



## BIPOLAR DISORDERS Factsheet

October 2021

### What is osteoporosis?

Osteoporosis is a progressive, systemic metabolic bone disorder, which results in lowered bone mineral density and increases an individual's risk of fracture. Between ages 25 to 35 years, the skeletal structure reaches maturity and bone mass reaches its peak. After 40 years, the bone remodeling process serves to repair areas of damage in the bone. Naturally with increasing age and menopause, the process of bone resorption may be faster than the process of bone formation, leading to osteoporosis. However, other diseases and drugs may also induce osteoporosis. Many people with bipolar disorder are prescribed medications that can cause hyperprolactinemia, which inhibits the amount of estrogen and testosterone secreted by the brain, and in turn can increase the risk of osteoporosis.

### What is the evidence for osteoporosis in bipolar disorder?

High quality evidence finds a small increased risk of fractures in people with bipolar disorder after adjusting for possible explanatory variables including age, sex, comorbidities, medications, race, marital status, and substance use.

Low quality evidence is unable to determine the effects of valproate on osteoporosis or bone density in premenopausal females with bipolar disorder.

For more information see the technical table



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*NeuRA (Neuroscience Research Australia) is one of the largest independent medical and clinical research institutes in Australia and an international leader in neurological research.*

*Diseases of the brain and nervous system pose the greatest health, economic and social burden of any disease group because they are chronic, debilitating and have no known cures.*

*Medical research is the cornerstone of efforts to advance the health and wellbeing of families and the community. Our dedicated scientists are focussed on transforming their research into significant and practical benefits for all patients.*

*While we hope you find this information useful, it is always important to discuss any questions about bipolar disorder or its treatment with your doctor or other health care provider.*

### HOW YOUR SUPPORT HELPS

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