

**Table S1.** Search strategyPub Med

| Search strategies | Search keywords  |
|-------------------|--|
| 1.Biomarker       | (Biomarkers) OR (biomarker) OR (Immune Markers) OR (Immune Marker) OR (immunologic Markers) OR (blood biomarker) OR (blood biomarkers) OR (serum biomarker) OR (serum biomarkers) OR (plasma biomarker) OR (plasma biomarkers) OR (plasma marker) OR (plasma markers) OR (serum marker) OR (serum markers) OR (blood indicator) OR (blood indicators) OR (serum indicator) OR (serum indicators) OR (plasma indicator) OR (plasma indicators) OR (plasma factors) OR (plasma factor) OR (serum factors) OR (serum factor) OR (blood factors) OR (blood factor) OR (biological marker) OR (biological markers) OR (biologic marker) OR (biologic markers) |
| 2.Geneticaly      | (Genetic) OR (Genes) OR (Geneticaly)   |
| 3.Ischemic stroke | (Stroke) OR (ischemic stroke) OR (Brain Ischemia) OR (cva) OR (ischemic strokes) OR (stroke syndrome) OR (Brain Ischemia) OR (cerebral vascular accident) OR (cerebrovascular accident) OR (cerebrovascular accidents) OR (cerebral vascular accidents) OR (Brain Ischemias) OR (cerebral ischemia) OR (cerebral ischemias) OR (ischemic brain) OR (ischemic brains)   |

Web Of Science

| Search strategies | Search keywords  |
|-------------------|--|
| 1.Biomarker       | (Biomarkers) OR (biomarker) OR (Immune Markers) OR (Immune Marker) OR (immunologic Markers) OR (blood biomarker) OR (blood biomarkers) OR (serum biomarker) OR (serum biomarkers) OR (plasma biomarker) OR (plasma biomarkers) OR (plasma marker) OR (plasma markers) OR (serum marker) OR (serum markers) OR (blood indicator) OR (blood indicators) OR (serum indicator) OR (serum indicators) OR (plasma indicator) OR (plasma indicators) OR (plasma factors) OR (plasma factor) OR (serum factors) OR (serum factor) OR (blood factors) OR (blood factor) OR (biological marker) OR (biological markers) OR (biologic marker) OR (biologic markers) |
| 2.Geneticaly      | (Genetic) OR (Genes) OR (Geneticaly)   |
| 3.Ischemic stroke | (Stroke) OR (ischemic stroke) OR (Brain Ischemia) OR (cva) OR (ischemic strokes) OR (stroke syndrome) OR (Brain Ischemia) OR (cerebral vascular accident) OR (cerebrovascular accident) OR (cerebrovascular accidents) OR (cerebral vascular accidents) OR (Brain Ischemias) OR (cerebral ischemia) OR (cerebral ischemias) OR (ischemic brain) OR (ischemic brains)   |

**Table S2.** REMARK Quality Questionnaire<sup>1</sup>

| Item | Question   |
|------|--|
| 1    | Was the study prospective?<br>YES: The study reported that patients and blood samples were collected prior to the development of an outcome<br>NO: No report or clearly retrospective (e.g. patients with poor prognosis collected prior to biomarker measurement) |
| 2    | Was the evaluation of the prognostic marker blinded to the patient outcome?<br>YES: The study reported an attempt to blind the person measuring the level of biomarker to patient outcome<br>NO: There was no such report  |
| 3    | Was there a defined time period during which patients were enrolled?<br>YES: Study defined time period, end of follow up period and median follow up time<br>NO: Did not define above criteria   |
| 4    | Were there precisely defined clinical outcomes at the beginning of the study?<br>YES: Study defined which clinical endpoints are to be measured<br>NO: No such definition  |
| 5    | Did the study provide a rationale for the study sample size?<br>YES: Evidence of a sensible sample size calculation (e.g. 10 outcomes/variable in a multiple regression model)<br>NO: No attempt to define sample size   |
| 6    | Did the study provide a list of candidate variables?<br>YES: A list of variables to be considered in multiple regression analysis were provided at the beginning of the study<br>NO: Evidence that variables were measured and not reported                        |
| 7    | Were the methods for measuring the prognostic marker adequately described and referenced?<br>YES NO  |
| 8    | Were the characteristics of the study patients described?<br>YES: The study described the source and inclusion and exclusion criteria<br>NO: Did not provide the information or it was unclear description   |

