention
Title: Endogenous miRNA and K+ Co-Activated Dynamic Assembly of DNA Coacervates for Intracellular miRNA Imaging and Mitochondrial Intervention.
DOI: 10.1021/acs.analchem.3c03053; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37674256/; Search date: 2026-10-18
S301 · PMID 37646973 · P01 · 2023-Nov · Secondary or non-primary literature
Title: The role of mitochondrial/metabolic axis in development of tamoxifen resistance in breast cancer.
DOI: 10.1007/s13577-023-00977-5; PMCID: PMC10587280; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37646973/; Search date: 2026-10-18
S302 · PMID 37646133 · P03 · 2023-Oct-10 · Engineered delivery or composite intervention
Title: ICAM-1-decorated extracellular vesicles loaded with miR-146a and Glut1 drive immunomodulation and hinder tumor progression in a murine model of breast cancer.
DOI: 10.1039/d3bm00573a; PMCID: PMC10591940; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37646133/; Search date: 2026-10-18
S303 · PMID 37620316 · P03 · 2023-Aug-24 · Broader EV/cancer evidence
Title: Cancer-cell-secreted miR-204-5p induces leptin signalling pathway in white adipose tissue to promote cancer-associated cachexia.
DOI: 10.1038/s41467-023-40571-9; PMCID: PMC10449837; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37620316/; Search date: 2026-10-18
S304 · PMID 37591453 · P02 · 2023-Oct-01 · Additional noncoding-RNA network evidence
Title: FOXQ1 inhibits breast cancer ferroptosis and progression via the circ_0000643/miR-153/SLC7A11 axis.
DOI: 10.1016/j.yexcr.2023.113737; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: RNA network or ceRNA study relevant to metabolic/death regulation. Individual small-RNA, target and endpoint contributions require separate appraisal; no pooled LIFT grade inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37591453/; Search date: 2026-10-18
S305 · PMID 37542585 · P04 · 2023-Aug-05 · Additional mitochondrial immune/stress context
Title: Acupuncture improves immunity and fatigue after chemotherapy in breast cancer patients by inhibiting the Leptin/AMPK signaling pathway.
DOI: 10.1007/s00520-023-07967-1; PMCID: PMC10404187; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37542585/; Search date: 2026-10-18

S306 · PMID 37461019 · P03 · 2023-Jul-17 · Additional noncoding-RNA Relay network
Title: Chemotherapy-induced exosomal circBACH1 promotes breast cancer resistance and stemness via miR-217/G3BP2 signaling pathway.
DOI: 10.1186/s13058-023-01672-x; PMCID: PMC10351125; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37461019/; Search date: 2026-10-18
S307 · PMID 37457713 · P04 · 2023 · Association, profiling or analytical method
Title: Mitochondrial DNA methylation is a predictor of immunotherapy response and prognosis in breast cancer: scRNA-seq and bulk-seq data insights.
DOI: 10.3389/fimmu.2023.1219652; PMCID: PMC10339346; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37457713/; Search date: 2026-10-18
S308 · PMID 37452413 · P03 · 2023-Jul-14 · Additional immune Relay candidate
Title: Tumor-derived small extracellular vesicles promote breast cancer progression by upregulating PD-L1 expression in macrophages.
DOI: 10.1186/s12935-023-02980-0; PMCID: PMC10347751; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated immune-cell or immune-response study. Relevant to recipient context; mitochondrial source or mediator is not inferred from immune activity.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37452413/; Search date: 2026-10-18
S309 · PMID 37439436 · P01;P03;P06 · 2023-Sep-06 · Additional host-muscle Relay evidence
Title: Cancer-cell-secreted extracellular vesicles target p53 to impair mitochondrial function in muscle.
DOI: 10.15252/embr.202256464; PMCID: PMC10481655; Publication type: Journal Article;Research Support, U.S. Gov't, Non-P.H.S.;Research Support, N.I.H., Extramural; Claim ID: not assigned
Screening basis: PubMed title and complete abstract; Reason: Breast-cancer EV miR-122-5p/TP53 perturbs muscle mitochondrial function. Relevant host consequence; muscle performance is distinct from tumor or immune-cell Release endpoints.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37439436/; Search date: 2026-10-18
S310 · PMID 37410095 · P03 · 2023-Aug · Excluded: retraction status
Title: Retraction statement: Ding, J., Wang, X., Gao, J. and Song, T. (2021), Silencing of cystatin SN abrogates cancer progression and stem cell properties in papillary thyroid carcinoma. FEBS Open Bio, 11: 2186-2197.
DOI: 10.1002/2211-5463.13664; PMCID: PMC10392042; Publication type: Retraction Notice; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: PubMed identifies a retracted publication or retraction notice; not used as positive mechanistic evidence.; Correction/retraction links: RetractionOf:34102026
PubMed: https://pubmed.ncbi.nlm.nih.gov/37410095/; Search date: 2026-10-18
S311 · PMID 37385973 · P03 · 2023-Aug · Additional noncoding-RNA Relay network
Title: Knockdown of circADAM9 inhibits cell progression and glycolysis by targeting the miR-1236-3p/FGF7 axis in breast cancer.
DOI: 10.1111/1759-7714.15025; PMCID: PMC10447173; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37385973/; Search date: 2026-10-18
S312 · PMID 37358264 · P05 · 2023-Jul-15 · Existing panel source
Title: Mitochondrial transfer from cancer-associated fibroblasts increases migration in aggressive breast cancer.
DOI: 10.1242/jcs.260419; PMCID: PMC10400000; Publication type: Journal Article;Research Support, N.I.H., Extramural; Claim ID: R14b

Screening basis: PubMed title and publication-type metadata; Reason: Fibroblast donor-to-breast-cancer whole-organelle transfer with migration endpoints; not merged with adipose donor claims.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37358264/; Search date: 2026-10-18
S313 · PMID 37352015 · P03 · 2023-Sep · Secondary or non-primary literature
Title: Exosomal miRNAs and breast cancer: a complex theranostics interlink with clinical significance.
DOI: 10.1080/1354750X.2023.2229537; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37352015/; Search date: 2026-10-18
S314 · PMID 37351806 · P02 · 2024-Jan · Secondary or non-primary literature
Title: Carcinogenic roles of MAFG-AS1 in human cancers.
DOI: 10.1007/s12094-023-03246-x; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37351806/; Search date: 2026-10-18
S315 · PMID 37322628 · P03 · 2023 · Association, profiling or analytical method
Title: Breast cancer nipple discharge exosomal microRNAs are stable under degradative conditions.
DOI: 10.4103/cjop.CJOP-D-22-00138; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37322628/; Search date: 2026-10-18
S316 · PMID 37274058 · P03 · 2023 · Excluded: retraction status
Title: Rab1A-Mediated Exosomal Sorting of miR-200c Enhances Breast Cancer Lung Metastasis.
DOI: 10.2147/BCTT.S400974; PMCID: PMC10239268; Publication type: Journal Article;Retracted Publication; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: PubMed identifies a retracted publication or retraction notice; not used as positive mechanistic evidence.; Correction/retraction links: RetractionIn:42318227
PubMed: https://pubmed.ncbi.nlm.nih.gov/37274058/; Search date: 2026-10-18
S317 · PMID 37265965 · P05 · 2023-May · Association, profiling or analytical method
Title: Analysis of Mitochondrial Transfer RNA Mutations in Breast Cancer.
DOI: 10.2478/bjmg-2022-0020; PMCID: PMC10230833; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37265965/; Search date: 2026-10-18
S318 · PMID 37243750 · P03 · 2023-May-27 · Secondary or non-primary literature
Title: Therapeutic and diagnostic applications of exosomal circRNAs in breast cancer.
DOI: 10.1007/s10142-023-01083-3; PMCID: PMC10224846; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37243750/; Search date: 2026-10-18
S319 · PMID 37237523 · P03 · 2023-May-12 · Secondary or non-primary literature
Title: Dynamic Role of Exosome microRNAs in Cancer Cell Signaling and Their Emerging Role as Noninvasive Biomarkers.
DOI: 10.3390/biology12050710; PMCID: PMC10215770; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37237523/; Search date: 2026-10-18

S320 · PMID 37233716 · P03 · 2023-May-21 · Secondary or non-primary literature
Title: Molecular Mechanisms of Western Diet-Induced Obesity and Obesity-Related Carcinogenesis-A Narrative Review.
DOI: 10.3390/metabo13050675; PMCID: PMC10222258; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37233716/; Search date: 2026-10-18
S321 · PMID 37221157 · P04 · 2023-May-23 · Additional mitochondrial immune/stress context
Title: Gas therapy potentiates aggregation-induced emission luminogen-based photoimmunotherapy of poorly immunogenic tumors through cGAS-STING pathway activation.
DOI: 10.1038/s41467-023-38601-7; PMCID: PMC10205712; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37221157/; Search date: 2026-10-18
S716 · PMID 37204526 · P06 · 2023-May-19 · Secondary or non-primary literature
Title: Non-coding RNAs in breast cancer: with a focus on glucose metabolism reprogramming.
DOI: 10.1007/s12672-023-00687-2; PMCID: PMC10199155; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37204526/; Search date: 2026-10-18
S322 · PMID 37198028 · P03 · 2023-Jul · Additional noncoding-RNA Relay network
Title: m6A Modification Mediates Exosomal LINC00657 to Trigger Breast Cancer Progression Via Inducing Macrophage M2 Polarization.
DOI: 10.1016/j.clbc.2023.04.007; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37198028/; Search date: 2026-10-18
S323 · PMID 37153758 · P03 · 2023 · Secondary or non-primary literature
Title: The landscape of exosomal non-coding RNAs in breast cancer drug resistance, focusing on underlying molecular mechanisms.
DOI: 10.3389/fphar.2023.1152672; PMCID: PMC10154547; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37153758/; Search date: 2026-10-18
S324 · PMID 37047783 · P03 · 2023-Apr-06 · Association, profiling or analytical method
Title: Extracellular Vesicles and Their Zeta Potential as Future Markers Associated with Nutrition and Molecular Biomarkers in Breast Cancer.
DOI: 10.3390/ijms24076810; PMCID: PMC10094966; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37047783/; Search date: 2026-10-18
S325 · PMID 37047163 · P03 · 2023-Mar-24 · Secondary or non-primary literature
Title: Systematic Review and Meta-Analysis of the Impact of Bariatric Surgery on Future Cancer Risk.
DOI: 10.3390/ijms24076192; PMCID: PMC10094585; Publication type: Meta-Analysis;Systematic Review;Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37047163/; Search date: 2026-10-18

S326 · PMID 37046799 · P03 · 2023-Apr-04 · Additional vascular Relay candidate
Title: miR-146a-5p Promotes Angiogenesis and Confers Trastuzumab Resistance in HER2+ Breast Cancer.
DOI: 10.3390/cancers15072138; PMCID: PMC10093389; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV/miRNA-associated angiogenesis or vascular endpoint. Mitochondrial control of loading or recipient function is not established by this bibliographic triage.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37046799/; Search date: 2026-10-18
S327 · PMID 37034479 · P03 · 2023 · Secondary or non-primary literature
Title: Molecular landscape and emerging therapeutic strategies in breast cancer brain metastasis.
DOI: 10.1177/17588359231165976; PMCID: PMC10074632; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37034479/; Search date: 2026-10-18
S328 · PMID 37020524 · P01 · 2023 · Association, profiling or analytical method
Title: Comprehensive analysis of the role of SFXN family in breast cancer.
DOI: 10.1515/med-2023-0685; PMCID: PMC10068752; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37020524/; Search date: 2026-10-18
S329 · PMID 37016537 · P04 · 2023-May · Engineered delivery or composite intervention
Title: Liposomal ATM siRNA delivery for enhancing triple-negaitive breast cancer immune checkpoint blockade therapy.
DOI: 10.1177/08853282231162111; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37016537/; Search date: 2026-10-18
S330 · PMID 37004031 · P03 · 2023-Mar-31 · Association, profiling or analytical method
Title: Analysis of circulating extracellular vesicle derived microRNAs in breast cancer patients with obesity: a potential role for Let-7a.
DOI: 10.1186/s12967-023-04075-w; PMCID: PMC10064709; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/37004031/; Search date: 2026-10-18
S331 · PMID 36999414 · P03 · 2023 · Secondary or non-primary literature
Title: MiRNAs Overexpression and Their Role in Breast Cancer: Implications for Cancer Therapeutics.
DOI: 10.2174/1389450124666230329123409; PMCID: not listed; Publication type: Review;Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36999414/; Search date: 2026-10-18
S332 · PMID 36992332 · P03 · 2023-Feb-24 · Outside breast-cancer experimental scope
Title: Alterations in Abundance and Compartmentalization of miRNAs in Blood Plasma Extracellular Vesicles and Extracellular Condensates during HIV/SIV Infection and Its Modulation by Antiretroviral Therapy (ART) and Delta-9-Tetrahydrocannabinol (Δ9-THC).
DOI: 10.3390/v15030623; PMCID: PMC10053514; Publication type: Journal Article;Research Support, Non-U.S. Gov't;Research Support, N.I.H., Extramural; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Primary study addresses another disease, non-breast tumor or non-tumor toxicity context. Retained as retrieval record; not assigned a breast-cancer RNA-causal tier.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36992332/; Search date: 2026-10-18

S333 · PMID 36980680 · P03 · 2023-Mar-16 · Secondary or non-primary literature
Title: Revisiting the Syndecans: Master Signaling Regulators with Prognostic and Targetable Therapeutic Values in Breast Carcinoma.
DOI: 10.3390/cancers15061794; PMCID: PMC10046401; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36980680/; Search date: 2026-10-18
S334 · PMID 36979159 · P03 · 2023-Mar-19 · Secondary or non-primary literature
Title: Therapeutic Delivery of Tumor Suppressor miRNAs for Breast Cancer Treatment.
DOI: 10.3390/biology12030467; PMCID: PMC10045434; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36979159/; Search date: 2026-10-18
S335 · PMID 36961985 · P03 · 2023-Apr-05 · Engineered delivery or composite intervention
Title: Engineered Cancer-Derived Small Extracellular Vesicle-Liposome Hybrid Delivery System for Targeted Treatment of Breast Cancer.
DOI: 10.1021/acsami.2c22749; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36961985/; Search date: 2026-10-18
S336 · PMID 36942488 · P03 · 2023-Jul · Association, profiling or analytical method
Title: Comprehensive analysis of the exosomal circRNA-miRNA-mRNA network in breast cancer.
DOI: 10.1002/jgm.3500; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36942488/; Search date: 2026-10-18
S337 · PMID 36941811 · P03 · 2024 · Secondary or non-primary literature
Title: Applications of Exosome Vesicles in Different Cancer Types as Biomarkers.
DOI: 10.2174/1566524023666230320120419; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36941811/; Search date: 2026-10-18
S338 · PMID 36938678 · P02 · 2023 · Additional noncoding-RNA network evidence
Title: LINC00460 Facilitates Cell Proliferation and Inhibits Ferroptosis in Breast Cancer Through the miR-320a/MAL2 Axis.
DOI: 10.1177/15330338231164359; PMCID: PMC10028644; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: RNA network or ceRNA study relevant to metabolic/death regulation. Individual small-RNA, target and endpoint contributions require separate appraisal; no pooled LIFT grade inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36938678/; Search date: 2026-10-18
S339 · PMID 36844629 · P03 · 2023-Mar · Broader EV/cancer evidence
Title: Taxol-resistant breast cancer cell-derived exosome-delivered miR-187-5p regulates the growth of breast cancer cells via ABCD2 and Wnt/β-catenin signaling.
DOI: 10.3892/ol.2023.13705; PMCID: PMC9950341; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36844629/; Search date: 2026-10-18
S340 · PMID 36838790 · P03 · 2023-Feb-14 · Secondary or non-primary literature
Title: Critical Review on the Different Roles of Exosomes in TNBC and Exosomal-Mediated Delivery of microRNA/siRNA/lncRNA and Drug Targeting Signalling Pathways in Triple-Negative Breast Cancer.

DOI: 10.3390/molecules28041802; PMCID: PMC9967195; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36838790/; Search date: 2026-10-18

S341 · PMID 36816749 · P03 · 2023-Mar-16 · Secondary or non-primary literature
Title: Breast cancer tumor microenvironment affects Treg/IL-17-producing Treg/Th17 cell axis: Molecular and therapeutic perspectives.
DOI: 10.1016/j.omto.2023.01.001; PMCID: PMC9922830; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36816749/; Search date: 2026-10-18

S342 · PMID 36798307 · P01;P03;P06 · 2023-Feb-09 · Preprint: separate report
Title: Breast adipose tissue-derived extracellular vesicles from women with obesity stimulate mitochondrial-induced dysregulated tumor cell metabolism.
DOI: 10.1101/2023.02.08.527715; PMCID: PMC9934680; Publication type: Preprint;Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Not added as a separately counted published mechanistic source. A later journal report, where identified, is preferred.; Correction/retraction links: UpdateIn:37929643
PubMed: https://pubmed.ncbi.nlm.nih.gov/36798307/; Search date: 2026-10-18

S343 · PMID 36765853 · P03 · 2023-Jan-31 · Broader EV/cancer evidence
Title: Exosome-Transmitted tRF-16-K8J7K1B Promotes Tamoxifen Resistance by Reducing Drug-Induced Cell Apoptosis in Breast Cancer.
DOI: 10.3390/cancers15030899; PMCID: PMC9913720; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36765853/; Search date: 2026-10-18

S344 · PMID 36750173 · P01;P06 · 2023-Jan-10 · Additional small-RNA Rewiring candidate
Title: miRNA-874-3p inhibits the migration, invasion and proliferation of breast cancer cells by targeting VDAC1.
DOI: 10.18632/aging.204474; PMCID: PMC9970320; Publication type: Journal Article;Research Support, N.I.H., Extramural; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36750173/; Search date: 2026-10-18

S345 · PMID 36745138 · P01;P06 · 2023-Apr · Secondary or non-primary literature
Title: Genetic and Epigenetic Regulation of the Innate Immune Response to Gout.
DOI: 10.1080/08820139.2023.2168554; PMCID: not listed; Publication type: Review;Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36745138/; Search date: 2026-10-18

S346 · PMID 36717039 · P03 · 2023-Apr-15 · Additional noncoding-RNA Relay network
Title: Exosomal lncRNA NEAT1 induces paclitaxel resistance in breast cancer cells and promotes cell migration by targeting miR-133b.
DOI: 10.1016/j.gene.2023.147230; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36717039/; Search date: 2026-10-18

S347 · PMID 36710054 · P04 · 2023 · Additional mitochondrial immune/stress context
Title: Quantitative assessment of mitophagy in irradiated cancer cells.
DOI: 10.1016/bs.mcb.2022.09.002; PMCID: not listed; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, Non-U.S. Gov't;Research Support, U.S. Gov't, Non-P.H.S.; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36710054/; Search date: 2026-10-18
S348 · PMID 36684253 · P03 · 2022 · Outside breast-cancer experimental scope
Title: Exosomal miRNA-profiling of pleural effusion in lung adenocarcinoma and tuberculosis.
DOI: 10.3389/fsurg.2022.1050242; PMCID: PMC9852630; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Primary study addresses another disease, non-breast tumor or non-tumor toxicity context. Retained as retrieval record; not assigned a breast-cancer RNA-causal tier.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36684253/; Search date: 2026-10-18
S349 · PMID 36621840 · P03 · 2023-Oct · Broader EV/cancer evidence
Title: Doxorubicin resistance in breast cancer xenografts and cell lines can be counterweighted by microRNA-140-3p, through PD-L1 suppression.
DOI: 10.14670/HH-18-577; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36621840/; Search date: 2026-10-18
S350 · PMID 36555190 · P04 · 2022-Dec-08 · Additional mitochondrial immune/stress context
Title: ONC201-Induced Mitochondrial Dysfunction, Senescence-like Phenotype, and Sensitization of Cultured BT474 Human Breast Cancer Cells to TRAIL.
DOI: 10.3390/ijms232415551; PMCID: PMC9779726; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36555190/; Search date: 2026-10-18
S351 · PMID 36548440 · P01 · 2023-Feb · Additional small-RNA Rewiring candidate
Title: Induced expression of miR-1250-5p exerts tumor suppressive role in triple-negative breast cancer cells.
DOI: 10.1002/jcb.30362; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36548440/; Search date: 2026-10-18
S352 · PMID 36535227 · P04 · 2023-Jan · Association, profiling or analytical method
Title: Expression of Treg-associated lncRNAs in breast cancer.
DOI: 10.1016/j.prp.2022.154270; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36535227/; Search date: 2026-10-18
S353 · PMID 36522479 · P03 · 2023-Feb · Broader EV/cancer evidence
Title: Exosomal transfer of miR-181b-5p confers senescence-mediated doxorubicin resistance via modulating BCLAF1 in breast cancer.
DOI: 10.1038/s41416-022-02077-x; PMCID: PMC9938221; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/36522479/; Search date: 2026-10-18

S354 · PMID 36497445 · P04 · 2022-Dec-02 · Additional mitochondrial immune/stress context

Title: The Microtubule Destabilizer Eribulin Synergizes with STING Agonists to Promote Antitumor Efficacy in Triple-Negative Breast Cancer Models.

DOI: 10.3390/cancers14235962; PMCID: PMC9740651; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/36497445/; Search date: 2026-10-18

S355 · PMID 36467585 · P01 · 2022 · Secondary or non-primary literature

Title: N1-methyladenosine modification in cancer biology: Current status and future perspectives.

DOI: 10.1016/j.csbj.2022.11.045; PMCID: PMC9712505; Publication type: Journal Article;Review; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/36467585/; Search date: 2026-10-18

S356 · PMID 36463188 · P03 · 2022-Dec-03 · Broader EV/cancer evidence

Title: Monocytes educated by cancer-associated fibroblasts secrete exosomal miR-181a to activate AKT signaling in breast cancer cells.

DOI: 10.1186/s12967-022-03780-2; PMCID: PMC9719191; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/36463188/; Search date: 2026-10-18

S357 · PMID 36438660 · P03 · 2022 · Secondary or non-primary literature

Title: The application of exosomes in the treatment of triple-negative breast cancer.

DOI: 10.3389/fmolb.2022.1022725; PMCID: PMC9684310; Publication type: Journal Article;Review; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/36438660/; Search date: 2026-10-18

S717 · PMID 36331032 · P06 · 2023-Jan · Correction notice

Title: [Corrigendum] miR-382 inhibits breast cancer progression and metastasis by affecting the M2 polarization of tumor-associated macrophages by targeting PGC-1α.

DOI: 10.3892/ijo.2022.5449; PMCID: PMC9699725; Publication type: Published Erratum; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Correction linked to a primary publication; not an independent mechanistic study.; Correction/retraction links: ErratumFor:36069230

PubMed: https://pubmed.ncbi.nlm.nih.gov/36331032/; Search date: 2026-10-18

S358 · PMID 36329436 · P02 · 2022-Nov-03 · Engineered delivery or composite intervention

Title: Ferroptosis assassinates tumor.

DOI: 10.1186/s12951-022-01663-8; PMCID: PMC9632125; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and relevant abstract passages; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/36329436/; Search date: 2026-10-18

S359 · PMID 36312586 · P01 · 2022 · Association, profiling or analytical method

Title: Database Mining Detected a Cuproptosis-Related Prognostic Signature and a Related Regulatory Axis in Breast Cancer.

