August 4, 2021

Capricor Announces Joint Publication with the US Army Institute of Surgical Research for Cardiosphere-Derived Exosomes as a Potential Therapeutic for Shock

-Preclinical Data Demonstrates Capricor's Exosome Product as an Antishock Therapeutic if Delivered Early

-Publication Further Supports Capricor's Exosome Platform Advancement-

LOS ANGELES, Aug. 04, 2021 (GLOBE NEWSWIRE) -- Capricor Therapeutics ("Capricor" or "the Company") (NASDAQ: CAPR), a biotechnology company focused on developing transformative cell and exosome-based therapeutics for treating and preventing a broad spectrum of diseases, announced today the publication, of a manuscript, which shows that cardiosphere-derived exosomes (CDC-EVs) can attenuate kidney damage and promote new blood vessel formation in a preclinical model of acute trauma, both of which are important factors in post-shock recovery. The publication titled, "Extracellular vesicles derived from cardiosphere-derived cells as a potential antishock therapeutic" was published in the international peer-reviewed journal, The Journal of Trauma and Acute Care Surgery in collaboration with researchers at the United States Army Institute of Surgical Research (USAISR).

"I am very excited to share the published results of this important study," said Linda Marbán, Ph.D., Capricor's CEO, "This has been a key collaboration between the USAISR and Capricor and shows the importance of CDC-EVs as a potential anti-shock therapeutic. The military continues to look for therapeutics that can be delivered in the field to stabilize wounded warriors. While cell therapy held promise in that arena, a lyophilized product that does not require ultra-cold storage is preferable. We believe that our CDC-EVs could potentially be that product. While further work is required to elucidate the full extent of possible clinical implications for CDC-EVs in treating trauma, these results certainly are a very important first step in that evaluation. We are delighted to work with the USAISR and look forward to extending this collaboration."

Multiple other publications have shown that exosomes isolated from cardiosphere-derived cells have shown promising results in various pre-clinical studies using established animal models of diseases by exerting anti-inflammatory, anti-fibrotic, pro-angiogenic, and anti-apoptotic effects.

The goal of the study was to determine the therapeutic potential of CDC-EVs in a rat model of acute traumatic coagulopathy induced by polytrauma and hemorrhagic shock. CDC-EVs were not functionally procoagulant and did not interfere with platelet function, a pathological

feature of acute polytrauma which was not ameliorated by another source of EVs, made from MSCs, in vitro. The findings suggest early delivery could improve outcomes of polytrauma and hemorrhagic shock, which is possible in the field due to the ease of utility, possibly being carried in a medic's pack.

Dr Marbán continued, "We believe that the mechanism of action of our lead product CAP-1002 are these exosomes, and we have seen positive clinical data with these cells in multiple studies. Of note, we are currently enrolling our Phase II, INSPIRE study with CAP-1002 treating, severe COVID-19 patients. Since one of the pathological sequalae to trauma is a hyperimmune response similar to that which we see in COVID-19 patients, we look forward to sharing the data from INSPIRE when it becomes available."

About Capricor Therapeutics

Capricor Therapeutics, Inc. (NASDAQ: CAPR) is a biotechnology company focused on developing transformative cell- and exosome-based therapeutics and vaccines for treating and preventing a broad spectrum of diseases. Capricor's lead candidate, CAP-1002, is an allogeneic cardiac-derived cell therapy that is currently in clinical development for treating Duchenne muscular dystrophy and the cytokine storm associated with COVID-19. Capricor is also developing its exosome technology as a next-generation therapeutic platform. The Company's current focus is on developing exosomes loaded with nucleic acids, including mRNA, to treat or prevent a variety of diseases. For more information, visit www.capricor.com, and follow the Company on Facebook, Instagram and Twitter.

Cautionary Note Regarding Forward-Looking Statements

Statements in this press release regarding the efficacy, safety, and intended utilization of Capricor's product candidates; the initiation, conduct, size, timing and results of discovery efforts and clinical trials; the pace of enrollment of clinical trials; plans regarding regulatory filings, future research and clinical trials; regulatory developments involving products, including the ability to obtain regulatory approvals or otherwise bring products to market; plans regarding current and future collaborative activities and the ownership of commercial rights; scope, duration, validity and enforceability of intellectual property rights; future royalty streams, revenue projections; expectations with respect to the expected use of proceeds from the recently completed offerings and the anticipated effects of the offerings; and any other statements about Capricor's management team's future expectations, beliefs, goals, plans or prospects constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Any statements that are not statements of historical fact (including statements containing the words "believes," "plans," "could," "anticipates," "expects," "estimates," "should," "target," "will," "would" and similar expressions) should also be considered to be forward-looking statements. There are a number of important factors that could cause actual results or events to differ materially from those indicated by such forward-looking statements. More information about these and other risks that may impact Capricor's business is set forth in Capricor's Annual Report on Form 10-K for the year ended December 31, 2020 as filed with the Securities and Exchange Commission on March 15, 2021 and in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2021 as filed with the Securities and Exchange Commission on May 14, 2021. All forward-looking statements in this press release are based on information available to Capricor as of the date hereof, and Capricor assumes no obligation to update these forward-looking statements.

CAP-1002 is an Investigational New Drug and is not approved for any indications. None of Capricor's exosome-based candidates have been approved for clinical investigation.

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Source: Capricor Therapeutics