**Supplemental Content 2**

The **formal search** was conducted under the supervision of a university librarian. As some databases were amenable to search using medical embedded sub-headings (MeSH), while others only permitted keywords, each database was searched separately. When available, MeSH terms were used in addition to keywords to maximize our ability to find eligible articles.

The search terms corresponded to three concepts: concussion, neuropsychology, and athletes. The concepts were then combined to capture the topic of interest using the Boolean operator “AND”. Within a given concept, the keywords were separated by the Boolean operator “OR". The truncated terms were used when appropriate and according to each database guidelines.

The following concepts were used:

1. Concussion: “heading” OR “head injury” OR “head injuries” OR “head injured” OR “brain injury” OR “brain injuries” OR “brain injured” OR “trauma” OR “traumatic brain injury” OR “repetitive mild traumatic brain injury” OR “mild brain injury” OR “sports-related head injury” OR “concuss\*” AND
2. Neuropsychology: “neuropsycholog\*” OR “cogniti\*” OR “neurocogniti\*” OR “deficits” OR “outcome assessment” OR “executive control” OR “executive function” OR “attention” OR “memory” OR “problem solving” OR “decision-making” OR “inhibition” OR “working memory” OR “shifting” OR “switch” AND 3) Athletes: “athlet\*” OR “sport\*”.

An additional search strategy was employed to ensure the exhaustive capture of the relevant literature for review. The **informal search** was conducted on five databases (EMBASE, Google Scholar, PubMed, and Web of Science) with the three same concepts as the formal search (i.e., concussion, neuropsychology, athlete). However, in this strategy, the Boolean equations and MeSH were not used. Instead, different combinations of the concepts (e.g., concussion “AND” athletes “AND” chronic deficits; concussion “AND” athlete “AND” long-term; mTBI “AND” neuropsychological assessment) were explored and refined to find relevant articles. This strategy was used to overcome the rigidity of the formal search strategy.

For articles stemming from both the strategies, gray literature was searched to find relevant thesis, dissertations, conference proceedings, poster sessions, published methods papers, etc. For the papers retrieved by both the formal and information search strategies, the reference list from previous published reviews and meta-analyses, as well as the reference list from articles that were screened for eligibility were scanned for additional potential studies pertinent to the present meta-analysis. Moreover, the curriculum vitae of scholars in the concussion field and main authors of relevant articles that were included in the present analyses were searched for additional articles.