IMAGION BIOSYSTEMS LIMITED

(ASX**: IBX**)

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Imagion presents positive new data at World Molecular Imaging Congress
Study reports MagSense™ utility as a potential MRI contrast agent

MELBOURNE — Imagion Biosystems Limited (ASX: IBX) (the **Company**), a company dedicated to improving healthcare through the earlier detection of cancer is presenting new data which further demonstrates the potential imaging utility of its nanoparticles for detecting HER2 breast cancer cells. The data was presented as a scientific poster at the 2019 World Molecular Imaging Congress being held in Montreal, Canada, September 4 -7.

This study is the Company's first reported results demonstrating that the anti-HER2 nanoparticles used in Imagion's MagSense™ technology, which provide specific targeting of cancerous cells, may also have potential as an MR imaging contrast agent. Thus, importantly, the study shows the MagSense™ nanoparticles may be equally effective as a multi-modal molecular imaging agent, generating detectable signals in two different imaging methods - super magnetic relaxometry (SPMR) and magnetic resonance imaging (MRI).

"This study provides further evidence and insight into the effectiveness of our nanoparticles and their ability to specifically bind to targeted tissue, where they then act as a magnetic tag or beacon and a non-invasive imaging tool" said Bob Proulx, CEO of Imagion Biosystems.

"While development of our proprietary magnetic relaxometry technology has been our focus to date, this new preliminary work shows the potential for our MagSense™ nanoparticles to work with MRI and could open up a new commercial pathway as an contrast agent that can be used to improve the effectiveness of MRI in the detection and monitoring of HER2 breast cancer."

Imagion's proprietary MagSense™ technology works by using the tiny bio-safe nanoparticles coated with tumour targeting antibodies to tag the cancer. MagSense™ sensors are able to detect the particles which have become attached to cancer cells which act like a magnetic beacon because bone and normal tissue are transparent to the detection platform. SMPR uses very low magnetic fields, making it safer for patients and less expensive to manufacture and install.

In the MRI setting, contrast agents are used to enhance the image and improve resolution. However, to-date, imaging agents have been general purpose, creating contrast at tissue boundaries but not providing functional imaging utility. A targeted MagSense™ nanoparticle detectable by SPMR, that also could be used as a contrast agent to enhance an MR image of specific tissue would create an opportunity for Imagion to work with the large installed base of existing MRI machines.

"Our toxicology studies have already demonstrated that our nanoparticles should be safe for use in humans and we remain focused on the completion of our first-in-human studies and the well-defined shortest path to commercialization. However, we are encouraged by these early results and plan to embark on further studies, to explore how our technology could be optimally positioned alongside existing clinical practices to enhance its commercial potential," said Mr Proulx.

A link to the poster, which was presented by Dr Marie Zhang, VP of Research and Pre-Clinical Development at Imagion Biosystems, can be found here: https://imagionbiosystems.com/2019-world-molecular-imaging-conference-poster/ The WMIC is the premier forum for scientists and clinicians focused on cutting-edge advances in molecular imaging.

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About Imagion Biosystems
Imagion Biosystems is developing a new non-radioactive and safe diagnostic imaging technology. Combining biotechnology and nanotechnology the Company aims to detect cancer and other diseases earlier and with higher specificity than is currently possible. Imagion Biosystems listed on the Australian Securities Exchange (ASX) in June 2017.

For further information please visit www.imagionbiosystems.com

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