Windtree Therapeutics Announces Positive Istaroxime Phase 2 Study in Early Cardiogenic Shock (SEISMiC) Published in the European Journal of Heart Failure

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WARRINGTON, Pa., Sept. 28, 2022 (GLOBE NEWSWIRE) -- Windtree Therapeutics, Inc. (NasdaqCM: WINT), a biotechnology company focused on advancing multiple late-stage interventions for acute cardiovascular disorders, today reported that the results of its positive Phase 2 istaroxime study in early cardiogenic shock were published in the *European Journal of Heart Failure* (**https://doi.org/10.1002/ejhf.2629**). Cardiogenic shock is caused by a failing heart resulting in diminished cardiac output to the body and is characterized by very low blood pressure and hypoperfusion to end-organs. It requires urgent treatment and has a high morbidity and mortality. Windtree conducted a study called SEISMiC of istaroxime in patients experiencing early cardiogenic shock due to heart failure.

“The results published in the *European Journal of Heart Failure* demonstrate that istaroxime can rapidly and significantly improve blood pressure and key parameters of cardiac function in a failing heart with an acceptable tolerability profile in our studies to date,” said Dr. Steven Simonson, Chief Medical Officer of Windtree. “The positive results of the SEISMiC study are consistent with previous Phase 2 studies in acute heart failure and help substantiate and advance the rationale for istaroxime as a potential treatment for cardiogenic shock. We look forward to the next steps of the istaroxime development program in which we plan to extend and optimize our dosing regimen with a small number of early cardiogenic shock patients and meet with the FDA to discuss the potential Phase 3 program.”

The SEISMiC study met its primary endpoint of significantly improved systolic blood pressure, a critical clinical objective in treating patients with cardiogenic shock, compared to the control group at 6 hours. The significant improvement in blood pressure profile persisted through 24 hours. Patients treated with istaroxime experienced a substantial increase in stroke volume (the amount of blood pumped from the heart with each contraction) that contributed to an increased cardiac output without increasing heart rate. The study met several other secondary endpoint assessments of cardiac function including left atrial area and left ventricular end systolic volume. Left ventricular end diastolic volume was also decreased with treatment. Importantly, renal function was not worsened.

“This study represents a potentially important innovative advancement in the treatment for heart failure related cardiogenic shock patients in the future,” said Craig Fraser, President and Chief Executive Officer of Windtree. “We believe the cardiogenic shock program has the potential to be a relatively fast and less expensive developmental and regulatory pathway in a critical market with high unmet need and, as such, we aligned our resources and activities to prioritize this program. We look forward to keeping everyone updated on our progress.”

About Cardiogenic Shock
Cardiogenic shock is a serious condition that occurs when the heart is failing significantly and cannot pump enough blood and oxygen to the brain, kidneys, and other vital organs. Mortality rates are significant and, depending on severity, range from 7% to 40% in the U.S. There is a lack of satisfactory pharmacological intervention to reverse the condition as available therapies have unwanted side effects such as risk for arrhythmias, decreasing blood pressure, renal dysfunction and even increases in mortality that limit their usefulness and position them as “rescue medicines” for severe cases. Market research revealed 99% of 100 U.S.-based clinical cardiologists interviewed who treat cardiogenic shock patients responded that new drug innovation to treat SCAI class B cardiogenic shock patients is highly needed. The cardiogenic shock worldwide total market value is estimated to be $1.25 billion, calculated by using cardiogenic shock patient US hospital claims and worldwide prevalence data multiplied by assumed various regional prices of drug treatment.

About Windtree Therapeutics
Windtree Therapeutics, Inc. is advancing multiple late-stage interventions for acute cardiovascular disorders to treat patients in moments of crisis. Using new scientific and clinical approaches, Windtree is developing a multi-asset franchise anchored around compounds with an ability to activate SERCA2a, with lead candidate, istaroxime, being developed as a first-in-class treatment for acute heart failure and for early cardiogenic shock. Windtree’s heart failure platform includes follow-on oral pre-clinical SERCA2a activator assets as well. Included in Windtree’s portfolio is rostafuroxin, a novel precision drug product targeting hypertensive patients with certain genetic profiles.

Forward-Looking Statements
This press release contains forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995. The Company may, in some cases, use terms such as "predicts," "believes," "potential," "proposed," "continue," "estimates," "anticipates," "expects," "plans," "intends," "may," "could," "might," "will," "should" or other words that convey uncertainty of future events or outcomes to identify these forward-looking statements. Such statements are based on information available to the Company as of the date of this press release and are subject to numerous important factors, risks and uncertainties that may cause actual events or results to differ materially from the Company’s current expectations. Examples of such risks and uncertainties include: risks and uncertainties associated with the ongoing economic and social consequences of the COVID-19 pandemic, including any adverse impact on the Company’s clinical trials, clinical trial timelines or disruption in supply chain; the success and advancement of the clinical development programs for istaroxime and the Company’s other product candidates; the impacts of political unrest, including as a result geopolitical tension, including escalation in the conflict between Russia and Ukraine, the People’s Republic of China and the Republic of China (Taiwan), and any additional resulting sanctions, export controls or other restrictive actions that may be imposed by the United States and/or other countries which could have an adverse impact on the Company’s operations, including through disruption in supply chain or access to potential international clinical trial sites, and through disruption, instability and volatility in the global markets, which could have an adverse impact on the Company’s ability to access the capital markets; the Company’s ability to secure significant additional capital as and when needed; the Company’s ability to access the debt or equity markets; the Company’s ability to manage costs and execute on its operational and budget plans; the results, cost and timing of the Company’s clinical development programs, including any delays to such clinical trials relating to enrollment or site initiation; risks related to technology transfers to contract manufacturers and manufacturing development activities; delays encountered by the

Company, contract manufacturers or suppliers in manufacturing drug products, drug substances, and other materials on a timely basis and in sufficient amounts; risks relating to rigorous regulatory requirements, including that: (i) the FDA or other regulatory authorities may not agree with the Company on matters raised during regulatory reviews, may require significant additional activities, or may not accept or may withhold or delay consideration of applications, or may not approve or may limit approval of the Company's product candidates, and (ii) changes in the national or international political and regulatory environment may make it more difficult to gain regulatory approvals and risks related to the Company's efforts to maintain and protect the patents and licenses related to its product candidates; risks that the Company may never realize the value of its intangible assets and have to incur future impairment charges; risks related to the size and growth potential of the markets for the Company's product candidates, and the Company's ability to service those markets; the Company's ability to develop sales and marketing capabilities, whether alone or with potential future collaborators; and the rate and degree of market acceptance of the Company's product candidates, if approved. These and other risks are described in the Company's periodic reports, including the annual report on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, filed with or furnished to the Securities and Exchange Commission and available at www.sec.gov. Any forward-looking statements that the Company makes in this press release speak only as of the date of this press release. The Company assumes no obligation to update forward-looking statements whether as a result of new information, future events or otherwise, after the date of this press release.

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