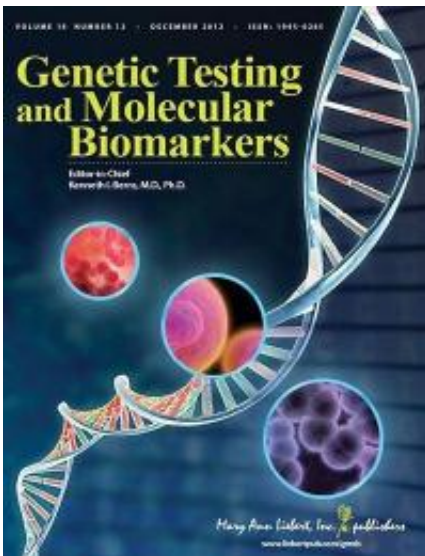


Can a genetic variation in the vitamin D receptor protect against osteoporosis?

November 29 2012



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Osteoporosis, or reduced bone mineral density that can increase the risk of fractures, may affect as many as 30% of women and 12% of men worldwide. One risk factor for osteoporosis is vitamin D deficiency. A modified form of the vitamin D receptor present in some individuals may lower their risk for developing osteoporosis, according to an article in *Genetic Testing and Molecular Biomarkers*.

To act on cells in the body, vitamin D binds to a specific receptor on the surface of cells. A variation in the gene for the vitamin D receptor

(called the Bsm I polymorphism) may change this interaction. In the article, "[Vitamin D Receptor BSM I Polymorphism and Osteoporosis Risk: A Meta-Analysis from 26 Studies](#)," authors Fu Jia and colleagues, Kunming Medical University and Yunnan University of [Chinese Traditional Medicine](#), Yunnan, People's Republic of China, report that people with this [genetic variation](#) appear to have a significantly decreased risk of developing osteoporosis.

"This meta-analysis provides a pathway to help determine the likelihood that a person may develop osteoporosis and is a good example for the potential application of genetics to clinical medicine," says Kenneth I. Berns, MD, PhD, Editor-in-Chief of Genetic Testing and Molecular Biomarkers, and Director of the University of Florida's Genetics Institute, College of Medicine, Gainesville, FL.

More information: The article is available on the [Genetic Testing and Molecular Biomarkers website](#).

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Citation: Can a genetic variation in the vitamin D receptor protect against osteoporosis? (2012, November 29) retrieved 25 April 2024 from <https://medicalxpress.com/news/2012-11-genetic-variation-vitamin-d-receptor.html>

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