

# The hunt for a successor to lithium for bipolar disorder

March 27 2013

---

Toxicity problems and adverse side effects when taking lithium, the mainstay medication for treating bipolar disorder, are fostering a scientific hunt for insights into exactly how lithium works in the body—with an eye to developing a safer alternative. That's the topic of the cover story in the current edition of *Chemical & Engineering News*. C&EN is the weekly newsmagazine of the American Chemical Society, the world's largest scientific society.

Bethany Halford, C&EN senior editor, explains that [lithium](#) often is the first-line medication used to calm the highs and boost the lows of bipolar disorder, which affects about 9 million people at some point in their lives in the United States alone. Lithium has distinct advantages over the dozen or so other medications. For instance, lithium is the only medication proven effective in preventing suicide in the mania phase of bipolar disorder. Lithium also is inexpensive.

The article explains, however, that lithium also has drawbacks, with a fine line between the effective dose and the toxic dose. Side effects include thyroid problems, weight gain and, in some cases, kidney failure. In the hope of skirting lithium's limitations, scientists are trying to pinpoint exactly how lithium stabilizes mood and how it engenders those unwanted effects. The goal is development of a second-generation successor without lithium's downsides, and Halford describes how scientists are working to do so.

**More information:** Limits Of Lithium -

[cen.acs.org/articles/91/i12/Limits-Lithium.html](http://cen.acs.org/articles/91/i12/Limits-Lithium.html)

Provided by American Chemical Society

Citation: The hunt for a successor to lithium for bipolar disorder (2013, March 27) retrieved 17 April 2024 from

<https://medicalxpress.com/news/2013-03-successor-lithium-bipolar-disorder.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.