DOI: 10.1155/2022/9004830; PMCID: PMC9605827; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and relevant abstract passages; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/36312586/; Search date: 2026-10-18

S360 · PMID 36281649 · P03 · 2022-Oct-25 · Additional noncoding-RNA Relay network
Title: Docetaxel-resistant triple-negative breast cancer cell-derived exosomal lncRNA LINC00667 reduces the chemosensitivity of breast cancer cells to docetaxel via targeting miR-200b-3p/Bcl-2 axis.
DOI: 10.4081/ejh.2022.3529; PMCID: PMC9667572; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36281649/; Search date: 2026-10-18
S361 · PMID 36276272 · P03 · 2022 · Broader EV/cancer evidence
Title: Exosome-Mediated Transfer of miR-3613-5p Enhances Doxorubicin Resistance by Suppression of PTEN Expression in Breast Cancer Cells.
DOI: 10.1155/2022/9494910; PMCID: PMC9586760; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36276272/; Search date: 2026-10-18
S362 · PMID 36266968 · P03 · 2023-Jan · Additional immune Relay candidate
Title: Macrophages in Tumor-Associated Adipose Microenvironment Accelerate Tumor Progression.
DOI: 10.1002/adbi.202200161; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated immune-cell or immune-response study. Relevant to recipient context; mitochondrial source or mediator is not inferred from immune activity.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36266968/; Search date: 2026-10-18
S363 · PMID 36238993 · P01 · 2022-Oct · Association, profiling or analytical method
Title: Microarray data reveal potential genes that regulate triple-negative breast cancer.
DOI: 10.1177/03000605221130188; PMCID: PMC9575453; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36238993/; Search date: 2026-10-18
S364 · PMID 36222020 · P03 · 2022 · Secondary or non-primary literature
Title: Cancer-associated Fibroblasts Communicate with Breast Tumor Cells Through Extracellular Vesicles in Tumor Development.
DOI: 10.1177/15330338221131647; PMCID: PMC9558853; Publication type: Journal Article;Review;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36222020/; Search date: 2026-10-18
S365 · PMID 36189796 · P03 · 2022-Oct-03 · Secondary or non-primary literature
Title: Harnessing tumorous flaws for immune supremacy: is miRNA-155 the weak link in breast cancer progression?
DOI: 10.1172/JCI163010; PMCID: PMC9525109; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, Non-U.S. Gov't;Comment; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: CommentOn:35925680
PubMed: https://pubmed.ncbi.nlm.nih.gov/36189796/; Search date: 2026-10-18
S366 · PMID 36096820 · P03 · 2022-Sep-12 · Secondary or non-primary literature
Title: Small extracellular vesicles: from promoting pre-metastatic niche formation to therapeutic strategies in breast cancer.
DOI: 10.1186/s12964-022-00945-w; PMCID: PMC9465880; Publication type: Journal Article;Review;Video-Audio Media;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36096820/; Search date: 2026-10-18

S367 · PMID 36076583 · P01;P05;P06 · 2022-Sep · Additional organelle-transfer context
Title: Regulation of mitochondrial fusion and mitophagy by intra-tumoral delivery of membrane-fused mitochondria or Midiv-1 enhances sensitivity to doxorubicin in triple-negative breast cancer.
DOI: 10.1016/j.biopha.2022.113484; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Whole-organelle transfer or transplantation is relevant to Relay, but does not identify a necessary transferred small-RNA cargo.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36076583/; Search date: 2026-10-18
S368 · PMID 36074234 · P01 · 2023-Jan · Association, profiling or analytical method
Title: Bioinformatic Analysis Divulged Novel Prognostic Circulating MicroRNAs and Their Potential Target Genes in Breast Cancer.
DOI: 10.1007/s12010-022-04151-9; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36074234/; Search date: 2026-10-18
S718 · PMID 36069230 · P06 · 2022-Oct · Additional small-RNA Rewiring candidate
Title: miR-382 inhibits breast cancer progression and metastasis by affecting the M2 polarization of tumor-associated macrophages by targeting PGC-1α.
DOI: 10.3892/ijo.2022.5416; PMCID: PMC9477106; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: ErratumIn:36331032
PubMed: https://pubmed.ncbi.nlm.nih.gov/36069230/; Search date: 2026-10-18
S369 · PMID 36064221 · P04 · 2022 · Additional mitochondrial immune/stress context
Title: RT-PCR-assisted quantification of type I IFN responses in irradiated cancer cells.
DOI: 10.1016/bs.mcb.2022.05.005; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't;Research Support, U.S. Gov't, Non-P.H.S.; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36064221/; Search date: 2026-10-18
S370 · PMID 36038948 · P03 · 2022-Aug-29 · Additional noncoding-RNA Relay network
Title: CircRNA-CREIT inhibits stress granule assembly and overcomes doxorubicin resistance in TNBC by destabilizing PKR.
DOI: 10.1186/s13045-022-01345-w; PMCID: PMC9425971; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36038948/; Search date: 2026-10-18
S371 · PMID 36012109 · P03 · 2022-Aug-09 · Secondary or non-primary literature
Title: Exosomes in Breast Cancer: Involvement in Tumor Dissemination and Prospects for Liquid Biopsy.
DOI: 10.3390/ijms23168845; PMCID: PMC9408748; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36012109/; Search date: 2026-10-18
S372 · PMID 36002186 · P03 · 2022-Aug · Additional immune Relay candidate
Title: Snail-regulated exosomal microRNA-21 suppresses NLRP3 inflammasome activity to enhance cisplatin resistance.
DOI: 10.1136/jitc-2022-004832; PMCID: PMC9413180; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: EV-associated immune-cell or immune-response study. Relevant to recipient context; mitochondrial source or mediator is not inferred from immune activity.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/36002186/; Search date: 2026-10-18
S373 · PMID 35963496 · P01 · 2022-Sep · Secondary or non-primary literature
Title: Mitochondrial miRNAs (MitomiRs): Their potential roles in breast and other cancers.
DOI: 10.1016/j.mito.2022.08.002; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35963496/; Search date: 2026-10-18
S374 · PMID 35955480 · P03 · 2022-Jul-28 · Secondary or non-primary literature
Title: Spotlight on Exosomal Non-Coding RNAs in Breast Cancer: An In Silico Analysis to Identify Potential lncRNA/circRNA-miRNA-Target Axis.
DOI: 10.3390/ijms23158351; PMCID: PMC9369058; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35955480/; Search date: 2026-10-18
S375 · PMID 35941273 · P03 · 2022-Aug-08 · Broader EV/cancer evidence
Title: Extracellular vesicles derived from Wharton's Jelly mesenchymal stem cells inhibit the tumor environment via the miR-125b/HIF1α signaling pathway.
DOI: 10.1038/s41598-022-17767-y; PMCID: PMC9359975; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35941273/; Search date: 2026-10-18
S719 · PMID 35936710 · P06 · 2022 · Additional small-RNA Rewiring candidate
Title: Mutant p53-microRNA-200c-ZEB2-Axis-Induced CPT1C Elevation Contributes to Metabolic Reprogramming and Tumor Progression in Basal-Like Breast Cancers.
DOI: 10.3389/fonc.2022.940402; PMCID: PMC9351713; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35936710/; Search date: 2026-10-18
S376 · PMID 35884604 · P01 · 2022-Jul-21 · Additional small-RNA Rewiring candidate
Title: NPC1 Confers Metabolic Flexibility in Triple Negative Breast Cancer.
DOI: 10.3390/cancers14143543; PMCID: PMC9319388; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35884604/; Search date: 2026-10-18
S377 · PMID 35852149 · P01 · 2022-Jul-29 · Association, profiling or analytical method
Title: Differential expression profile of mRNAs, lncRNAs, and circRNAs reveals potential molecular mechanism in breast cancer.
DOI: 10.1042/BSR20220645; PMCID: PMC9338430; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35852149/; Search date: 2026-10-18

S378 · PMID 35850524 · P01 · 2023-Jan · Additional small-RNA Rewiring candidate
Title: MicroRNA-Mediated Mitochondrial Dysfunction Is Involved in the Anti-triple-Negative Breast Cancer Cell Activity of Phytosesquiterpene Lactones.
DOI: 10.1089/ars.2021.0251; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35850524/; Search date: 2026-10-18
S379 · PMID 35813865 · P03 · 2022 · Additional noncoding-RNA Relay network
Title: Exosomes Derived from Tumor Cells Initiate Breast Cancer Cell Metastasis and Chemoresistance through a MALAT1-Dependent Mechanism.
DOI: 10.1155/2022/5483523; PMCID: PMC9262507; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35813865/; Search date: 2026-10-18
S380 · PMID 35753437 · P01 · 2022-Sep-01 · Additional small-RNA Rewiring candidate
Title: HMGB3 inhibition by miR-142-3p/sh-RNA modulates autophagy and induces apoptosis via ROS accumulation and mitochondrial dysfunction and reduces the tumorigenic potential of human breast cancer cells.
DOI: 10.1016/j.lfs.2022.120727; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35753437/; Search date: 2026-10-18
S381 · PMID 35743133 · P04 · 2022-Jun-15 · Additional mitochondrial immune/stress context
Title: Altered Retrograde Signaling Patterns in Breast Cancer Cells Cybrids with H and J Mitochondrial DNA Haplogroups.
DOI: 10.3390/ijms23126687; PMCID: PMC9224519; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35743133/; Search date: 2026-10-18
S382 · PMID 35710947 · P03 · 2022-Jun-16 · Additional noncoding-RNA Relay network
Title: MALAT1-dependent hsa_circ_0076611 regulates translation rate in triple-negative breast cancer.
DOI: 10.1038/s42003-022-03539-x; PMCID: PMC9203778; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35710947/; Search date: 2026-10-18
S383 · PMID 35688263 · P03 · 2022-Sep-01 · Engineered delivery or composite intervention
Title: Exosomes deliver lncRNA DARS-AS1 siRNA to inhibit chronic unpredictable mild stress-induced TNBC metastasis.
DOI: 10.1016/j.canlet.2022.215781; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35688263/; Search date: 2026-10-18
S384 · PMID 35679722 · P03 · 2022-Aug · Secondary or non-primary literature
Title: Emerging role of LINC00461 in cancer.
DOI: 10.1016/j.biopha.2022.113239; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/35679722/; Search date: 2026-10-18

S385 · PMID 35673569 · P03 · 2022 · Additional vascular Relay candidate

Title: Exosomal EPHA2 derived from highly metastatic breast cancer cells promotes angiogenesis by activating the AMPK signaling pathway through Ephrin A1-EPHA2 forward signaling.

DOI: 10.7150/thno.72404; PMCID: PMC9169374; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: EV/miRNA-associated angiogenesis or vascular endpoint. Mitochondrial control of loading or recipient function is not established by this bibliographic triage.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/35673569/; Search date: 2026-10-18

S386 · PMID 35656866 · P03 · 2022-Jun · Additional immune Relay candidate

Title: Endothelial extracellular vesicles promote tumour growth by tumour-associated macrophage reprogramming.

DOI: 10.1002/jev2.12228; PMCID: PMC9164145; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: EV-associated immune-cell or immune-response study. Relevant to recipient context; mitochondrial source or mediator is not inferred from immune activity.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/35656866/; Search date: 2026-10-18

S387 · PMID 35655918 · P03 · 2022 · Broader EV/cancer evidence

Title: Extracellular Vesicles Carrying miR-887-3p Promote Breast Cancer Cell Drug Resistance by Targeting BTBD7 and Activating the Notch1/Hes1 Signaling Pathway.

DOI: 10.1155/2022/5762686; PMCID: PMC9152417; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/35655918/; Search date: 2026-10-18

S388 · PMID 35637408 · P03 · 2022-Jun · Additional metabolic Relay candidate

Title: Cancer-cell-secreted extracellular vesicles suppress insulin secretion through miR-122 to impair systemic glucose homeostasis and contribute to tumour growth.

DOI: 10.1038/s41556-022-00919-7; PMCID: PMC9233030; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, Non-U.S. Gov't; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: EV-associated metabolic communication with a specified recipient or metabolic process. Retained as broader Relay evidence; mitochondrial mediation is not assumed from a metabolic endpoint.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/35637408/; Search date: 2026-10-18

S389 · PMID 35615145 · P01 · 2022 · Protein, drug or EV intervention context

Title: ST08 Altered NF-κB Pathway in Breast Cancer Cells In Vitro as Revealed by miRNA-mRNA Analysis and Enhanced the Effect of Cisplatin on Tumour Reduction in EAC Mouse Model.

DOI: 10.3389/fonc.2022.835027; PMCID: PMC9125255; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and relevant abstract passages; Reason: The intervention principally concerns a protein, compound or composite EV exposure; associated miRNA expression alone is not treated as RNA-specific causal evidence.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/35615145/; Search date: 2026-10-18

S390 · PMID 35583065 · P03 · 2022-Apr · Additional immune Relay candidate

Title: [Plasma exosomal miR-335-5p serves as a diagnostic indicator and inhibits immune escape in triple-negative breast cancer].

DOI: not listed; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: EV-associated immune-cell or immune-response study. Relevant to recipient context; mitochondrial source or mediator is not inferred from immune activity.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/35583065/; Search date: 2026-10-18

S391 · PMID 35582044 · P03 · 2020 · Secondary or non-primary literature

Title: Predictive value of exosomes and their cargo in drug response/resistance of breast cancer patients.

DOI: 10.20517/cdr.2019.90; PMCID: PMC9094052; Publication type: Journal Article;Review; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35582044/; Search date: 2026-10-18
S392 · PMID 35578228 · P03 · 2022-May-16 · Secondary or non-primary literature
Title: Exosomal microRNAs shuttling between tumor cells and macrophages: cellular interactions and novel therapeutic strategies.
DOI: 10.1186/s12935-022-02594-y; PMCID: PMC9109313; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35578228/; Search date: 2026-10-18
S393 · PMID 35565446 · P03 · 2022-May-07 · Secondary or non-primary literature
Title: Circulating miRNAs in Breast Cancer Diagnosis and Prognosis.
DOI: 10.3390/cancers14092317; PMCID: PMC9101355; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35565446/; Search date: 2026-10-18
S394 · PMID 35563661 · P03 · 2022-May-09 · Secondary or non-primary literature
Title: Dormancy in Breast Cancer, the Role of Autophagy, lncRNAs, miRNAs and Exosomes.
DOI: 10.3390/ijms23095271; PMCID: PMC9105119; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35563661/; Search date: 2026-10-18
S395 · PMID 35538484 · P03 · 2022-May-10 · Secondary or non-primary literature
Title: Liquid biopsies to occult brain metastasis.
DOI: 10.1186/s12943-022-01577-x; PMCID: PMC9088117; Publication type: Journal Article;Review;Research Support, U.S. Gov't, Non-P.H.S.;Research Support, N.I.H., Extramural; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35538484/; Search date: 2026-10-18
S396 · PMID 35534582 · P03 · 2022-Jul · Secondary or non-primary literature
Title: Prospect of exosomal circular RNAs in breast Cancer: presents and future.
DOI: 10.1007/s11033-022-07472-4; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35534582/; Search date: 2026-10-18
S397 · PMID 35460835 · P03 · 2022-Jul · Additional noncoding-RNA Relay network
Title: Breast cancer derived exosomes promoted angiogenesis of endothelial cells in microenvironment via circHIPK3/miR-124-3p/MTDH axis.
DOI: 10.1016/j.cellsig.2022.110338; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35460835/; Search date: 2026-10-18
S398 · PMID 35398617 · P03 · 2022-May · Association, profiling or analytical method
Title: Exosomal-microRNA transcriptome profiling of Parental and CSC-like MDA-MB-231 cells in response to cisplatin treatment.
DOI: 10.1016/j.prp.2022.153854; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35398617/; Search date: 2026-10-18

S399 · PMID 35392236 · P02 · 2022 · Secondary or non-primary literature
Title: Breast Cancer Stem-Like Cells in Drug Resistance: A Review of Mechanisms and Novel Therapeutic Strategies to Overcome Drug Resistance.
DOI: 10.3389/fonc.2022.856974; PMCID: PMC8979779; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35392236/; Search date: 2026-10-18
S400 · PMID 35342359 · P02 · 2022 · Secondary or non-primary literature
Title: Ferroptosis in Cancer Progression: Role of Noncoding RNAs.
DOI: 10.7150/ijbs.66917; PMCID: PMC8935228; Publication type: Journal Article;Research Support, Non-U.S. Gov't;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35342359/; Search date: 2026-10-18
S720 · PMID 35320184 · P06 · 2022-Feb · Secondary or non-primary literature
Title: Roles of microRNAs in metabolic reprogramming of breast cancer.
DOI: 10.47391/JPMA.1132; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35320184/; Search date: 2026-10-18
S401 · PMID 35297485 · P01 · 2022-Apr-15 · Additional small-RNA Rewiring candidate
Title: Expression analysis and function of mitochondrial genome-encoded microRNAs.
DOI: 10.1242/jcs.258937; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and complete abstract; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35297485/; Search date: 2026-10-18
S402 · PMID 35279198 · P01;P06 · 2022-Mar-12 · Additional small-RNA Rewiring candidate
Title: Inhibition of the mitochondrial protein Opa1 curtails breast cancer growth.
DOI: 10.1186/s13046-022-02304-6; PMCID: PMC8917763; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35279198/; Search date: 2026-10-18
S403 · PMID 35224148 · P03 · 2022-Mar · Secondary or non-primary literature
Title: Tumor microenvironment pathways: Cross regulation in breast cancer metastasis.
DOI: 10.1016/j.gendis.2020.11.015; PMCID: PMC8843880; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35224148/; Search date: 2026-10-18
S404 · PMID 35173168 · P03 · 2022-Feb-16 · Additional immune Relay candidate
Title: Lin28B-high breast cancer cells promote immune suppression in the lung pre-metastatic niche via exosomes and support cancer progression.
DOI: 10.1038/s41467-022-28438-x; PMCID: PMC8850492; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated immune-cell or immune-response study. Relevant to recipient context; mitochondrial source or mediator is not inferred from immune activity.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35173168/; Search date: 2026-10-18

S405 · PMID 35091089 · P03 · 2022-Mar · Additional noncoding-RNA Relay network
Title: Endoplasmic reticulum stress promotes breast cancer cells to release exosomes circ_0001142 and induces M2 polarization of macrophages to regulate tumor progression.
DOI: 10.1016/j.phrs.2022.106098; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35091089/; Search date: 2026-10-18
S406 · PMID 35036357 · P03 · 2021 · Excluded: retraction status
Title: Retraction: Exosomal MicroRNA-221-3p Confers Adriamycin Resistance in Breast Cancer Cells by Targeting PIK3R1.
DOI: 10.3389/fonc.2021.839904; PMCID: PMC8756093; Publication type: Retraction Notice; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: PubMed identifies a retracted publication or retraction notice; not used as positive mechanistic evidence.; Correction/retraction links: RetractionOf:32426266
PubMed: https://pubmed.ncbi.nlm.nih.gov/35036357/; Search date: 2026-10-18
S407 · PMID 35032831 · P03 · 2022-Feb · Secondary or non-primary literature
Title: Signaling pathways modulated by miRNAs in breast cancer angiogenesis and new therapeutics.
DOI: 10.1016/j.prp.2022.153764; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/35032831/; Search date: 2026-10-18
S408 · PMID 35027669 · P03 · 2022-Apr · Additional noncoding-RNA Relay network
Title: Exosomal circCARM1 from spheroids reprograms cell metabolism by regulating PFKFB2 in breast cancer.
DOI: 10.1038/s41388-021-02061-4; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: ErratumIn:35194153
PubMed: https://pubmed.ncbi.nlm.nih.gov/35027669/; Search date: 2026-10-18
S409 · PMID 35023068 · P03 · 2022-May · Broader EV/cancer evidence
Title: Mesenchymal stem cell-derived exosome mir-342-3p inhibits metastasis and chemo-resistance of breast cancer through regulating ID4.
DOI: 10.1007/s13258-021-01200-1; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: ErratumIn:37843782
PubMed: https://pubmed.ncbi.nlm.nih.gov/35023068/; Search date: 2026-10-18
S410 · PMID 34970595 · P03 · 2021 · Secondary or non-primary literature
Title: Long-Term Cognitive Dysfunction in Cancer Survivors.
DOI: 10.3389/fmolb.2021.770413; PMCID: PMC8713760; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34970595/; Search date: 2026-10-18
S411 · PMID 34926237 · P01 · 2021 · Additional small-RNA Rewiring candidate
Title: MicroRNA-1246 Mediates Drug Resistance and Metastasis in Breast Cancer by Targeting NFE2L3.
DOI: 10.3389/fonc.2021.677168; PMCID: PMC8671458; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34926237/; Search date: 2026-10-18

S412 · PMID 34900733 · P04 · 2021 · Additional mitochondrial-dsRNA immune evidence
Title: Hypoxia Regulates Endogenous Double-Stranded RNA Production via Reduced Mitochondrial DNA Transcription.
DOI: 10.3389/fonc.2021.779739; PMCID: PMC8651540; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Hypoxia alters mitochondrial transcription and dsRNA-associated type-I interferon responses in breast cancer; no individual mitochondrial small-RNA species is established.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34900733/; Search date: 2026-10-18
S413 · PMID 34875250 · P03 · 2022-Jan-15 · Secondary or non-primary literature
Title: Enigmatic role of exosomes in breast cancer progression and therapy.
DOI: 10.1016/j.lfs.2021.120210; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34875250/; Search date: 2026-10-18
S414 · PMID 34847299 · P05 · 2022-Feb-16 · Additional organelle-transfer context
Title: Movement of Mitochondria with Mutant DNA through Extracellular Vesicles Helps Cancer Cells Acquire Chemoresistance.
DOI: 10.1002/cmdc.202100642; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Whole-organelle transfer or transplantation is relevant to Relay, but does not identify a necessary transferred small-RNA cargo.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34847299/; Search date: 2026-10-18
S415 · PMID 34838007 · P01 · 2021-Nov-27 · Existing panel source
Title: Let-7a induces metabolic reprogramming in breast cancer cells via targeting mitochondrial encoded ND4.
DOI: 10.1186/s12935-021-02339-3; PMCID: PMC8627041; Publication type: Journal Article; Claim ID: R2
Screening basis: PubMed title and publication-type metadata; Reason: Candidate mitochondrial residency and an mtDNA-encoded ND4 interaction; opposite ND4 directions in two breast-cancer cell lines.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34838007/; Search date: 2026-10-18
S416 · PMID 34829498 · P03 · 2021-Nov-20 · Secondary or non-primary literature
Title: Advances of Exosomal miRNAs in Breast Cancer Progression and Diagnosis.
DOI: 10.3390/diagnostics11112151; PMCID: PMC8622700; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34829498/; Search date: 2026-10-18
S417 · PMID 34821131 · P01 · 2021-Nov-19 · Secondary or non-primary literature
Title: MitomiRs: their roles in mitochondria and importance in cancer cell metabolism.
DOI: 10.2478/raon-2021-0042; PMCID: PMC8647792; Publication type: Journal Article;Research Support, Non-U.S. Gov't;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34821131/; Search date: 2026-10-18
S418 · PMID 34795441 · P05 · 2022-Jan · Existing panel source
Title: Intercellular nanotubes mediate mitochondrial trafficking between cancer and immune cells.
DOI: 10.1038/s41565-021-01000-4; PMCID: PMC10071558; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, Non-U.S. Gov't;Research Support, U.S. Gov't, Non-P.H.S.; Claim ID: R21
Screening basis: PubMed title and publication-type metadata; Reason: Immune-cell-to-cancer mitochondrial trafficking; non-RNA transfer mechanism control.; Correction/retraction links: CommentIn:34795442
PubMed: https://pubmed.ncbi.nlm.nih.gov/34795441/; Search date: 2026-10-18
S419 · PMID 34771077 · P03 · 2021-Nov-03 · Broader EV/cancer evidence
Title: Towards Unravelling the Role of ERα-Targeting miRNAs in the Exosome-Mediated Transferring of the Hormone Resistance.

