



Appendix 1: Search Strategies

PUBMED:

(Chondroitin*[TIAB] OR Proteochondroitin[TIAB] OR “Chondroitinases and Chondroitin Lyases”[Mesh] OR “Chondroitin Sulfate Proteoglycans”[Mesh])

AND (“Spinal Cord”[Mesh] OR “Spinal Cord Injuries”[Mesh] OR Myelopath* [TIAB] OR (lateral*[TIAB] AND (cornu[TIAB] OR horn[TIAB])) OR (spinal[TIAB] AND marrow[TIAB]) OR spinalcord*[TIAB] OR Myelon*[TIAB] OR (Medulla[TIAB] AND Spinal*[TIAB]) OR (Conus[TIAB] AND (Medullari* [TIAB] OR Terminali*[TIAB])) OR ((spine[TIAB] OR spinal*[tiab] OR Lumbar [TIAB] OR Thoracic[TIAB] OR Coccygeal[TIAB] OR Sacral[TIAB]) AND Cord*[TIAB]))

AND (“Wounds and Injuries”[Mesh] OR Injur*[TIAB] OR reinjury[TIAB] OR Trauma*[TIAB] OR Transection* [TIAB] OR Laceration*[TIAB] OR Contusion*[TIAB] OR fracture*[TIAB] OR wound*[TIAB] OR trauma*[TIAB] OR damag*[TIAB] OR hemisection* [TIAB] OR compress*[TIAB] OR Broken [TIAB] OR break*[TIAB] OR “Spinal Injuries”[Mesh])

SCOPUS:

TITLE-ABS-KEY((gut microbiome OR gut microbiota OR intestinal microbiome OR intestinal microbiota OR gut flora OR gut bacteria) AND (traumatic brain injury OR TBI OR head injury OR brain trauma OR brain damage) AND (“gut-brain axis” OR “microbiota-gut-brain axis” OR “brain-gut axis”) AND (inflammation OR oxidative stress OR “blood-brain barrier”)) AND (LIMIT-TO(DOCTYPE, “ar”) AND LANGUAGE (English)) AND (PUBYEAR > 2013)

WEB OF SCIENCE:

TS=((“traumatic brain injury” OR “TBI” OR “brain trauma” OR “head injury”) AND (“gut microbiome” OR “intestinal microbiota” OR “gut flora” OR “intestinal flora” OR “gut bacteria” OR “intestinal bacteria”)))

EMBASE:

(‘traumatic brain injury’ OR ‘TBI’ OR ‘brain trauma’ OR ‘head injury’) AND (‘gut microbiota’ OR ‘intestinal microbiota’ OR ‘gut flora’ OR ‘intestinal flora’ OR ‘gut microbiome’ OR ‘intestinal microbiome’ OR ‘gut bacteria’ OR ‘intestinal bacteria’) AND [embase]/lim NOT [medline]/lim

Cochrane library:

#1 MeSH descriptor: [Brain Injuries, Traumatic] explode all trees

#2 ((trauma* OR injur* OR damag*) AND (brain* OR head)):ti,ab,kw

#3 #1 OR #2

#4 MeSH descriptor: [Gastrointestinal Microbiome] explode all trees

#5 ((gut OR intestinal OR microbiome OR microbiota OR microflora) AND (bacteria OR microbial)):ti,ab,kw

#6 #4 OR #5

#7 #3 AND #6