**Appendix A: Medline search strategy**

*Sport:*

1. exp sports/
2. exp athletic injuries/
3. exp sports medicine/
4. (athlet\* or sport\* or player\*).mp
5. (football\* or rugby or soccer or box\* or martial arts or hockey or horse rac\* or horse rid\* or equestrian or basketball or gymnast\* or volleyball or netball or wrestl\* or tennis or baseball).tw
6. or/1-5

*Concussion/ post-concussion syndrome*

1. exp brain injuries/
2. (((severe or moderate) adj2 (head or brain or traumatic or tbi) not (mild or minor or minimal)).tw
3. 7 not 8
4. exp brain concussion/
5. concuss\*.mp
6. commotio cerebri.mp
7. ((mild or minor or minimal) adj3 (traumatic brain or tbi)).tw
8. mtbi.mp
9. (prolong\* or persist\* or unresolved or delay\*).mp
10. (or/9-14) and 15
11. exp post-concussion syndrome/
12. (post-concuss\* or postconcuss\*).mp
13. or/16-18

*Investigation/assessment:*

1. exp diagnosis/
2. exp biomarker/
3. (investigat\* or screen\* or diagnos\* or assess\* or test\*).mp
4. ((neuropsych\* or cognitive or psychometric) adj2 (function\* or test\*)).tw
5. ((vision or visual function\*) adj2 test\*).tw
6. ((vestibul\*) adj2 test\*).mp
7. ((post-concuss\* or postconcuss or symptom or anxiety or depression) adj3 (scale or index)).mp
8. (balance or BESS).mp
9. (standardi?ed assessment or SAC).mp
10. (sport\* concussion assessment tool or SCAT\*).mp
11. (scan or imag\* or magnetic resonance or MRI or positron emission tomograph\* or PET or MRS or DTI).mp
12. (electroencephalogra\* or EEG).mp
13. (biomarker\* or gene\*).mp
14. (transcranial magnetic stimulation or TMS).mp
15. or/20-33

*Treatment:*

1. exp therapeutics/
2. exp treatment outcome/
3. exp exercise therapy/
4. exp exercise/
5. exp cognitive therapy/
6. (treat\* or manage\* or rehab\* or exercis\* or pharmacotherapy or brain train or neurorehab\* or train\* or physiotherapy or physical therapy).mp
7. (drug\* or medication\* or supplement\*).mp
8. (cognitive adj2 therapy).mp
9. or/35-42
10. 6 and 19
11. 44 and 34
12. 44 and 43
13. 45 or 46