

First real anti-aging drug on the horizon? Common drugs turned back body's epigenetic clock 2.5 years in small trial

A small clinical study in California has suggested for the first time that it might be possible to reverse the body's epigenetic clock, which measures a person's biological age.

For one year, nine healthy volunteers took a cocktail of three common drugs — growth hormone and two diabetes medications [metformin and DHEA] — and on average shed 2.5 years of their biological ages, measured by analysing marks on a person's genomes. The participants' immune systems also showed signs of rejuvenation.

The results were a surprise even to the trial organizers — but researchers caution that the findings are preliminary because the trial was small and did not include a control arm.

"I'd expected to see slowing down of the clock, but not a reversal," says geneticist Steve Horvath.

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Researchers are already testing metformin for its potential to protect against common age-related diseases, such as cancer and heart disease. [Researcher Gregory] Fahy says that the three drugs in the cocktail might contribute separately to the effect on biological ageing through unique mechanisms. Intervene Immune is planning a larger study that will include people of different age groups and ethnicities, and women.

Read full, original post: [First hint that body's 'biological age' can be reversed](#)