Thiogenesis Therapeutics to Present at UMDF's Mitochondrial Medicine 2025 Conference

Dr. Rioux to Highlight Industry-Leading Clinical Programs in MELAS and Leigh Syndrome Spectrum

San Diego, California--(Newsfile Corp. - June 20, 2025) - **Thiogenesis Therapeutics, Corp. (TSXV: TTI) (OTCQX: TTIPF) ("Thiogenesis" or the "Company")**, a clinical-stage biopharmaceutical company developing sulfur-based therapeutics for rare pediatric and inherited mitochondrial disorders, today announced that its Chief Executive Officer, Patrice Rioux, MD, Ph.D., will participate in a high-profile clinical panel discussion at the United Mitochondrial Disease Foundation's ("UMDF") 2025 Mitochondrial Medicine Conference. The session is scheduled for Friday, June 20, 2025, in St. Louis, Missouri.

The UMDF Mitochondrial Medicine Conference is recognized as the foremost global gathering for mitochondrial disease research, bringing together over 700 leading scientists, clinicians, and industry stakeholders. The conference is a premier platform for showcasing advances in diagnostics, clinical research, and potential therapeutics in mitochondrial medicine.

Dr. Rioux will provide updates on Thiogenesis' two lead Phase 2 clinical programs evaluating its novel thiol drug, TTI-0102:

- A European multicenter trial in patients with Mitochondrial Encephalomyopathy, Lactic Acidosis, and Stroke-like Episodes ("MELAS"), initiated *on May 14, 2025*

- A U.S.-based trial targeting the Leigh Syndrome Spectrum ("LSS"), following FDA clearance of the Company's Investigational New Drug ("IND") application *on June 11, 2025*

"I am honored to join my peers at UMDF's Mito Med 2025 to present our promising drug candidate currently in clinical development for two inherited mitochondrial diseases," said Dr. Rioux. "Our lead compound, TTI-0102, a next-generation thiol-based prodrug, is uniquely engineered to enhance intracellular levels of glutathione and taurine-two critical compounds for mitigating oxidative stress, a core pathological driver in mitochondrial disorders."

About UMDF

The United Mitochondrial Disease Foundation's mission is to promote research and education for the diagnosis, treatment and cure of mitochondrial disorders and to provide support to affected individuals and families. For more than 25 years, UMDF has built a network of the top clinicians, hospitals and researchers dedicated to fighting mitochondrial disease. It is driven by a nationwide community of ambassadors solely focused on supporting patients and families affected by mitochondrial disease. UMDF is committed to making a difference by funding the best science no matter where it is found in the world and providing critical programs and services to patients and their families.

About Leigh Syndrome Spectrum ("LSS")

Mitochondria are critical intracellular "powerplants" that provide the cell with the energy it needs to function normally; the disruption of mitochondrial function can result in a range of complex and life-threatening conditions. LSS is one such rare inherited genetic disease manifestation that results from the disruption of normal mitochondrial function, which is usually diagnosed in infancy and affects an estimated 1/40,000 births. Initial symptoms for LSS include impaired feeding capability, loss of motor

and communication skills, respiratory and gastrointestinal problems, poor muscle function, and seizures. There is currently no cure for LSS, and treatment is primarily supportive, focusing on managing symptoms and complications. LSS is highly heterogeneous, caused by pathogenic variants in over 113 mitochondrial DNA ("mtDNA") and nuclear DNA ("nDNA") genes that adversely affect mitochondrial respiratory chain function. TTI-0102 has been engineered to combat abnormally high levels of mitochondrial oxidative stress, a key characteristic of LSS *(Enns et al., 2014)* and thereby help to ameliorate mitochondrial function and potentially improve clinical outcomes for these patients.

