

## Singapore develops new potential therapies for osteoporosis

14 August 2020 | News

**There is an urgent need to develop new strategies that overcome the limitations of current treatments**



A research team from the National University of Singapore (NUS) has identified a new avenue to maintain bone health while reducing bone resorption. The work, led by Associate Professor Christoph Winkler from [NUS Biological Sciences](#), opens up new and potentially more effective osteoporosis treatments.

To develop new strategies to treat osteoporosis, the NUS team, collaborated with research groups from the Genome Institute Singapore and the University of Wuerzburg. They used genetic analysis to discover a connection between a small protein, chemokine CXCL9, and the important part it plays in maintaining healthy bones. They also identified two inhibitors as promising drug targets for osteoporosis.

Most current osteoporosis therapies include the use of bisphosphonates, which block osteoclast activity and thus prevent excessive bone resorption. However, prolonged treatment with these drugs eliminates the necessary bone turnover leading to increased fracture risk and other unwanted side effects. Therefore, there is an urgent need to develop new strategies that overcome the limitations of current treatments.