

## Supplementary material 1.

Search strategies for the PubMed, Web of science, Medline, Embase and Cochrane databases.

### PubMed: 14 results.

((('Neoplasms'[Mesh]) 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]))) AND (('Immune Checkpoint Inhibitors'[Mesh]) OR ((Checkpoint Inhibitors, Immune [Title/Abstract]) OR (Immune Checkpoint Inhibitor [Title/Abstract]) OR (Checkpoint Inhibitor, Immune [Title/Abstract]) OR (Immune Checkpoint Blockers [Title/Abstract]) OR (Checkpoint Blockers, Immune [Title/Abstract]) OR (Immune Checkpoint Blockade [Title/Abstract]) OR (Checkpoint Blockade, Immune [Title/Abstract]) OR (Immune Checkpoint Inhibition [Title/Abstract]) OR (Checkpoint Inhibition, Immune [Title/Abstract]) OR (PD-L1 Inhibitors [Title/Abstract]) OR (PD L1 Inhibitors [Title/Abstract]) OR (PD-L1 Inhibitor [Title/Abstract]) OR (PD L1 Inhibitor [Title/Abstract]) OR (Programmed Death-Ligand 1 Inhibitors [Title/Abstract]) OR (Programmed Death Ligand 1 Inhibitors [Title/Abstract]) OR (PD-1-PD-L1 Blockade [Title/Abstract]) OR (Blockade, PD-1-PD-L1 [Title/Abstract]) OR (PD 1 PD L1 Blockade [Title/Abstract]) OR (CTLA-4 Inhibitors [Title/Abstract]) OR (CTLA 4 Inhibitors [Title/Abstract]) OR (CTLA-4 Inhibitor [Title/Abstract]) OR (CTLA 4 Inhibitor [Title/Abstract]) OR (Cytotoxic T-Lymphocyte-Associated Protein 4 Inhibitors [Title/Abstract]) OR (Cytotoxic T Lymphocyte Associated Protein 4 Inhibitors [Title/Abstract]) OR (Cytotoxic T-Lymphocyte-Associated Protein 4 Inhibitor [Title/Abstract]) OR (Cytotoxic T Lymphocyte Associated Protein 4 Inhibitor [Title/Abstract]) OR (PD-1 Inhibitors [Title/Abstract]) OR (PD 1 Inhibitors [Title/Abstract]) OR (PD-1 Inhibitor [Title/Abstract]) OR (PD 1 Inhibitor [Title/Abstract]) OR (Inhibitor, PD-1 [Title/Abstract]) OR (PD 1 Inhibitor [Title/Abstract]) OR (Programmed Cell Death Protein 1 Inhibitor [Title/Abstract]) OR (Programmed Cell Death Protein 1 Inhibitors [Title/Abstract]))) AND ((Glasgow Prognostic Score [Title/Abstract]) OR (GPS [Title/Abstract]) OR (modified Glasgow prognostic score [Title/Abstract]) OR (mGPS [Title/Abstract]))) AND (English [Language]))

### Web of science: 26 results.

#1 (((((((((((((((((TS=(Tumor)) OR TS=(Neoplasm)) OR TS=(Tumors)) OR TS=(Neoplasia)) OR TS=(Neoplasias)) OR TS=(Cancer)) OR TS=(Cancers)) OR TS=(Malignant Neoplasm)) OR TS=(Malignancy)) OR TS=(Malignancies)) OR TS=(Malignant Neoplasms)) OR TS=(Neoplasm, Malignant)) OR TS=(Neoplasms, Malignant)) OR TS=(Benign Neoplasms)) OR TS=(Benign Neoplasm)) OR TS=(Neoplasms, Benign)) OR TS=(Neoplasm, Benign)

Neoplasms)) OR TS=(Benign Neoplasm)) OR TS=(Neoplasms, Benign)) OR TS=(Neoplasm, Benign)

