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Avalia Immunotherapies is an immuno-oncology company developing immunotherapies for the treatment of prostate and other cancers. Cancer immunotherapy involves using a therapeutic vaccine and/or immunomodulator to stimulate a patient's own immune system to kill cancerous tissue. Therapeutic cancer vaccines currently in development have modest clinical efficacy and new treatment options offering improved efficacy and life-extension are required for unmet medical needs.

Avalia has developed a platform technology to deliver therapeutic cancer vaccines that activate the most powerful tumor-fighting cells in the body. The vaccines are discrete synthetic compounds that deliver both a cancer-specific peptide antigen and a powerful immune system activator simultaneously to dendritic cells. They have a unique mechanism of action compared to other products in development and offer functional, immunological and therapeutic advantages. In addition to cancer, the Avalia platform has application in allergy and infectious disease. Early development work in these areas will open partnering and pipeline development opportunities at a pre-clinical stage.

Avalia has licensed four patent families from its founding institutions – Victoria University of Wellington (VUW) and the Malaghan Institute of Medical Research (MIMR). One is a provisional application and three have progressed to PCT stage, with international search reports indicating all claims are novel and inventive.

The Avalia platform will first be applied to the development of an improved treatment for advanced prostate cancer. Last year, more than 233,000 new cases were diagnosed and over 29,000 men died from prostate cancer in the US alone. A new treatment would be a significant medical advancement given that present treatment options all carry serious side effects and are often not a long-term cure. There is currently one cancer therapeutic cancer vaccine on the market (Provenge), which offers life extension of 4.1 months for patients with metastatic castrate-resistant prostate cancer. Avalia will be targeting an immunotherapy improving survival over current standard of care in patients with advanced prostate cancer.

The Avalia executive team includes the scientific founders Dr. Ian Hermans (CSO) and Dr. Gavin Painter (CTO). Dr. Shivali Gulab is serving as CEO. The team brings a combined fifty years of R&D and business development experience in drug discovery, pre-clinical development, Phase I clinical studies and contract manufacturing from their roles at MIMR, VUW, Victoria Link Limited (tech transfer office of VUW) GlycoSyn (CMO) and Callaghan Innovation (NZ government research and commercialisation institute). In addition to the executive, the team includes 4 FTE scientists. A supporting advisory board with science, clinical and commercial expertise has been established. The chair of the board of directors is Professor Ashley Dunn, who joined the Ludwig Cancer Research Institute in Melbourne, Australia in 1982 and was the Institute's Associate Director from 1987 to 2003.

The first year of Avalia's operations will focus on optimizing the technology platform for vaccine development, confirming the lead indication (prostate cancer proposed) and selecting a lead vaccine candidate. The formal pre-clinical plan will be initiated in 2016 with the lead vaccine candidate. Avalia is currently seeking academic and industry partners with synthetic peptide vaccines in pre-clinical or clinical development that could benefit from an enhanced activator or adjuvant.

Avalia Immunotherapies will be formally established in March 2015, with company offices located in New York, USA and Wellington, New Zealand. Initial pre-clinical development will occur in New Zealand, with further studies proposed in Australia and the US.

Avalia has raised \$1.3 M in its seed-round (combination of non-dilutive grants, debt financing and private investment from Powerhouse Ventures Ltd). A further \$1.5+ M is proposed from Powerhouse, to be committed pending the following key milestones: lead candidate selection, initiation of GLP animal toxicity studies and filing of the first IND. The team is seeking an additional \$3 M by 2017 to complete the pre-clinical program and first-in-human clinical trial.