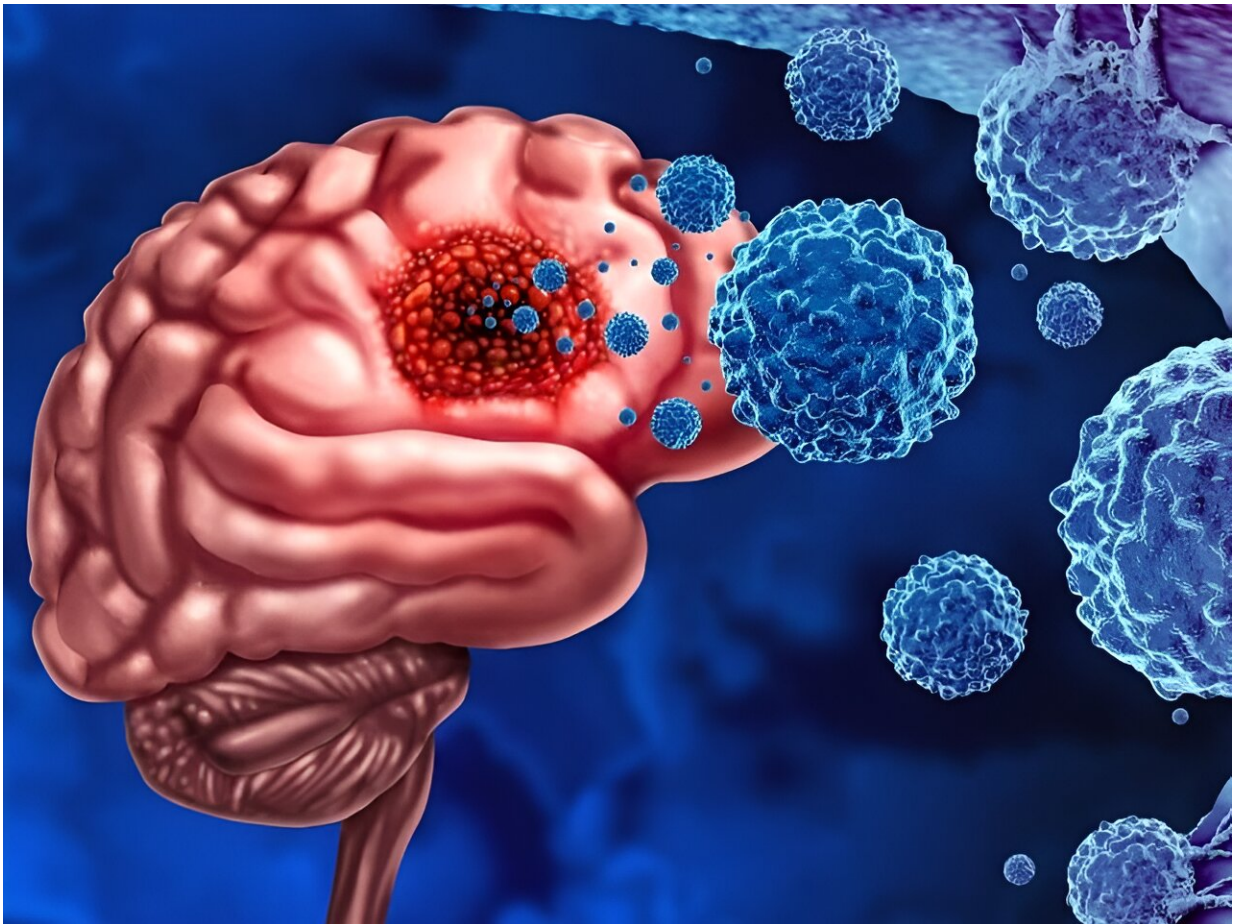


Dabrafenib, trametinib found more effective in pediatric glioma with BRAF V600

September 21 2023, by Elana Gotkine



Dabrafenib plus trametinib results in significantly more responses and

longer progression-free survival than standard chemotherapy for pediatric patients with low-grade glioma with BRAF V600 mutations, according to a study published in the Sept. 21 issue of the *New England Journal of Medicine*.

Eric Bouffet, M.D., from The Hospital for Sick Children in Toronto, and colleagues conducted a phase 2 trial involving patients with pediatric low-grade glioma with BRAF V600 mutations who were scheduled to receive first-line therapy. In total, 110 patients were randomly assigned to receive dabrafenib plus trametinib or standard chemotherapy (carboplatin plus vincristine; 73 and 37 patients, respectively). The independently assessed overall response (complete or partial response) according to the Response Assessment in Neuro-Oncology criteria was examined as the primary outcome.

The researchers found that an overall response occurred in 47% and 11% of those treated with dabrafenib plus trametinib and those treated with chemotherapy, respectively, at a median follow-up of 18.9 months (risk ratio, 4.31). Clinical benefit was observed in 86% and 46% of patients receiving dabrafenib plus trametinib and chemotherapy, respectively (risk ratio, 1.88). Significantly longer median progression-free survival was seen with dabrafenib plus trametinib versus chemotherapy (20.1 versus 7.4 months; hazard ratio, 0.31). Grade 3 or higher adverse events occurred in 47% and 94% of those receiving dabrafenib plus trametinib and chemotherapy, respectively.

"Overall, these findings show the value of early molecular testing in children with low-grade glioma to determine the presence or absence of BRAF V600 [mutations](#)," the authors write.

More information: Eric Bouffet et al, Dabrafenib plus Trametinib in Pediatric Glioma with BRAF V600 Mutations, *New England Journal of Medicine* (2023). [DOI: 10.1056/NEJMoa2303815](https://doi.org/10.1056/NEJMoa2303815)

2023 HealthDay. All rights reserved.

Citation: Dabrafenib, trametinib found more effective in pediatric glioma with BRAF V600
(2023, September 21) retrieved 9 May 2024 from

<https://medicalxpress.com/news/2023-09-dabrafenib-trametinib-effective-pediatric-glioma.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.