

Human Interventional Orthopedic Studies Utilizing Adipose-Derived Lipoaspirate (2011-2019)

There is currently a growing body of research supporting the use of adipose derived mesenchymal stem cells (AD-MSCs) to treat orthopedic conditions. Here is a list of all significant publications to date highlighting human clinical applications of AD-MSCs. Each shape 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, and the shape and color of each correspond to the area treated and lipoaspirate preparation process to extract AD-MSCs, respectively.

N = 5,642

2011



2012



2013



2014



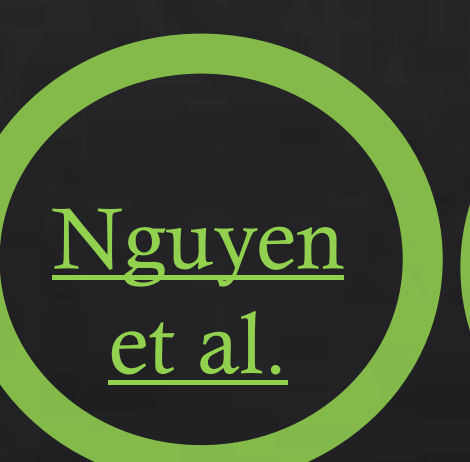
2015



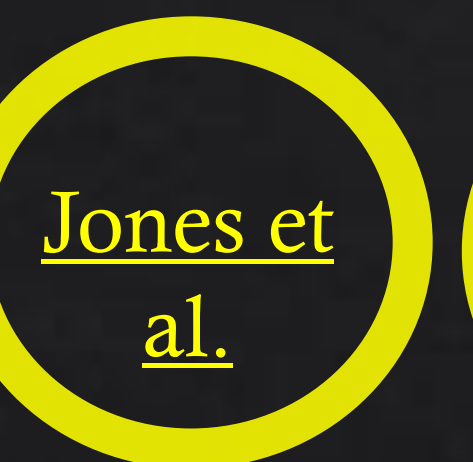
2016



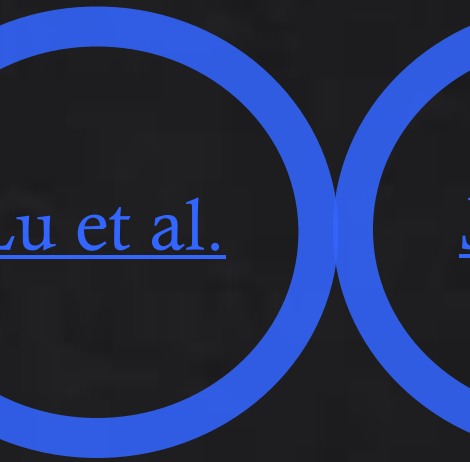
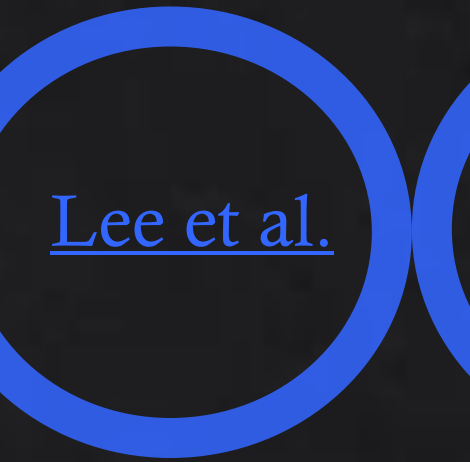
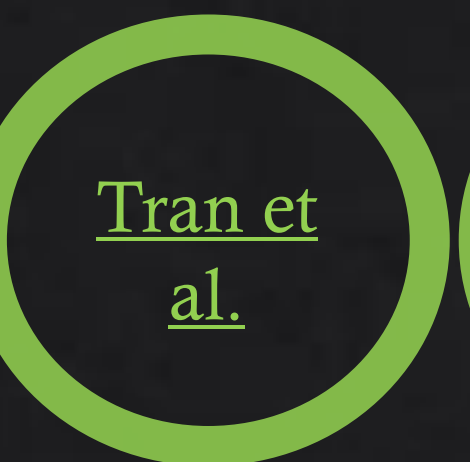
2017



2018



2019



2020



Lipoaspirate samples micro-fractured via mechanical and non-enzymatic processes



Lipoaspirate samples digested using enzymatic reaction and reconstituted without the use of cultured media



Lipoaspirate samples grown in culture media with or without enzymatic digestion