Windtree Therapeutics Announces the Start of Patient Dosing In Phase 2 SEISMiC Extension Study of Istaroxime in Early Cardiogenic Shock

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SEISMiC Extension Study results are anticipated in mid-2024 and expected to provide dose optimization for Phase 3

The Company is also progressing a parallel SCAI Stage C Phase 2 study with istaroxime in cardiogenic shock targeting data in a similar timeframe

WARRINGTON, Pa., Dec. 18, 2023 (GLOBE NEWSWIRE) -- Windtree Therapeutics, Inc. (“Windtree” or the “Company”) (NasdaqCM: WINT), a biotechnology company focused on advancing late-stage interventions for critical cardiovascular disorders, today announced that the Company recently enrolled the first subject in its Phase 2 SEISMiC Extension Study of istaroxime in the treatment of early cardiogenic shock. Study results are expected in mid-2024.

Building upon the positive SEISMiC study results, the Extension Study is expected to enroll up to 30 subjects with the objective to evaluate a longer dosing cycle of istaroxime, a novel first-in-class therapy that is designed to improve systolic contraction and diastolic relaxation of the heart while also increasing blood pressure. The study of hospitalized patients with early cardiogenic shock (SCAI Stage B) due to acute heart failure (AHF) will evaluate two dose regimens of istaroxime compared to placebo. Subjects on istaroxime will receive infusions for up to 60 hours with one istaroxime group receiving a tapered decreasing dose over time and the second istaroxime group receiving a consistent lower dose. In the previous SEISMiC study in early cardiogenic shock, patients were infused with drug or placebo for 24 hours. We believe extending the dosing duration of istaroxime has the potential to provide additional benefit and, along with dose titration, is an important factor in determining the optimal dosing regimen to study in a potential Phase 3 trial. The Extension Study will also gather data to characterize the potential benefits of SERCA2a activation in these patients, advancing the Company’s clinical and regulatory position for potential Phase 3 readiness.

The Company is also progressing the start-up of a parallel study in more severe, SCAI Stage C cardiogenic shock patients. SCAI Stage C patients have low blood pressure and inadequate blood flow to vital organs. The istaroxime cardiogenic shock SCAI Stage C study is expected to enroll up to 20 subjects with SCAI Stage C cardiogenic shock due to AHF. Multiple physiologic measures associated with cardiac function, blood pressure and safety will be assessed. The Company is targeting data from this study in a similar timeframe as the SEISMiC Extension Study.

“The SEISMiC Extension Study builds upon the positive data from our three Phase 2 studies in acute heart failure and early cardiogenic shock and is expected to determine the best dosing regimen for our anticipated Phase 3 program in cardiogenic shock,” said Craig Fraser, Windtree's President and Chief Executive Officer. “Along with data from more severe, SCAI Stage C cardiogenic shock patients coming from a parallel study, program results in mid-2024 are expected to contribute to finalizing our strategy and design for Phase 3 clinical trials and our end of Phase 2 discussions with FDA.”

About Istaroxime
Istaroxime is a first-in-class dual mechanism therapy designed to improve both systolic and diastolic cardiac function. Istaroxime is a positive inotropic agent that increases myocardial contractility through inhibition of Na+/K+- ATPase with a complimentary mechanism that facilitates myocardial relaxation through activation of the SERCA2a calcium pump on the sarcoplasmic reticulum enhancing calcium reuptake from the cytoplasm. Data from multiple Phase 2 studies in patients with early cardiogenic shock or acute decompensated heart failure demonstrate that istaroxime infused intravenously significantly improves cardiac function and blood pressure without increasing heart rate or the incidence of cardiac rhythm disturbances.

About Windtree Therapeutics, Inc.
Windtree Therapeutics, Inc. is advancing late-stage interventions for 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 cardiogenic shock and acute decompensated heart failure. Windtree’s heart failure platform includes follow-on pre-clinical SERCA2a activator assets as well. In pulmonary care, Windtree has focused on facilitating the transfer of the KL4 surfactant platform, to its licensee, Lee’s Pharmaceutical (HK) Ltd. and Zhaoke Pharmaceutical (Hefei) Co. Ltd. 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 success and advancement of the clinical development programs for istaroxime and the Company’s other product candidates; 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 U.S. Food and Drug Administration 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; the rate and degree of market acceptance of the Company's product candidates, if approved; the economic and social consequences of the COVID-19 pandemic and the impacts of political unrest, including as a result of geopolitical tension, including the conflict between Russia and Ukraine, the People's Republic of China and the Republic of China (Taiwan), and the evolving events in Israel and Gaza, and any 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. These and other risks are described in the Company's periodic reports, including its 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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