Emergency Department Subgroup Study Showed Hi-VNI® Technology Had Similar Outcomes to Non-invasive Positive Pressure Ventilation in Management of Respiratory Distress Among Acute Decompensated Heart Failure Patients

EXETER, N.H.--(BUSINESS WIRE)-- Vapotherm, Inc. (NYSE: VAPO), a global medical technology company focused on the development and commercialization of its proprietary Hi-VNI® Technology, today announced that a paper published in the American Journal of Emergency Medicine, titled "HVNI vs NIPPV in the treatment of Acute Decompensated Heart Failure: subgroup analysis of a multi-center trial in the ED" showed equivalent outcomes between Hi-VNI Technology and Non-invasive Positive Pressure Ventilation (NiPPV) in the treatment of respiratory distress in a subgroup of patients suffering from acute decompensated heart failure (ADHF). More than one million patients with ADHF as a primary diagnosis are admitted to U.S. hospitals each year.

"These results represent another proof point that Vapotherm Hi-VNI Technology is a viable alternative to relieve undifferentiated respiratory distress across a wide variety of patient populations," said Joe Army, President and CEO. "This analysis shows that even if that diagnosis is respiratory distress due to exacerbation of CHF, Hi-VNI Technology provides Mask-Free NIV[™] for spontaneously breathing patients and is potentially a viable alternative to NiPPV. This is particularly important for ED clinicians who may need to make treatment decisions before knowing the patient diagnosis."

The ADHF patient subgroup is from a larger multi-center trial that compares the efficacy of NiPPV and High Velocity Nasal Insufflation (HVNI) in treating adults in undifferentiated respiratory distress presenting in the Emergency Department (ED) that found HVNI non-inferior to NiPPV. This ADHF subgroup analysis, which examined the 42 patients that constituted the subset of enrolled patients with an ADHF discharge diagnosis, determined that the primary clinical outcomes between Hi-VNI and NiPPV are also comparable for the subgroup.

Secondary outcomes of the original study included findings that Vapotherm's Hi-VNI Technology was superior or equivalent to NiPPV in the physician perception of patient comfort and tolerance, and the clinical use of the technology.

Mask-Free NIV[™] for spontaneously breathing patients is the first major NIV innovation in the past thirty years. Although NiPPV is the traditional standard in treatment of patients in undifferentiated respiratory distress, studies show that over 30% of NiPPV failure occurs due to patients being intolerant of the tight-fitting mask needed to administer the therapy. The mask-free interface of Hi-VNI Technology helps to avoid such failure while providing clinical outcomes that are proven to be as effective as NiPPV.

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 1.7 million patients have been treated with Vapotherm Hi-VNI Technology. For more information, visit <u>www.vapotherm.com</u>.

Hi-VNI® Technology is mask-free noninvasive ventilation for spontaneously breathing patients and 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. Hi-VNI Technology's 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, <u>http://investors.vapotherm.com/</u>. 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 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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<u>https://investors.vapotherm.com/2019-03-26-Emergency-Department-Subgroup-Study-Showed-Hi-VNI-R-</u> <u>Technology-Had-Similar-Outcomes-to-Non-invasive-Positive-Pressure-Ventilation-in-Management-of-Respiratory-</u> <u>Distress-Among-Acute-Decompensated-Heart-Failure-Patients</u>