#2 (((TS=(Checkpoint Inhibitors, Immune)) OR TS=(Immune Checkpoint Inhibitor)) OR TS=(Checkpoint Inhibitor, Immune)) OR TS=(Immune Checkpoint Blockers)) OR TS=(Checkpoint Blockers, Immune)) OR TS=(Immune Checkpoint Blockade)) OR TS=(Checkpoint Blockade, Immune)) OR TS=(Immune Checkpoint Inhibition)) OR TS=(Checkpoint Inhibition, Immune)) OR TS=(PD-L1 Inhibitors)) OR TS=(PD L1 Inhibitors)) OR TS=(PD-L1 Inhibitor)) OR TS=(PD L1 Inhibitor)) OR TS=(Programmed Death-Ligand 1 Inhibitors)) OR TS=(Programmed Death Ligand 1 Inhibitors)) OR TS=(PD-1-PD-L1 Blockade)) OR TS=(Blockade, PD-1-PD-L1)) OR TS=(PD 1 PD L1 Blockade)) OR TS=(CTLA-4 Inhibitors)) OR TS=(CTLA 4 Inhibitors)) OR TS=(CTLA-4 Inhibitor)) OR TS=(CTLA 4 Inhibitor)) OR TS=(Cytotoxic T-Lymphocyte-Associated Protein 4 Inhibitors)) OR TS=(Cytotoxic T Lymphocyte Associated Protein 4 Inhibitors)) OR TS=(Cytotoxic T-Lymphocyte-Associated Protein 4 Inhibitor)) OR TS=(Cytotoxic T Lymphocyte Associated Protein 4 Inhibitor)) OR TS=(PD-1 Inhibitors)) OR TS=(PD 1 Inhibitors)) OR TS=(PD-1 Inhibitor)) OR TS=(Inhibitor, PD-1)) OR TS=(PD 1 Inhibitor)) OR TS=(Programmed Cell Death Protein 1 Inhibitor)) OR TS=(Programmed Cell Death Protein 1 Inhibitors))

#3 ((TS=(Glasgow Prognostic Score)) OR TS=(GPS)) OR TS=(modified Glasgow Prognostic Score)) OR TS=(mGPS)

#4 LA=(English)

#1 AND #2 AND #3 AND #4

### Medline: 24 results.

#1 (((((((((((((((((TS=(Tumor)) OR TS=(Neoplasm)) OR TS=(Tumors)) OR TS=(Neoplasia)) OR TS=(Neoplasias)) OR TS=(Cancer)) OR TS=(Cancers)) OR TS=(Malignant Neoplasm)) OR TS=(Malignancy)) OR TS=(Malignancies)) OR TS=(Malignant Neoplasms)) OR TS=(Neoplasm, Malignant)) OR TS=(Neoplasms, Malignant)) OR TS=(Benign Neoplasms)) OR TS=(Benign Neoplasm)) OR TS=(Neoplasms, Benign)) OR TS=(Neoplasm, Benign)

#2 (((TS=(Checkpoint Inhibitors, Immune)) OR TS=(Immune Checkpoint Inhibitor)) OR TS=(Checkpoint Inhibitor, Immune)) OR TS=(Immune Checkpoint Blockers)) OR TS=(Checkpoint Blockers, Immune)) OR TS=(Immune Checkpoint Blockade)) OR TS=(Checkpoint Blockade, Immune)) OR TS=(Immune Checkpoint Inhibition)) OR TS=(Checkpoint Inhibition, Immune)) OR TS=(PD-L1 Inhibitors)) OR TS=(PD L1 Inhibitors)) OR TS=(PD-L1 Inhibitor)) OR TS=(PD L1 Inhibitor)) OR TS=(Programmed Death-Ligand 1 Inhibitors)) OR TS=(Programmed Death Ligand 1 Inhibitors)) OR TS=(PD-1-PD-L1 Blockade)) OR TS=(Blockade, PD-1-PD-L1)) OR TS=(PD 1 PD L1 Blockade)) OR TS=(CTLA-4 Inhibitors)) OR TS=(CTLA 4 Inhibitors)) OR TS=(CTLA-4 Inhibitor)) OR TS=(CTLA

