

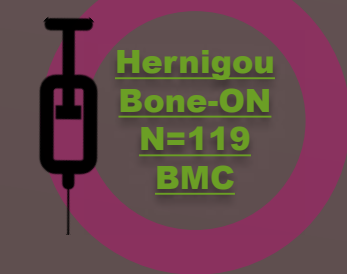
# All Orthopedic Stem Cell Type and ECM Research Summary (1997-2018)

1997



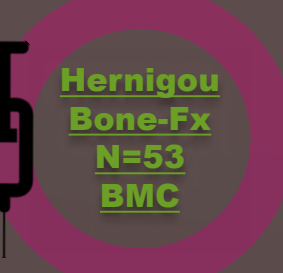
Some physicians and scientists argue that we don't have much research supporting the use of stem cells to treat orthopedic conditions. Here I list all significant publications from the late 90s through summer 2018. The list was compiled by running various searches on body parts and various cell types 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



n=11,691

2005

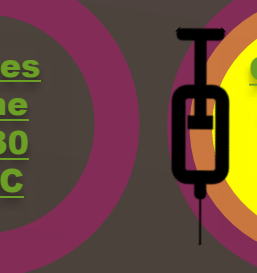
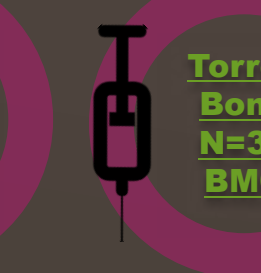
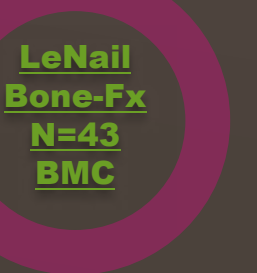
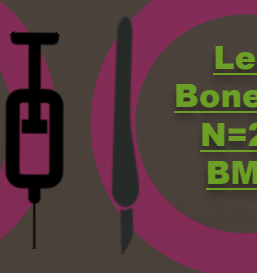
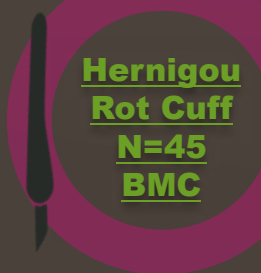
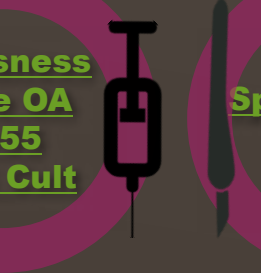
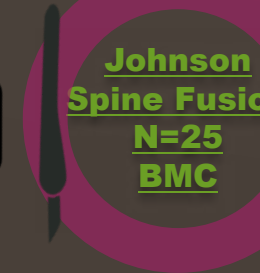
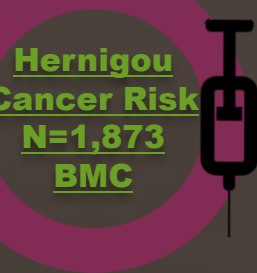
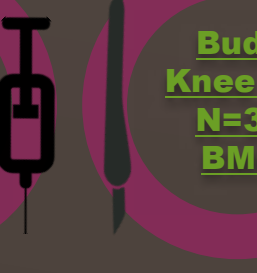
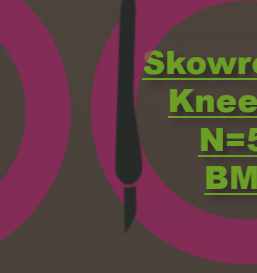
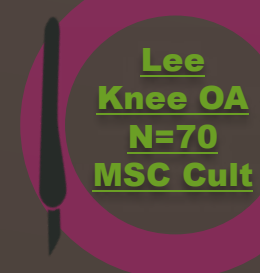
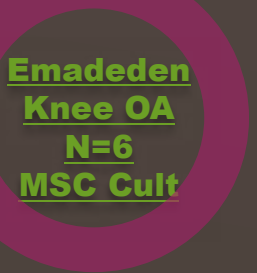
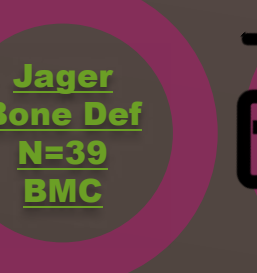
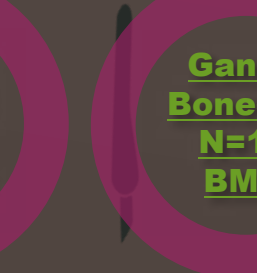
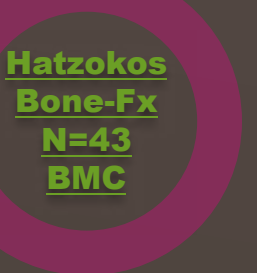