DOI: 10.3390/molecules26216661; PMCID: PMC8588049; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34771077/; Search date: 2026-10-18
S420 · PMID 34762598 · P03 · 2021-Nov-11 · Broader EV/cancer evidence
Title: Restoration of aged hematopoietic cells by their young counterparts through instructive microvesicles release.
DOI: 10.18632/aging.203689; PMCID: PMC8610119; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34762598/; Search date: 2026-10-18
S421 · PMID 34738322 · P05 · 2022-Jan · Additional organelle-transfer context
Title: Tunneling nanotube formation promotes survival against 5-fluorouracil in MCF-7 breast cancer cells.
DOI: 10.1002/2211-5463.13324; PMCID: PMC8727926; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Whole-organelle transfer or transplantation is relevant to Relay, but does not identify a necessary transferred small-RNA cargo.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34738322/; Search date: 2026-10-18
S422 · PMID 34733934 · P03 · 2021-Sep · Additional noncoding-RNA Relay network
Title: Analysis of the expression profile of serum exosomal lncRNA in breast cancer patients.
DOI: 10.21037/atm-21-3483; PMCID: PMC8506548; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34733934/; Search date: 2026-10-18
S423 · PMID 34716206 · P04 · 2021-Oct · Additional mitochondrial immune/stress context
Title: Aged neutrophils form mitochondria-dependent vital NETs to promote breast cancer lung metastasis.
DOI: 10.1136/jitc-2021-002875; PMCID: PMC8559246; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: ErratumIn:34836889
PubMed: https://pubmed.ncbi.nlm.nih.gov/34716206/; Search date: 2026-10-18
S424 · PMID 34707990 · P03 · 2021 · Secondary or non-primary literature
Title: Tumor-Derived Exosomal Non-Coding RNAs: The Emerging Mechanisms and Potential Clinical Applications in Breast Cancer.
DOI: 10.3389/fonc.2021.738945; PMCID: PMC8544822; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34707990/; Search date: 2026-10-18
S425 · PMID 34671433 · P03 · 2021-Dec · Association, profiling or analytical method
Title: Exosomal miRNA profiles of triple-negative breast cancer in neoadjuvant treatment.
DOI: 10.3892/ol.2021.13080; PMCID: PMC8503811; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34671433/; Search date: 2026-10-18
S426 · PMID 34668628 · P02 · 2021-Nov · Additional noncoding-RNA network evidence
Title: CircGFRA1 facilitates the malignant progression of HER-2-positive breast cancer via acting as a sponge of miR-1228 and enhancing AIFM2 expression.
DOI: 10.1111/jcmm.16963; PMCID: PMC8572792; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned

Screening basis: PubMed title and relevant abstract passages; Reason: RNA network or ceRNA study relevant to metabolic/death regulation. Individual small-RNA, target and endpoint contributions require separate appraisal; no pooled LIFT grade inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34668628/; Search date: 2026-10-18
S427 · PMID 34657047 · P03 · 2021-Oct · Broader EV/cancer evidence
Title: [Clinical Application of Liquid Biopsy for Breast Cancer Diagnosis and Treatment].
DOI: not listed; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34657047/; Search date: 2026-10-18
S428 · PMID 34652079 · P01;P04 · 2021-Oct · Additional mitochondrial immune/stress context
Title: Long Noncoding-RNA Component of Mitochondrial RNA Processing Endoribonuclease Promotes Carcinogenesis in Triple-Negative Breast Cancer Cells via the Competing Endogenous RNA Mechanism.
DOI: 10.4048/jbc.2021.24.e42; PMCID: PMC8561136; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34652079/; Search date: 2026-10-18
S429 · PMID 34638377 · P03 · 2021-Sep-29 · Secondary or non-primary literature
Title: Circulating and Intracellular miRNAs as Prognostic and Predictive Factors in HER2-Positive Early Breast Cancer Treated with Neoadjuvant Chemotherapy: A Review of the Literature.
DOI: 10.3390/cancers13194894; PMCID: PMC8508299; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34638377/; Search date: 2026-10-18
S430 · PMID 34621748 · P01 · 2021 · Additional noncoding-RNA network evidence
Title: LncRNA RNA Component of Mitochondrial RNA-Processing Endoribonuclease Promotes AKT-Dependent Breast Cancer Growth and Migration by Trapping MicroRNA-206.
DOI: 10.3389/fcell.2021.730538; PMCID: PMC8490808; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: RNA network or ceRNA study relevant to metabolic/death regulation. Individual small-RNA, target and endpoint contributions require separate appraisal; no pooled LIFT grade inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34621748/; Search date: 2026-10-18
S431 · PMID 34589347 · P03 · 2021-Aug · Secondary or non-primary literature
Title: Exosome-Derived microRNA: Efficacy in Cancer.
DOI: 10.7759/cureus.17441; PMCID: PMC8460558; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34589347/; Search date: 2026-10-18
S432 · PMID 34572835 · P03 · 2021-Sep-14 · Secondary or non-primary literature
Title: Extracellular Vesicle-Associated miRNAs and Chemoresistance: A Systematic Review.
DOI: 10.3390/cancers13184608; PMCID: PMC8472653; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34572835/; Search date: 2026-10-18
S433 · PMID 34571083 · P01;P02 · 2021-Dec-01 · Existing panel source
Title: SLC7A11/ xCT is a target of miR-5096 and its restoration partially rescues miR-5096-mediated ferroptosis and anti-tumor effects in human breast cancer cells.
DOI: 10.1016/j.canlet.2021.09.033; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: R10
Screening basis: PubMed title and publication-type metadata; Reason: SLC7A11-linked ferroptosis; partial rescue provides a concrete Moderate-versus-High boundary.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/34571083/; Search date: 2026-10-18

S434 · PMID 34421983 · P01 · 2021 · Association, profiling or analytical method

Title: A TIMM17A Regulatory Network Contributing to Breast Cancer.

DOI: 10.3389/fgene.2021.658154; PMCID: PMC8375323; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and relevant abstract passages; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/34421983/; Search date: 2026-10-18

S435 · PMID 34368150 · P03 · 2021 · Engineered delivery or composite intervention

Title: Extracellular Vesicles From the Human Natural Killer Cell Line NK3.3 Have Broad and Potent Anti-Tumor Activity.

DOI: 10.3389/fcell.2021.698639; PMCID: PMC8343581; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/34368150/; Search date: 2026-10-18

S721 · PMID 34312906 · P06 · 2022-Apr · Outside breast-cancer experimental scope

Title: Vitamin D modulates hepatic microRNAs and mitigates tamoxifen-induced steatohepatitis in female rats.

DOI: 10.1111/fcp.12720; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and relevant abstract passages; Reason: Primary study addresses another disease, non-breast tumor or non-tumor toxicity context. Retained as retrieval record; not assigned a breast-cancer RNA-causal tier.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/34312906/; Search date: 2026-10-18

S722 · PMID 34312289 · P06 · 2021-Nov · Additional small-RNA Rewiring candidate

Title: Mutant p53 Attenuates Oxidative Phosphorylation and Facilitates Cancer Stemness through Downregulating miR-200c-PCK2 Axis in Basal-Like Breast Cancer.

DOI: 10.1158/1541-7786.MCR-21-0098; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned

Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/34312289/; Search date: 2026-10-18

S436 · PMID 34312217 · P04 · 2021-Oct · Additional mitochondrial immune/stress context

Title: Eribulin Activates the cGAS-STING Pathway via the Cytoplasmic Accumulation of Mitochondrial DNA.

DOI: 10.1124/molpharm.121.000297; PMCID: PMC8626644; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, Non-U.S. Gov't; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/34312217/; Search date: 2026-10-18

S437 · PMID 34298743 · P03 · 2021-Jul-14 · Additional noncoding-RNA Relay network

Title: Identification and Roles of miR-29b-1-3p and miR29a-3p-Regulated and Non-Regulated lncRNAs in Endocrine-Sensitive and Resistant Breast Cancer Cells.

DOI: 10.3390/cancers13143530; PMCID: PMC8307416; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/34298743/; Search date: 2026-10-18

S438 · PMID 34295807 · P03 · 2021 · Additional noncoding-RNA Relay network

Title: Circular RNA circ-MMP11 Contributes to Lapatinib Resistance of Breast Cancer Cells by Regulating the miR-153-3p/ANLN Axis.

DOI: 10.3389/fonc.2021.639961; PMCID: PMC8290203; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34295807/; Search date: 2026-10-18
S439 · PMID 34294040 · P03 · 2021-Jul-16 · Broader EV/cancer evidence
Title: Breast cancer cell-derived extracellular vesicles transfer miR-182-5p and promote breast carcinogenesis via the CMTM7/EGFR/AKT axis.
DOI: 10.1186/s10020-021-00338-8; PMCID: PMC8296627; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34294040/; Search date: 2026-10-18
S440 · PMID 34292880 · P03 · 2021-Jul-22 · Broader EV/cancer evidence
Title: Exosomal miRNA-205 promotes breast cancer chemoresistance and tumorigenesis through E2F1.
DOI: 10.18632/aging.203298; PMCID: PMC8351670; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34292880/; Search date: 2026-10-18
S441 · PMID 34249913 · P03 · 2021 · Broader EV/cancer evidence
Title: Breast Tumor-Derived Exosomal MicroRNA-200b-3p Promotes Specific Organ Metastasis Through Regulating CCL2 Expression in Lung Epithelial Cells.
DOI: 10.3389/fcell.2021.657158; PMCID: PMC8264457; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34249913/; Search date: 2026-10-18
S442 · PMID 34238918 · P03 · 2021-Jul-08 · Additional metabolic Relay candidate
Title: Carcinoma associated fibroblasts small extracellular vesicles with low miR-7641 promotes breast cancer stemness and glycolysis by HIF-1α.
DOI: 10.1038/s41420-021-00524-x; PMCID: PMC8266840; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated metabolic communication with a specified recipient or metabolic process. Retained as broader Relay evidence; mitochondrial mediation is not assumed from a metabolic endpoint.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34238918/; Search date: 2026-10-18
S443 · PMID 34207035 · P03 · 2021-Jun-18 · Secondary or non-primary literature
Title: Tumor-Associated Macrophages as Multifaceted Regulators of Breast Tumor Growth.
DOI: 10.3390/ijms22126526; PMCID: PMC8233875; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34207035/; Search date: 2026-10-18
S444 · PMID 34202777 · P01 · 2021-Jun-24 · Secondary or non-primary literature
Title: Long Noncoding RNA GAS5 in Breast Cancer: Epigenetic Mechanisms and Biological Functions.
DOI: 10.3390/ijms22136810; PMCID: PMC8267719; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34202777/; Search date: 2026-10-18
S445 · PMID 34141617 · P01 · 2021 · Additional noncoding-RNA network evidence
Title: Regulatory Mechanisms and Functional Roles of Hypoxia-Induced Long Non-Coding RNA MTORT1 in Breast Cancer Cells.
DOI: 10.3389/fonc.2021.663114; PMCID: PMC8204045; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and relevant abstract passages; Reason: RNA network or ceRNA study relevant to metabolic/death regulation. Individual small-RNA, target and endpoint contributions require separate appraisal; no pooled LIFT grade inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34141617/; Search date: 2026-10-18
S446 · PMID 34122108 · P02 · 2021 · Additional small-RNA Rewiring candidate
Title: Lidocaine Promoted Ferroptosis by Targeting miR-382-5p /SLC7A11 Axis in Ovarian and Breast Cancer.
DOI: 10.3389/fphar.2021.681223; PMCID: PMC8188239; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34122108/; Search date: 2026-10-18
S447 · PMID 34095151 · P03 · 2021 · Broader EV/cancer evidence
Title: miR-224-5p Carried by Human Umbilical Cord Mesenchymal Stem Cells-Derived Exosomes Regulates Autophagy in Breast Cancer Cells via HOXA5.
DOI: 10.3389/fcell.2021.679185; PMCID: PMC8176026; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34095151/; Search date: 2026-10-18
S448 · PMID 34093857 · P03 · 2021 · Additional immune Relay candidate
Title: Cancer-derived exosomal miR-138-5p modulates polarization of tumor-associated macrophages through inhibition of KDM6B.
DOI: 10.7150/thno.51864; PMCID: PMC8171095; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated immune-cell or immune-response study. Relevant to recipient context; mitochondrial source or mediator is not inferred from immune activity.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34093857/; Search date: 2026-10-18
S449 · PMID 34045663 · P01;P06 · 2022-Mar · Additional small-RNA Rewiring candidate
Title: Fatty acid β-oxidation promotes breast cancer stemness and metastasis via the miRNA-328-3p-CPT1A pathway.
DOI: 10.1038/s41417-021-00348-y; PMCID: PMC8940624; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34045663/; Search date: 2026-10-18
S450 · PMID 34016964 · P01;P03;P06 · 2021-May-20 · Existing panel source
Title: Exosomal microRNA-503-3p derived from macrophages represses glycolysis and promotes mitochondrial oxidative phosphorylation in breast cancer cells by elevating DACT2.
DOI: 10.1038/s41420-021-00492-2; PMCID: PMC8137952; Publication type: Journal Article; Claim ID: R11
Screening basis: PubMed title and publication-type metadata; Reason: Macrophage-to-cancer small-RNA relay with metabolic readouts and unresolved direction.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34016964/; Search date: 2026-10-18
S451 · PMID 34003544 · P01;P06 · 2021-May · Existing panel source
Title: The HIF-1/SNHG1/miR-199a-3p/TFAM axis explains tumor angiogenesis and metastasis under hypoxic conditions in breast cancer.
DOI: 10.1002/biof.1702; PMCID: not listed; Publication type: Journal Article; Claim ID: R7b
Screening basis: PubMed title and publication-type metadata; Reason: Hypoxia/SNHG1-associated TFAM relationship; separate condition and incomplete source coverage.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/34003544/; Search date: 2026-10-18
S452 · PMID 33996836 · P01 · 2021 · Secondary or non-primary literature
Title: Long Non-coding RNA RMRP in the Pathogenesis of Human Disorders.

DOI: 10.3389/fcell.2021.676588; PMCID: PMC8120005; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33996836/; Search date: 2026-10-18

S453 · PMID 33950409 · P04 · 2022-Feb · Secondary or non-primary literature
Title: Mechanisms of breast cancer metastasis.
DOI: 10.1007/s10585-021-10090-2; PMCID: PMC8568733; Publication type: Journal Article;Review;Research Support, Non-U.S. Gov't;Research Support, N.I.H., Extramural;Research Support, U.S. Gov't, Non-P.H.S.; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33950409/; Search date: 2026-10-18

S454 · PMID 33947836 · P02 · 2021-May-04 · Association, profiling or analytical method
Title: The role of ferroptosis in breast cancer patients: a comprehensive analysis.
DOI: 10.1038/s41420-021-00473-5; PMCID: PMC8097021; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33947836/; Search date: 2026-10-18

S455 · PMID 33917233 · P03 · 2021-Apr-07 · Secondary or non-primary literature
Title: Exosomal microRNAs: Pleiotropic Impacts on Breast Cancer Metastasis and Their Clinical Perspectives.
DOI: 10.3390/biology10040307; PMCID: PMC8067993; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33917233/; Search date: 2026-10-18

S456 · PMID 33916931 · P01 · 2021-Apr-07 · Secondary or non-primary literature
Title: The Anticancer Effects of Flavonoids through miRNAs Modulations in Triple-Negative Breast Cancer.
DOI: 10.3390/nu13041212; PMCID: PMC8067583; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33916931/; Search date: 2026-10-18

S457 · PMID 33911067 · P03 · 2021-Apr-28 · Additional noncoding-RNA Relay network
Title: Tumor-derived exosomal circPSMA1 facilitates the tumorigenesis, metastasis, and migration in triple-negative breast cancer (TNBC) through miR-637/Akt1/β-catenin (cyclin D1) axis.
DOI: 10.1038/s41419-021-03680-1; PMCID: PMC8080849; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33911067/; Search date: 2026-10-18

S458 · PMID 33842876 · P01 · 2021 · Association, profiling or analytical method
Title: Aging-associated skeletal muscle defects in HER2/Neu transgenic mammary tumor model.
DOI: 10.1002/rco2.23; PMCID: PMC8028024; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33842876/; Search date: 2026-10-18

S459 · PMID 33824695 · P01;P06 · 2021 · Secondary or non-primary literature
Title: Advances in Understanding Mitochondrial MicroRNAs (mitomiRs) on the Pathogenesis of Triple-Negative Breast Cancer (TNBC).
DOI: 10.1155/2021/5517777; PMCID: PMC8007369; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/33824695/; Search date: 2026-10-18

S460 · PMID 33823894 · P03 · 2021-Apr-06 · Broader EV/cancer evidence

Title: Chemotherapy-elicited exosomal miR-378a-3p and miR-378d promote breast cancer stemness and chemoresistance via the activation of EZH2/STAT3 signaling.

DOI: 10.1186/s13046-021-01901-1; PMCID: PMC8022546; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/33823894/; Search date: 2026-10-18

S461 · PMID 33821219 · P03 · 2021 · Broader EV/cancer evidence

Title: Exosomal-mediated transfer of OIP5-AS1 enhanced cell chemoresistance to trastuzumab in breast cancer via up-regulating HMGB3 by sponging miR-381-3p.

DOI: 10.1515/med-2021-0249; PMCID: PMC8010158; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/33821219/; Search date: 2026-10-18

S462 · PMID 33820555 · P03 · 2021-Apr-05 · Additional noncoding-RNA Relay network

Title: Long non-coding RNA NEAT1 transported by extracellular vesicles contributes to breast cancer development by sponging microRNA-141-3p and regulating KLF12.

DOI: 10.1186/s13578-021-00556-x; PMCID: PMC8022671; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/33820555/; Search date: 2026-10-18

S463 · PMID 33803776 · P03 · 2021-Mar-18 · Secondary or non-primary literature

Title: The Role of Exosomes in Breast Cancer Diagnosis.

DOI: 10.3390/biomedicines9030312; PMCID: PMC8003248; Publication type: Journal Article;Review; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/33803776/; Search date: 2026-10-18

S464 · PMID 33770377 · P03 · 2021-Jul · Broader EV/cancer evidence

Title: Human umbilical cord mesenchymal stem cell-derived exosomes inhibit migration and invasion of breast cancer cells via miR-21-5p/ZNF367 pathway.

DOI: 10.1007/s12282-021-01218-z; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/33770377/; Search date: 2026-10-18

S465 · PMID 33752173 · P03 · 2021-Mar-22 · Additional immune Relay candidate

Title: Exosomal miR-222 from adriamycin-resistant MCF-7 breast cancer cells promote macrophages M2 polarization via PTEN/Akt to induce tumor progression.

DOI: 10.18632/aging.202802; PMCID: PMC8064228; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: EV-associated immune-cell or immune-response study. Relevant to recipient context; mitochondrial source or mediator is not inferred from immune activity.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/33752173/; Search date: 2026-10-18

S466 · PMID 33750303 · P03 · 2021-Mar-09 · Secondary or non-primary literature

Title: Anesthetics may modulate cancer surgical outcome: a possible role of miRNAs regulation.

DOI: 10.1186/s12871-021-01294-w; PMCID: PMC7941705; Publication type: Journal Article;Research Support, Non-U.S. Gov't;Review; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for

background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33750303/; Search date: 2026-10-18
S467 · PMID 33686957 · P02 · 2021-Mar-03 · Additional noncoding-RNA network evidence
Title: Circular RNA RHOT1 promotes progression and inhibits ferroptosis via mir-106a-5p/STAT3 axis in breast cancer.
DOI: 10.18632/aging.202608; PMCID: PMC8034942; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: RNA network or ceRNA study relevant to metabolic/death regulation. Individual small-RNA, target and endpoint contributions require separate appraisal; no pooled LIFT grade inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33686957/; Search date: 2026-10-18
S468 · PMID 33643816 · P04 · 2021-Feb · Secondary or non-primary literature
Title: Long non-coding RNAs: From disease code to drug role.
DOI: 10.1016/j.apsb.2020.10.001; PMCID: PMC7893121; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33643816/; Search date: 2026-10-18
S469 · PMID 33627501 · P03 · 2021-Jun · Secondary or non-primary literature
Title: Exosomes in Breast Cancer - Mechanisms of Action and Clinical Potential.
DOI: 10.1158/1541-7786.MCR-20-0952; PMCID: PMC8178200; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, Non-U.S. Gov't;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33627501/; Search date: 2026-10-18
S470 · PMID 33599630 · P03 · 2021-Apr-07 · Association, profiling or analytical method
Title: Breast cancer plasma biopsy by in situ determination of exosomal microRNA-1246 with a molecular beacon.
DOI: 10.1039/d0an02224a; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33599630/; Search date: 2026-10-18
S471 · PMID 33544643 · P03 · 2021-Mar · Secondary or non-primary literature
Title: The role of non-coding RNAs in ABC transporters regulation and their clinical implications of multidrug resistance in cancer.
DOI: 10.1080/17425255.2021.1887139; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33544643/; Search date: 2026-10-18
S472 · PMID 33522578 · P02 · 2021-Mar-02 · Additional small-RNA Rewiring candidate
Title: Metformin induces ferroptosis by targeting miR-324-3p/GPX4 axis in breast cancer.
DOI: 10.1093/abbs/gmaa180; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33522578/; Search date: 2026-10-18
S473 · PMID 33507481 · P04 · 2021-Jun · Additional mitochondrial immune/stress context
Title: Allostatic score and its associations with demographics, healthy behaviors, tumor characteristics, and mitochondrial DNA among breast cancer patients.
DOI: 10.1007/s10549-021-06102-0; PMCID: PMC12952051; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33507481/; Search date: 2026-10-18

S474 · PMID 33467725 · P03 · 2021-Jan-15 · Broader EV/cancer evidence
Title: Delivery of miR-424-5p via Extracellular Vesicles Promotes the Apoptosis of MDA-MB-231 TNBC Cells in the Tumor Microenvironment.
DOI: 10.3390/ijms22020844; PMCID: PMC7831022; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33467725/; Search date: 2026-10-18
S475 · PMID 33451320 · P03 · 2021-Jan-15 · Broader EV/cancer evidence
Title: Exosomes from tamoxifen-resistant breast cancer cells transmit drug resistance partly by delivering miR-9-5p.
DOI: 10.1186/s12935-020-01659-0; PMCID: PMC7809732; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: ErratumIn:33926445;ErratumIn:34906143
PubMed: https://pubmed.ncbi.nlm.nih.gov/33451320/; Search date: 2026-10-18
S476 · PMID 33442289 · P03 · 2021 · Additional noncoding-RNA Relay network
Title: Circ_0004771 Accelerates Cell Carcinogenic Phenotypes via Suppressing miR-1253-Mediated DDAH1 Inhibition in Breast Cancer.
DOI: 10.2147/CMAR.S273783; PMCID: PMC7797298; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33442289/; Search date: 2026-10-18
S477 · PMID 33439992 · P01 · 2021-Jan-29 · Association, profiling or analytical method
Title: Mitochondria-related core genes and TF-miRNA-hub mrDEGs network in breast cancer.
DOI: 10.1042/BSR20203481; PMCID: PMC7843495; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33439992/; Search date: 2026-10-18
S478 · PMID 33414420 · P03 · 2021-Jan-04 · Additional vascular Relay candidate
Title: STIM1 promotes angiogenesis by reducing exosomal miR-145 in breast cancer MDA-MB-231 cells.
DOI: 10.1038/s41419-020-03304-0; PMCID: PMC7791041; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV/miRNA-associated angiogenesis or vascular endpoint. Mitochondrial control of loading or recipient function is not established by this bibliographic triage.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33414420/; Search date: 2026-10-18
S479 · PMID 33375383 · P01 · 2020-Dec-26 · Protein, drug or EV intervention context
Title: Rhus coriaria L. (Sumac) Demonstrates Oncostatic Activity in the Therapeutic and Preventive Model of Breast Carcinoma.
DOI: 10.3390/ijms22010183; PMCID: PMC7795985; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The intervention principally concerns a protein, compound or composite EV exposure; associated miRNA expression alone is not treated as RNA-specific causal evidence.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33375383/; Search date: 2026-10-18
S480 · PMID 33374314 · P01 · 2020-Dec-24 · Additional small-RNA Rewiring candidate
Title: miR614 Expression Enhances Breast Cancer Cell Motility.
DOI: 10.3390/ijms22010112; PMCID: PMC7801944; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/33374314/; Search date: 2026-10-18

S481 · PMID 33345445 · P03 · 2021-Feb-03 · Broader EV/cancer evidence

Title: Cancer-secreted miRNAs regulate amino-acid-induced mTORC1 signaling and fibroblast protein synthesis.

DOI: 10.15252/embr.202051239; PMCID: PMC7857427; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, U.S. Gov't, Non-P.H.S.; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/33345445/; Search date: 2026-10-18

S482 · PMID 33329014 · P04;P05 · 2020 · Additional organelle-transfer context

Title: Mitochondrial DNA Affects the Expression of Nuclear Genes Involved in Immune and Stress Responses in a Breast Cancer Model.

DOI: 10.3389/fphys.2020.543962; PMCID: PMC7732479; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Whole-organelle transfer or transplantation is relevant to Relay, but does not identify a necessary transferred small-RNA cargo.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/33329014/; Search date: 2026-10-18

S483 · PMID 33324075 · P03 · 2020 · Secondary or non-primary literature

Title: The Role of Exosomes in the Female Reproductive System and Breast Cancers.

DOI: 10.2147/OTT.S281909; PMCID: PMC7733408; Publication type: Journal Article;Review; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/33324075/; Search date: 2026-10-18

S484 · PMID 33311449 · P03 · 2020-Dec-11 · Broader EV/cancer evidence

Title: Anti-PD1 therapy induces lymphocyte-derived exosomal miRNA-4315 release inhibiting Bim-mediated apoptosis of tumor cells.

DOI: 10.1038/s41419-020-03224-z; PMCID: PMC7733505; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/33311449/; Search date: 2026-10-18

S485 · PMID 33282730 · P03 · 2020 · Secondary or non-primary literature

Title: Triple-Negative Breast Cancer Comparison With Canine Mammary Tumors From Light Microscopy to Molecular Pathology.

DOI: 10.3389/fonc.2020.563779; PMCID: PMC7689249; Publication type: Journal Article;Review; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/33282730/; Search date: 2026-10-18

S723 · PMID 33273726 · P06 · 2021-Jan · Excluded: retraction status

Title: MSC-induced lncRNA AGAP2-AS1 promotes stemness and trastuzumab resistance through regulating CPT1 expression and fatty acid oxidation in breast cancer.

