

**Supplementary Table 1.** Search strategy for each database

| Database                             | Search strategy  |
|--------------------------------------|--|
| PubMed                               | #1 “Cervical Vertebrae”[MeSH Terms] OR “Cervical Vertebra”[All Fields] OR “Cervical Spines”[All Fields] OR “Cervical Spine”[All Fields]<br>#2 “Robotics”[MeSH Terms] OR “robot”[All Fields] OR “robotic”[All Fields]<br>#3 #1 AND #2 |
| Embase Database                      | #1 “Cervical Vertebrae”[MeSH Terms] OR “Cervical Vertebra”[All Fields] OR “Cervical Spines”[All Fields] OR “Cervical Spine”[All Fields]<br>#2 “Robotics”[MeSH Terms] OR “robot”[All Fields] OR “robotic”[All Fields]<br>#3 #1 AND #2 |
| Cochrane library                     | #1 “Cervical Vertebrae”[MeSH Terms] OR “Cervical Vertebra”[All Fields] OR “Cervical Spines”[All Fields] OR “Cervical Spine”[All Fields]<br>#2 “Robotics”[MeSH Terms] OR “robot”[All Fields] OR “robotic”[All Fields]<br>#3 #1 AND #2 |
| Web of Science                       | #1 “Cervical Vertebrae”[MeSH Terms] OR “Cervical Vertebra”[All Fields] OR “Cervical Spines”[All Fields] OR “Cervical Spine”[All Fields]<br>#2 “Robotics”[MeSH Terms] OR “robot”[All Fields] OR “robotic”[All Fields]<br>#3 #1 AND #2 |
| Chinese National Knowledge Databases | #1 “ji qi ren” [TS]<br>#2 “jing zhui” [TS]<br>#3 #1 AND #2   |
| Wanfang Database                     | #1 “ji qi ren” [TS]<br>#2 “jing zhui” [TS]<br>#3 #1 AND #2   |