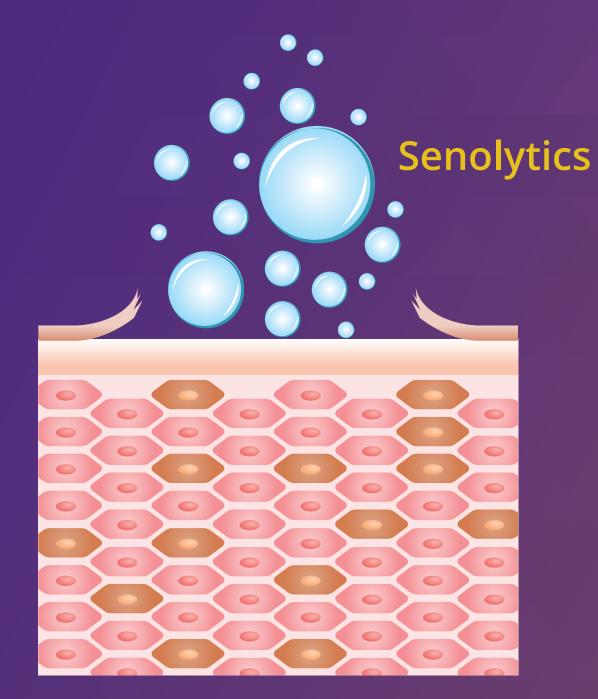
A Novel Target for Anti-Senescence Therapies

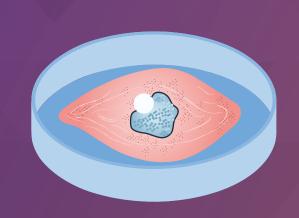
Senolysis, the elimination of senescent cells from various tissues, can improve aging-related phenotypes



Specific senolytic approaches that only target senescent cells are required to avoid damage to other tissues in the body

Can vaccines targeting senescence-related proteins (seno-antigens) attenuate aging-related phenotypes?



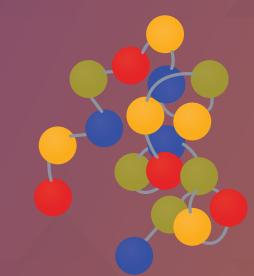


Senescent human vascular endothelial cells



Progeroid mouse models

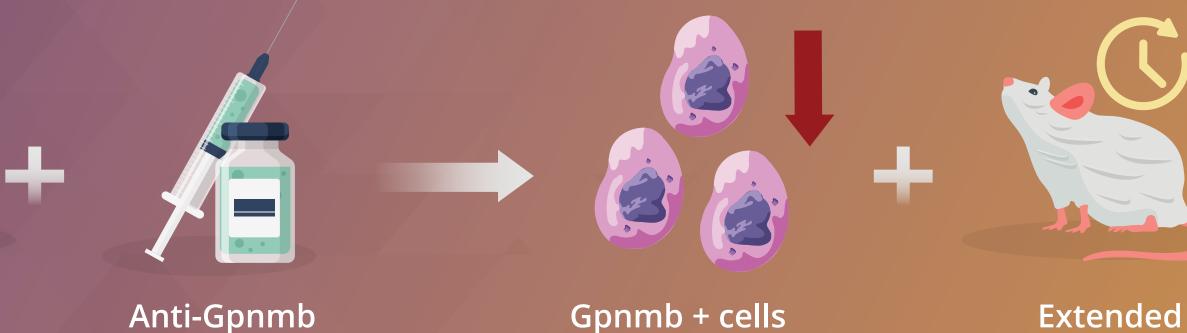
Suda *et al.* (2021) | *Nature Aging* | DOI: 10.1038/s43587-021-00151-2



Transcriptome analysis

Up-regulation of glycoprotein nonmetastatic melanoma protein B (GPNMB)

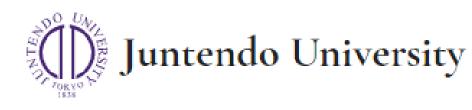
Effects of anti-Gpnmb senolytic vaccine



Vaccines targeting seno-antigens like GPNMB could present a new form of anti-senescence therapy

Senolytic vaccination improves normal and pathological age-related phenotypes and increases lifespan in progeroid mice

senolytic vaccine



lifespan



