



CalciMedica Announces Publication of Preclinical Data in Journal of Clinical Investigation (JCI) Insight Supporting the Development of CRAC Channel Inhibitors for Chronic Pancreatitis (CP)

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Results support the initiation of clinical studies to assess Orai1 inhibition in patients with recurrent acute pancreatitis (RAP) and early CP

Data show that inhibiting Orai1-mediated store-operated Ca^{2+} entry (SOCE) with a selective CRAC channel inhibitor prevented the progression of RAP and early CP into established CP

LA JOLLA, Calif., June 06, 2023 (GLOBE NEWSWIRE) -- CalciMedica Inc. ("CalciMedica") (OTCQB: CALC), a clinical-stage biopharmaceutical company focused on developing therapies for life-threatening inflammatory diseases with high unmet need, today announced the publication of preclinical data in *The Journal of Clinical Investigation (JCI) Insight* that details the potential benefit of CRAC channel inhibitors for chronic pancreatitis (CP). The study, titled "[Orai1 calcium channel inhibition prevents progression of chronic pancreatitis](#)," was conducted by József Maléth, M.D., Ph.D., and his team at University of Szeged and the manuscript was co-authored by CalciMedica's co-founder and Chief Scientific Officer, Ken Stauderman, Ph.D., and CalciMedica's Chief Medical Officer, Sudarshan Hebbar, M.D.

"We are encouraged by the data gathered in this study, which illustrate the potential benefit of Orai1 inhibition with a selective CRAC channel inhibitor for the treatment of chronic pancreatitis," said Dr. Stauderman. "The data show that inhibition of Orai1 channels diminished aberrant SOCE, restored the expression of SARAF, a protein that inhibits CRAC channels and is decreased in pancreatitis, and prevented the progression of early CP to end-stage disease in mice. In addition, a decrease in fibrosis was observed in the mouse model, consistent with a significant reduction in the severity of CP. The work that we have done with Dr. Maléth and his team builds on previous research with CM5480, a CRAC channel inhibitor tool compound, in acute pancreatitis and suggests that Orai1 inhibition has implications beyond the management of RAP and can act as a treatment for both early and end-stage CP."

CP is a progressive inflammatory disease characterized by an inability of the SOCE signaling mechanism to properly regulate Ca^{2+} influx, resulting in intracellular Ca^{2+} overload. The study authors aimed to demonstrate that Orai1 inhibition using the selective CRAC channel inhibitor, CM5480, prevents the progression of RAP into early CP, both as simulated by the model, and, eventually, into end-stage CP. The authors found that the use of CM5480 to inhibit Orai1 impaired inflammatory cell infiltration improved acinar cell enzyme activity, maintained ductal cell secretory function and prevented activation of pancreatic stellate cells (PSCs), in turn decreasing tissue damage and fibrosis in CP. As a result, the progression of RAP and early CP into established CP was prevented. These results support the initiation of clinical studies to assess the beneficial effects of Orai1 inhibition in patients with RAP and early CP.

"The pathogenesis of CP is complex and involves interactions among multiple cell types. Using ex vivo and in vivo preclinical disease models, we demonstrated that Orai1 inhibition prevents progression of RAP and early CP," said Dr. Maléth. "In the current therapeutic landscape where there is no specific therapy in RAP or in early CP that may hinder disease progression, these findings warrant further investigation of selective CRAC channel inhibitors as a potential novel treatment."

Rachel Leheny, Ph.D., CalciMedica's CEO, commented, "CalciMedica has CRAC channel inhibitor compounds with very similar profiles to CM5480 that are amenable to oral dosing which we believe are well suited for application to chronic pancreatitis. These compounds are moving through pre-IND studies and could be ready for clinical studies in late 2024."

About CalciMedica

CalciMedica is a clinical-stage biopharmaceutical company focused on developing therapies for life-threatening inflammatory diseases with high unmet need. CalciMedica's proprietary technology targets the inhibition of CRAC channels designed to modulate the immune response and protect against tissue cell injury, with the potential to provide therapeutic benefits in life-threatening inflammatory diseases for which there are currently no approved therapies. CalciMedica's lead product candidate Auxora, a proprietary, intravenous-formulated CRAC channel inhibitor, has demonstrated positive and consistent clinical results in four completed efficacy clinical trials. Auxora is in development for acute pancreatitis with systemic inflammatory response syndrome and asparaginase-associated pancreatitis. CalciMedica was founded by scientists from Torrey Pines Therapeutics and the Harvard CBR Institute for Biomedical Research, and is headquartered in La Jolla, CA. For more information, please visit www.calcimedica.com.

Forward-Looking Statements

This communication contains forward-looking statements which include, but are not limited to, statements regarding the design and potential benefits of CalciMedica's product candidates; and CalciMedica's ongoing and planned clinical trials. These forward-looking statements are subject to the safe harbor provisions under the Private Securities Litigation Reform Act of 1995. CalciMedica's expectations and beliefs regarding these matters may not materialize. Actual outcomes and results may differ materially from those contemplated by these forward-looking statements as a result of uncertainties, risks, and changes in circumstances, including but not limited to risks and uncertainties related to: the impact of fluctuations in global financial markets on CalciMedica's business and the actions it may take in response thereto; CalciMedica's ability to execute its plans and strategies; the ability to obtain and maintain regulatory approval for CalciMedica's product candidates; results from clinical trials may not be indicative of results that may be observed in the future; potential safety and other complications from CalciMedica's product candidates; economic, business, competitive, and/or regulatory factors affecting the business of CalciMedica generally; CalciMedica's ability to protect its intellectual property position; and the impact of government laws and regulations. Additional risks and uncertainties that could cause actual outcomes and results to differ materially from those contemplated by the forward-looking statements are included under the caption "Risk Factors" in CalciMedica's Quarterly Report on Form 10-Q for the quarter ended March 31, 2023 and elsewhere in CalciMedica's subsequent reports on Form 10-K, Form 10-Q or Form 8-K filed with the SEC from time to time and available at www.sec.gov. These documents can be accessed on CalciMedica's web page at ir.calcimedica.com/financials-filings/sec-filings.

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