

Supplementary Materials

Supplementary Materials S1: Search String

PubMed

((((Metabolism[MeSH Terms]) OR (biomarkers[MeSH Terms]))) AND ((Glioblastoma[Title/Abstract]) OR (glioblastoma[MeSH Terms]))) AND (((((artificial intelligence[MeSH Terms]) OR ("Artificial Intelligence"[Title/Abstract])) OR ("Machine Learning"[Title/Abstract])) OR ("Deep Learning"[Title/Abstract])) OR ("Predictive model"[Title/Abstract]))

Embase

('metabolism':ti,ab OR 'biological marker':ti,ab) AND 'glioblastoma' AND ('artificial intelligence':ti,ab OR 'machine learning':ti,ab OR 'deep learning':ti,ab OR 'predictive model':ti,ab)

Web of Science

((("metabolism" OR "biomarkers") AND "glioblastoma" AND ("artificial intelligence" OR "machine learning" OR "deep learning" OR "predictive model"))).ti,ab.

Ovid

((("metabolism" OR "biological marker") AND "glioblastoma" AND ("artificial intelligence" OR "machine learning" OR "deep learning" OR "predictive model"))).ti,ab.

Cochrane

("glioblastoma"):ti,ab AND ("machine learning" OR "deep learning" OR "artificial intelligence" OR "predictive model"):ti,ab AND ("metabolism" OR "biomarkers"):ti,ab

Table S1: Risk of Bias Assessment

| STUDY | TYPE | LEVEL OF EVIDENCE | RISK OF BIAS | | | | | PATIENT SELECT ION | APPLICABILITY CONCERNS | | |
|-------------------|------------|-------------------------|--------------------------|---------------|-----------------------|-----------------------|----------|--------------------------|---------------------------|-----------------------|-----------------------|
| | | | PATIENT SELECT ION | INDEX TEST | REFERENCE STANDARD | FLOW AND TIMING | ANALYSIS | | INDEX TEST | REFERENCE STANDARD | FLOW AND TIMING |
| Ishwar (2022) | Diagnostic | II | UNSURE | UNSURE | LOW | UNSURE | | UNSURE | LOW | LOW | |
| McInerney (2022) | Both | II | HIGH | LOW | HIGH | LOW | LOW | LOW | LOW | LOW | LOW |
| Firdous (2021) | Diagnostic | I | HIGH | LOW | UNSURE | UNSURE | | LOW | LOW | LOW | |
| Jia (2021) | Prognostic | II | HIGH | UNSURE | UNSURE | LOW | UNSURE | LOW | LOW | LOW | LOW |
| Kaluzinska (2021) | Prognostic | II | UNSURE | UNSURE | UNSURE | HIGH | UNSURE | LOW | LOW | LOW | LOW |
| He (2020) | Prognostic | II | HIGH | UNSURE | UNSURE | UNSURE | UNSURE | LOW | LOW | UNSURE | UNSURE |
| Zeng (2019) | Prognostic | II | UNSURE | LOW | HIGH | UNSURE | UNSURE | LOW | LOW | LOW | UNSURE |
| Hao (2018) | Prognostic | II | HIGH | HIGH | HIGH | UNSURE | HIGH | LOW | LOW | LOW | HIGH |
| Shu (2018) | Prognostic | II | HIGH | UNSURE | UNSURE | HIGH | HIGH | LOW | LOW | UNSURE | UNSURE |
| Gollapalli (2012) | Diagnostic | II | HIGH | HIGH | UNSURE | UNSURE | | LOW | UNSURE | LOW | |

Risk of bias assessment based on Quality Assessment of Diagnostic Accuracy Studies 2 (QUADAS-2) for diagnostic studies and the Quality Assessment of Prognostic Accuracy Studies (QUAPAS) for prognostic studies.