

# Clinical trial: New drug makes exercise, everyday tasks easier for people with common heart condition

May 13 2024, by Franny White

---



Credit: Pixabay/CC0 Public Domain

People with a common heart condition were able to use significantly more oxygen while exercising after taking an investigational drug in an international clinical trial, according to a study [published](#) today in the *New England Journal of Medicine*. The finding was also presented today at the European Society of Cardiology's Heart Failure 2024 meeting in Lisbon, Portugal.

Oregon Health & Science University is part of the randomized, double-blind Phase 3 trial that is evaluating the experimental drug aficamten, which was developed by Cytokinetics to treat the obstructive form of hypertrophic cardiomyopathy, or HCM. Of the 282 adults participating in the trial, 19 enrolled through OHSU—the most of any trial center.

"By having more oxygen available during exercise, patients with obstructive hypertrophic cardiomyopathy can more easily walk, perform household chores, and do other everyday tasks," said cardiologist Ahmad Masri, M.D., M.S., who co-wrote today's paper and directs the OHSU Knight Cardiovascular Institute's Hypertrophic Cardiomyopathy Center. "Our latest clinical trial results suggest aficamten is a [promising treatment](#) for HCM."

HCM affects about 1 in 500 people and is one of the most common causes of sudden death for youth and otherwise healthy athletes. Often caused by inherited gene mutations, it thickens heart muscles and makes it difficult for the heart to work as it should. It causes shortness of breath and reduces people's ability to exercise. The obstructive form of HCM reduces blood flow out of the heart.

About half of the trial's participants were given the experimental drug, and the other half took a placebo and served as the study's control group. Scientists measured the participants' oxygen levels while they used

treadmills or bicycles. Those who took aficamten had a significant increase in their maximum oxygen use—1.7 milliliters per kilogram per minute more than those in the control group.

Having an increased peak oxygen uptake can improve a patient's ability to be physically active, whereas reduced [oxygen](#) uptake can increase the risk of experiencing heart failure, needing a heart transplant, and dying.

Non-drug treatment options for obstructive HCM include surgery to remove excess heart muscle. In 2022, the Food and Drug Administration also approved mavacamten as the first drug designed to target the underlying cause of obstructive HCM. However, mavacamten may increase the risk of [heart](#) failure and it interacts with several commonly used medications. As a result, patients who use mavacamten must also undergo intense monitoring.

During the past decade, OHSU has been involved in many research studies exploring new HCM treatment options. It has been a center for several mavacamten studies and is participating in gene therapy research. The university is also currently involved in four other aficamten trials that are evaluating it as a potential treatment for various forms of HCM and in different types of patients, including children.

"This is an exciting time for treating HCM," Masri said. "While we continue to offer traditional surgical and procedural therapies for HCM, we are now also able to offer patients other treatment options: therapies that were recently approved by the FDA and investigational therapies that are available by participating in [clinical trials](#)."

**More information:** Martin S. Maron et al, Aficamten for Symptomatic Obstructive Hypertrophic Cardiomyopathy, *New England Journal of Medicine* (2024). [DOI: 10.1056/NEJMoa2401424](https://doi.org/10.1056/NEJMoa2401424)

Provided by Oregon Health & Science University

Citation: Clinical trial: New drug makes exercise, everyday tasks easier for people with common heart condition (2024, May 13) retrieved 26 June 2024 from <https://medicalxpress.com/news/2024-05-clinical-trial-drug-everyday-tasks.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.