(The patient n is approximate as a few studies list joints instead of patients. On the other hand, several later case studies and small case series were also excluded due to significance. In addition, this number represents total publishing activity as in a few studies, patients from prior studies are likely repeated by later studies.)

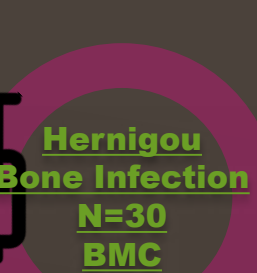
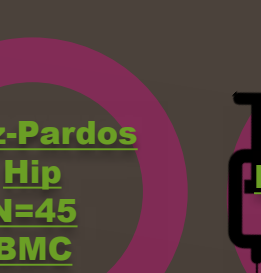
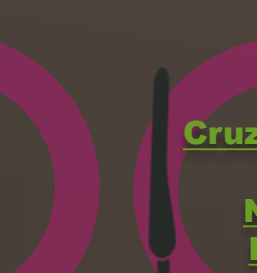
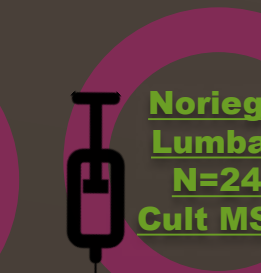
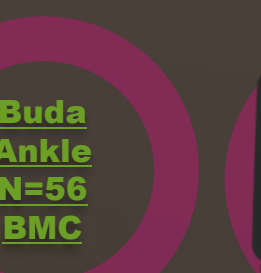
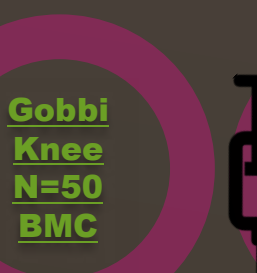
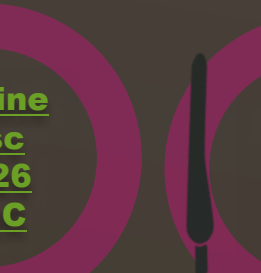