DOI: 10.1038/s41388-020-01574-8; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't;Retracted Publication; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: PubMed identifies a retracted publication or retraction notice; not used as positive mechanistic evidence.; Correction/retraction links: RetractionIn:37420031

PubMed: https://pubmed.ncbi.nlm.nih.gov/33273726/; Search date: 2026-10-18

S486 · PMID 33255471 · P03 · 2020-Nov-24 · Secondary or non-primary literature

Title: Novel miRNA Targets and Therapies in the Triple-Negative Breast Cancer Microenvironment: An Emerging Hope for a Challenging Disease.

DOI: 10.3390/ijms21238905; PMCID: PMC7727826; Publication type: Journal Article;Review; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33255471/; Search date: 2026-10-18
S487 · PMID 33252198 · P01;P06 · 2021-Feb · Additional noncoding-RNA network evidence
Title: Long non-coding RNA RACGAP1P promotes breast cancer invasion and metastasis via miR-345-5p/RACGAP1-mediated mitochondrial fission.
DOI: 10.1002/1878-0261.12866; PMCID: PMC7858103; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: RNA network or ceRNA study relevant to metabolic/death regulation. Individual small-RNA, target and endpoint contributions require separate appraisal; no pooled LIFT grade inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33252198/; Search date: 2026-10-18
S488 · PMID 33249048 · P03 · 2021-Jan · Additional immune Relay candidate
Title: Exosome-mediated miR-33 transfer induces M1 polarization in mouse macrophages and exerts antitumor effect in 4T1 breast cancer cell line.
DOI: 10.1016/j.intimp.2020.107198; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated immune-cell or immune-response study. Relevant to recipient context; mitochondrial source or mediator is not inferred from immune activity.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33249048/; Search date: 2026-10-18
S489 · PMID 33162971 · P03 · 2020 · Excluded: retraction status
Title: Cancer-Associated Fibroblasts-Derived Exosomes Suppress Immune Cell Function in Breast Cancer via the miR-92/PD-L1 Pathway.
DOI: 10.3389/fimmu.2020.02026; PMCID: PMC7581790; Publication type: Journal Article;Retracted Publication; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: PubMed identifies a retracted publication or retraction notice; not used as positive mechanistic evidence.; Correction/retraction links: RetractionIn:39139568
PubMed: https://pubmed.ncbi.nlm.nih.gov/33162971/; Search date: 2026-10-18
S490 · PMID 33159957 · P03 · 2021-Jan-01 · Additional vascular Relay candidate
Title: Docosahexaenoic acid reverses the promoting effects of breast tumor cell-derived exosomes on endothelial cell migration and angiogenesis.
DOI: 10.1016/j.lfs.2020.118719; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV/miRNA-associated angiogenesis or vascular endpoint. Mitochondrial control of loading or recipient function is not established by this bibliographic triage.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33159957/; Search date: 2026-10-18
S491 · PMID 33108715 · P03 · 2020-Sep · Secondary or non-primary literature
Title: A systematic review of the biological mechanisms linking physical activity and breast cancer.
DOI: 10.20463/pan.2020.0018; PMCID: PMC7669467; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33108715/; Search date: 2026-10-18
S492 · PMID 33083904 · P03 · 2021-Feb · Broader EV/cancer evidence
Title: Conditional knockdown of integrin beta-3 reveals its involvement in osteolytic and soft tissue lesions of breast cancer skeletal metastasis.
DOI: 10.1007/s00432-020-03428-y; PMCID: PMC7817553; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33083904/; Search date: 2026-10-18
S493 · PMID 33068176 · P03 · 2020-Dec · Association, profiling or analytical method
Title: Exosomal miR-1246 and miR-155 as predictive and prognostic biomarkers for trastuzumab-based therapy resistance in HER2-positive breast cancer.

DOI: 10.1007/s00280-020-04168-z; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33068176/; Search date: 2026-10-18
S494 · PMID 33067576 · P01;P03 · 2020-Nov · Existing panel source
Title: MCU-dependent negative sorting of miR-4488 to extracellular vesicles enhances angiogenesis and promotes breast cancer metastatic colonization.
DOI: 10.1038/s41388-020-01514-6; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: R20
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial calcium-dependent EV miRNA sorting and recipient angiogenesis; separates organelle control from cargo necessity.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33067576/; Search date: 2026-10-18
S495 · PMID 33061571 · P03 · 2020 · Broader EV/cancer evidence
Title: Adipose Mesenchymal Stem Cell-Derived Exosomal microRNA-1236 Reduces Resistance of Breast Cancer Cells to Cisplatin by Suppressing SLC9A1 and the Wnt/β-Catenin Signaling.
DOI: 10.2147/CMAR.S270200; PMCID: PMC7519869; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33061571/; Search date: 2026-10-18
S496 · PMID 33040091 · P03 · 2020-Oct-10 · Additional vascular Relay candidate
Title: Targeting IL-3Rα on tumor-derived endothelial cells blunts metastatic spread of triple-negative breast cancer via extracellular vesicle reprogramming.
DOI: 10.1038/s41389-020-00274-y; PMCID: PMC7548009; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV/miRNA-associated angiogenesis or vascular endpoint. Mitochondrial control of loading or recipient function is not established by this bibliographic triage.; Correction/retraction links: ErratumIn:37491339
PubMed: https://pubmed.ncbi.nlm.nih.gov/33040091/; Search date: 2026-10-18
S497 · PMID 33027894 · P03 · 2020-Oct-05 · Association, profiling or analytical method
Title: Total Blood Exosomes in Breast Cancer: Potential Role in Crucial Steps of Tumorigenesis.
DOI: 10.3390/ijms21197341; PMCID: PMC7582945; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/33027894/; Search date: 2026-10-18
S498 · PMID 32987253 · P03 · 2020-Nov · Association, profiling or analytical method
Title: Immunosuppressive profiles in liquid biopsy at diagnosis predict response to neoadjuvant chemotherapy in triple-negative breast cancer.
DOI: 10.1016/j.ejca.2020.08.020; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/32987253/; Search date: 2026-10-18
S724 · PMID 32946972 · P06 · 2020-Dec · Additional noncoding-RNA network evidence
Title: LINC00346 regulates glycolysis by modulation of glucose transporter 1 in breast cancer cells.
DOI: 10.1016/j.mcp.2020.101667; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: RNA network or ceRNA study relevant to metabolic/death regulation. Individual small-RNA, target and endpoint contributions require separate appraisal; no pooled LIFT grade inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/32946972/; Search date: 2026-10-18

S499 · PMID 32945512 · P01;P06 · 2020-Oct · Additional small-RNA Rewiring candidate
Title: MicroRNA-137 exerts protective effects on hypoxia-induced cell injury by inhibiting autophagy/mitophagy and maintaining mitochondrial function in breast cancer stem-like cells.
DOI: 10.3892/or.2020.7714; PMCID: PMC7448477; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/32945512/; Search date: 2026-10-18
S500 · PMID 32872155 · P01 · 2020-Aug-28 · Secondary or non-primary literature
Title: The Regulatory Role of Mitochondrial MicroRNAs (MitomiRs) in Breast Cancer: Translational Implications Present and Future.
DOI: 10.3390/cancers12092443; PMCID: PMC7564393; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/32872155/; Search date: 2026-10-18
S501 · PMID 32805688 · P03 · 2020-Aug · Secondary or non-primary literature
Title: MicroRNAs in breast cancer: New maestros defining the melody.
DOI: 10.1016/j.cancergen.2020.08.005; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/32805688/; Search date: 2026-10-18
S502 · PMID 32756532 · P03 · 2020-Aug-05 · Additional noncoding-RNA Relay network
Title: Exosomes Mediated Transfer of Circ_UBE2D2 Enhances the Resistance of Breast Cancer to Tamoxifen by Binding to MiR-200a-3p.
DOI: 10.12659/MSM.922253; PMCID: PMC7431386; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/32756532/; Search date: 2026-10-18
S503 · PMID 32747819 · P04 · 2020-Oct · Existing panel source
Title: Mitochondrial DNA drives abscopal responses to radiation that are inhibited by autophagy.
DOI: 10.1038/s41590-020-0751-0; PMCID: not listed; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, Non-U.S. Gov't;Research Support, U.S. Gov't, Non-P.H.S.; Claim ID: R24
Screening basis: PubMed title and publication-type metadata; Reason: Breast-cancer radiation-associated mtDNA immune response; DNA and non-RNA intervention comparator.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/32747819/; Search date: 2026-10-18
S504 · PMID 32737655 · P03 · 2020-Dec · Association, profiling or analytical method
Title: Tracking of Tumor Cell-Derived Extracellular Vesicles In Vivo Reveals a Specific Distribution Pattern with Consecutive Biological Effects on Target Sites of Metastasis.
DOI: 10.1007/s11307-020-01521-9; PMCID: PMC7666295; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/32737655/; Search date: 2026-10-18
S505 · PMID 32708015 · P01 · 2020-Jul-22 · Secondary or non-primary literature
Title: The RNA Methyltransferase NSUN2 and Its Potential Roles in Cancer.
DOI: 10.3390/cells9081758; PMCID: PMC7463552; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/32708015/; Search date: 2026-10-18

S506 · PMID 32705260 · P04 · 2020-Sep · Additional mitochondrial immune/stress context
Title: TGF-β1-induced epithelial-mesenchymal transition increases fatty acid oxidation and OXPHOS activity via the p-AMPK pathway in breast cancer cells.
DOI: 10.3892/or.2020.7661; PMCID: not listed; Publication type: Journal Article;Observational Study; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/32705260/; Search date: 2026-10-18
S507 · PMID 32673663 · P03 · 2020-Oct-01 · Additional vascular Relay candidate
Title: Docosahexaenoic acid (DHA) inhibits pro-angiogenic effects of breast cancer cells via down-regulating cellular and exosomal expression of angiogenic genes and microRNAs.
DOI: 10.1016/j.lfs.2020.118094; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV/miRNA-associated angiogenesis or vascular endpoint. Mitochondrial control of loading or recipient function is not established by this bibliographic triage.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/32673663/; Search date: 2026-10-18
S508 · PMID 32672418 · P03 · 2020-Sep · Additional immune Relay candidate
Title: Endoplasmic reticulum stress-induced exosomal miR-27a-3p promotes immune escape in breast cancer via regulating PD-L1 expression in macrophages.
DOI: 10.1111/jcmm.15367; PMCID: PMC7520328; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated immune-cell or immune-response study. Relevant to recipient context; mitochondrial source or mediator is not inferred from immune activity.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/32672418/; Search date: 2026-10-18
S509 · PMID 32641987 · P01 · 2020 · Additional small-RNA Rewiring candidate
Title: A novel miR-1291-ERRα-CPT1C axis modulates tumor cell proliferation, metabolism and tumorigenesis.
DOI: 10.7150/thno.44877; PMCID: PMC7330864; Publication type: Journal Article;Meta-Analysis;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/32641987/; Search date: 2026-10-18
S510 · PMID 32606744 · P05 · 2020 · Engineered delivery or composite intervention
Title: Antitumor Actions of Intratumoral Delivery of Membrane-Fused Mitochondria in a Mouse Model of Triple-Negative Breast Cancers.
DOI: 10.2147/OTT.S238143; PMCID: PMC7294573; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/32606744/; Search date: 2026-10-18
S511 · PMID 32491855 · P01 · 2020-Jun-23 · Engineered delivery or composite intervention
Title: Hexokinase II-Derived Cell-Penetrating Peptide Mediates Delivery of MicroRNA Mimic for Cancer-Selective Cytotoxicity.
DOI: 10.1021/acs.biochem.0c00141; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/32491855/; Search date: 2026-10-18
S512 · PMID 32466456 · P03 · 2020-May-26 · Association, profiling or analytical method
Title: The Possible Influence of Mediterranean Diet on Extracellular Vesicle miRNA Expression in Breast Cancer Survivors.
DOI: 10.3390/cancers12061355; PMCID: PMC7352167; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/32466456/; Search date: 2026-10-18
S513 · PMID 32426266 · P03 · 2020 · Excluded: retraction status
Title: Exosomal MicroRNA-221-3p Confers Adriamycin Resistance in Breast Cancer Cells by Targeting PIK3R1.
DOI: 10.3389/fonc.2020.00441; PMCID: PMC7212418; Publication type: Journal Article;Retracted Publication; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: PubMed identifies a retracted publication or retraction notice; not used as positive mechanistic evidence.; Correction/retraction links: RetractionIn:35036357
PubMed: https://pubmed.ncbi.nlm.nih.gov/32426266/; Search date: 2026-10-18
S514 · PMID 32398867 · P03 · 2020-Jun · Additional immune Relay candidate
Title: Cancer exosome-derived miR-9 and miR-181a promote the development of early-stage MDSCs via interfering with SOCS3 and PIAS3 respectively in breast cancer.
DOI: 10.1038/s41388-020-1322-4; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated immune-cell or immune-response study. Relevant to recipient context; mitochondrial source or mediator is not inferred from immune activity.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/32398867/; Search date: 2026-10-18
S515 · PMID 32384893 · P03 · 2020-May-08 · Excluded: retraction status
Title: LncRNA BCRT1 promotes breast cancer progression by targeting miR-1303/PTBP3 axis.
DOI: 10.1186/s12943-020-01206-5; PMCID: PMC7206728; Publication type: Journal Article;Research Support, Non-U.S. Gov't;Retracted Publication; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: PubMed identifies a retracted publication or retraction notice; not used as positive mechanistic evidence.; Correction/retraction links: RetractionIn:35715798
PubMed: https://pubmed.ncbi.nlm.nih.gov/32384893/; Search date: 2026-10-18
S516 · PMID 32360582 · P03 · 2020-Jul · Engineered delivery or composite intervention
Title: Adipose-derived mesenchymal stem cells and extracellular vesicles confer antitumor activity in preclinical treatment of breast cancer.
DOI: 10.1016/j.phrs.2020.104843; PMCID: not listed; Publication type: Comparative Study;Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/32360582/; Search date: 2026-10-18
S517 · PMID 32355577 · P03 · 2020 · Association, profiling or analytical method
Title: Identification of exosomal miRNAs associated with the anthracycline-induced liver injury in postoperative breast cancer patients by small RNA sequencing.
DOI: 10.7717/peerj.9021; PMCID: PMC7185038; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/32355577/; Search date: 2026-10-18
S518 · PMID 32346919 · P03 · 2020-Apr · Secondary or non-primary literature
Title: Recent Advances in Pathology: the 2020 Annual Review Issue of The Journal of Pathology.
DOI: 10.1002/path.5425; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/32346919/; Search date: 2026-10-18
S519 · PMID 32345959 · P03 · 2020-Apr-29 · Additional noncoding-RNA Relay network
Title: Breast cancer-derived exosomes transmit lncRNA SNHG16 to induce CD73+γδ1 Treg cells.
DOI: 10.1038/s41392-020-0129-7; PMCID: PMC7188864; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: EV-associated long/circular-RNA or ceRNA network. Cargo identity differs from a demonstrated transferred small-RNA mechanism and is kept explicit.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/32345959/; Search date: 2026-10-18
S520 · PMID 32248711 · P01;P06 · 2020 · Additional small-RNA Rewiring candidate
Title: Combinatorial Effect of DCA and Let-7a on Triple-Negative MDA-MB-231 Cells: A Metabolic Approach of Treatment.
DOI: 10.1177/1534735420911437; PMCID: PMC7136934; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/32248711/; Search date: 2026-10-18
S521 · PMID 32204409 · P01 · 2020-Mar-19 · Protein, drug or EV intervention context
Title: Chemopreventive and Therapeutic Efficacy of Cinnamomum zeylanicum L. Bark in Experimental Breast Carcinoma: Mechanistic In Vivo and In Vitro Analyses.
DOI: 10.3390/molecules25061399; PMCID: PMC7144360; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The intervention principally concerns a protein, compound or composite EV exposure; associated miRNA expression alone is not treated as RNA-specific causal evidence.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/32204409/; Search date: 2026-10-18
S522 · PMID 32155056 · P03 · 2020-Apr-08 · Association, profiling or analytical method
Title: Antibody-Conjugated Signaling Nanocavities Fabricated by Dynamic Molding for Detecting Cancers Using Small Extracellular Vesicle Markers from Tears.
DOI: 10.1021/jacs.9b13874; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/32155056/; Search date: 2026-10-18
S523 · PMID 32115494 · P03 · 2020-Feb · Association, profiling or analytical method
Title: Fibrinolytic Activity of Circulating Microvesicles Is Associated with Progression of Breast Cancer.
DOI: 10.1620/tjem.250.121; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/32115494/; Search date: 2026-10-18
S524 · PMID 32068312 · P01;P06 · 2020-Apr · Additional small-RNA Rewiring candidate
Title: An epigenetic increase in mitochondrial fission by MiD49 and MiD51 regulates the cell cycle in cancer: Diagnostic and therapeutic implications.
DOI: 10.1096/fj.201903117R; PMCID: not listed; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/32068312/; Search date: 2026-10-18
S525 · PMID 32052874 · P01 · 2020-Oct · Secondary or non-primary literature
Title: miR-125b lowers sensitivity to apoptosis following mitotic arrest: Implications for breast cancer therapy.
DOI: 10.1002/jcp.29610; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/32052874/; Search date: 2026-10-18

S526 · PMID 31972210 · P05 · 2020-Mar-01 · Additional organelle-transfer context
Title: Mitochondrial characteristics contribute to proliferation and migration potency of MDA-MB-231 cancer cells and their response to cisplatin treatment.
DOI: 10.1016/j.lfs.2020.117339; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Whole-organelle transfer or transplantation is relevant to Relay, but does not identify a necessary transferred small-RNA cargo.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/31972210/; Search date: 2026-10-18
S527 · PMID 31971358 · P01 · 2019-Dec · Secondary or non-primary literature
Title: Association of insulin resistance with breast cancer: miR26b behind the scenes pulling autophagy strings?
DOI: 10.23736/S0391-1977.18.02875-4; PMCID: not listed; Publication type: Letter; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/31971358/; Search date: 2026-10-18
S528 · PMID 31969559 · P03 · 2020-Jan-22 · Excluded: retraction status
Title: Exosome-transmitted miR-567 reverses trastuzumab resistance by inhibiting ATG5 in breast cancer.
DOI: 10.1038/s41419-020-2250-5; PMCID: PMC6976584; Publication type: Journal Article;Research Support, Non-U.S. Gov't;Retracted Publication; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: PubMed identifies a retracted publication or retraction notice; not used as positive mechanistic evidence.; Correction/retraction links: RetractionIn:37949846
PubMed: https://pubmed.ncbi.nlm.nih.gov/31969559/; Search date: 2026-10-18
S529 · PMID 31956955 · P01;P03;P06 · 2020-Jul · Additional noncoding-RNA network evidence
Title: SNHG3 Functions as miRNA Sponge to Promote Breast Cancer Cells Growth Through the Metabolic Reprogramming.
DOI: 10.1007/s12010-020-03244-7; PMCID: PMC7320061; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: RNA network or ceRNA study relevant to metabolic/death regulation. Individual small-RNA, target and endpoint contributions require separate appraisal; no pooled LIFT grade inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/31956955/; Search date: 2026-10-18
S530 · PMID 31955007 · P03 · 2020-Mar-06 · Broader EV/cancer evidence
Title: MicroRNA-181d-5p-Containing Exosomes Derived from CAFs Promote EMT by Regulating CDX2/HOXA5 in Breast Cancer.
DOI: 10.1016/j.omtn.2019.11.024; PMCID: PMC6970169; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/31955007/; Search date: 2026-10-18
S531 · PMID 31941005 · P01 · 2020-Jan-13 · Secondary or non-primary literature
Title: Systemic Actions of Breast Cancer Facilitate Functional Limitations.
DOI: 10.3390/cancers12010194; PMCID: PMC7016719; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/31941005/; Search date: 2026-10-18
S532 · PMID 31922312 · P03 · 2020-Feb · Engineered delivery or composite intervention
Title: Exosomes co-expressing AQP5-targeting miRNAs and IL-4 receptor-binding peptide inhibit the migration of human breast cancer cells.
DOI: 10.1096/fj.201902434R; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/31922312/; Search date: 2026-10-18
S533 · PMID 31833519 · P03 · 2020-Jan-02 · Outside breast-cancer experimental scope
Title: Use of lung-specific exosomes for miRNA-126 delivery in non-small cell lung cancer.

DOI: 10.1039/c9nr09011h; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Primary study addresses another disease, non-breast tumor or non-tumor toxicity context. Retained as retrieval record; not assigned a breast-cancer RNA-causal tier.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/31833519/; Search date: 2026-10-18
S534 · PMID 31766495 · P03 · 2019-Nov-21 · Secondary or non-primary literature
Title: MicroRNA-A Tumor Trojan Horse for Tumor-Associated Macrophages.
DOI: 10.3390/cells8121482; PMCID: PMC6953083; Publication type: Journal Article;Research Support, Non-U.S. Gov't;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/31766495/; Search date: 2026-10-18
S535 · PMID 31765945 · P01;P06 · 2019-Dec-06 · Additional small-RNA Rewiring candidate
Title: Mitochondrial Damage Mediated by miR-1 Overexpression in Cancer Stem Cells.
DOI: 10.1016/j.omtn.2019.10.016; PMCID: PMC6883328; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: ErratumIn:32464551
PubMed: https://pubmed.ncbi.nlm.nih.gov/31765945/; Search date: 2026-10-18
S536 · PMID 31727903 · P03 · 2019-Nov-14 · Association, profiling or analytical method
Title: A miRNA signature in endothelial cell-derived extracellular vesicles in tumor-bearing mice.
DOI: 10.1038/s41598-019-52466-1; PMCID: PMC6856062; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/31727903/; Search date: 2026-10-18
S537 · PMID 31608175 · P03 · 2019 · Broader EV/cancer evidence
Title: MicroRNA-205-5p inhibits three-dimensional spheroid proliferation of ErbB2-overexpressing breast epithelial cells through direct targeting of CLCN3.
DOI: 10.7717/peerj.7799; PMCID: PMC6788438; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/31608175/; Search date: 2026-10-18
S725 · PMID 31552162 · P06 · 2019 · Secondary or non-primary literature
Title: The Flick of a Switch: Conferring Survival Advantage to Breast Cancer Stem Cells Through Metabolic Plasticity.
DOI: 10.3389/fonc.2019.00753; PMCID: PMC6736574; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/31552162/; Search date: 2026-10-18
S538 · PMID 31500658 · P03 · 2019-Sep-10 · Secondary or non-primary literature
Title: Cancer-associated adipocytes: key players in breast cancer progression.
DOI: 10.1186/s13045-019-0778-6; PMCID: PMC6734503; Publication type: Journal Article;Research Support, Non-U.S. Gov't;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/31500658/; Search date: 2026-10-18
S726 · PMID 31485672 · P06 · 2019-Nov · Additional noncoding-RNA network evidence
Title: Long non-coding RNA nuclear paraspeckle assembly transcript 1 interacts with microRNA-107 to modulate breast cancer growth and metastasis by targeting carnitine palmitoyltransferase-1.
DOI: 10.3892/ijo.2019.4869; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and relevant abstract passages; Reason: RNA network or ceRNA study relevant to metabolic/death regulation. Individual small-RNA, target and endpoint contributions require separate appraisal; no pooled LIFT grade inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/31485672/; Search date: 2026-10-18
S539 · PMID 31424364 · P03 · 2019 · Additional immune Relay candidate
Title: Cisplatin-resistant MDA-MB-231 Cell-derived Exosomes Increase the Resistance of Recipient Cells in an Exosomal miR-423-5p-dependent Manner.
DOI: 10.2174/1389200220666190819151946; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated immune-cell or immune-response study. Relevant to recipient context; mitochondrial source or mediator is not inferred from immune activity.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/31424364/; Search date: 2026-10-18
S540 · PMID 31354350 · P03 · 2019 · Association, profiling or analytical method
Title: Bioinformatics analysis of dysregulated microRNAs in exosomes from docetaxel-resistant and parental human breast cancer cells.
DOI: 10.2147/CMAR.S201335; PMCID: PMC6579872; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/31354350/; Search date: 2026-10-18
S541 · PMID 31344855 · P01 · 2019-Jul-24 · Additional noncoding-RNA network evidence
Title: LncRNA NEAT1 Silenced miR-133b Promotes Migration and Invasion of Breast Cancer Cells.
DOI: 10.3390/ijms20153616; PMCID: PMC6695844; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: RNA network or ceRNA study relevant to metabolic/death regulation. Individual small-RNA, target and endpoint contributions require separate appraisal; no pooled LIFT grade inferred.; Correction/retraction links: ErratumIn:32825207
PubMed: https://pubmed.ncbi.nlm.nih.gov/31344855/; Search date: 2026-10-18
S542 · PMID 31341019 · P03 · 2019-Sep-13 · Additional immune Relay candidate
Title: Triple-negative breast cancer-derived microvesicles transfer microRNA221 to the recipient cells and thereby promote epithelial-to-mesenchymal transition.
DOI: 10.1074/jbc.RA119.008619; PMCID: PMC6746455; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated immune-cell or immune-response study. Relevant to recipient context; mitochondrial source or mediator is not inferred from immune activity.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/31341019/; Search date: 2026-10-18
S543 · PMID 31322822 · P03 · 2019-Nov · Secondary or non-primary literature
Title: Emerging roles of exosomal miRNAs in breast cancer drug resistance.
DOI: 10.1002/iub.2116; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/31322822/; Search date: 2026-10-18
S544 · PMID 31310736 · P01;P06 · 2019-Oct · Secondary or non-primary literature
Title: Breast cancer: Occluded role of mitochondria N-acetylserotonin/melatonin ratio in co-ordinating pathophysiology.
DOI: 10.1016/j.bcp.2019.07.014; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/31310736/; Search date: 2026-10-18
S545 · PMID 31233837 · P03 · 2019-Sep-28 · Secondary or non-primary literature
Title: Tumor-derived extracellular vesicles in breast cancer: From bench to bedside.
DOI: 10.1016/j.canlet.2019.06.012; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/31233837/; Search date: 2026-10-18

S546 · PMID 31190817 · P01 · 2019 · Engineered delivery or composite intervention

Title: Nanosized functional miRNA liposomes and application in the treatment of TNBC by silencing Slug gene.

