

# Pilot Study demonstrates Vapotherm HVNI technology is more effective than standard oxygen therapy for treatment of acute asthma in children

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EXETER, N.H.--(BUSINESS WIRE)-- Vapotherm, Inc. (NYSE: VAPO), a global medical technology company focused on the development and commercialization of its proprietary Vapotherm high velocity therapy® products, which are used to treat patients of all ages suffering from respiratory distress, today announced the presentation of an Investigator-initiated clinical trial, “High flow humidified oxygen as an early intervention in children with acute severe asthma - a feasibility randomized controlled trial” at the European Respiratory Society International Congress 2023. The study was conducted through the Brighton and Sussex Clinical Trial Unit at University Hospitals, Sussex, England under the direction of Drs. Hector Rojas-Anaya and Paul Seddon.

Children who presented to the Emergency Department with acute, severe, asthma exacerbations that did not respond to initial pharmacologic treatment were randomized to either HVNI or standard nasal oxygen therapy. Eighty-six percent (19/22) of children treated with standard oxygen required escalation of therapy, while only 61% (17/28) of children treated with HVNI needed further escalation. In addition, children treated with HVNI met hospital discharge criteria in a median time of 29 hours, compared to a median time of 37 hours for those treated with standard oxygen.

“Anytime a child with severe asthma can get well faster and avoid more invasive care it is a victory. We are excited and proud that our technology was utilized in this study and in the care of these children.” said Dr. Jessica Whittle, Chief Medical Officer of Vapotherm.

Almost 5 million children in the USA, and 1 million children in the UK have asthma, according to the CDC and NHS.

([https://www.cdc.gov/asthma/most\\_recent\\_national\\_asthma\\_data.htm](https://www.cdc.gov/asthma/most_recent_national_asthma_data.htm); <https://www.england.nhs.uk/childhood-asthma/>) The annual cost for asthma is estimated to be \$56 billion according to the Asthma and Allergy Foundation of America. Studies of acute asthma and other emergent conditions are limited, in part, by the challenge of obtaining informed consent. This study demonstrated the feasibility of pediatric emergency studies utilizing coordinated care and delayed informed consent.

“These numbers show that we have an enormous opportunity to help children all over world breathe better and have better lives with our technology,” said Joe Army, CEO of Vapotherm.

## About Vapotherm

Vapotherm, Inc. (NYSE: VAPO) is a publicly traded developer and manufacturer of advanced respiratory technology based in Exeter, New Hampshire, USA. The Company develops innovative, comfortable, non-invasive technologies for respiratory support of patients with chronic or acute breathing disorders. Over 4.0 million patients have been treated with the use of Vapotherm high velocity therapy® systems. For more information, visit [www.vapotherm.com](http://www.vapotherm.com).

Vapotherm high velocity therapy is mask-free non-invasive respiratory support and is a front-line tool for relieving respiratory distress—including hypercapnia, hypoxemia, and dyspnea. It allows for the fast, safe treatment of undifferentiated respiratory distress with one tool. The HVT 2.0 and Precision Flow systems’ mask-free interface delivers optimally conditioned breathing gases, making it comfortable for patients and reducing the risks and care complexities associated with mask therapies. While being treated, patients can talk, eat, drink and take oral medication.

## Website Information

Vapotherm routinely posts important information for investors on the Investor Relations section of its website, <http://investors.vapotherm.com/>. Vapotherm intends to use this website as a means of disclosing

material, non-public information and for complying with Vapotherm's disclosure obligations under Regulation FD. Accordingly, investors should monitor the Investor Relations section of Vapotherm's website, in addition to following Vapotherm's press releases, Securities and Exchange Commission ("SEC") filings, public conference calls, presentations and webcasts. The information contained on, or that may be accessed through, Vapotherm's website is not incorporated by reference into, and is not a part of, this document.

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This press release contains forward-looking statements under the Private Securities Litigation Reform Act of 1995, including statements about the benefits of Vapotherm's products. In some cases, you can identify forward-looking statements by terms such as "expect," "continue," "plan," "intend," "will," or "typically," or the negative of these terms or other similar expressions, although not all forward-looking statements contain these words, and the use of future dates. Each forward-looking statement is subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied in such statement. Applicable risks and uncertainties include, but are not limited to the following: subsequent trials or clinical results could contradict or call into question the results of the clinical study discussed above or Vapotherm could be otherwise unsuccessful in obtaining broad clinical acceptance of the use of its devices in the treatment of pediatric asthma; Vapotherm has incurred losses in the past and may be unable to achieve or sustain profitability in the future or achieve its 2023 financial guidance including reduced cash burn; risks associated with its manufacturing operations in Mexico; Vapotherm's ability to raise additional capital to fund its existing commercial operations, develop and commercialize new products, and expand its operations; Vapotherm's ability to comply with its financial covenants, execute on its path-to-profitability initiative, convert excess inventory into cash and fund its business through 2023; Vapotherm's dependence on sales generated from its High Velocity Therapy systems, competition from multi-national corporations who have significantly greater resources than Vapotherm and are more established in the respiratory market; the ability for Precision Flow systems to gain increased market acceptance; Vapotherm's inexperience directly marketing and selling its products; the potential loss of one or more suppliers and dependence on its new third party manufacturer; Vapotherm's susceptibility to seasonal fluctuations; Vapotherm's failure to comply with applicable United States and foreign regulatory requirements; the failure to obtain U.S. Food and Drug Administration or other regulatory authorization to market and sell future products or its inability to secure, maintain or enforce patent or other intellectual property protection for its products; the impact of COVID on its business, including its supply chain, risks associated with the recently consummated reverse stock split, Vapotherm's ability to regain compliance with the continued listing standards of the NYSE, market conditions and the impact of the reverse stock split on the trading price of Vapotherm's common stock, a possible delisting of Vapotherm's common stock and the other risks and uncertainties included under the heading "Risk Factors" in Vapotherm's Annual Report on Form 10-K for the fiscal year ended December 31, 2022, as filed with the SEC on February 23, 2023, and in its subsequent filings with the SEC, including its Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2023, as filed with the SEC on August 8, 2023. The forward-looking statements contained in this press release reflect Vapotherm's views as of the date hereof, and Vapotherm does not assume and specifically disclaims any obligation to update any forward-looking statements whether as a result of new information, future events or otherwise, except as required by law.

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