About MELAS

Mitochondrial encephalomyopathy with lactic acidosis and stroke-like episodes ("MELAS") is an inherited mitochondrial disorder, most often caused by a mutation of m.3243A>G in the MT-TL1 gene in mitochondrial DNA. Initial symptoms usually include seizures, vomiting, headaches, muscle weakness, loss of appetite and fatigue. Longer term the disease may cause a loss of motor skills and intellectual disability. MELAS usually presents itself before the age of 20. Oxidative stress, including deficiencies in glutathione and taurine, play an important role in mitochondria dysfunction and are potential pathological mechanisms of mitochondrial disorders, making for viable targets for the treatment of MELAS and other mitochondrial diseases. Although it is one of the most prevalent inherited mitochondrial diseases, MELAS is still considered an orphan disease. There are estimated to be approximately 4.1/100,000 of the population *(Ryytty et al. 2023)* with MELAS worldwide.

About TTI-0102

Thiogenesis' lead product candidate, TTI-0102, is an asymmetric disulfide and a prodrug that acts as a precursor to the thiol compound cysteamine. Thiols, which have a functional SH group (containing sulfur and hydrogen), are versatile bio-active molecules that are known to be involved in key biochemical reactions and metabolic processes, making them promising candidates to treat several diseases. Thiols are known to be precursors to important antioxidants such as glutathione and amino acids like taurine, providing the potential to restore mitochondrial function. The prodrug TTI-0102 was developed to address the challenges of first-generation thiol-based drugs, including their short half live, adverse side effects and dosing limitations.

About Prodrugs

Prodrugs are drugs that contain previously approved active ingredients and are modified so that they only become active when metabolized. For regulatory purposes prodrugs can use existing third-party safety data in regulatory submissions in the streamlined 505 (b)(2) regulatory pathway in the U.S., and its equivalent hybrid system in the EU, to proceed into human efficacy trials with regulatory clearance. Prodrugs may enhance the profile of the active ingredient to increase its bioavailability and reduce side effects.

About Thiogenesis

Thiogenesis Therapeutics, Corp. (TSXV: TTI) (OTCQX: TTIPF) is a clinical-stage biopharmaceutical company with operations based in San Diego, CA. The Company is publicly traded on the TSX Venture Exchange and in the U.S. on the OTCQX. Thiogenesis is developing sulfur-containing prodrugs that act as precursors to previously approved thiol-active compounds, with the potential to treat serious pediatric diseases with unmet medical needs. Thiogenesis' lead product candidate, TTI-0102 has an active Phase 2 clinical trial in Mitochondrial Encephalopathy Lactic Acidosis and Stroke ("MELAS") and is planning clinical trials in Leigh syndrome, Rett syndrome and pediatric MASH.

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Forward Looking Statements

This news release contains certain forward-looking statements and forward-looking information (collectively referred to herein as "forward- looking statements") within the meaning of Canadian securities laws including, without limitation, statements with respect to the future investments by the Company. All statements other than statements of historical fact are forward-looking statements. Undue reliance should not be placed on forward-looking statements, which are inherently uncertain, are based on estimates and assumptions, and are subject to known and unknown risks and uncertainties (both general and specific) that contribute to the possibility that the future events or circumstances contemplated by the forward-looking statements will not occur. Although the Company believes that the expectations reflected in the forward-looking statements contained in this press release, and the assumptions on which such forward-looking statements are made, are reasonable, there can be no assurance that such expectations will prove to be correct. Readers are cautioned not to place undue reliance on forward-looking statements included in this document, as there can be no assurance that the plans, intentions, or expectations upon which the forward-looking statements are based will occur. By their nature, forward-looking statements involve numerous assumptions, known and unknown risks and uncertainties that contribute to the possibility that the predictions, forecasts, projections and other forward-looking statements will not occur, which may cause the Company's actual performance and results in future periods to differ materially from any estimates or projections of future performance or results expressed or implied by such forward-looking statements. The forward-looking statements contained in this news release are made as of the date hereof and the Company does not undertake any obligation to update publicly or to revise any of the included forward-looking statements, except as required by applicable law. The forward-looking statements contained herein are expressly qualified by this cautionary statement.

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