
Regenerative implantable medical devices: An overview

Hongman Wang

Peking University Health Science Center, China

Objectives: To conduct a bibliometric evaluation and trend prediction of English literature on animal-derived regenerative implantable medical devices based on tissue engineering technology.

Methods: Data identified by a search strategy with 11 combinations of keywords before 1 January, 2014 were downloaded from 8 databases on 25 November, 2014. The study analyzed publication year, journal preference, authors' geographic location, and research topics.

Results: Research on animal-derived regenerative implantable medical devices is gradually increasing. The majority of the first authors are from colleges or universities. Approximate one third of the papers were the result of cooperation of different institutions. The top five productive countries are USA, China, UK, Germany and Italy. Biomaterials are the main literature source. Bradford's law analysis shows that a core journal area has formed. The active areas of research and future research directions are scaffold materials, biocompatibility, growth factors and extracellular matrix.

Conclusion: Research of animal-derived regenerative implantable medical devices has attracted more and more attention from the academia. But most of the research achievements are generated by a few developed countries. Researchers around the world need to complement each other in knowledge and academic resources by communication and cooperation.

cghsd2011@163.com