DOI: 10.2147/IJN.S207837; PMCID: PMC6529035; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and relevant abstract passages; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/31190817/; Search date: 2026-10-18

S547 · PMID 31142736 · P01 · 2019-May-29 · Additional small-RNA Rewiring candidate

Title: Mitochondrial ncRNA targeting induces cell cycle arrest and tumor growth inhibition of MDA-MB-231 breast cancer cells through reduction of key cell cycle progression factors.

DOI: 10.1038/s41419-019-1649-3; PMCID: PMC6541642; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned

Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/31142736/; Search date: 2026-10-18

S548 · PMID 31138258 · P03 · 2019-May-28 · Excluded: retraction status

Title: Exosomes from the tumour-adipocyte interplay stimulate beige/brown differentiation and reprogram metabolism in stromal adipocytes to promote tumour progression.

DOI: 10.1186/s13046-019-1210-3; PMCID: PMC6537177; Publication type: Journal Article;Retracted Publication; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: PubMed identifies a retracted publication or retraction notice; not used as positive mechanistic evidence.; Correction/retraction links: RetractionIn:36631828

PubMed: https://pubmed.ncbi.nlm.nih.gov/31138258/; Search date: 2026-10-18

S549 · PMID 31129098 · P03 · 2019-Jun · Broader EV/cancer evidence

Title: Ca2+ and CACNA1H mediate targeted suppression of breast cancer brain metastasis by AM RF EMF.

DOI: 10.1016/j.ebiom.2019.05.038; PMCID: PMC6604768; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: ErratumIn:39731855

PubMed: https://pubmed.ncbi.nlm.nih.gov/31129098/; Search date: 2026-10-18

S550 · PMID 31118200 · P03 · 2019-Jul-15 · Broader EV/cancer evidence

Title: Chemotherapy-Induced Extracellular Vesicle miRNAs Promote Breast Cancer Stemness by Targeting ONECUT2.

DOI: 10.1158/0008-5472.CAN-18-4055; PMCID: PMC8972808; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/31118200/; Search date: 2026-10-18

S551 · PMID 31112051 · P01 · 2020 · Protein, drug or EV intervention context

Title: Effect of Turkish Propolis on miRNA Expression, Cell Cycle, and Apoptosis in Human Breast Cancer (MCF-7) Cells.

DOI: 10.1080/01635581.2019.1616100; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned

Screening basis: PubMed title and relevant abstract passages; Reason: The intervention principally concerns a protein, compound or composite EV exposure; associated miRNA expression alone is not treated as RNA-specific causal evidence.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/31112051/; Search date: 2026-10-18

S552 · PMID 31046734 · P04 · 2019-May-02 · Additional mitochondrial immune/stress context

Title: Mitochondrial autoimmunity and MNRR1 in breast carcinogenesis.

DOI: 10.1186/s12885-019-5575-7; PMCID: PMC6498478; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/31046734/; Search date: 2026-10-18
S553 · PMID 30932749 · P01;P06 · 2019-Jul · Existing panel source
Title: MiR-195 regulates mitochondrial function by targeting mitofusin-2 in breast cancer cells.
DOI: 10.1080/15476286.2019.1600999; PMCID: PMC6546347; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: R18
Screening basis: PubMed title and publication-type metadata; Reason: MFN2-linked mitochondrial morphology rescue; endpoint restriction prevents borrowing support for apoptosis.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/30932749/; Search date: 2026-10-18
S554 · PMID 30903363 · P01 · 2019-Jun · Secondary or non-primary literature
Title: Metformin and Breast Cancer: Molecular Targets.
DOI: 10.1007/s10911-019-09429-z; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/30903363/; Search date: 2026-10-18
S555 · PMID 30868953 · P03 · 2019 · Association, profiling or analytical method
Title: Blood Circulating Exosomes Contain Distinguishable Fractions of Free and Cell-Surface-Associated Vesicles.
DOI: 10.2174/1566524019666190314120532; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/30868953/; Search date: 2026-10-18
S556 · PMID 30850595 · P03 · 2019-Mar-08 · Additional immune Relay candidate
Title: Apoptotic tumor cell-derived microRNA-375 uses CD36 to alter the tumor-associated macrophage phenotype.
DOI: 10.1038/s41467-019-08989-2; PMCID: PMC6408494; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated immune-cell or immune-response study. Relevant to recipient context; mitochondrial source or mediator is not inferred from immune activity.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/30850595/; Search date: 2026-10-18
S557 · PMID 30840889 · P03 · 2019-Mar-05 · Broader EV/cancer evidence
Title: MicroRNA-Mediated Suppression of the TGF-β Pathway Confers Transmissible and Reversible CDK4/6 Inhibitor Resistance.
DOI: 10.1016/j.celrep.2019.02.023; PMCID: PMC6449498; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/30840889/; Search date: 2026-10-18
S558 · PMID 30832465 · P04 · 2019-Feb · Additional mitochondrial immune/stress context
Title: Treadmill Exercise Ameliorates Chemotherapy-Induced Muscle Weakness and Central Fatigue by Enhancing Mitochondrial Function and Inhibiting Apoptosis.
DOI: 10.5213/inj.1938046.023; PMCID: PMC6433210; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/30832465/; Search date: 2026-10-18
S559 · PMID 30728670 · P03 · 2019-Jan · Association, profiling or analytical method
Title: Interrelation of the Circulating and Tissue MicroRNA-21 with Tissue PDCD4 Expression and the Invasiveness of Iraqi Female Breast Tumors.

DOI: 10.1007/s12291-017-0710-1; PMCID: PMC6346619; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/30728670/; Search date: 2026-10-18
S560 · PMID 30674338 · P05 · 2019-Jan-23 · Additional organelle-transfer context
Title: Mitochondrial transplantation regulates antitumour activity, chemoresistance and mitochondrial dynamics in breast cancer.
DOI: 10.1186/s13046-019-1028-z; PMCID: PMC6343292; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Whole-organelle transfer or transplantation is relevant to Relay, but does not identify a necessary transferred small-RNA cargo.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/30674338/; Search date: 2026-10-18
S561 · PMID 30612562 · P03 · 2019-Jan-07 · Association, profiling or analytical method
Title: Direct isolation and characterization of circulating exosomes from biological samples using magnetic nanowires.
DOI: 10.1186/s12951-018-0433-3; PMCID: PMC6322342; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/30612562/; Search date: 2026-10-18
S562 · PMID 30602375 · P03 · 2019-Jan-03 · Secondary or non-primary literature
Title: Exosomes of pasteurized milk: potential pathogens of Western diseases.
DOI: 10.1186/s12967-018-1760-8; PMCID: PMC6317263; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/30602375/; Search date: 2026-10-18
S563 · PMID 30545127 · P03 · 2018-Dec-12 · Secondary or non-primary literature
Title: Non-Coding RNAs in Breast Cancer: Intracellular and Intercellular Communication.
DOI: 10.3390/ncrna4040040; PMCID: PMC6316884; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/30545127/; Search date: 2026-10-18
S564 · PMID 30520388 · P01 · 2019 · Additional small-RNA Rewiring candidate
Title: miR-342-5p as a Potential Regulator of HER2 Breast Cancer Cell Growth.
DOI: 10.2174/2211536608666181206124922; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/30520388/; Search date: 2026-10-18
S565 · PMID 30474469 · P03 · 2019-Dec · Excluded: retraction status
Title: Breast cancer-released exosomes trigger cancer-associated cachexia to promote tumor progression.
DOI: 10.1080/21623945.2018.1551688; PMCID: PMC6768245; Publication type: Journal Article;Research Support, Non-U.S. Gov't;Retracted Publication; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: PubMed identifies a retracted publication or retraction notice; not used as positive mechanistic evidence.; Correction/retraction links: RetractionIn:36961293
PubMed: https://pubmed.ncbi.nlm.nih.gov/30474469/; Search date: 2026-10-18
S566 · PMID 30381647 · P03 · 2018 · Secondary or non-primary literature
Title: [Epigenetic Regulation of Pharmacokinetic-related Genes in Human Tissues].

DOI: 10.1248/yakushi.18-00145; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/30381647/; Search date: 2026-10-18
S567 · PMID 30362582 · P03 · 2019-Jun · Engineered delivery or composite intervention
Title: microRNA modified tumor-derived exosomes as novel tools for maturation of dendritic cells.
DOI: 10.1002/jcp.27626; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/30362582/; Search date: 2026-10-18
S568 · PMID 30359265 · P03 · 2018-Oct-25 · Excluded: retraction status
Title: Tumour-originated exosomal miR-155 triggers cancer-associated cachexia to promote tumour progression.
DOI: 10.1186/s12943-018-0899-5; PMCID: PMC6201501; Publication type: Letter;Research Support, Non-U.S. Gov't;Retracted Publication; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: PubMed identifies a retracted publication or retraction notice; not used as positive mechanistic evidence.; Correction/retraction links: RetractionIn:36726152
PubMed: https://pubmed.ncbi.nlm.nih.gov/30359265/; Search date: 2026-10-18
S569 · PMID 30346694 · P03 · 2018-Nov-27 · Engineered delivery or composite intervention
Title: Tumor Cell-Derived Extracellular Vesicle-Coated Nanocarriers: An Efficient Theranostic Platform for the Cancer-Specific Delivery of Anti-miR-21 and Imaging Agents.
DOI: 10.1021/acsnano.8b02587; PMCID: PMC6684278; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: CommentIn:31157278;ErratumIn:37721437
PubMed: https://pubmed.ncbi.nlm.nih.gov/30346694/; Search date: 2026-10-18
S727 · PMID 30341280 · P06 · 2018-Oct-19 · Additional small-RNA Rewiring candidate
Title: miR4673 improves fitness profile of neoplastic cells by induction of autophagy.
DOI: 10.1038/s41419-018-1088-6; PMCID: PMC6195512; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/30341280/; Search date: 2026-10-18
S570 · PMID 30272274 · P03 · 2018-Dec · Broader EV/cancer evidence
Title: Regulation of RAB22A by mir-193b inhibits breast cancer growth and metastasis mediated by exosomes.
DOI: 10.3892/ijo.2018.4571; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/30272274/; Search date: 2026-10-18
S571 · PMID 30201690 · P03 · 2018-Dec-21 · Association, profiling or analytical method
Title: Analysis of miRNA signature differentially expressed in exosomes from adriamycin-resistant and parental human breast cancer cells.
DOI: 10.1042/BSR20181090; PMCID: PMC6240718; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/30201690/; Search date: 2026-10-18

S572 · PMID 30173296 · P03 · 2018-Dec · Additional immune Relay candidate
Title: Extracellular vesicles from triple-negative breast cancer cells promote proliferation and drug resistance in non-tumorigenic breast cells.
DOI: 10.1007/s10549-018-4925-5; PMCID: PMC6245099; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated immune-cell or immune-response study. Relevant to recipient context; mitochondrial source or mediator is not inferred from immune activity.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/30173296/; Search date: 2026-10-18
S573 · PMID 30160115 · P01 · 2018-Sep-19 · Protein, drug or EV intervention context
Title: Anti-breast-Cancer Activity Exerted by β-Sitosterol-d-glucoside from Sweet Potato via Upregulation of MicroRNA-10a and via the PI3K-Akt Signaling Pathway.
DOI: 10.1021/acs.jafc.8b03305; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The intervention principally concerns a protein, compound or composite EV exposure; associated miRNA expression alone is not treated as RNA-specific causal evidence.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/30160115/; Search date: 2026-10-18
S574 · PMID 30142511 · P03 · 2018-Oct · Outside breast-cancer experimental scope
Title: Annexin A1 regulates EGFR activity and alters EGFR-containing tumour-derived exosomes in head and neck cancers.
DOI: 10.1016/j.ejca.2018.07.123; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Primary study addresses another disease, non-breast tumor or non-tumor toxicity context. Retained as retrieval record; not assigned a breast-cancer RNA-causal tier.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/30142511/; Search date: 2026-10-18
S575 · PMID 30132530 · P04 · 2018-Oct · Outside breast-cancer experimental scope
Title: Elevated expression of PTCD3 correlates with tumor progression and predicts poor prognosis in patients with prostate cancer.
DOI: 10.3892/mmr.2018.9402; PMCID: PMC6131642; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Primary study addresses another disease, non-breast tumor or non-tumor toxicity context. Retained as retrieval record; not assigned a breast-cancer RNA-causal tier.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/30132530/; Search date: 2026-10-18
S576 · PMID 30126376 · P03 · 2018-Aug-20 · Association, profiling or analytical method
Title: Malignant canine mammary epithelial cells shed exosomes containing differentially expressed microRNA that regulate oncogenic networks.
DOI: 10.1186/s12885-018-4750-6; PMCID: PMC6102898; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/30126376/; Search date: 2026-10-18
S577 · PMID 30088260 · P01 · 2018-Dec · Protein, drug or EV intervention context
Title: Metformin inhibits human breast cancer cell growth by promoting apoptosis via a ROS-independent pathway involving mitochondrial dysfunction: pivotal role of superoxide dismutase (SOD).
DOI: 10.1007/s13402-018-0398-0; PMCID: PMC12995255; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The intervention principally concerns a protein, compound or composite EV exposure; associated miRNA expression alone is not treated as RNA-specific causal evidence.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/30088260/; Search date: 2026-10-18
S578 · PMID 30076721 · P03 · 2018-Jan · Secondary or non-primary literature
Title: MiR-214 is an important regulator of the musculoskeletal metabolism and disease.
DOI: 10.1002/jcp.26856; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't;Review; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/30076721/; Search date: 2026-10-18
S579 · PMID 30061173 · P03 · 2018-Oct-31 · Broader EV/cancer evidence
Title: d Rhamnose β-hederin reverses chemoresistance of breast cancer cells by regulating exosome-mediated resistance transmission.
DOI: 10.1042/BSR20180110; PMCID: PMC6165836; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/30061173/; Search date: 2026-10-18
S580 · PMID 30026327 · P03 · 2018-Aug-01 · Additional immune Relay candidate
Title: Loss of XIST in Breast Cancer Activates MSN-c-Met and Reprograms Microglia via Exosomal miRNA to Promote Brain Metastasis.
DOI: 10.1158/0008-5472.CAN-18-1102; PMCID: PMC6072593; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated immune-cell or immune-response study. Relevant to recipient context; mitochondrial source or mediator is not inferred from immune activity.; Correction/retraction links: ErratumIn:34725134
PubMed: https://pubmed.ncbi.nlm.nih.gov/30026327/; Search date: 2026-10-18
S581 · PMID 30015837 · P03 · 2018-Sep · Excluded: retraction status
Title: Exosome-mediated transfer of lncRNA-SNHG14 promotes trastuzumab chemoresistance in breast cancer.
DOI: 10.3892/ijo.2018.4467; PMCID: PMC6065402; Publication type: Journal Article;Retracted Publication; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: PubMed identifies a retracted publication or retraction notice; not used as positive mechanistic evidence.; Correction/retraction links: RetractionIn:35686548
PubMed: https://pubmed.ncbi.nlm.nih.gov/30015837/; Search date: 2026-10-18
S582 · PMID 30012170 · P01;P06 · 2018-Jul-16 · Existing panel source
Title: Suppression of PDHX by microRNA-27b deregulates cell metabolism and promotes growth in breast cancer.
DOI: 10.1186/s12943-018-0851-8; PMCID: PMC6048708; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: R8
Screening basis: PubMed title and publication-type metadata; Reason: PDHX-linked pyruvate metabolic adaptation; target knockdown phenocopy is separated from restoration.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/30012170/; Search date: 2026-10-18
S583 · PMID 30003739 · P01;P03 · 2018 · Association, profiling or analytical method
Title: A miRNAs profile evolution of triple negative breast cancer cells in the presence of a possible adjuvant therapy and senescence inducer.
DOI: not listed; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/30003739/; Search date: 2026-10-18
S584 · PMID 29988033 · P01 · 2018-Jul-09 · Additional small-RNA Rewiring candidate
Title: α-ketoglutarate dehydrogenase inhibition counteracts breast cancer-associated lung metastasis.
DOI: 10.1038/s41419-018-0802-8; PMCID: PMC6037705; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/29988033/; Search date: 2026-10-18
S585 · PMID 29975932 · P01 · 2018 · Excluded: retraction status
Title: miR-100 Reverses Cisplatin Resistance in Breast Cancer by Suppressing HAX-1.
DOI: 10.1159/000491476; PMCID: not listed; Publication type: Journal Article;Retracted Publication; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: PubMed identifies a retracted publication or retraction notice; not used as positive mechanistic evidence.; Correction/retraction links: RetractionIn:34190498
PubMed: https://pubmed.ncbi.nlm.nih.gov/29975932/; Search date: 2026-10-18
S586 · PMID 29963267 · P01 · 2018-Jun-15 · Association, profiling or analytical method
Title: Small non-coding RNA landscape is modified by GPAT2 silencing in MDA-MB-231 cells.
DOI: 10.18632/oncotarget.25582; PMCID: PMC6021339; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/29963267/; Search date: 2026-10-18
S587 · PMID 29881714 · P03 · 2018 · Secondary or non-primary literature
Title: Mechanisms and Therapy for Cancer Metastasis to the Brain.
DOI: 10.3389/fonc.2018.00161; PMCID: PMC5976742; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/29881714/; Search date: 2026-10-18
S588 · PMID 29872722 · P03 · 2018 · Secondary or non-primary literature
Title: Organotropism: new insights into molecular mechanisms of breast cancer metastasis.
DOI: 10.1038/s41698-018-0047-0; PMCID: PMC5871901; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/29872722/; Search date: 2026-10-18
S589 · PMID 29662176 · P03 · 2018-May · Additional metabolic Relay candidate
Title: Cancer-cell-secreted exosomal miR-105 promotes tumour growth through the MYC-dependent metabolic reprogramming of stromal cells.
DOI: 10.1038/s41556-018-0083-6; PMCID: PMC5920728; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated metabolic communication with a specified recipient or metabolic process. Retained as broader Relay evidence; mitochondrial mediation is not assumed from a metabolic endpoint.; Correction/retraction links: CommentIn:29662180
PubMed: https://pubmed.ncbi.nlm.nih.gov/29662176/; Search date: 2026-10-18
S590 · PMID 29620157 · P03 · 2018-Jun · Association, profiling or analytical method
Title: Glucocorticoid receptor overexpression slightly shifts microRNA expression patterns in triple-negative breast cancer.
DOI: 10.3892/ijo.2018.4336; PMCID: PMC5919721; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/29620157/; Search date: 2026-10-18
S591 · PMID 29609137 · P03 · 2018-Aug · Secondary or non-primary literature
Title: Cytokine-mediated therapeutic resistance in breast cancer.
DOI: 10.1016/j.cyto.2018.03.020; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/29609137/; Search date: 2026-10-18
S592 · PMID 29593419 · P03 · 2018 · Secondary or non-primary literature
Title: Functional miRNAs in breast cancer drug resistance.
DOI: 10.2147/OTT.S152462; PMCID: PMC5865556; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/29593419/; Search date: 2026-10-18

S593 · PMID 29434858 · P01 · 2018-Feb · Additional small-RNA Rewiring candidate
Title: miR-125b regulates the drug-resistance of breast cancer cells to doxorubicin by targeting HAX-1.
DOI: 10.3892/ol.2017.7476; PMCID: PMC5774474; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/29434858/; Search date: 2026-10-18
S594 · PMID 29425833 · P01 · 2018-Apr · Additional small-RNA Rewiring candidate
Title: Over expressing miR-19b-1 suppress breast cancer growth by inhibiting tumor microenvironment induced angiogenesis.
DOI: 10.1016/j.biocel.2018.02.005; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/29425833/; Search date: 2026-10-18
S595 · PMID 29348263 · P04 · 2018-Aug-14 · Additional mitochondrial immune/stress context
Title: Phosphoinositide 3-Kinase Gamma Inhibition Protects From Anthracycline Cardiotoxicity and Reduces Tumor Growth.
DOI: 10.1161/CIRCULATIONAHA.117.030352; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/29348263/; Search date: 2026-10-18
S596 · PMID 29339789 · P03 · 2018-Jan-16 · Broader EV/cancer evidence
Title: Exosome-mediated breast cancer chemoresistance via miR-155 transfer.
DOI: 10.1038/s41598-018-19339-5; PMCID: PMC5770414; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/29339789/; Search date: 2026-10-18
S597 · PMID 29323124 · P03 · 2018-Jan-11 · Broader EV/cancer evidence
Title: MiR-770 suppresses the chemo-resistance and metastasis of triple negative breast cancer via direct targeting of STMN1.
DOI: 10.1038/s41419-017-0030-7; PMCID: PMC5849036; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/29323124/; Search date: 2026-10-18
S598 · PMID 29229607 · P01 · 2018-Mar-01 · Association, profiling or analytical method
Title: Race Disparities in the Contribution of miRNA Isoforms and tRNA-Derived Fragments to Triple-Negative Breast Cancer.
DOI: 10.1158/0008-5472.CAN-17-1947; PMCID: PMC5935570; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/29229607/; Search date: 2026-10-18
S599 · PMID 29216623 · P03 · 2017 · Broader EV/cancer evidence
Title: Exosomal MicroRNA MiR-1246 Promotes Cell Proliferation, Invasion and Drug Resistance by Targeting CCNG2 in Breast Cancer.
DOI: 10.1159/000485780; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/29216623/; Search date: 2026-10-18
S600 · PMID 29151358 · P03 · 2018-Feb · Secondary or non-primary literature
Title: Exosomal microRNA: a novel biomarker for breast cancer.
DOI: 10.2217/bmm-2017-0305; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/29151358/; Search date: 2026-10-18
S601 · PMID 29143228 · P03 · 2018-Jul · Secondary or non-primary literature
Title: Effect of exosome biomarkers for diagnosis and prognosis of breast cancer patients.
DOI: 10.1007/s12094-017-1805-0; PMCID: not listed; Publication type: Journal Article;Systematic Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/29143228/; Search date: 2026-10-18
S602 · PMID 29139296 · P03 · 2018-Jan-05 · Association, profiling or analytical method
Title: Differential Content of Proteins, mRNAs, and miRNAs Suggests that MDSC and Their Exosomes May Mediate Distinct Immune Suppressive Functions.
DOI: 10.1021/acs.jproteome.7b00646; PMCID: PMC6200353; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/29139296/; Search date: 2026-10-18
S603 · PMID 29137386 · P01 · 2017-Oct-13 · Additional small-RNA Rewiring candidate
Title: Mitochondrial calcium uniporter as a target of microRNA-340 and promoter of metastasis via enhancing the Warburg effect.
DOI: 10.18632/oncotarget.19747; PMCID: PMC5663558; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/29137386/; Search date: 2026-10-18
S728 · PMID 29132384 · P06 · 2017-Nov-13 · Additional small-RNA Rewiring candidate
Title: MiR-361-5p inhibits glycolytic metabolism, proliferation and invasion of breast cancer by targeting FGFR1 and MMP-1.
DOI: 10.1186/s13046-017-0630-1; PMCID: PMC5683540; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/29132384/; Search date: 2026-10-18
S604 · PMID 29116653 · P01 · 2018-Jan · Additional small-RNA Rewiring candidate
Title: MiR-128 regulation of glucose metabolism and cell proliferation in triple-negative breast cancer.
DOI: 10.1002/bjs.10646; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/29116653/; Search date: 2026-10-18
S605 · PMID 29113237 · P01 · 2017-Nov · Additional small-RNA Rewiring candidate
Title: MicroRNA-10a suppresses breast cancer progression via PI3K/Akt/mTOR pathway.
DOI: 10.3892/ol.2017.6930; PMCID: PMC5661611; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/29113237/; Search date: 2026-10-18
S606 · PMID 29066618 · P01;P06 · 2017-Dec-15 · Additional small-RNA Rewiring candidate
Title: Epigenetic modification of miR-663 controls mitochondria-to-nucleus retrograde signaling and tumor progression.
DOI: 10.1074/jbc.M117.797001; PMCID: PMC5733605; Publication type: Comparative Study;Journal Article;Research Support, U.S. Gov't, Non-P.H.S.;Research Support, N.I.H., Extramural; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/29066618/; Search date: 2026-10-18
S729 · PMID 28990063 · P06 · 2017-Dec · Association, profiling or analytical method
Title: Bioinformatics analysis of gene expression data for the identification of critical genes in breast invasive carcinoma.
DOI: 10.3892/mmr.2017.7717; PMCID: PMC5779935; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/28990063/; Search date: 2026-10-18
S607 · PMID 28920955 · P01;P04 · 2017-Oct · Core example added
Title: miR-25/93 mediates hypoxia-induced immunosuppression by repressing cGAS.
DOI: 10.1038/ncb3615; PMCID: PMC5658024; Publication type: Journal Article; Claim ID: R34
Screening basis: Primary main text and figure captions; PubMed record; Reason: Direct breast-cancer miR-25/93–NCOA3–cGAS immune-sensing perturbation and rescue. Changes Release Tier-1 count; does not show control of mtDNA release quantity.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/28920955/; Search date: 2026-10-18
S608 · PMID 28741069 · P03 · 2017-Oct · Additional vascular Relay candidate
Title: MicroRNA-100 shuttled by mesenchymal stem cell-derived exosomes suppresses in vitro angiogenesis through modulating the mTOR/HIF-1α/VEGF signaling axis in breast cancer cells.
DOI: 10.1007/s13402-017-0335-7; PMCID: PMC13001539; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV/miRNA-associated angiogenesis or vascular endpoint. Mitochondrial control of loading or recipient function is not established by this bibliographic triage.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/28741069/; Search date: 2026-10-18
S609 · PMID 28701793 · P01;P06 · 2017-Jul-12 · Association, profiling or analytical method
Title: The miR-29 transcriptome in endocrine-sensitive and resistant breast cancer cells.
DOI: 10.1038/s41598-017-05727-w; PMCID: PMC5507892; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/28701793/; Search date: 2026-10-18
S610 · PMID 28694015 · P03 · 2017-Aug · Secondary or non-primary literature
Title: Predicting treatment resistance and relapse through circulating DNA.
DOI: 10.1016/j.breast.2017.06.024; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/28694015/; Search date: 2026-10-18
S611 · PMID 28683441 · P03 · 2017 · Association, profiling or analytical method

