



DESTINATION STARTUP[®]

BromeCare Therapeutics, LLC

One-Sentence Summary of What You Do: BromeCare Therapeutics is rapidly developing a plant-derived therapeutic which disrupts SARS-CoV-2 spike protein as well as altering the ACE-2 and TMPRSS2 receptors that SARS-CoV-2 uses to gain entry into human cells for use in the treatment and prevention of COVID-19.

Affiliated Institution: University of Nebraska Medical Center

Have you formed a company yet? Yes

Funding/Financing: Direct/Indirect University Support, Angel Funding (including Self or Friends/Family)

Please describe your company and the problem you are trying to solve: Our company comprises two researchers and business executives associated with the Eppley Research Institute at the University of Nebraska Medical Center's Fred & Pamela Buffett Cancer Center. In evaluating the anti-cancer response of a bioactive plant-derived compound, the research team also assessed this compound against the SARS-CoV-2 virus and the viral cell surface targets used by the virus for attaching to and infecting human cells due to the compound's known activity. Key collaborations were created with clinical and research groups across the University's campus, and our compound was tested quickly. As suspected, this compound delivered a dual activity impact of both down-regulating the two cellular receptor sites required for viral RNA insertion and infection (ACE-2 and TMPRSS2) as well as disrupting the SARS-CoV-2 spike protein structure, which prevented the virus from binding to ACE-2 receptor sites altogether. This strongly suggests that our proprietary compound could both treat and possibly prevent Covid-19 infections. SARS-CoV-2 is a newly emergent Coronavirus for which vaccine prevention and post-infection treatments are limited and only partially effective. Total worldwide cases have reached over 41 million, with 1 million deaths, and U.S. cases have reached over 8 million infections and 220,000 deaths. With no vaccine currently available, fears of anti-vaccination proponents, and limited treatment success, a new treatment modality is urgently needed globally. Our compound can be produced in large quantities and should have a relatively safe profile due to its plant origins.

What is/was your go-to-market strategy? Our current strategy is to quickly validate our compound's activity in an animal model (it has already shown activity in tissue culture experiments). Following these animal studies, we would initiate human trials first through our medical center due to its world-class capabilities in infectious disease research and treatment, and then in broader trials. We would simultaneously seek collaborations with biopharma partners who would quickly invest and support scale-up and FDA clinical trials. We would have this partner secure FDA approval or



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emergency use authorization and then support them for full-scales sales and distribution of the drug. The key partnerships needed within our medical system have already been established, which has enabled us to complete active cell lines and challenge testing against the virus and its cellular binding targets at record speed. The expanding challenge is to further validate our compound's activity in treating and preventing Covid-19 infections, complete human clinical trials and move this novel therapeutic to market with the greatest possible speed.

How will/do you generate revenue? We anticipate revenue in two forms—royalty payments from drug sales for treating patients as well as the compound's use in preventing infection as a vaccine replacement as well as up-front license fees from motivated biopharma partners who understand the value and monetization of such a unique treatment compound. Expected up-front licensing fees should include substantial fees from establishing a partnership with one or more biopharma companies as well as development support funding and progress payments. The total value for both revenue streams is expected to be substantial.

How will this showcase benefit your company or technology? We are seeking immediate funding from angel or venture sources in combination to STTR grant funding which we will submit for shortly. We are also rapidly seeking a formal biopharma partner who could provide additional bridge funding combined with license and progress payments until our product reaches commercial sales. We expect that this event will broaden our recognition regionally as well as provide critical introductions to potential investors, acquirers and biopharma partners. We are also quite motivated to add additional team members to support further development and clinical testing of our compound above what is available locally at our medical center. We are also seeking business development interactions with all potential contributors that can help us accelerate this compound to market to combat the still growing threat from SARS-CoV-2.

Who are the members of your team and why is this the right team to get the job done?

Our company includes not only our founding researchers, Drs. Radhakrishnan and Sagar, but world-class resources at the University of Nebraska Medical Center (UNMC), the Eppley Research Institute, and the Fred & Pamela Buffett Cancer Center, which includes UNMC's world-famous Global Center for Health Security with its Bio-Containment Unit where critically ill Ebola patients were taken for treatment. Moreover, our medical center licensing team has deep relationships across the infectious disease biopharma community, which we will leverage for sifting through potential partnerships quickly. Dr. Radhakrishnan is a well-known pancreatic cancer researcher with several notable publications for key discoveries on the mechanisms, causes, and processes of pancreatic cancer development and progression. One of his pivotal discoveries was the mucin 16 (muc16) mechanism of metastatic growth signaling. He previously received the UNMC Postdoctoral Scholar of the Year Award and his PhD thesis work was in infectious disease. Dr. Sagar has contributed significant research progress for several of the recent publications in Dr. Radhakrishnan's laboratory. Craig



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Tuttle is an experienced biopharma and biotech executive with over 40 years of experience in the medical field. He was previously CEO of Transgenomic, Inc., a leader in DNA mutation discovery in cancer where he raised over \$50 million in investment and M&A capital and former General Partner at Prairie Ventures, a private equity firm. In 2013 he was awarded the Nebraska Governor's Bioscience Award.

