



NeuRA

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BIPOLAR DISORDERS Factsheet

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What are anti-inflammatory medications?

Growing evidence suggests that inflammatory processes may contribute to the development of mental disorders. Pro-inflammatory cytokines interleukin (IL) 4, tumor necrosis factor alpha (TNF- α), soluble IL-2 receptor (sIL-2R), IL-1b, IL-6, soluble receptor of TNF- α type 1 (STNFR1), and C-reactive protein (CRP) have been shown to be elevated in people with bipolar disorder compared to healthy controls. This suggests a potential role for anti-inflammatory agents in the treatment of bipolar disorder. These agents primarily include non-steroidal anti-inflammatory agents (e.g., aspirin, celecoxib), but also omega-3 polyunsaturated fatty acids, N-acetylcysteine (a glutamate modulator) and pioglitazone (an antidiabetic) have some anti-inflammatory properties.

What is the evidence for anti-inflammatory medications?

Moderate to high quality evidence finds adjunctive omega-3 to be more effective than placebo for depression, but not for mania symptoms. There is good evidence of some benefit of adjunctive celecoxib over placebo for mania symptoms.

Moderate quality evidence finds some benefit of adjunctive N-acetylcysteine over placebo for depression, with no differences in adverse events. The finding for depression was not consistently found across reviews due to slight differences in included studies.

Moderate to low quality evidence finds no benefit of adjunctive aspirin for depression, and low quality evidence is unable to determine any benefits of pioglitazone.

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

We are able to make significant advances due to the generosity of countless people. Your donation allows us to continue to work towards transforming lives. For information on how you can support our research, phone **1300 888 019** or make a secure donation at neura.edu.au.

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