Title: Clinical Relevance of Circulating, Cell-Free and Exosomal microRNAs in Plasma and Serum of Breast Cancer Patients.
DOI: 10.1159/000478019; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/28683441/; Search date: 2026-10-18

S612 · PMID 28672799 · P03 · 2017-Jun-24 · Secondary or non-primary literature
Title: Exosomal MicroRNAs in Breast Cancer towards Diagnostic and Therapeutic Applications.
DOI: 10.3390/cancers9070071; PMCID: PMC5532607; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/28672799/; Search date: 2026-10-18

S730 · PMID 28639399 · P06 · 2018-Jan · Additional small-RNA Rewiring candidate
Title: TP73-AS1 promotes breast cancer cell proliferation through miR-200a-mediated TFAM inhibition.
DOI: 10.1002/jcb.26231; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/28639399/; Search date: 2026-10-18

S613 · PMID 28591165 · P01;P06 · 2017 · Comparative mammary-cancer pharmacology
Title: Dichloroacetate affects proliferation but not apoptosis in canine mammary cell lines.
DOI: 10.1371/journal.pone.0178744; PMCID: PMC5462399; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Canine mammary-cell dichloroacetate experiment. Comparative pharmacological context, without a separately appraised small-RNA perturbation claim.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/28591165/; Search date: 2026-10-18

S614 · PMID 28435471 · P03 · 2017 · Engineered delivery or composite intervention
Title: Nucleolin-targeted Extracellular Vesicles as a Versatile Platform for Biologics Delivery to Breast Cancer.
DOI: 10.7150/thno.16532; PMCID: PMC5399599; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/28435471/; Search date: 2026-10-18

S615 · PMID 28423543 · P01 · 2017-Mar-28 · Additional small-RNA Rewiring candidate
Title: MiR-519d impedes cisplatin-resistance in breast cancer stem cells by down-regulating the expression of MCL-1.
DOI: 10.18632/oncotarget.15781; PMCID: PMC5400641; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/28423543/; Search date: 2026-10-18

S616 · PMID 28383996 · P01 · 2017-Nov-01 · Additional small-RNA Rewiring candidate
Title: NFE2L2/NRF2 Activity Is Linked to Mitochondria and AMP-Activated Protein Kinase Signaling in Cancers Through miR-181c/Mitochondria-Encoded Cytochrome c Oxidase Regulation.
DOI: 10.1089/ars.2016.6797; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/28383996/; Search date: 2026-10-18

S617 · PMID 28220193 · P01 · 2017-Jun · Existing panel source
Title: hsa-miR-4485 regulates mitochondrial functions and inhibits the tumorigenicity of breast cancer cells.
DOI: 10.1007/s00109-017-1517-5; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: R3
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial rRNA-associated small RNA; distinguishes molecular interaction from protected organelle topology.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/28220193/; Search date: 2026-10-18
S618 · PMID 28202520 · P03 · 2017-Apr-15 · Broader EV/cancer evidence
Title: Evolution of Cancer Stem-like Cells in Endocrine-Resistant Metastatic Breast Cancers Is Mediated by Stromal Microvesicles.
DOI: 10.1158/0008-5472.CAN-16-2129; PMCID: PMC5392366; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: ErratumIn:28972069
PubMed: https://pubmed.ncbi.nlm.nih.gov/28202520/; Search date: 2026-10-18
S619 · PMID 28163101 · P03 · 2017-Nov-15 · Secondary or non-primary literature
Title: Identification of miRNAs as biomarkers for acquired endocrine resistance in breast cancer.
DOI: 10.1016/j.mce.2017.02.004; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/28163101/; Search date: 2026-10-18
S620 · PMID 28160157 · P03 · 2017-Apr · Association, profiling or analytical method
Title: A comparison of serum miRNAs influencing metastatic growth of EMT6 vs 4THM tumor cells in wild-type and CD200R1KO mice.
DOI: 10.1007/s10549-017-4128-5; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/28160157/; Search date: 2026-10-18
S621 · PMID 28126676 · P01;P06 · 2017-Apr · Existing panel source
Title: MiR-199a-3p enhances breast cancer cell sensitivity to cisplatin by downregulating TFAM (TFAM).
DOI: 10.1016/j.biopha.2017.01.058; PMCID: not listed; Publication type: Journal Article; Claim ID: R7a
Screening basis: PubMed title and publication-type metadata; Reason: TFAM-linked cisplatin-sensitivity claim with explicitly partial reversal; separated from hypoxic TFAM regulation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/28126676/; Search date: 2026-10-18
S622 · PMID 28121625 · P03 · 2017-Mar-21 · Broader EV/cancer evidence
Title: Cancer-associated fibroblasts release exosomal microRNAs that dictate an aggressive phenotype in breast cancer.
DOI: 10.18632/oncotarget.14752; PMCID: PMC5386708; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/28121625/; Search date: 2026-10-18
S623 · PMID 28109133 · P03 · 2018-Feb · Secondary or non-primary literature
Title: The prognostic and therapeutic application of microRNAs in breast cancer: Tissue and circulating microRNAs.
DOI: 10.1002/jcp.25813; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/28109133/; Search date: 2026-10-18
S624 · PMID 28084318 · P01 · 2017-Feb · Additional small-RNA Rewiring candidate
Title: Apoptosis-inducing and antiproliferative effect by inhibition of miR-182-5p through the regulation of CASP9 expression in human breast cancer.

DOI: 10.1038/cgt.2016.79; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/28084318/; Search date: 2026-10-18
S625 · PMID 28038441 · P03 · 2017-Feb-07 · Broader EV/cancer evidence
Title: Visualization of exosome-mediated miR-210 transfer from hypoxic tumor cells.
DOI: 10.18632/oncotarget.14247; PMCID: PMC5354779; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/28038441/; Search date: 2026-10-18
S731 · PMID 27916422 · P06 · 2017-Jan · Additional small-RNA Rewiring candidate
Title: PGC-1 alpha interacts with microRNA-217 to functionally regulate breast cancer cell proliferation.
DOI: 10.1016/j.biopha.2016.11.062; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/27916422/; Search date: 2026-10-18
S626 · PMID 27894092 · P03 · 2016-Dec-27 · Engineered delivery or composite intervention
Title: A novel fully human anti-NCL immunoRNase for triple-negative breast cancer therapy.
DOI: 10.18632/oncotarget.13522; PMCID: PMC5349967; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/27894092/; Search date: 2026-10-18
S627 · PMID 27853906 · P03 · 2017-Jan · Broader EV/cancer evidence
Title: Downregulation of estrogen receptor and modulation of growth of breast cancer cell lines mediated by paracrine stromal cell signals.
DOI: 10.1007/s10549-016-4052-0; PMCID: PMC5556382; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/27853906/; Search date: 2026-10-18
S628 · PMID 27822413 · P01;P06 · 2016 · Additional small-RNA Rewiring candidate
Title: MiR-106b-mediated Mfn2 suppression is critical for PKM2 induced mitochondrial fusion.
DOI: not listed; PMCID: PMC5088287; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/27822413/; Search date: 2026-10-18
S629 · PMID 27822407 · P03 · 2016 · Secondary or non-primary literature
Title: Exosomes-mediate microRNAs transfer in breast cancer chemoresistance regulation.
DOI: not listed; PMCID: PMC5088281; Publication type: Review;Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/27822407/; Search date: 2026-10-18
S732 · PMID 27807832 · P06 · 2017 · Secondary or non-primary literature
Title: Transcriptome and Proteome Analyses of TNFAIP8 Knockdown Cancer Cells Reveal New Insights into Molecular Determinants of Cell Survival and Tumor Progression.

DOI: 10.1007/978-1-4939-6539-7_7; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/27807832/; Search date: 2026-10-18
S630 · PMID 27618431 · P01 · 2016 · Additional small-RNA Rewiring candidate
Title: MicroRNA-223 Increases the Sensitivity of Triple-Negative Breast Cancer Stem Cells to TRAIL-Induced Apoptosis by Targeting HAX-1.
DOI: 10.1371/journal.pone.0162754; PMCID: PMC5019415; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/27618431/; Search date: 2026-10-18
S631 · PMID 27596816 · P01 · 2016-Nov-01 · Additional small-RNA Rewiring candidate
Title: miR-15a/miR-16 induces mitochondrial dependent apoptosis in breast cancer cells by suppressing oncogene BMI1.
DOI: 10.1016/j.lfs.2016.08.028; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/27596816/; Search date: 2026-10-18
S632 · PMID 27579604 · P03 · 2016 · Association, profiling or analytical method
Title: Distinct Small RNA Signatures in Extracellular Vesicles Derived from Breast Cancer Cell Lines.
DOI: 10.1371/journal.pone.0161824; PMCID: PMC5006963; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/27579604/; Search date: 2026-10-18
S633 · PMID 27571936 · P03 · 2016-Aug-30 · Outside breast-cancer experimental scope
Title: Circulating intestine-derived exosomal miR-328 in plasma, a possible biomarker for estimating BCRP function in the human intestines.
DOI: 10.1038/srep32299; PMCID: PMC5004159; Publication type: Clinical Trial;Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Primary study addresses another disease, non-breast tumor or non-tumor toxicity context. Retained as retrieval record; not assigned a breast-cancer RNA-causal tier.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/27571936/; Search date: 2026-10-18
S634 · PMID 27569215 · P03 · 2016-Oct-01 · Broader EV/cancer evidence
Title: Mesenchymal Stem Cell-Derived Exosomes Stimulate Cycling Quiescence and Early Breast Cancer Dormancy in Bone Marrow.
DOI: 10.1158/0008-5472.CAN-16-1092; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/27569215/; Search date: 2026-10-18
S635 · PMID 27515302 · P03 · 2016-Aug-11 · Secondary or non-primary literature
Title: Tumor-associated stromal cells as key contributors to the tumor microenvironment.
DOI: 10.1186/s13058-016-0740-2; PMCID: PMC4982339; Publication type: Journal Article;Review;Research Support, N.I.H., Extramural; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/27515302/; Search date: 2026-10-18

S636 · PMID 27476169 · P01 · 2016-Oct · Additional small-RNA Rewiring candidate
Title: Knockdown of miR-182 promotes apoptosis via regulating RIP1 deubiquitination in TNF-α-treated triple-negative breast cancer cells.
DOI: 10.1007/s13277-016-5174-z; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/27476169/; Search date: 2026-10-18
S637 · PMID 27464995 · P01;P06 · 2016 · Secondary or non-primary literature
Title: Potential of Taming MicroRNA on Driver Seat to Control Mitochondrial Horses in Breast Carcinoma.
DOI: 10.2174/2211536605666160727104405; PMCID: not listed; Publication type: Journal Article;Review;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/27464995/; Search date: 2026-10-18
S638 · PMID 27345402 · P03 · 2017-Feb-02 · Additional immune Relay candidate
Title: Exosomes miR-126a released from MDSC induced by DOX treatment promotes lung metastasis.
DOI: 10.1038/onc.2016.229; PMCID: PMC5419051; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, Non-U.S. Gov't;Research Support, U.S. Gov't, Non-P.H.S.; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated immune-cell or immune-response study. Relevant to recipient context; mitochondrial source or mediator is not inferred from immune activity.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/27345402/; Search date: 2026-10-18
S639 · PMID 27294413 · P01 · 2016-May-26 · Association, profiling or analytical method
Title: Human genome meeting 2016 : Houston, TX, USA. 28 February - 2 March 2016.
DOI: 10.1186/s40246-016-0063-5; PMCID: PMC4896275; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/27294413/; Search date: 2026-10-18
S640 · PMID 27266580 · P01 · 2016-Jul-05 · Engineered delivery or composite intervention
Title: Codelivery of a miR-124 Mimic and Obatoclax by Cholesterol-Penetratin Micelles Simultaneously Induces Apoptosis and Inhibits Autophagic Flux in Breast Cancer in Vitro and in Vivo.
DOI: 10.1021/acs.molpharmaceut.6b00211; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/27266580/; Search date: 2026-10-18
S641 · PMID 27245202 · P01 · 2016-Oct · Additional small-RNA Rewiring candidate
Title: HMGI-C suppressing induces P53/caspase9 axis to regulate apoptosis in breast adenocarcinoma cells.
DOI: 10.1080/15384101.2016.1190892; PMCID: PMC5053549; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/27245202/; Search date: 2026-10-18
S642 · PMID 27010860 · P01;P06 · 2016-Mar-24 · Additional small-RNA Rewiring candidate
Title: MiR-485-3p and miR-485-5p suppress breast cancer cell metastasis by inhibiting PGC-1α expression.
DOI: 10.1038/cddis.2016.27; PMCID: PMC4823935; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared

ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/27010860/; Search date: 2026-10-18
S643 · PMID 26910922 · P03 · 2016-Apr-12 · Association, profiling or analytical method
Title: MicroRNA expression profiles of drug-resistance breast cancer cells and their exosomes.
DOI: 10.18632/oncotarget.7481; PMCID: PMC4991404; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/26910922/; Search date: 2026-10-18
S644 · PMID 26797784 · P03 · 2016-Mar · Secondary or non-primary literature
Title: Extracellular vesicles in breast cancer drug resistance and their clinical application.
DOI: 10.1007/s13277-015-4683-5; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/26797784/; Search date: 2026-10-18
S733 · PMID 26795347 · P06 · 2016-Mar-15 · Additional small-RNA Rewiring candidate
Title: miR-155 Drives Metabolic Reprogramming of ER+ Breast Cancer Cells Following Long-Term Estrogen Deprivation and Predicts Clinical Response to Aromatase Inhibitors.
DOI: 10.1158/0008-5472.CAN-15-2038; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/26795347/; Search date: 2026-10-18
S645 · PMID 26794868 · P03 · 2016-Feb · Engineered delivery or composite intervention
Title: Cross-kingdom inhibition of breast cancer growth by plant miR159.
DOI: 10.1038/cr.2016.13; PMCID: PMC4746606; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/26794868/; Search date: 2026-10-18
S646 · PMID 26707189 · P01 · 2016-Mar · Additional small-RNA Rewiring candidate
Title: Isolinderalactone enhances the inhibition of SOCS3 on STAT3 activity by decreasing miR-30c in breast cancer.
DOI: 10.3892/or.2015.4503; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: ErratumIn:41456436
PubMed: https://pubmed.ncbi.nlm.nih.gov/26707189/; Search date: 2026-10-18
S647 · PMID 26662313 · P01 · 2016-May · Additional small-RNA Rewiring candidate
Title: miR-27a regulates the sensitivity of breast cancer cells to cisplatin treatment via BAK-SMAC/DIABLO-XIAP axis.
DOI: 10.1007/s13277-015-4500-1; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/26662313/; Search date: 2026-10-18
S648 · PMID 26632252 · P01 · 2015-Dec-03 · Additional small-RNA Rewiring candidate

Title: MicroRNA-195 inhibits proliferation, invasion and metastasis in breast cancer cells by targeting FASN, HMGCR, ACACA and CYP27B1.
DOI: 10.1038/srep17454; PMCID: PMC4668367; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/26632252/; Search date: 2026-10-18
S649 · PMID 26601108 · P03 · 2015 · Secondary or non-primary literature
Title: Breast Cancer-Derived Extracellular Vesicles: Characterization and Contribution to the Metastatic Phenotype.
DOI: 10.1155/2015/634865; PMCID: PMC4639645; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/26601108/; Search date: 2026-10-18
S650 · PMID 26582656 · P03 · 2016-Sep-28 · Secondary or non-primary literature
Title: Non-coding RNA as mediators in microenvironment-breast cancer cell communication.
DOI: 10.1016/j.canlet.2015.11.016; PMCID: not listed; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/26582656/; Search date: 2026-10-18
S651 · PMID 26572075 · P01 · 2016-Feb · Additional small-RNA Rewiring candidate
Title: MiR-181b promotes chemoresistance in breast cancer by regulating Bim expression.
DOI: 10.3892/or.2015.4417; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/26572075/; Search date: 2026-10-18
S652 · PMID 26555545 · P03 · 2016-Apr · Broader EV/cancer evidence
Title: Exosomes decrease sensitivity of breast cancer cells to adriamycin by delivering microRNAs.
DOI: 10.1007/s13277-015-4402-2; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/26555545/; Search date: 2026-10-18
S653 · PMID 26528758 · P03 · 2015-Dec-01 · Broader EV/cancer evidence
Title: Exosomes enriched in stemness/metastatic-related mRNAS promote oncogenic potential in breast cancer.
DOI: 10.18632/oncotarget.5818; PMCID: PMC4747353; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/26528758/; Search date: 2026-10-18
S654 · PMID 26520043 · P01 · 2016-Jan · Protein, drug or EV intervention context
Title: Tailored-CuO-nanowire decorated with folic acid mediated coupling of the mitochondrial-ROS generation and miR425-PTEN axis in furnishing potent anti-cancer activity in human triple negative breast carcinoma cells.
DOI: 10.1016/j.biomaterials.2015.10.044; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The intervention principally concerns a protein, compound or composite EV exposure; associated miRNA expression alone is not treated as RNA-specific causal evidence.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/26520043/; Search date: 2026-10-18

S655 · PMID 26503209 · P01 · 2016-Apr · Additional small-RNA Rewiring candidate

Title: Knockdown of miR-221 promotes the cisplatin-inducing apoptosis by targeting the BIM-Bax/Bak axis in breast cancer.

DOI: 10.1007/s13277-015-4267-4; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/26503209/; Search date: 2026-10-18

S656 · PMID 26477310 · P01 · 2016-May · Additional small-RNA Rewiring candidate

Title: Systematic integration of molecular profiles identifies miR-22 as a regulator of lipid and folate metabolism in breast cancer cells.

DOI: 10.1038/onc.2015.333; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned

Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/26477310/; Search date: 2026-10-18

S657 · PMID 26468652 · P01;P06 · 2015 · Protein, drug or EV intervention context

Title: Mitochondrial DNA Polymerase POLG1 Disease Mutations and Germline Variants Promote Tumorigenic Properties.

DOI: 10.1371/journal.pone.0139846; PMCID: PMC4607296; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, U.S. Gov't, Non-P.H.S.; Claim ID: not assigned

Screening basis: PubMed title and relevant abstract passages; Reason: The intervention principally concerns a protein, compound or composite EV exposure; associated miRNA expression alone is not treated as RNA-specific causal evidence.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/26468652/; Search date: 2026-10-18

S658 · PMID 26432333 · P03 · 2016-Mar · Broader EV/cancer evidence

Title: Exosomes from adriamycin-resistant breast cancer cells transmit drug resistance partly by delivering miR-222.

DOI: 10.1007/s13277-015-4161-0; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/26432333/; Search date: 2026-10-18

S659 · PMID 26416415 · P03 · 2015-Oct-20 · Engineered delivery or composite intervention

Title: miR-134 in extracellular vesicles reduces triple-negative breast cancer aggression and increases drug sensitivity.

DOI: 10.18632/oncotarget.5192; PMCID: PMC4741729; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/26416415/; Search date: 2026-10-18

S660 · PMID 26407856 · P05 · 2015-Oct · Additional organelle-transfer context

Title: Exogenous normal mammary epithelial mitochondria suppress glycolytic metabolism and glucose uptake of human breast cancer cells.