<sup>1</sup>REMARK = REporting recommendations for tumour MARKer prognostic studies

*Note.* Adapted from “Blood biomarkers for physical recovery in ischemic stroke: a systematic review,” by Lai YJ, Hanneman SK, Casarez RL, Wang J, McCullough LD. *Am J Transl Res.* 2019;11:4603–13 (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6731415/>). CC BY-NC.

**Table S3.** Quality Assessment of Each Study Included in the Systematic Review by Using the Modified REMARK Questionnaire

| Article           | Item of REMARK questionnaire |       |       |     |       |       |     |       | Percentage of Yes |
|-------------------|------------------------------|-------|-------|-----|-------|-------|-----|-------|-------------------|
|                   | 1                            | 2     | 3     | 4   | 5     | 6     | 7   | 8     |                   |
| 1                 | YES                          | NO    | NO    | YES | NO    | YES   | YES | YES   | 62.5              |
| 2                 | YES                          | YES   | YES   | YES | NO    | YES   | YES | YES   | 87.5              |
| 3                 | YES                          | NO    | YES   | YES | NO    | YES   | YES | YES   | 75                |
| 4                 | YES                          | NO    | YES   | YES | NO    | YES   | YES | YES   | 75                |
| 5                 | YES                          | YES   | YES   | YES | NO    | YES   | YES | YES   | 87.5              |
| 6                 | YES                          | NO    | NO    | YES | NO    | YES   | YES | YES   | 62.5              |
| 7                 | NO                           | NO    | NO    | YES | NO    | NO    | YES | NO    | 25                |
| 8                 | YES                          | NO    | YES   | YES | NO    | YES   | YES | YES   | 75                |
| 9                 | YES                          | NO    | YES   | YES | NO    | YES   | YES | YES   | 75                |
| 10                | YES                          | NO    | YES   | YES | NO    | YES   | YES | YES   | 75                |
| 11                | YES                          | NO    | YES   | YES | NO    | YES   | YES | YES   | 75                |
| 12                | YES                          | YES   | YES   | YES | YES   | YES   | YES | NO    | 87.5              |
| 13                | YES                          | NO    | NO    | YES | NO    | YES   | YES | YES   | 62.5              |
| 14                | YES                          | NO    | NO    | YES | NO    | NO    | YES | NO    | 37.5              |
| 15                | YES                          | NO    | YES   | YES | NO    | YES   | YES | YES   | 75                |
| 16                | YES                          | NO    | YES   | YES | NO    | YES   | YES | YES   | 75                |
| 17                | NO                           | NO    | YES   | YES | NO    | YES   | YES | YES   | 62.5              |
| 18                | YES                          | NO    | NO    | YES | NO    | YES   | YES | YES   | 62.5              |
| 19                | YES                          | YES   | YES   | YES | NO    | YES   | YES | YES   | 87.5              |
| 20                | YES                          | YES   | YES   | YES | YES   | YES   | YES | YES   | 100               |
| 21                | YES                          | YES   | YES   | YES | YES   | YES   | YES | YES   | 100               |
| Percentage of Yes | 90.47                        | 28.57 | 71.42 | 100 | 14.28 | 90.47 | 100 | 85.71 | 72.61             |

*Note.* Adapted from “Blood biomarkers for physical recovery in ischemic stroke: a systematic review,” by Lai YJ, Hanneman SK, Casarez RL, Wang J, McCullough LD. *Am J Transl Res.* 2019;11:4603–13 (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6731415/>). CC BY-NC.