

# All Orthopedic Stem Cell Type and ECM Research Summary (1997-2021)

**1997** Some physicians and scientists argue that we don't have much research supporting the use of stem cells to treat orthopedic conditions. Here I list all significant publications from the late 90s through May, 2021. The list was compiled by running various searches on body parts and various cell types on PubMed. Each circle represents a research study and is hyperlinked to the abstract in the U.S. National Library of Medicine or the full text article. The main author is listed, the area of treatment, the number of patients involved, and the type of stem cells used. The scalpel or injection icons represent the three types of delivery techniques: injection, surgical, or both. The shape of the icon denotes cell source (circle=bone marrow, square=adipose, triangle=birth tissues). I have also included amniotic ECM papers, as these tissues contain no live and functional cells, but instead act as growth factors and extra-cellular matrix. Regenexx publications are highlighted.

**2000**

**2005**

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