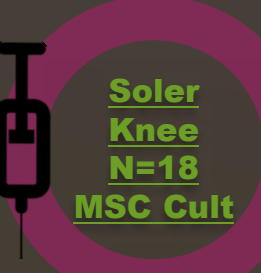
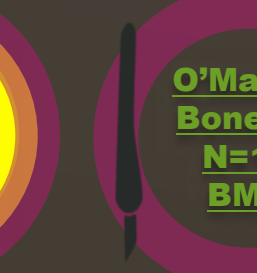
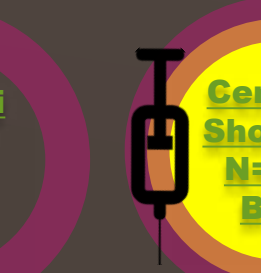
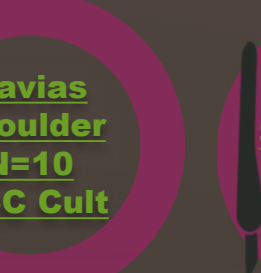
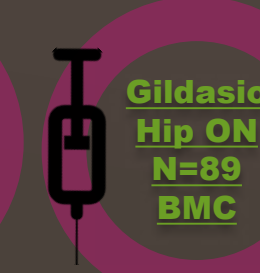
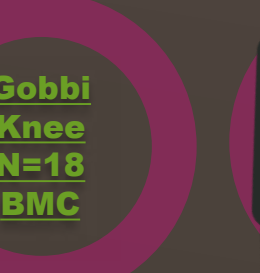
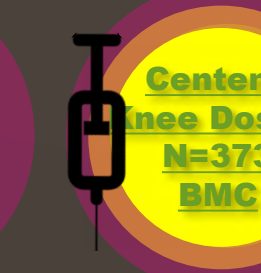
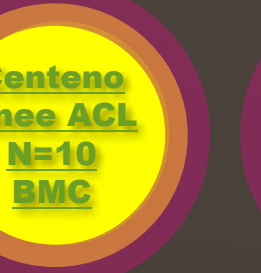
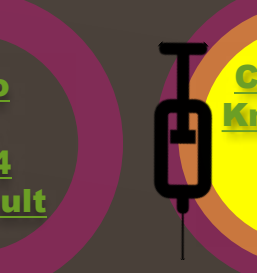
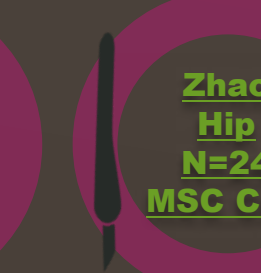
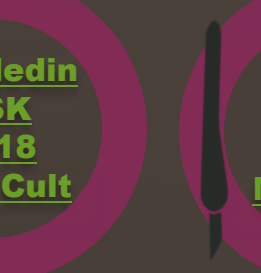
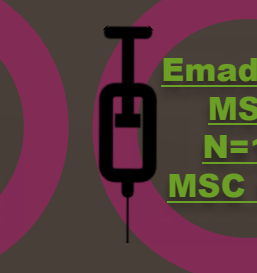
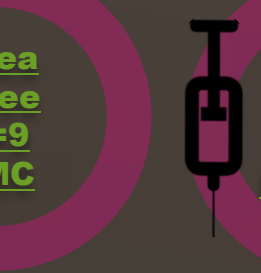
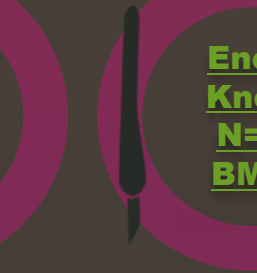
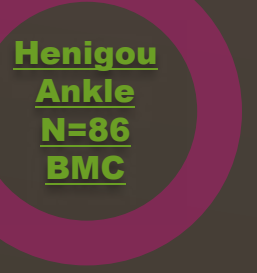