4 Inhibitor)) OR TS=(Cytotoxic T-Lymphocyte-Associated Protein 4 Inhibitors)) OR TS=(Cytotoxic T Lymphocyte Associated Protein 4 Inhibitors)) OR TS=(Cytotoxic T-Lymphocyte-Associated Protein 4 Inhibitor)) OR TS=(Cytotoxic T Lymphocyte Associated Protein 4 Inhibitor)) OR TS=(PD-1 Inhibitors)) OR TS=(PD 1 Inhibitors)) OR TS=(PD-1 Inhibitor)) OR TS=(Inhibitor, PD-1)) OR TS=(PD 1 Inhibitor)) OR TS=(Programmed Cell Death Protein 1 Inhibitor)) OR TS=(Programmed Cell Death Protein 1 Inhibitors)

#3 (((TS=(Glasgow Prognostic Score)) OR TS=(GPS)) OR TS=(modified Glasgow Prognostic Score)) OR TS=(mGPS)

#4 LA=(English)

#1 AND #2 AND #3 AND #4

**Embase: 5 results.**

#1 'malignant neoplasm'/exp OR 'cancer':ti,ab OR 'cancers':ti,ab OR 'malignant neoplasia':ti,ab OR 'malignant neoplastic disease':ti,ab OR 'malignant tumor':ti,ab OR 'malignant tumour':ti,ab OR 'neoplasia':ti,ab OR 'malignant':ti,ab OR 'tumor, malignant':ti,ab OR 'tumour, malignant':ti,ab

#2 'immune checkpoint inhibitor'/exp OR 'immune checkpoint inhibitor':ti,ab OR 'immune checkpoint inhibitors':ti,ab

#3 'glasgow prognostic score':ti,ab OR 'GPS':ti,ab OR 'modified glasgow prognostic score':ti,ab OR 'mGPS':ti,ab

#1 AND #2 AND #3 AND [english]/lim

**Cochrane Library: 2 results, 2 trials.**

#1 MeSH descriptor: [Neoplasms] explode all trees

#2 (Neoplasm, Malignant):ti,ab,kw OR (Malignancies):ti,ab,kw OR (Neoplasms, Malignant):ti,ab,kw OR

(Malignant Neoplasm):ti,ab,kw OR (Cancers):ti,ab,kw OR (Malignancy):ti,ab,kw OR (Malignant Neoplasms):ti,ab,kw OR (Cancer):ti,ab,kw OR (Benign Neoplasms):ti,ab,kw OR (Neoplasm, Benign):ti,ab,kw OR (Benign Neoplasm):ti,ab,kw OR (Neoplasms, Benign):ti,ab,kw OR (Tumor):ti,ab,kw OR (Neoplasias):ti,ab,kw OR (Neoplasm):ti,ab,kw OR (Neoplasia):ti,ab,kw OR (Tumors):ti,ab,kw

