

Table SI. Search strategies used to search articles using the PubMed, Cochrane Library, Embase and Web of Science databases.

Database	Search terms
PubMed	<p>(((Oleanolic acid[MeSH Terms]) OR (Oleanol[Title/Abstract])) OR (Oleanane Triterpenes[Title/Abstract])) OR (Triterpenes, Oleanane[Title/Abstract])) OR (Hederins[Title/Abstract])AND((((((((((((((((Neoplasms[MeSH Terms]) OR (Tumor[Title/Abstract])) OR (Neoplasm[Title/Abstract])) OR (Tumors[Title/Abstract])) OR (Neoplasia[Title/Abstract])) OR (Neoplasias[Title/Abstract])) OR (Cancer[Title/Abstract])) OR (Cancers[Title/Abstract])) OR (Malignant Neoplasm[Title/Abstract])) OR (Malignancy[Title/Abstract])) OR (Malignancies[Title/Abstract])) OR (Malignant Neoplasms[Title/Abstract])) OR (Neoplasm, Malignant[Title/Abstract])) OR (Neoplasms, Malignant[Title/Abstract])) OR (Benign Neoplasms[Title/Abstract])) OR (Benign Neoplasm[Title/Abstract])) OR (Neoplasms, Benign[Title/Abstract])) OR (Neoplasm, Benign[Title/Abstract])</p>
Cochrane library	<p>Comment: ID Search Hits #1 MeSH descriptor: [Oleanolic Acid] explode all trees 20 #2 (Oleanol OR Oleanane Triterpenes OR Triterpenes, Oleanane OR Hederins):ti,ab,kw (Word variations have been searched) 40 #3 MeSH descriptor: [Neoplasms] explode all trees 112562</p>

	<p>#4 (Tumor OR Neoplasm OR Tumors OR Neoplasia OR Neoplasias OR Cancer OR Cancers OR Malignant OR Neoplasm OR Malignancy OR Malignancies OR Malignant Neoplasms OR Neoplasm, Malignant OR Neoplasms, Malignant OR Benign Neoplasms OR Benign Neoplasm OR Neoplasms, Benign OR Neoplasm, Benign):ti,ab,kw (Word variations have been searched) 257218</p> <p>#5 #1 OR #2 40</p> <p>#6 #3 OR #4 270105</p> <p>#7 #5 AND #6 3</p>
Embase	<p>(‘oleanolic acid’/exp OR ‘oleanol’:ti,ab,kw OR ‘oleanane triterpenes’:ti,ab,kw OR ‘triterpenes, oleanane’:ti,ab,kw OR ‘hederins’:ti,ab,kw)AND(‘neoplasm’/exp OR ‘tumor’:ti,ab,kw OR ‘neoplasms’:ti,ab,kw OR ‘tumors’:ti,ab,kw OR ‘neoplasia’:ti,ab,kw OR ‘neoplasias’:ti,ab,kw OR ‘cancer’:ti,ab,kw OR ‘cancers’:ti,ab,kw OR ‘malignant neoplasm’:ti,ab,kw OR ‘malignancy’:ti,ab,kw OR ‘malignancies’:ti,ab,kw OR ‘malignant neoplasms’:ti,ab,kw OR ‘neoplasm, malignant’:ti,ab,kw OR ‘neoplasms, malignant’:ti,ab,kw OR ‘benign neoplasms’:ti,ab,kw OR ‘benign neoplasm’:ti,ab,kw OR ‘neoplasms, benign’:ti,ab,kw OR ‘neoplasm, benign’:ti,ab,kw)</p>
Web of Science	<p>TS=(Oleanolic acid OR Oleanol OR Oleanane Triterpenes OR Triterpenes, Oleanane OR Hederins)AND TS=(Neoplasms OR Tumor OR Neoplasm OR Tumors OR Neoplasia OR Neoplasias OR Cancer OR Cancers OR Malignant Neoplasm OR Malignancy OR Malignancies OR Malignant Neoplasms OR Neoplasm, Malignant OR Neoplasms, Malignant OR</p>

	Benign Neoplasms OR Benign Neoplasm OR Neoplasms, Benign OR Neoplasm, Benign)
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Table SII. SYRCLE bias risk assessment results of included studies.

First author, year	Selection			Performance		Detection		Attrition	Reporting	Other	(Ref.)
	1 ^a	2 ^a	3 ^a	4 ^a	5 ^a	6 ^a	7 ^a	8 ^a	9 ^a	10 ^a	
Li <i>et al</i> , 2015	Unclear	Unclear	Unclear	Yes	Unclear	No	Yes	Yes	Yes	Unclear	(51)
Tang <i>et al</i> , 2013	Unclear	Unclear	Unclear	Yes	Unclear	No	Yes	Yes	Yes	Unclear	(61)
Liang <i>et al</i> , 2021	Unclear	Unclear	Unclear	Yes	Unclear	No	Yes	Yes	Yes	Unclear	(46)
Wang <i>et al</i> , 2019	Unclear	Unclear	Unclear	Yes	Unclear	No	Yes	Yes	Yes	Unclear	(47)
Li <i>et al</i> , 2016	Unclear	Unclear	Unclear	Yes	Unclear	No	Yes	Yes	Unclear	Unclear	(52)
Niu <i>et al</i> , 2018	Unclear	Unclear	Unclear	Unclear	Unclear	No	Yes	Yes	Unclear	Unclear	(62)
Jiang <i>et al</i> , 2021	Unclear	Unclear	Unclear	Unclear	Unclear	No	Yes	Yes	Yes	Unclear	(53)
Potočnjak <i>et al</i> , 2022	Unclear	Yes	Unclear	Yes	Unclear	No	Yes	Yes	Unclear	Unclear	(27)
Lee <i>et al</i> , 2021	Unclear	No	Unclear	Unclear	Unclear	No	Yes	Unclear	Unclear	Unclear	(63)
Gao <i>et al</i> , 2016	Unclear	Unclear	Unclear	Unclear	Unclear	No	Yes	Unclear	Unclear	Unclear	(64)
Woo <i>et al</i> , 2021	Unclear	No	Unclear	Yes	Unclear	No	Yes	Unclear	Unclear	Unclear	(65)
Nie <i>et al</i> , 2016	Unclear	Unclear	Unclear	Unclear	Unclear	No	Yes	Unclear	Unclear	Unclear	(66)

^aNumber corresponds to each question of the SYRCLE's risk of bias tool (55). Yes, low risk of bias; No, high risk of bias; Unclear, the concept could not be attributed; SYRCLE, Systematic Review Centre for Laboratory Animal Experimentation.