DOI: 10.1007/s10549-015-3583-0; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: Whole-organelle transfer or transplantation is relevant to Relay, but does not identify a necessary transferred small-RNA cargo.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/26407856/; Search date: 2026-10-18

S661 · PMID 26325506 · P01 · 2015-Sep-22 · Association, profiling or analytical method
Title: Dissecting tRNA-derived fragment complexities using personalized transcriptomes reveals novel fragment classes and unexpected dependencies.
DOI: 10.18632/oncotarget.4695; PMCID: PMC4694795; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/26325506/; Search date: 2026-10-18
S734 · PMID 26309161 · P06 · 2015-Sep-29 · Additional small-RNA Rewiring candidate
Title: The oncoprotein HBXIP promotes glucose metabolism reprogramming via downregulating SCO2 and PDHA1 in breast cancer.
DOI: 10.18632/oncotarget.4508; PMCID: PMC4694983; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/26309161/; Search date: 2026-10-18
S662 · PMID 26298722 · P01 · 2016-Feb · Additional small-RNA Rewiring candidate
Title: MiR-944 functions as a novel oncogene and regulates the chemoresistance in breast cancer.
DOI: 10.1007/s13277-015-3844-x; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/26298722/; Search date: 2026-10-18
S663 · PMID 26279432 · P03 · 2015 · Broader EV/cancer evidence
Title: β-Elemene Reverses Chemoresistance of Breast Cancer Cells by Reducing Resistance Transmission via Exosomes.
DOI: 10.1159/000430191; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/26279432/; Search date: 2026-10-18
S664 · PMID 26238497 · P03 · 2015-Jul · Secondary or non-primary literature
Title: Potential biomarkers of exosomal cargo in endocrine signaling.
DOI: 10.4149/endo_2015_03_141; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/26238497/; Search date: 2026-10-18
S665 · PMID 26214095 · P04 · 2015-Jul-30 · Outside breast-cancer experimental scope
Title: Human saliva as route of inter-human infection for mouse mammary tumor virus.
DOI: 10.18632/oncotarget.4567; PMCID: PMC4621895; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Primary study addresses another disease, non-breast tumor or non-tumor toxicity context. Retained as retrieval record; not assigned a breast-cancer RNA-causal tier.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/26214095/; Search date: 2026-10-18
S666 · PMID 26178901 · P03 · 2015-Jul-16 · Additional vascular Relay candidate
Title: Exosome-mediated microRNA signaling from breast cancer cells is altered by the anti-angiogenesis agent docosahexaenoic acid (DHA).
DOI: 10.1186/s12943-015-0400-7; PMCID: PMC4504101; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, Non-U.S. Gov't; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: EV/miRNA-associated angiogenesis or vascular endpoint. Mitochondrial control of loading or recipient function is not established by this bibliographic triage.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/26178901/; Search date: 2026-10-18
S667 · PMID 26130410 · P03 · 2014-Dec · Secondary or non-primary literature
Title: Exosomes Derived from Breast Cancer Cells, Small Trojan Horses?
DOI: 10.1007/s10911-015-9332-5; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/26130410/; Search date: 2026-10-18
S668 · PMID 26107945 · P01 · 2015 · Additional small-RNA Rewiring candidate
Title: MiR-133a Is Functionally Involved in Doxorubicin-Resistance in Breast Cancer Cells MCF-7 via Its Regulation of the Expression of Uncoupling Protein 2.
DOI: 10.1371/journal.pone.0129843; PMCID: PMC4481265; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/26107945/; Search date: 2026-10-18
S669 · PMID 25894378 · P01 · 2015-Sep · Additional small-RNA Rewiring candidate
Title: The role of miR-125b-mitochondria-caspase-3 pathway in doxorubicin resistance and therapy in human breast cancer.
DOI: 10.1007/s13277-015-3438-7; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/25894378/; Search date: 2026-10-18
S670 · PMID 25860935 · P03 · 2015-Apr-30 · Additional vascular Relay candidate
Title: Endothelial exosomes contribute to the antitumor response during breast cancer neoadjuvant chemotherapy via microRNA transfer.
DOI: 10.18632/oncotarget.3520; PMCID: PMC4496353; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV/miRNA-associated angiogenesis or vascular endpoint. Mitochondrial control of loading or recipient function is not established by this bibliographic triage.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/25860935/; Search date: 2026-10-18
S671 · PMID 25860815 · P03 · 2015-Apr-09 · Secondary or non-primary literature
Title: The Roles of MicroRNAs in Breast Cancer.
DOI: 10.3390/cancers7020598; PMCID: PMC4491673; Publication type: Journal Article;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/25860815/; Search date: 2026-10-18
S672 · PMID 25845386 · P04 · 2015-Jun · Association, profiling or analytical method
Title: Mitochondrial DNA alterations correlate with the pathological status and the immunological ER, PR, HER-2/neu, p53 and Ki-67 expression in breast invasive ductal carcinoma.
DOI: 10.3892/or.2015.3887; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/25845386/; Search date: 2026-10-18
S673 · PMID 25669981 · P01;P06 · 2015-Feb-10 · Additional small-RNA Rewiring candidate
Title: Metabolic reprogramming of metastatic breast cancer and melanoma by let-7a microRNA.

DOI: 10.18632/oncotarget.3235; PMCID: PMC4385863; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/25669981/; Search date: 2026-10-18
S674 · PMID 25669974 · P03 · 2015-Mar-10 · Engineered delivery or composite intervention
Title: Extracellular vesicles from bone marrow mesenchymal stem/stromal cells transport tumor regulatory microRNA, proteins, and metabolites.
DOI: 10.18632/oncotarget.3211; PMCID: PMC4467126; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Imposed RNA/drug/vesicle delivery or an analytical nanoplatform. Kept separate from evidence of endogenous RNA origin and trafficking.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/25669974/; Search date: 2026-10-18
S675 · PMID 25621950 · P03 · 2015-Feb · Additional metabolic Relay candidate
Title: Breast-cancer-secreted miR-122 reprograms glucose metabolism in premetastatic niche to promote metastasis.
DOI: 10.1038/ncb3094; PMCID: PMC4380143; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, Non-U.S. Gov't;Research Support, U.S. Gov't, Non-P.H.S.; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated metabolic communication with a specified recipient or metabolic process. Retained as broader Relay evidence; mitochondrial mediation is not assumed from a metabolic endpoint.; Correction/retraction links: CommentIn:25928026
PubMed: https://pubmed.ncbi.nlm.nih.gov/25621950/; Search date: 2026-10-18
S676 · PMID 25596948 · P01 · 2015-Apr · Additional small-RNA Rewiring candidate
Title: Quercetin inhibits proliferation and invasion acts by up-regulating miR-146a in human breast cancer cells.
DOI: 10.1007/s11010-014-2317-7; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/25596948/; Search date: 2026-10-18
S677 · PMID 25069443 · P03 · 2014 · Additional immune Relay candidate
Title: Tumor-Derived Exosomes Contain microRNAs with Immunological Function: Implications for a Novel Immunosuppression Mechanism.
DOI: 10.2174/22115366113029990012; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated immune-cell or immune-response study. Relevant to recipient context; mitochondrial source or mediator is not inferred from immune activity.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/25069443/; Search date: 2026-10-18
S678 · PMID 25007959 · P03 · 2014-Sep · Broader EV/cancer evidence
Title: Exosomal miR-221/222 enhances tamoxifen resistance in recipient ER-positive breast cancer cells.
DOI: 10.1007/s10549-014-3037-0; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/25007959/; Search date: 2026-10-18
S679 · PMID 24969560 · P03 · 2014-Oct · Broader EV/cancer evidence
Title: Exosomes from docetaxel-resistant breast cancer cells alter chemosensitivity by delivering microRNAs.
DOI: 10.1007/s13277-014-2242-0; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/24969560/; Search date: 2026-10-18
S680 · PMID 24740415 · P03 · 2014 · Broader EV/cancer evidence
Title: Exosomes from drug-resistant breast cancer cells transmit chemoresistance by a horizontal transfer of microRNAs.
DOI: 10.1371/journal.pone.0095240; PMCID: PMC3989268; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/24740415/; Search date: 2026-10-18
S681 · PMID 24684598 · P01;P06 · 2014-May · Additional small-RNA Rewiring candidate
Title: microRNA-200a inhibits cell proliferation by targeting mitochondrial transcription factor A in breast cancer.
DOI: 10.1089/dna.2013.2132; PMCID: not listed; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/24684598/; Search date: 2026-10-18
S682 · PMID 24564888 · P04 · 2014-Feb-24 · Additional mitochondrial immune/stress context
Title: Wnt modulates MCL1 to control cell survival in triple negative breast cancer.
DOI: 10.1186/1471-2407-14-124; PMCID: PMC3936852; Publication type: Journal Article;Randomized Controlled Trial; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Mitochondrial DNA, stress, protein or therapeutic intervention context. Does not by itself demonstrate a specified mitochondrial small-RNA causal chain.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/24564888/; Search date: 2026-10-18
S683 · PMID 24391924 · P03 · 2013 · Additional vascular Relay candidate
Title: Exosomes derived from mesenchymal stem cells suppress angiogenesis by down-regulating VEGF expression in breast cancer cells.
DOI: 10.1371/journal.pone.0084256; PMCID: PMC3877259; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV/miRNA-associated angiogenesis or vascular endpoint. Mitochondrial control of loading or recipient function is not established by this bibliographic triage.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/24391924/; Search date: 2026-10-18
S684 · PMID 24272085 · P03 · 2014-Apr · Secondary or non-primary literature
Title: MicroRNAs delivered by extracellular vesicles: an emerging resistance mechanism for breast cancer.
DOI: 10.1007/s13277-013-1417-4; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/24272085/; Search date: 2026-10-18
S685 · PMID 24044575 · P03 · 2013-Sep-17 · Additional immune Relay candidate
Title: Exosome derived from epigallocatechin gallate treated breast cancer cells suppresses tumor growth by inhibiting tumor-associated macrophage infiltration and M2 polarization.
DOI: 10.1186/1471-2407-13-421; PMCID: PMC3848851; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated immune-cell or immune-response study. Relevant to recipient context; mitochondrial source or mediator is not inferred from immune activity.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/24044575/; Search date: 2026-10-18
S686 · PMID 24039897 · P01 · 2013 · Excluded: retraction status
Title: A Bmi1-miRNAs cross-talk modulates chemotherapy response to 5-fluorouracil in breast cancer cells.

DOI: 10.1371/journal.pone.0073268; PMCID: PMC3767789; Publication type: Journal Article;Research Support, Non-U.S. Gov't;Retracted Publication; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: PubMed identifies a retracted publication or retraction notice; not used as positive mechanistic evidence.; Correction/retraction links: RetractionIn:39992914
PubMed: https://pubmed.ncbi.nlm.nih.gov/24039897/; Search date: 2026-10-18
S687 · PMID 23623609 · P01 · 2013-Jun · Additional small-RNA Rewiring candidate
Title: miR-135b coordinates progression of ErbB2-driven mammary carcinomas through suppression of MID1 and MTCH2.
DOI: 10.1016/j.ajpath.2013.02.046; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/23623609/; Search date: 2026-10-18
S688 · PMID 23487440 · P03 · 2013-May · Secondary or non-primary literature
Title: MicroRNAs in Cancer: the 22nd Hiroshima Cancer Seminar/the 4th Japanese Association for RNA Interference Joint International Symposium, 30 August 2012, Grand Prince Hotel Hiroshima.
DOI: 10.1093/jjco/hyt037; PMCID: not listed; Publication type: Conference Proceedings; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/23487440/; Search date: 2026-10-18
S689 · PMID 23439645 · P03 · 2013-Apr-12 · Additional vascular Relay candidate
Title: Neutral sphingomyelinase 2 (nSMase2)-dependent exosomal transfer of angiogenic microRNAs regulate cancer cell metastasis.
DOI: 10.1074/jbc.M112.446831; PMCID: PMC3624465; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV/miRNA-associated angiogenesis or vascular endpoint. Mitochondrial control of loading or recipient function is not established by this bibliographic triage.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/23439645/; Search date: 2026-10-18
S690 · PMID 23091604 · P01 · 2012 · Additional small-RNA Rewiring candidate
Title: Oxidized LDL triggers pro-oncogenic signaling in human breast mammary epithelial cells partly via stimulation of MiR-21.
DOI: 10.1371/journal.pone.0046973; PMCID: PMC3473036; Publication type: Journal Article;Research Support, Non-U.S. Gov't;Research Support, U.S. Gov't, Non-P.H.S.; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/23091604/; Search date: 2026-10-18
S691 · PMID 22998595 · P03 · 2012-Sep-24 · Broader EV/cancer evidence
Title: Hypoxic enhancement of exosome release by breast cancer cells.
DOI: 10.1186/1471-2407-12-421; PMCID: PMC3488584; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: General EV biomarker, drug-response, growth, invasion or dissemination topic. Retained transparently; detailed small-RNA/mitochondrial mechanism was not selected for source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/22998595/; Search date: 2026-10-18
S692 · PMID 22977373 · P04 · 2012-Jan · Association, profiling or analytical method
Title: Association of mitochondrial DNA 10398 polymorphism in invasive breast cancer in malay population of peninsular malaysia.
DOI: not listed; PMCID: PMC3436496; Publication type: Journal Article; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed

PubMed: https://pubmed.ncbi.nlm.nih.gov/22977373/; Search date: 2026-10-18
S693 · PMID 22844461 · P01;P06 · 2012 · Association, profiling or analytical method
Title: Differential gene expression in tamoxifen-resistant breast cancer cells revealed by a new analytical model of RNA-Seq data.
DOI: 10.1371/journal.pone.0041333; PMCID: PMC3402532; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/22844461/; Search date: 2026-10-18
S694 · PMID 22616882 · P01 · 2012-May-22 · Additional small-RNA Rewiring candidate
Title: MicroRNA-34a and microRNA-21 play roles in the chemopreventive effects of 3,6-dihydroxyflavone on 1-methyl-1-nitrosourea-induced breast carcinogenesis.
DOI: 10.1186/bcr3194; PMCID: PMC3446343; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/22616882/; Search date: 2026-10-18
S695 · PMID 22418571 · P03 · 2012-Apr · Secondary or non-primary literature
Title: Lipid-based carriers of microRNAs and intercellular communication.
DOI: 10.1097/MOL.0b013e328350a425; PMCID: PMC5570485; Publication type: Journal Article;Research Support, N.I.H., Intramural;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/22418571/; Search date: 2026-10-18
S696 · PMID 22328513 · P01 · 2012-Mar-15 · Additional small-RNA Rewiring candidate
Title: Downregulation of BCL2 by miRNAs augments drug-induced apoptosis--a combined computational and experimental approach.
DOI: 10.1242/jcs.095976; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/22328513/; Search date: 2026-10-18
S697 · PMID 21965597 · P03 · 2012-Jan · Association, profiling or analytical method
Title: Microparticle-associated nucleic acids mediate trait dominance in cancer.
DOI: 10.1096/fj.11-186817; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/21965597/; Search date: 2026-10-18
S698 · PMID 21939504 · P03 · 2011-Sep-22 · Additional immune Relay candidate
Title: Microvesicles secreted by macrophages shuttle invasion-potentiating microRNAs into breast cancer cells.
DOI: 10.1186/1476-4598-10-117; PMCID: PMC3190352; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: EV-associated immune-cell or immune-response study. Relevant to recipient context; mitochondrial source or mediator is not inferred from immune activity.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/21939504/; Search date: 2026-10-18
S699 · PMID 21601258 · P03 · 2011-Aug · Association, profiling or analytical method
Title: Loss of EpCAM expression in breast cancer derived serum exosomes: role of proteolytic cleavage.
DOI: 10.1016/j.ygyno.2011.04.035; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned

Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/21601258/; Search date: 2026-10-18
S700 · PMID 21235772 · P01 · 2011-Jan-14 · Association, profiling or analytical method
Title: Global analysis of estrogen receptor beta binding to breast cancer cell genome reveals an extensive interplay with estrogen receptor alpha for target gene regulation.
DOI: 10.1186/1471-2164-12-36; PMCID: PMC3025958; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/21235772/; Search date: 2026-10-18
S701 · PMID 21059829 · P03 · 2011-Jan · Secondary or non-primary literature
Title: Intracellular and extracellular microRNAs in breast cancer.
DOI: 10.1373/clinchem.2010.150730; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/21059829/; Search date: 2026-10-18
S702 · PMID 21042732 · P01 · 2010-Dec · Additional small-RNA Rewiring candidate
Title: PUMA is a novel target of miR-221/222 in human epithelial cancers.
DOI: 10.3892/ijo_00000816; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't;Validation Study; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/21042732/; Search date: 2026-10-18
S703 · PMID 20861672 · P01;P06 · 2010-Sep-01 · Association, profiling or analytical method
Title: The autophagic tumor stroma model of cancer: Role of oxidative stress and ketone production in fueling tumor cell metabolism.
DOI: 10.4161/cc.9.17.12721; PMCID: PMC3047615; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/20861672/; Search date: 2026-10-18
S704 · PMID 20682393 · P04 · 2010-Sep · Association, profiling or analytical method
Title: Number of somatic mutations in the mitochondrial D-loop region indicates poor prognosis in breast cancer, independent of TP53 mutation.
DOI: 10.1016/j.cancergencyto.2010.05.013; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/20682393/; Search date: 2026-10-18
S705 · PMID 20514397 · P01 · 2010-Jul · Additional small-RNA Rewiring candidate
Title: miR-1226 targets expression of the mucin 1 oncoprotein and induces cell death.
DOI: 10.3892/ijo_00000653; PMCID: PMC3027208; Publication type: Journal Article;Research Support, N.I.H., Extramural; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Retrieved for a small-RNA and mitochondrial/metabolic/death relationship. Retained as additional relevant evidence rather than declared ineligible; not included in the illustrative LIFT panel without separate source-level appraisal.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/20514397/; Search date: 2026-10-18
S706 · PMID 20305446 · P04 · 2010-Apr · Outside breast-cancer experimental scope
Title: Spectrum of MLH1 and MSH2 mutations in Chilean families with suspected Lynch syndrome.

DOI: 10.1007/DCR.0b013e3181d0c114; PMCID: not listed; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Primary study addresses another disease, non-breast tumor or non-tumor toxicity context. Retained as retrieval record; not assigned a breast-cancer RNA-causal tier.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/20305446/; Search date: 2026-10-18
S707 · PMID 20235276 · P03 · 2010-Jun · Secondary or non-primary literature
Title: Flow cytometric analysis of circulating microparticles in plasma.
DOI: 10.1002/cyto.a.20886; PMCID: PMC2919894; Publication type: Journal Article;Research Support, N.I.H., Extramural;Review; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: Retained in retrieval inventory for background/citation tracing; not an independent mechanistic observation.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/20235276/; Search date: 2026-10-18
S708 · PMID 20122248 · P01 · 2010-Feb-02 · Outside breast-cancer experimental scope
Title: Antimicrobial peptaibols, novel suppressors of tumor cells, targeted calcium-mediated apoptosis and autophagy in human hepatocellular carcinoma cells.
DOI: 10.1186/1476-4598-9-26; PMCID: PMC2825246; Publication type: Journal Article;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and relevant abstract passages; Reason: Primary study addresses another disease, non-breast tumor or non-tumor toxicity context. Retained as retrieval record; not assigned a breast-cancer RNA-causal tier.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/20122248/; Search date: 2026-10-18
S709 · PMID 19170108 · P04 · 2009-Jun · Association, profiling or analytical method
Title: Mitochondrial localization, ELK-1 transcriptional regulation and growth inhibitory functions of BRCA1, BRCA1a, and BRCA1b proteins.
DOI: 10.1002/jcp.21708; PMCID: PMC3693557; Publication type: Journal Article;Research Support, N.I.H., Extramural;Research Support, Non-U.S. Gov't; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/19170108/; Search date: 2026-10-18
S710 · PMID 17604135 · P04 · 2007-Dec · Association, profiling or analytical method
Title: ERbeta shifts from mitochondria to nucleus during estrogen-induced neoplastic transformation of human breast epithelial cells and is involved in estrogen-induced synthesis of mitochondrial respiratory chain proteins.
DOI: 10.1016/j.bbamcr.2007.05.008; PMCID: not listed; Publication type: Journal Article;Research Support, U.S. Gov't, Non-P.H.S.; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/17604135/; Search date: 2026-10-18
S711 · PMID 14736707 · P04 · 2004-Jun · Association, profiling or analytical method
Title: Mitochondrial localization of ERalpha and ERbeta in human MCF7 cells.
DOI: 10.1152/ajpendo.00508.2003; PMCID: not listed; Publication type: Journal Article;Research Support, U.S. Gov't, P.H.S.; Claim ID: not assigned
Screening basis: PubMed title and publication-type metadata; Reason: The title/abstract supports observational, computational or analytical evidence. No separately appraised RNA-perturbation claim is inferred.; Correction/retraction links: not listed
PubMed: https://pubmed.ncbi.nlm.nih.gov/14736707/; Search date: 2026-10-18

Data S3. Claim data and source-selection crosswalk
Thirty-eight selected records: LIFT/context classifications, inclusion and function subsets, source scope and selection rationale. These are selected claims, not the 734-record PubMed eligibility denominator.

R1 · Rewiring · Inhibition of mitochondrial genome-encoded mitomiR-3 contributes to ZEB1 mediated GPX4 downregulation and pro-ferroptotic lipid metabolism to induce ferroptosis in breast cancer cells.
Citation: 40239722; DOI 10.1016/j.freeradbiomed.2025.04.019; revised ref. 22
L/I/F/T: L/M/NR/M; Tier: 1; Evidence type: RNA
Included Table II-C: True; Observed: True; Grade-comparison: False; F≥M subset: False
Search queries: P01;P02; Retrieval route: Thematic PubMed search
Selection rationale: Mitochondrial-genome-derived miRNA-like candidate with breast-cancer ferroptosis perturbation; explicit source-limited Function assessment.
Source material: Published abstract / bibliographic record; final full text and SI not obtained.
Function rationale: NR: source insufficient; no Function grade
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R2 Rewiring Let-7a induces metabolic reprogramming in breast cancer cells via targeting mitochondrial encoded ND4.
Citation: 34838007; DOI 10.1186/s12935-021-02339-3; revised ref. 30
L/I/F/T: M/M/M/L; Tier: 1; Evidence type: RNA
Included Table II-C: True; Observed: True; Grade-comparison: True; F≥M subset: True
Search queries: P01; Retrieval route: Thematic PubMed search
Selection rationale: Candidate mitochondrial residency and an mtDNA-encoded ND4 interaction; opposite ND4 directions in two breast-cancer cell lines.
Source material: Main article: reciprocal respiratory readouts; cell-line-dependent ND4 direction.
Function rationale: M: reciprocal RNA + quantitative function
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R3 Rewiring hsa-miR-4485 regulates mitochondrial functions and inhibits the tumorigenicity of breast cancer cells.
Citation: 28220193; DOI 10.1007/s00109-017-1517-5; revised ref. 43
L/I/F/T: M/M/M/M; Tier: 1; Evidence type: RNA
Included Table II-C: True; Observed: True; Grade-comparison: True; F≥M subset: True
Search queries: P01; Retrieval route: Thematic PubMed search
Selection rationale: Mitochondrial rRNA-associated small RNA; distinguishes molecular interaction from protected organelle topology.
Source material: Publisher abstract and original Figures 1–4; full methods/SI not obtained.
Function rationale: M: reciprocal RNA + quantitative function
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R4 · Rewiring · Mitochondrial miRNA Determines Chemoresistance by Reprogramming Metabolism and Regulating Mitochondrial Transcription.
Citation: 30659020; DOI 10.1158/0008-5472.CAN-18-2505; revised ref. 55
L/I/F/T: M/M/M/M; Tier: 3; Evidence type: RNA
Included Table II-C: True; Observed: True; Grade-comparison: False; F≥M subset: False
Search queries: identifier-based; Retrieval route: PubMed identifier query ID01; not returned by thematic queries
Selection rationale: Non-breast mitochondrial RNA precedent retained to separate cross-system support from breast-cancer causality.
Source material: Author-manuscript full main article in PMC; supplementary DOCX not retrieved.
Function rationale: M: reciprocal RNA + quantitative function
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R5 Rewiring Mitochondrial tRNA fragment, mt-tRF-Tyr-GTA-001 (tRF-21-X3OJI8EWB), in breast cancer and its potential clinical implications.
Citation: 40102335; DOI 10.1007/s10549-025-07682-x; revised ref. 36
L/I/F/T: L/L/L/M; Tier: 2; Evidence type: Association
Included Table II-C: True; Observed: True; Grade-comparison: False; F≥M subset: False
Search queries: P01; Retrieval route: Thematic PubMed search
Selection rationale: Mitochondrial tRNA-fragment origin with human outcome association; no perturbation-derived Function inference.
Source material: Publisher abstract / cohort-level record.
Function rationale: L: observational association
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R6 · Rewiring · The tRF-33/IGF1 axis dysregulates mitochondrial homeostasis in HER2-negative breast cancer.
Citation: 39792150; DOI 10.1152/ajpcell.00588.2024; revised ref. 58
L/I/F/T: NA/M/M/M; Tier: 1; Evidence type: RNA
Included Table II-C: True; Observed: True; Grade-comparison: True; F≥M subset: True
Search queries: P01; Retrieval route: Thematic PubMed search
Selection rationale: Nuclear tRNA-fragment perturbation affecting mitochondrial homeostasis; contrasts RNA origin with phenotype.
Source material: Publisher-indexed main article and captions inspected; supplementary source data not comprehensively inspected.
Function rationale: M: reciprocal RNA + quantitative function
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R7a Rewiring · MiR-199a-3p enhances breast cancer cell sensitivity to cisplatin by downregulating TFAM (TFAM).
Citation: 28126676; DOI 10.1016/j.biopha.2017.01.058; revised ref. 37
L/I/F/T: NA/M/M/L; Tier: 1; Evidence type: RNA
Included Table II-C: True; Observed: True; Grade-comparison: True; F≥M subset: True
Search queries: P01;P06; Retrieval route: Thematic PubMed search
Selection rationale: TFAM-linked cisplatin-sensitivity claim with explicitly partial reversal; separated from hypoxic TFAM regulation.
Source material: Published PubMed abstract; full final paper not retrieved.
Function rationale: M: target/cargo functional reversal or explicitly partial rescue
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R7b Rewiring The HIF-1/SNHG1/miR-199a-3p/TFAM axis explains tumor angiogenesis and metastasis under hypoxic conditions in breast cancer.
Citation: 34003544; DOI 10.1002/biof.1702; revised ref. 56
L/I/F/T: NA/M/NR/M; Tier: 1; Evidence type: RNA
Included Table II-C: True; Observed: True; Grade-comparison: False; F≥M subset: False
Search queries: P01;P06; Retrieval route: Thematic PubMed search
Selection rationale: Hypoxia/SNHG1-associated TFAM relationship; separate condition and incomplete source coverage.
Source material: Primary bibliographic / indexed record; final full text and SI unavailable.
Function rationale: NR: source insufficient; no Function grade
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R8 · Rewiring · Suppression of PDHX by microRNA-27b deregulates cell metabolism and promotes growth in breast cancer.
Citation: 30012170; DOI 10.1186/s12943-018-0851-8; revised ref. 41
L/I/F/T: NA/M/M/M; Tier: 1; Evidence type: RNA
Included Table II-C: True; Observed: True; Grade-comparison: True; F≥M subset: True

