Nodenza Venture Partners invests in Trellis Bioscience

Lead product TRL1068 targets biofilm, estimated to cause 60-70% of antibiotic resistant infections

New York, October 22, 2024 – Nodenza Venture Partners ("Nodenza"), today announces its investment in Trellis Bioscience ("Trellis"), a clinical-stage company focused on discovering and developing native human monoclonal antibodies to treat and prevent drug-resistant, life-threatening infectious diseases.

Trellis has developed a patented, proprietary technology (CellSpot™) to clone genes of rare fully-human therapeutic monoclonal antibodies (mAbs) from memory B-cells of the blood of individual human donors. CellSpot has identified a high-affinity, broad-spectrum native human antibody, TRL1068, which targets and disrupts bacterial biofilm, a physiological factor promoting drug resistance in most clinically relevant multi-drug-resistant bacteria species, both gram positive and gram negative.

TRL1068 is being developed for the treatment of chronic prosthetic joint infection ("PJI"), a chronic infection which requires, as standard of the care, the surgical removal of the prostheses with an estimated cost to the US health system of more than $10bn a year. In addition to PJI, it is estimated that biofilm is the cause of 60-70% of antibiotic resistant infections. TRL1068 has been granted Fast Track and QIDP designations and orphan drug designation for PJI and infective endocarditis by the U.S. Food and Drug Administration (FDA).

Chronic PJI always forms biofilms on the prosthesis, thereby shielding the bacteria from eradication by antibiotics, being the reason for PJI to be a difficult-to-treat disease. As biofilm cannot be removed by antibiotics or any other non-invasive treatment, the current standard treatment of chronic PJI is a complex two-stage surgical procedure consisting of removal and replacement of the infected prosthesis. This costly and invasive two-stage process substantially and adversely affects quality of life, with increased immobility and morbidity in addition to decreased 5-year survival rates in patients with PJI when compared with non-infected patients that receive a prosthetic joint replacement.

In a clinical proof-of-concept trial, published in a peer-reviewed article in the prestigious AAC Journal, TRL1068 has demonstrated the ability to disrupt the bacterial biofilm barrier to antibiotic access, allowing antibiotics to be efficacious without surgical intervention:

- In 25% of TRL1068-treated patients, biofilm was removed below the limit of detection after only 7 days of treatment, a finding that has never been observed in this patient population.
- 64% of chronic PJI patients treated with an infusion of a single dose of TRL1068 and standard antibiotics had a bacterial biofilm burden below 100 CFU/mL sonication fluid after only 7 days of treatment. Although the sample size is small (n=11), a favourable comparison to historical data where only 15% of PJI patients are below that mark, suggesting that a treatment period 8 times longer, as planned in a Phase 2 study, will be highly efficacious.
- TRL1068 was well-tolerated across all three dose groups with no drug-related adverse events.
- The results of this initial exploratory study have provided strong evidence of efficacy across a diverse set of bacterial species, safety, and pharmacokinetic data to guide the design of a pivotal clinical study of TRL1068 for PJI with the goal to treat the infection without the need for a complex replacement surgery.

Ross Morton, Managing Partner of Nodenza Venture Partners, said: "Antibiotic resistance is a significant and growing global threat, with insufficient investment to identify urgently needed new approaches. Trellis stands out with its truly novel and innovative approach to address antibiotic resistance. Through the application of its unique CellSpot technology, Trellis has the potential to be at the forefront of innovation in this critical field. CellSpot and TRL1068 align perfectly with Nodenza Venture Partners' strategy of identifying and investing in disruptive technologies and therapies with the potential to deliver exceptional benefits to patients. We believe that Trellis has the potential to generate a multi-fold return on for Nodenza."

Stefan Ryser, Ph.D, President & CEO of Trellis Bioscience, commented: "Nodenza's deep expertise of the pharmaceutical and biotech industry, and their recognition of the novelty of biofilm disruption, makes it an ideal investment partner for Trellis Bioscience as we prepare to advance TRL1068 rapidly through the clinic. The positive data generated to date give us confidence in the potential for a successful clinical study that may result in early FDA marketing authorisation given the five times higher mortality of the PJI standard of care surgery versus an aseptic prostheses replacement as well as the lack of new mechanisms to tackle the specific challenges of prosthetic joint infection. Nodenza has also recognized the enormous potential of TRL1068 beyond PJI as it addresses the broader global threat of antibiotic resistance."

Contacts:

Nodenza Venture Partners
Ross Morton, Managing Partner info@nodenza.com

Mo Advisory PR mo@mopradvisory.com
Mo Noonan / Jonathan Birt

Notes to Editors

About Nodenza Venture Partners
Nodenza Venture Partners provides financial and operational support to early-stage and pre-commercial biotech and medtech companies and products designed to bring exceptional patient benefit. Our bi-modal investment strategy combines early-stage opportunities – advancing new treatment modalities through active IND to phase 2 - with pre-commercial targets supporting their transition from scientific to commercial companies delivering strong upside potential. Established by a team of experienced life sciences entrepreneurs, founders and leaders, our approach leverages Nodenza's extensive expertise in the creation and growth of new companies, as well as late-stage product development and launch.

For more information visit us at https://www.nodenza.com

Trellis Bioscience
Trellis Bioscience is a clinical-stage company focused on discovering and developing native human monoclonal antibodies to treat and prevent drug-resistant, life-threatening infectious diseases. Antibodies are the immune system's most potent natural weapon against disease. Trellis's innovative proprietary technology CellSpot™ overcomes technical obstacles that have long hindered exploiting the full human antibody repertoire. This ideal source of drugs focuses on the selection of elite antibodies that bind highly conserved target epitopes with high affinity. To learn more, visit trellisbio.com.