#3 MeSH descriptor: [Immune Checkpoint Inhibitors] explode all trees

#4 (Checkpoint Inhibitors, Immune):ti,ab,kw OR (Immune Checkpoint Inhibition):ti,ab,kw OR (Checkpoint Blockade, Immune):ti,ab,kw OR (Checkpoint Inhibition, Immune):ti,ab,kw OR (Immune Checkpoint Blockers):ti,ab,kw OR (Checkpoint Inhibitor, Immune):ti,ab,kw OR (Checkpoint Inhibitors, Immune):ti,ab,kw OR (Checkpoint Blockers, Immune):ti,ab,kw OR (Immune Checkpoint Inhibitor):ti,ab,kw OR (PD-L1 Inhibitor):ti,ab,kw OR (PD-L1 Inhibitors):ti,ab,kw OR (PD L1 Inhibitor):ti,ab,kw OR (PD L1 Inhibitors):ti,ab,kw OR (Programmed Death-Ligand 1 Inhibitors):ti,ab,kw OR (Programmed Death Ligand 1 Inhibitors):ti,ab,kw OR (PD 1 PD L1 Blockade):ti,ab,kw OR (CTLA 4 Inhibitors):ti,ab,kw OR (CTLA 4 Inhibitor):ti,ab,kw OR (Cytotoxic T-Lymphocyte-Associated Protein 4 Inhibitor):ti,ab,kw OR (Cytotoxic T Lymphocyte Associated Protein 4 Inhibitors):ti,ab,kw OR (Cytotoxic T-Lymphocyte-Associated Protein 4 Inhibitors):ti,ab,kw OR (CTLA-4 Inhibitors):ti,ab,kw OR (CTLA-4 Inhibitor):ti,ab,kw OR (Programmed Cell Death Protein 1 Inhibitor):ti,ab,kw OR (Programmed Cell Death Protein 1 Inhibitors):ti,ab,kw OR (PD 1 Inhibitors):ti,ab,kw OR (PD 1 Inhibitor):ti,ab,kw OR (Inhibitor, PD-1):ti,ab,kw OR (PD-1 Inhibitor):ti,ab,kw OR (PD-1 Inhibitors):ti,ab,kw

#5 (Glasgow Prognostic Score):ti,ab,kw OR (GPS):ti,ab,kw OR (modified Glasgow Prognostic Score):ti,ab,kw

(#1 OR #2) AND (#3 OR #4) AND #5

Figure S1. Sensitivity analysis for the prognostic value of the Glasgow prognostic score for (A) progression-free survival and (B) overall survival. (a) Univariate analysis results and (b) multivariate analysis results of the same study; # and ## indicate 1 vs. 0 and 2 vs. 0 subgroups in the same study, respectively.

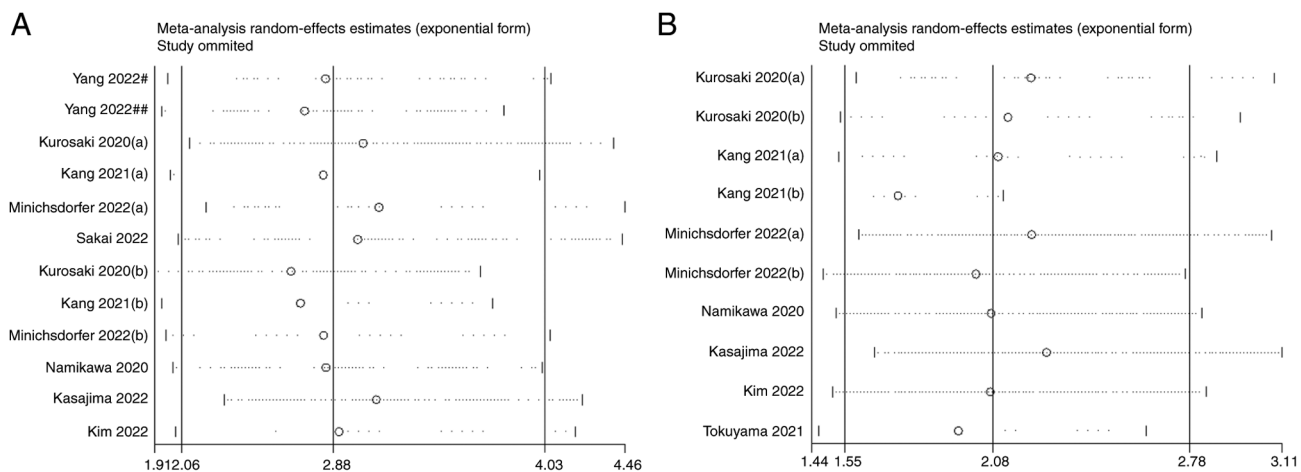


Figure S2. Sensitivity analysis for the prognostic value of the modified Glasgow prognostic score for (A) progression-free survival and (B) overall survival. (a) Univariate analysis results and (b) multivariate analysis results of the same study; # and ## represent 1 vs. 0 and 2 vs. 0 subgroups in the same study, respectively; \* and ^ represent different studies conducted by the same author in the same year.