Search queries: P01;P06; Retrieval route: Thematic PubMed search
Selection rationale: PDHX-linked pyruvate metabolic adaptation; target knockdown phenocopy is separated from restoration.
Source material: Main article: reciprocal metabolic effects; knockdown phenocopy distinguished from restoration.
Function rationale: M: reciprocal RNA + quantitative function
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R9 · Rewiring · miR-218-5p and doxorubicin combination enhances anticancer activity in breast cancer cells through Parkin-dependent mitophagy inhibition.
Citation: 38514650; DOI 10.1038/s41420-024-01914-7; revised ref. 80
L/I/F/T: NA/L/L/L; Tier: 1; Evidence type: RNA
Included Table II-C: True; Observed: True; Grade-comparison: True; F≥M subset: False
Search queries: P01;P06; Retrieval route: Thematic PubMed search
Selection rationale: PARKIN/mitophagy-linked chemotherapy phenotype; demonstrates the limit of one-direction perturbation evidence.
Source material: Main article and all three supplementary figure PDFs inspected.
Function rationale: L: one-direction RNA function without restoration
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R10 Rewiring SLC7A11/ xCT is a target of miR-5096 and its restoration partially rescues miR-5096-mediated ferroptosis and anti-tumor effects in human breast cancer cells.
Citation: 34571083; DOI 10.1016/j.canlet.2021.09.033; revised ref. 96
L/I/F/T: NA/M/M/M; Tier: 1; Evidence type: RNA
Included Table II-C: True; Observed: True; Grade-comparison: True; F≥M subset: True
Search queries: P01;P02; Retrieval route: Thematic PubMed search
Selection rationale: SLC7A11-linked ferroptosis; partial rescue provides a concrete Moderate-versus-High boundary.
Source material: Published abstract; source wording explicitly identifies partial target rescue.
Function rationale: M: target/cargo functional reversal or explicitly partial rescue
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R16 Rewiring Mitochondrial Carrier SLC25A13 Drives Ferroptosis Resistance and Immune Evasion via a STAT3-IFI6 Circuit in Breast Cancer.
Citation: 42183833; DOI 10.1002/advs.75818; revised ref. 100
L/I/F/T: NA/NA/NA/H; Tier: 2; Evidence type: Enabling
Included Table II-C: True; Observed: True; Grade-comparison: False; F≥M subset: False
Search queries: identifier-based; Retrieval route: PubMed identifier query ID01; not returned by thematic queries
Selection rationale: Non-RNA mitochondrial protein/metabolism-to-immune bridge; separates protein causality from RNA grading.
Source material: Publisher main article; main text reports the tumor PD results associated with Figure S10. Supplementary images were not fully assessed.
Function rationale: NA: non-RNA causal unit
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R18 Rewiring MiR-195 regulates mitochondrial function by targeting mitofusin-2 in breast cancer cells.
Citation: 30932749; DOI 10.1080/15476286.2019.1600999; revised ref. 38
L/I/F/T: NA/M/M/L; Tier: 1; Evidence type: RNA
Included Table II-C: True; Observed: True; Grade-comparison: True; F≥M subset: True
Search queries: P01;P06; Retrieval route: Thematic PubMed search
Selection rationale: MFN2-linked mitochondrial morphology rescue; endpoint restriction prevents borrowing support for apoptosis.

Source material: Complete published PDF in the University of Glasgow institutional repository inspected 18 October 2026: Figures 1, 2, 5 and 7 and associated Results; supplementary figures were not independently reassessed.
Function rationale: M: quantified MFN2 morphology rescue after RNA overexpression; reciprocal morphology evidence is not established by the inspected experiments.
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R19 Rewiring Targeting the miR-325-3p/GSTP1 axis overcomes paclitaxel resistance in triple-negative breast cancer by inducing ferroptosis.
Citation: 40833485; DOI 10.1007/s13258-025-01669-0; revised ref. 79
L/I/F/T: NA/M/M/M; Tier: 1; Evidence type: RNA
Included Table II-C: True; Observed: True; Grade-comparison: True; F≥M subset: True
Search queries: P02; Retrieval route: Thematic PubMed search
Selection rationale: GSTP1-linked taxane response and ferroptosis; treatment-specific partial-rescue example.
Source material: Publisher abstract and available original Figures 5–6; full methods/SI unavailable.
Function rationale: M: target/cargo functional reversal or explicitly partial rescue
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R11 Relay Exosomal microRNA-503-3p derived from macrophages represses glycolysis and promotes mitochondrial oxidative phosphorylation in breast cancer cells by elevating DACT2.
Citation: 34016964; DOI 10.1038/s41420-021-00492-2; revised ref. 104
L/I/F/T: NA/M/M/M; Tier: 1; Evidence type: RNA
Included Table II-C: True; Observed: True; Grade-comparison: True; F≥M subset: True
Search queries: P01; P03; P06; Retrieval route: Thematic PubMed search
Selection rationale: Macrophage-to-cancer small-RNA relay with metabolic readouts and unresolved direction.
Source material: Publisher main article; title/abstract versus Results/Discussion compared.
Function rationale: M: target/cargo functional reversal or explicitly partial rescue
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R12 · Relay · Cancer cell-derived exosomal miR-20a-5p inhibits CD8+ T-cell function and confers anti-programmed cell death 1 therapy resistance in triple-negative breast cancer.
Citation: 38129137; DOI 10.1111/cas.16036; revised ref. 105
L/I/F/T: NA/M/M/M; Tier: 1; Evidence type: RNA
Included Table II-C: True; Observed: True; Grade-comparison: True; F≥M subset: True
Search queries: P03; Retrieval route: Thematic PubMed search
Selection rationale: Tumor EV-to-CD8 small-RNA relay with functional immune and treatment endpoints; no mitochondrial residency inference.
Source material: Full publisher main article; Figures S1–S2 supplementary DOC not retrieved.
Function rationale: M: target/cargo functional reversal or explicitly partial rescue
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R13 · Relay · MiR-181a targets STING to drive PARP inhibitor resistance in BRCA- mutated triple-negative breast cancer and ovarian cancer.
Citation: 37932806; DOI 10.1186/s13578-023-01151-y; revised ref. 144
L/I/F/T: NA/M/M/M; Tier: 1; Evidence type: RNA
Included Table II-C: True; Observed: True; Grade-comparison: True; F≥M subset: True
Search queries: P03; Retrieval route: Thematic PubMed search
Selection rationale: Breast-cancer EV-associated RNA and STING-linked PARP-inhibitor resistance; separates disease-model evidence.
Source material: Main article: TNBC inhibition/overexpression; ovarian knockout kept separate.
Function rationale: M: reciprocal RNA + quantitative function
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R14a Relay Mitochondrial transfer from Adipose stem cells to breast cancer cells drives multi-drug resistance.
Citation: 38877575; DOI 10.1186/s13046-024-03087-8; revised ref. 121
L/I/F/T: NA/NA/NA/M; Tier: 2; Evidence type: Enabling
Included Table II-C: True; Observed: True; Grade-comparison: False; F≥M subset: False
Search queries: P05; Retrieval route: Thematic PubMed search
Selection rationale: Adipose-stromal donor-to-breast-cancer whole-organelle transfer with treatment-resistance endpoints.
Source material: Publisher main article.
Function rationale: NA: non-RNA causal unit
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R14b Relay Mitochondrial transfer from cancer-associated fibroblasts increases migration in aggressive breast cancer.
Citation: 37358264; DOI 10.1242/jcs.260419; revised ref. 122
L/I/F/T: NA/NA/NA/M; Tier: 2; Evidence type: Enabling
Included Table II-C: True; Observed: True; Grade-comparison: False; F≥M subset: False
Search queries: P05; Retrieval route: Thematic PubMed search
Selection rationale: Fibroblast donor-to-breast-cancer whole-organelle transfer with migration endpoints; not merged with adipose donor claims.
Source material: Primary abstract / indexed record; full text not retrieved.
Function rationale: NA: non-RNA causal unit
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R15 Relay Unobserved hypothesis
Citation: -; DOI -; revised ref.
L/I/F/T: U/U/U/U; Tier: 4; Evidence type: Hypothesis
Included Table II-C: True; Observed: False; Grade-comparison: False; F≥M subset: False
Search queries: identifier-based; Retrieval route: No publication: explicit hypothesis
Selection rationale: Explicit unobserved small-RNA necessity hypothesis after whole-organelle transfer; no supporting publication counted.
Source material: Hypothesis, not an observed publication-derived claim.
Function rationale: U: proposed relationship
Assessment boundary: Excluded from observed-relationship counts.

R20 · Relay · MCU-dependent negative sorting of miR-4488 to extracellular vesicles enhances angiogenesis and promotes breast cancer metastatic colonization.
Citation: 33067576; DOI 10.1038/s41388-020-01514-6; revised ref. 57
L/I/F/T: NA/M/NR/M; Tier: 1; Evidence type: RNA
Included Table II-C: True; Observed: True; Grade-comparison: False; F≥M subset: False
Search queries: P01; P03; Retrieval route: Thematic PubMed search
Selection rationale: Mitochondrial calcium-dependent EV miRNA sorting and recipient angiogenesis; separates organelle control from cargo necessity.
Source material: Publisher abstract and low-resolution figure previews; final full methods/rescue panels not obtained.
Function rationale: NR: source insufficient; no Function grade
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R17a Release CD36-mediated ferroptosis dampens intratumoral CD8+ T cell effector function and impairs their antitumor ability.
Citation: 33691090; DOI 10.1016/j.cmet.2021.02.015; revised ref. 148
L/I/F/T: NA/NA/NA/M; Tier: 3; Evidence type: Enabling
Included Table II-C: True; Observed: True; Grade-comparison: False; F≥M subset: False
Search queries: identifier-based; Retrieval route: PubMed identifier query ID01; not returned by thematic queries

Selection rationale: Cross-system immune-cell ferroptosis precedent; preserves a demonstrated death endpoint.
Source material: Primary abstract / indexed source; main and SI not fully inspected.
Function rationale: NA: non-RNA causal unit
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R17b Release Uptake of oxidized lipids by the scavenger receptor CD36 promotes lipid peroxidation and dysfunction in CD8+ T cells in tumors.
Citation: 34102100; DOI 10.1016/j.immuni.2021.05.003; revised ref. 149
L/I/F/T: NA/NA/NA/M; Tier: 3; Evidence type: Enabling
Included Table II-C: True; Observed: True; Grade-comparison: False; F≥M subset: False
Search queries: identifier-based; Retrieval route: PubMed identifier query ID01; not returned by thematic queries
Selection rationale: Cross-system oxidized-lipid uptake and immune dysfunction precedent; not relabeled as demonstrated ferroptotic death.
Source material: Primary abstract / indexed source; main and SI not fully inspected.
Function rationale: NA: non-RNA causal unit
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R21 Relay Intercellular nanotubes mediate mitochondrial trafficking between cancer and immune cells.
Citation: 34795441; DOI 10.1038/s41565-021-01000-4; revised ref. 118
L/I/F/T: NA/NA/NA/NA; Tier: 2; Evidence type: Enabling
Included Table II-C: True; Observed: True; Grade-comparison: False; F≥M subset: False
Search queries: P05; Retrieval route: Thematic PubMed search
Selection rationale: Immune-cell-to-cancer mitochondrial trafficking; non-RNA transfer mechanism control.
Source material: Primary publisher abstract.
Function rationale: Context-only extension; no RNA Function grade
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R22 Relay Nerve-to-cancer transfer of mitochondria during cancer metastasis.
Citation: 40562940; DOI 10.1038/s41586-025-09176-8; revised ref. 123
L/I/F/T: NA/NA/NA/NA; Tier: 2; Evidence type: Enabling
Included Table II-C: True; Observed: True; Grade-comparison: False; F≥M subset: False
Search queries: P05; Retrieval route: Thematic PubMed search
Selection rationale: Nerve-to-cancer mitochondrial trafficking; distinct donor lineage and metastasis endpoint.
Source material: Publisher full main article.
Function rationale: Context-only extension; no RNA Function grade
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R23 Release A Bioinspired Exosomal Nanoplatform for Coordinated Sorafenib and MicroRNA Delivery to Sensitize Ferroptosis and Induce Immunoactivation in Triple-Negative Breast Cancer.
Citation: 42030227; DOI 10.1021/acsnano.6c02310; revised ref. 146
L/I/F/T: NA/NA/NA/NA; Tier: 2; Evidence type: Engineered
Included Table II-C: True; Observed: True; Grade-comparison: False; F≥M subset: False
Search queries: P01; P02; P03; Retrieval route: Thematic PubMed search
Selection rationale: Engineered plant-EV/RNA/drug composite illustrates imposed delivery and component-attribution limits.
Source material: Published PubMed abstract; full component-control/SI appraisal incomplete.
Function rationale: Context-only extension; no RNA Function grade
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R24 · Release Mitochondrial DNA drives abscopal responses to radiation that are inhibited by autophagy.
Citation: 32747819; DOI 10.1038/s41590-020-0751-0; revised ref. 84
L/I/F/T: NA/NA/NA/NA; Tier: 2; Evidence type: Enabling

Included Table II-C: True; Observed: True; Grade-comparison: False; F≥M subset: False
Search queries: P04; Retrieval route: Thematic PubMed search
Selection rationale: Breast-cancer radiation-associated mtDNA immune response; DNA and non-RNA intervention comparator.
Source material: Published abstract available in the University of Florence institutional repository, inspected 18 October 2026; full article and supplementary experiments were not reassessed. Source location: Published abstract: mouse mammary carcinoma, autophagy-gene deletion, mtDNA/cGAS-STING perturbation and distant-tumor response. PMID 32747819.
Function rationale: Context-only extension; no RNA Function grade
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R25 Release Serine Depletion Promotes Antitumor Immunity by Activating Mitochondrial DNA-Mediated cGAS-STING Signaling.
Citation: 38861367; DOI 10.1158/0008-5472.CAN-23-1788; revised ref. 73
L/I/F/T: NA/NA/NA/NA; Tier: 3; Evidence type: Enabling
Included Table II-C: True; Observed: True; Grade-comparison: False; F≥M subset: False
Search queries: identifier-based; Retrieval route: PubMed identifier query ID01; not returned by thematic queries
Selection rationale: Serine-restriction mtDNA/immune precedent primarily in colorectal models; cross-system control.
Source material: AACR publisher-provided abstract/figure captions and article preview hosted on ResearchGate.
Function rationale: Context-only extension; no RNA Function grade
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R26 Release Ultrasound-responsive low-dose doxorubicin liposomes trigger mitochondrial DNA release and activate cGAS-STING-mediated antitumour immunity.
Citation: 37391428; DOI 10.1038/s41467-023-39607-x; revised ref. 136
L/I/F/T: NA/NA/NA/NA; Tier: 2; Evidence type: Enabling
Included Table II-C: True; Observed: True; Grade-comparison: False; F≥M subset: False
Search queries: identifier-based; Retrieval route: PubMed identifier query ID01; not returned by thematic queries
Selection rationale: Externally triggered therapeutic/immune platform with a breast-cancer arm; model-specific evidence is kept separate.
Source material: Publisher full main article.
Function rationale: Context-only extension; no RNA Function grade
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R27 · Release · The low-dose CHK1 inhibitor prexasertib triggers VDAC1 dephosphorylation to activate mtDNA-STING signaling and synergize immunotherapy.
Citation: 40249707; DOI 10.1016/j.celrep.2025.115605; revised ref. 138
L/I/F/T: NA/NA/NA/NA; Tier: unclassified; Evidence type: Unclassified background
Included Table II-C: False; Observed: True; Grade-comparison: False; F≥M subset: False
Search queries: identifier-based; Retrieval route: PubMed identifier query ID01; not returned by thematic queries
Selection rationale: Pharmacological mtDNA/STING background without sufficient verified disease-model detail; excluded from context totals.
Source material: Published PubMed abstract plus indexed publisher methods snippet; full text/PDF not obtained.
Function rationale: Context-only extension; no RNA Function grade
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R28 Release Raddeanin A Enhances Mitochondrial DNA-cGAS/STING Axis-Mediated Antitumor Immunity by Targeting Transactive Responsive DNA-Binding Protein 43.
Citation: 36876644; DOI 10.1002/advs.202206737; revised ref. 137
L/I/F/T: NA/NA/NA/NA; Tier: 3; Evidence type: Enabling
Included Table II-C: True; Observed: True; Grade-comparison: False; F≥M subset: False
Search queries: identifier-based; Retrieval route: PubMed identifier query ID01; not returned by thematic queries
Selection rationale: Pharmacological TDP-43/mtDNA immune activation in non-breast tumor models; cross-system control.
Source material: Publisher full main article.
Function rationale: Context-only extension; no RNA Function grade
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R29 · Release · Mitochondrial DNA released by senescent tumor cells enhances PMN-MDSC-driven immunosuppression through the cGAS-STING pathway.
Citation: 40203808; DOI 10.1016/j.immuni.2025.03.005; revised ref. 142
L/I/F/T: NA/NA/NA/NA; Tier: 3; Evidence type: Enabling
Included Table II-C: True; Observed: True; Grade-comparison: False; F≥M subset: False
Search queries: identifier-based; Retrieval route: PubMed identifier query ID01; not returned by thematic queries
Selection rationale: Chronic mtDNA-associated immune selection in non-breast models; context and duration comparator.
Source material: Published abstract available in the University of Padua institutional repository, inspected 18 October 2026; full main text and supplementary data were not reassessed. Source location: Published abstract: senescent-cell EV-associated mtDNA, PMN-MDSC cGAS-STING-NF-kappaB/PERK signalling and VDAC inhibition in prostate-cancer mouse models. PMID 40203808.
Function rationale: Context-only extension; no RNA Function grade
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R30 · Release · Mitochondrial double-stranded RNA triggers antiviral signalling in humans.
Citation: 30046113; DOI 10.1038/s41586-018-0363-0; revised ref. 63
L/I/F/T: NA/NA/NA/NA; Tier: 3; Evidence type: Enabling
Included Table II-C: True; Observed: True; Grade-comparison: False; F≥M subset: False
Search queries: identifier-based; Retrieval route: PubMed identifier query ID01; not returned by thematic queries
Selection rationale: Mitochondrial double-stranded-RNA sensing precedent; distinguishes long dsRNA from a defined small-RNA species.
Source material: PMC author-manuscript main text inspected 18 October 2026, including Figures 1-3 legends and the MDA5 sensor-knockdown Results; supplementary files were not separately reassessed. Source location: Figures 1-3 and Results paragraph beginning with the analysis of RNA sensors in PNPase-deficient cells; PMCID PMC6570621.
Function rationale: Context-only extension; no RNA Function grade
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R31 Release Cancer cells dying from ferroptosis impede dendritic cell-mediated anti-tumor immunity.
Citation: 35760796; DOI 10.1038/s41467-022-31218-2; revised ref. 147
L/I/F/T: NA/NA/NA/NA; Tier: 3; Evidence type: Enabling
Included Table II-C: True; Observed: True; Grade-comparison: False; F≥M subset: False
Search queries: identifier-based; Retrieval route: PubMed identifier query ID01; not returned by thematic queries
Selection rationale: Ferroptotic dying-cell effects on dendritic cells; non-RNA immune-consequence comparator.
Source material: Open-access article text and main-figure legends retrieved from Europe PMC and inspected 18 October 2026; supplementary files and underlying source-data files were not separately reassessed. Source

location: Figures 1-3 (death kinetics and DC maturation), Figures 5-6 (cross-presentation and vaccination), and cell-culture/animal Methods; PMCID PMC9237053.
Function rationale: Context-only extension; no RNA Function grade
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R32 · Release · Oxidized mitochondrial DNA sensing by STING signaling promotes the antitumor effect of an irradiated immunogenic cancer cell vaccine.
Citation: 32398808; DOI 10.1038/s41423-020-0456-1; revised ref. 83
L/I/F/T: NA/NA/NA/NA; Tier: 3; Evidence type: Enabling
Included Table II-C: True; Observed: True; Grade-comparison: False; F≥M subset: False
Search queries: identifier-based; Retrieval route: PubMed identifier query ID01; not returned by thematic queries
Selection rationale: VDAC2/mtDNA immune-sensing precedent; protein perturbation and disease context remain separate.
Source material: Open-access article text and main-figure legends retrieved from Europe PMC and inspected 18 October 2026; supplementary files and underlying source-data files were not separately reassessed. Source location: Figures 1 and 3-7; Methods: Cell lines, Immunizations and mtDNA depletion; PMCID PMC8429462.
Function rationale: Context-only extension; no RNA Function grade
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R33 Relay Immune evasion through mitochondrial transfer in the tumour microenvironment.
Citation: 39843734; DOI 10.1038/s41586-024-08439-0; revised ref. 127
L/I/F/T: NA/NA/NA/NA; Tier: 3; Evidence type: Enabling
Included Table II-C: True; Observed: True; Grade-comparison: False; F≥M subset: False
Search queries: identifier-based; Retrieval route: PubMed identifier query ID01; not returned by thematic queries
Selection rationale: Tumor-to-immune mitochondrial transfer and immune evasion in predominantly non-breast mechanistic models, with an additional artificial breast-cell-mitochondria-to-Jurkat component; donor-direction comparator.
Source material: Open-access article text and figure legends retrieved from Europe PMC and inspected 18 October 2026, including Extended Data Figure 5; supplementary files and underlying source-data files were not separately reassessed. Source location: Figures 1-5; Extended Data Figure 5; Methods: Cell lines and culture conditions, and Creation of mitochondria-transferred Jurkat cells through MitoCeption or EVs for functional analyses. PMCID PMC11798832.
Function rationale: Context-only extension; no RNA Function grade
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R34 Release miR-25/93 mediates hypoxia-induced immunosuppression by repressing cGAS.
Citation: 28920955; DOI 10.1038/ncb3615; revised ref. 135
L/I/F/T: NA/M/H/M; Tier: 1; Evidence type: RNA
Included Table II-C: True; Observed: True; Grade-comparison: True; F≥M subset: True
Search queries: P01;P04; Retrieval route: Thematic PubMed search
Selection rationale: Breast-cancer miR-25/93 perturbation and cGAS-dependent immune rescue establish RNA-dependent sensing of released mtDNA; controls sensing, not mtDNA release amount.
Source material: PMC author-manuscript text and main-figure legends inspected 18 October 2026. Figures 2, 4-8 support RNA perturbation, cGAS-dependent immune phenotypes, NCOA3 interaction and human associations. mtDNA-specific results in Figures S5-S6 were assessed from their description in the main text; supplementary figures and source-data files were not separately reassessed.
Function rationale: H: reciprocal RNA immune/tumor phenotypes plus cGAS-dependent rescue and epistasis; not an mtDNA-release or mitochondrial-residency claim.
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.

R35 Rewiring The novel tRNA-derived fragment, tiRNA-Met, inhibits the malignant progression of triple-negative breast cancer by regulating RANBP3L via a targeted interaction with SNRPA.
Citation: 40410734; DOI 10.1186/s11658-025-00738-2; revised ref. 99
L/I/F/T: L/M/M/M; Tier: 1; Evidence type: RNA
Included Table II-C: True; Observed: True; Grade-comparison: True; F≥M subset: True
Search queries: P01; Retrieval route: Thematic PubMed search
Selection rationale: Mitochondrial tRNA-derived fragment with breast-cancer gain/loss function and a cytoplasmic SNRPA mechanism; distinguishes RNA origin, site of action and functional evidence.
Source material: Open-access publisher main text and main-figure legends inspected 18 October 2026; full article XML also retrieved from Europe PMC. Figures 1-7 and relevant Methods were assessed; supplementary files and underlying source-data files were not separately reassessed.
Function rationale: M: reciprocal RNA phenotypes with SNRPA-dependent reversal and partial RANBP3L-dependent functional reversal; cytoplasmic action, no protected mitochondrial residency or immune mechanism.
Assessment boundary: Claim-specific materials and limitations are reported in Table SI. Search retrieval alone is not source verification.