

Aging breakthrough? Pruning old cells rejuvenates bone density in mice – could osteoporosis drugs be next?

[Several studies](#) have shown that pruning away old, inactive senescent cells [can do wonders for aged mice](#), restoring their bald patches, strengthening their aged muscles, improving their cardiovascular function and repairing their damaged kidneys. “Oh, to be a mouse,” as Christopher Reeve once wistfully mused.

Now researchers at the Mayo Clinic in Rochester, Minnesota, have shown for the first time that the same approach can restore the strength of brittle bones.

...

[Researchers Sundeep Khosla, Jim Kirkland] and colleagues tested their hunch by treating 20-month-old mice (the equivalent of 70-year-old humans) with two senolytic compounds previously identified.

...

Mice received their senolytic cocktail once a month for four months. Those treated showed a 30% increase in their bone volume. Scans showed that not only had their bone mass increased – a finding that could be due to increased mineralization – but the structure of their bone revealed new deposition of bone tissue, increasing its strength.

...

“With the aging of the population in the U.S. and around the world, age-related bone loss is going to continue to be an enormous public health problem, and patients with osteoporosis have a higher risk for other age-related comorbidities,” says Khosla. He says preliminary clinical trials with the bone-strengthening agents have already begun in people.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [Shedding old cells rejuvenates the brittle bones of ageing mice](#)