

# Single dose of zilebesiran linked to reduction in systolic BP

February 20 2024, by Elana Gotkine

---



A single dose of subcutaneous zilebesiran is associated with a reduction in systolic blood pressure (SBP), according to a study [published](#) online Feb. 16 in the *Journal of the American Medical Association*.

George L. Bakris, M.D., from the University of Chicago in Illinois, and colleagues examined antihypertensive efficacy and safety of different zilebesiran dosing regimens in a phase 2 randomized trial. Participants were randomly assigned to one of four zilebesiran regimens (150, 300, or 600 mg once every six months or 300 mg once every three months) or placebo for six months. The full analysis set included 377 patients: 302

receiving zilebesiran and 75 receiving placebo.

The researchers found that the 24-hour mean ambulatory SBP changes were  $-7.3$ ,  $-10.0$ , and  $-8.9$  mm Hg with zilebesiran 150 mg once every six months, 300 mg once every three months or once every six months, and 600 mg every six months, respectively, compared with 6.8 mm Hg with placebo. In the change from baseline to month 3, the least-squares mean differences versus placebo were  $-14.1$ ,  $-16.7$ , and  $-15.7$  mm Hg for zilebesiran 150 mg every six months, 300 mg once every three months or six months, and 600 mg every six months, respectively. Over six months, 60.9 and 50.7 percent of patients receiving zilebesiran and [placebo](#), respectively, had adverse events, and 3.6 and 6.7 percent, respectively, had serious adverse events.

"These data support further investigation of zilebesiran as a [therapeutic strategy](#) for patients with hypertension," the authors write.

Several authors disclosed ties to pharmaceutical companies, including Alnylam Pharmaceuticals, which manufactures zilebesiran and funded the study.

**More information:** George L. Bakris et al, RNA Interference With Zilebesiran for Mild to Moderate Hypertension, *JAMA* (2024). [DOI: 10.1001/jama.2024.0728](https://doi.org/10.1001/jama.2024.0728)

Ernesto L. Schiffrin, RNA Injection Every 6 Months to Improve Adherence and Lower Blood Pressure in Patients With Hypertension, *JAMA* (2024). [DOI: 10.1001/jama.2023.26071](https://doi.org/10.1001/jama.2023.26071)

Copyright © 2024 [HealthDay](#). All rights reserved.

Citation: Single dose of zilebesiran linked to reduction in systolic BP (2024, February 20)

retrieved 27 April 2024 from

<https://medicalxpress.com/news/2024-02-dose-zilebesiran-linked-reduction-systolic.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.