Satellos Announces Publication in *Nature Communications* Supporting its Novel Treatment Approach for Duchenne Muscular Dystrophy

- ***Research confirms muscle stem cell dysfunction impairs polarity and impedes production of myogenic progenitors during fetal development***
- ***Findings solidify AAK1 as a paradigm shifting drug target to restore muscle repair and regeneration in Duchenne muscular dystrophy***
- ***Publication available here***

TORONTO--(BUSINESS WIRE)--November 18, 2025--Satellos Bioscience Inc. (TSX: MSCL, OTCQB: MSCLF) ("Satellos" or the "Company"), a clinical-stage biotechnology company developing life-improving medicines to treat degenerative muscle diseases, today announced the publication in *Nature Communications* of new research from a scientific team at the Ottawa Hospital Research Institute (OHRI) that validates the company's novel approach to treating the underlying cause of Duchenne muscular dystrophy and other diseases.

The paper — authored by OHRI researchers, including Satellos co-founder and Chief Discovery Officer Dr. Michael Rudnicki, an OHRI senior scientist and director of the Sprott Centre for Stem Cell Research — reveals that Duchenne muscular dystrophy (DMD, Duchenne) begins during fetal development as a stem cell disease characterized by intrinsic muscle stem cell dysfunction. In the absence of dystrophin, researchers showed that muscle stem cells lose polarity and produce fewer myogenic progenitors, resulting in fewer and smaller muscle fibers. Notably, these changes arise during fetal muscle development before inflammation or tissue degeneration begin to appear.

Importantly, the researchers demonstrated that muscle stem cells lacking dystrophin could be induced to achieve polarity, generate new progenitor cells, and form normal amounts of muscle by blocking the activity of the protein AAK1, findings which support the potential of an AAK1 inhibitor, such as SAT-3247, to restore muscle regeneration in Duchenne.

Unlike treatment approaches in development for Duchenne that focus on helping DMD patients produce a form of dystrophin to help safeguard muscle, Satellos' differentiated approach aims to restore muscle regeneration for people living with Duchenne through targeted inhibition of AAK1.

"These findings make it abundantly clear that Duchenne begins as a failure of muscle stem cells to build and maintain muscle — without any evidence of myofiber fragility or damage," said Dr. Rudnicki, senior author of the paper. "By modulating AAK1, we have demonstrated a powerful means to regulate polarity, normalize stem cell function and enhance muscle formation in dystrophic models, pointing to a compelling path toward regenerative treatment strategies."

Added Frank Gleeson, Satellos co-founder and CEO, “These findings further validate our conviction that correcting stem-cell dysfunction is essential to changing the trajectory of Duchenne. We congratulate Dr. Rudnicki and his OHRI colleagues for uncovering and confirming muscle biology that may open doors to more effective intervention.”

The *Nature Communications* article, titled “Intrinsic dysfunction in muscle stem cells lacking dystrophin begins during secondary myogenesis,” is available online.

ABOUT THE OTTAWA HOSPITAL RESEARCH INSTITUTE

The Ottawa Hospital Research Institute is the research arm of The Ottawa Hospital – one of Canada’s largest learning and research hospitals. We are proudly affiliated with the University of Ottawa and supported by The Ottawa Hospital Foundation. With more than 2,200 scientists, clinician investigators, trainees and staff, and total revenues of more than $120 million, we are one of the foremost Canadian hospital-based research institutes. Our research spans more than a hundred different diseases, conditions, and specialties with an overall focus on translating discoveries and knowledge into better health.

ABOUT SAT-3247

SAT-3247 is a proprietary, oral, small molecule drug being developed by Satellos as a novel treatment to regenerate skeletal muscle that is lost in Duchenne muscular dystrophy and other degenerative or injury conditions. Satellos is advancing SAT-3247 as a potential treatment for DMD, independent of dystrophin and regardless of exon mutation status.

ABOUT SATELLOS BIOSCIENCE INC.

Satellos is a clinical-stage drug development company focused on restoring natural muscle repair and regeneration in degenerative muscle diseases. Through its research, Satellos has developed SAT-3247, a first-of-its-kind, orally administered small molecule drug designed to address deficits in muscle repair and regeneration. SAT-3247 targets AAK1, a key protein that Satellos has identified as capable of replacing the signal normally provided by dystrophin in muscle stem cells to effect repair and regeneration. By restoring this missing dystrophin signal in DMD, SAT-3247 enables muscle stem cells to divide properly and more efficiently, promoting natural muscle repair and regeneration. SAT-3247 is currently in clinical development as a potential disease-modifying treatment initially for DMD. Satellos also is leveraging its proprietary discovery platform MyoReGenX™ to identify additional muscle diseases or injury conditions where restoring muscle repair and regeneration may have therapeutic benefit and represent future clinical development opportunities. For more information, visit www.satellos.com.

NOTICE ON FORWARD-LOOKING STATEMENTS

This press release includes forward-looking information or forward-looking statements within the meaning of applicable securities laws regarding Satellos and its business, which may include, but are not limited to, the potential of our approach in other degenerative muscle diseases; its/their prospective impact on Duchenne patients, patients with other degenerative muscle

disease or muscle injury or trauma, and on muscle regeneration generally; and Satellos' technologies and drug development plans. All statements that are, or information which is, not historical facts, including without limitation, statements regarding future estimates, plans, programs, forecasts, projections, objectives, assumptions, expectations or beliefs of future performance, occurrences or developments, are "forward-looking information or statements." Often but not always, forward-looking information or statements can be identified by the use of words such as "shall", "intends", "believe", "plan", "expect", "intend", "estimate", "anticipate", "potential", "prospective" , "assert" or any variations (including negative or plural variations) of such words and phrases, or state that certain actions, events or results "may", "might", "can", "could", "would" or "will" be taken, occur, lead to, result in, or, be achieved. Such statements are based on the current expectations and views of future events of the management of the Company. They are based on assumptions and subject to risks and uncertainties. Although management believes that the assumptions underlying these statements are reasonable, they may prove to be incorrect. The forward-looking events and circumstances discussed in this release, may not occur and could differ materially as a result of known and unknown risk factors and uncertainties affecting the Company, including, without limitation, risks relating to the pharmaceutical and bioscience industry (including the risks associated with preclinical and clinical trials and regulatory approvals), and the research and development of therapeutics, the results of preclinical and clinical trials, general market conditions and equity markets, economic factors and management's ability to manage and to operate the business of the Company generally, including inflation and the costs of operating a biopharma business, and those risks listed in the "Risk Factors" section of Satellos' Annual Information Form dated March 26, 2025 (which is located on Satellos' profile at www.sedarplus.ca). Although Satellos has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results to differ from those anticipated, estimated or intended. Accordingly, readers should not place undue reliance on any forward-looking statements or information. No forward-looking statement can be guaranteed. Except as required by applicable securities laws, forward-looking statements speak only as of the date on which they are made and Satellos does not undertake any obligation to publicly update or revise any forward-looking statement, whether resulting from new information, future events, or otherwise.

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