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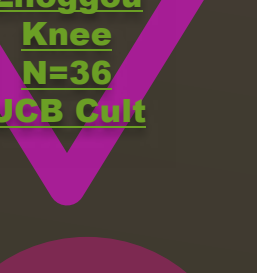
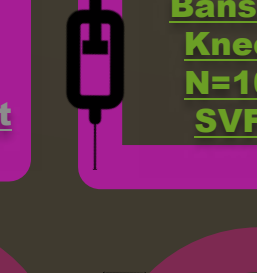
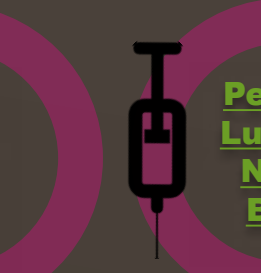
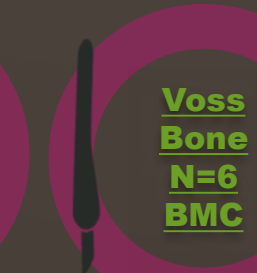
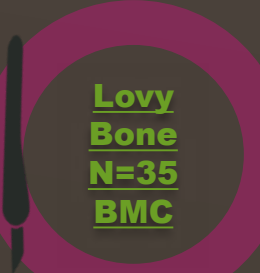
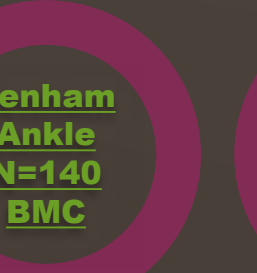
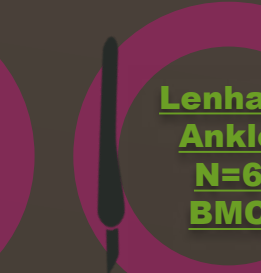
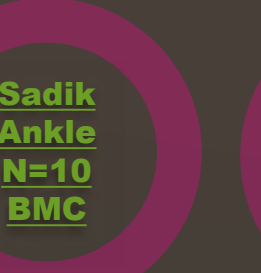
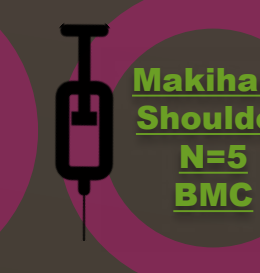
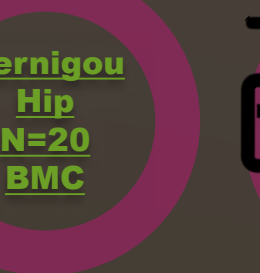
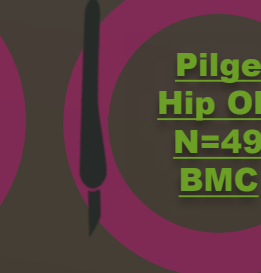
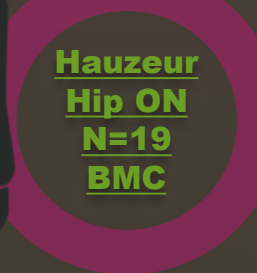
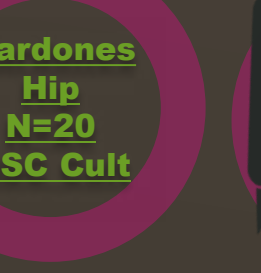
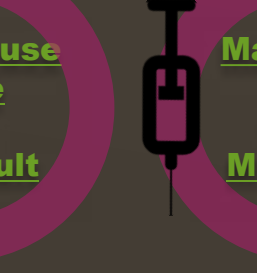
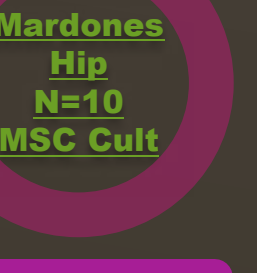
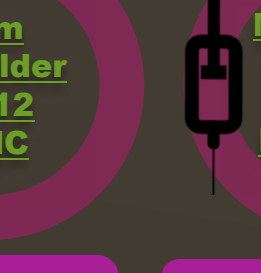
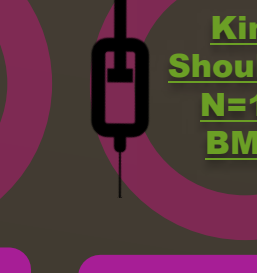
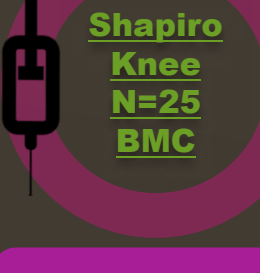
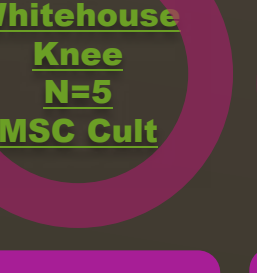
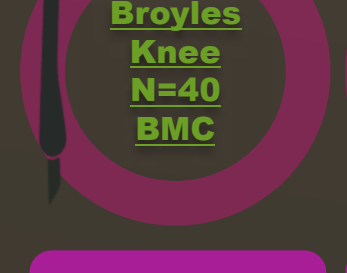
2010



2015



2017



2018

