Imugene arginine modulator demonstrates activity in melanoma cancer model

- **Successful *in vivo* studies of its lead arginine modulator drug candidate**
- **Tested in 12 mouse models of most prevalent cancers**
- **Significant activity demonstrated in cancer model of melanoma**
- **Relationship with the Baker Heart and Diabetes Institute expanded**

MELBOURNE Australia, 19 February 2018: Imugene Limited (ASX: IMU), a clinical stage immuno-oncology company, today said pre-clinical *in vivo* data for its arginine modulator drug candidate had demonstrated anti-tumor activity in 12 different cancer mouse models of the most prevalent cancers, with significant activity in a melanoma cancer model.

Arginine is a naturally occurring amino acid critical for the activation, growth and survival of the body's own cancer-fighting cells. Depletion of arginine has been observed in a number of cancers and researchers believe increasing availability of arginine could help restore the tumor killing activity of the body's cancer fighting cells.

Imugene's arginine modulator program stems from a 2016 agreement with the internationally respected Baker Heart and Diabetes Institute in Melbourne to develop and commercialise its portfolio of small molecule arginine modulators for oncology.

In 2018 Imugene has expanded its relationship with the Baker Heart and Diabetes Institute with the submission of a joint National Health and Medical Research Council (NHMRC) grant application to investigate developing new and improved immunotherapy drug candidates that will enhance the anti-tumour actions of immune T cells with the lead application focused on melanoma cancer.

Australia and New Zealand have the highest melanoma rates in the world and melanoma is the third most common cancer in Australia with an estimated 14,000 Australians diagnosed with melanoma in 2017. In Australia, 1 in 14 men and 1 in 24 women will be diagnosed with melanoma sometime in their life according to the Australian Institute of Health and Welfare.

Baker Heart and Diabetes Institute NHMRC Senior Principal Research Fellow Professor David Kaye said, "We are excited to work with Imugene to investigate certain new small molecule

drugs with immuno-oncology applications. This collaboration is supporting an exciting and novel therapeutic approach to treat cancers with a strong potential for improving patient outcomes."

Imugene CEO Leslie Chong said, "We are honoured to establish this expanded collaboration with Professor David Kaye's team and look forward to exploring the potential of a first-in-class immuno-oncology therapy. The collaboration aims to yield important composition of matter intellectual property and with improved anti-tumour activity"

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About Imugene (ASX:IMU)

Imugene (ASX:IMU) is a clinical stage immuno-oncology company headquartered in Melbourne, Australia. Its lead product is HER-Vaxx, a B cell peptide vaccine for the treatment of gastric cancer. HER-Vaxx is a cancer immunotherapy designed to treat tumours that over-express the HER-2/neu receptor, such as gastric, breast, ovarian, lung and pancreatic cancers. Developed by leading scientists at the Medical University of Vienna in Austria, the peptide vaccine is constructed from several B cell epitopes of HER-2/neu. It has been shown in pre-clinical studies and in one Phase I study to stimulate a potent polyclonal antibody response to HER-2/neu, a well-known and validated cancer target.

Imugene in partnership with the Medical University of Vienna is working to discover and develop mimotope-based immunotherapies against validated and new oncology targets. This partnership has the potential to create game-changing B cell peptide vaccines that would replace or augment conventional monoclonal antibody therapies.

Imugene is also building a pipeline of small molecule immuno-oncology drugs. Arginine is a critical amino acid for the health of cancer fighting T-cells and depletion of it limits the effectiveness of T-cells to fight tumours. We are leveraging our core expertise in tumor biology and medicinal chemistry to develop small molecule selective arginine modulators.