ASX & Media Release

PAT-DX1 Targets Delivery of Nanoparticles to Breast Cancer Tumors in Animal Model

Melbourne, Australia; January 29, 2018: Patrys Limited **(ASX: PAB)**, a therapeutic antibody development company, is pleased to announce further pre-clinical data for its drug candidate PAT-DX1-NP. This candidate links PAT-DX1, Patrys' humanized version of the 3E10 anti-DNA antibody, to nanoparticles (NPs) that can be loaded with chemotherapeutic (or other) drugs.

Linking PAT-DX1 to nanoparticles allows the preferential targeting of nanoparticles to tumor tissues and, using murine 3E10, has previously been shown to increase the efficacy of drug therapy. More targeted delivery may open opportunities for lower doses of chemotherapies to be used in treating cancer.

Studies performed in the laboratories of Dr James Hansen and Dr Jiangbing Zhou at Yale University found that mice with xenograft triple negative breast cancer tumors showed significantly higher localization of PAT-DX1-NP at the tumor sites when compared with unconjugated nanoparticles. This data is consistent with previously reported data using a glioblastoma cancer model and supports the broad utility of PAT-DX1-NP as a delivery vehicle for chemotherapeutics against a range of different cancers.

"This study adds to our understanding of PAT-DX1-NP, and confirms that it can be used to localise a range of different tumors, with differing underlying pathologies" said Dr James Campbell, Chief Executive Officer and Managing Director of Patrys. "With utility against a range of cancers confirmed, Patrys will expand the PAT-DX1-NP program to trial the delivery of nanoparticles embedded with chemotherapeutics in coming months."

"Patrys' novel position in the field of DNA damage response (DDR) therapeutics is expanding, with confirmation of activity against a range of cancer types, and demonstrated synergy with the PARP inhibitor olaparib. Future work supported by the current fully underwritten Rights Issue will seek to progress the broader PAT-DX1 program towards the clinic as soon as possible."

About Deoxymab 3E10, PAT-DX1 and PAT-DX1-NP

Deoxymab 3E10 is a DNA damage-repair (DDR) antibody that was first identified in lupus as an autoantibody that bound to normal cells. Of particular interest is that whilst most antibodies bind to cell surface markers, Deoxymab 3E10 penetrates into the cell nuclei and binds directly to DNA, where it inhibits DNA repair processes and kills cells that have mutations or deficiencies in DNA repair mechanisms as found in various cancer cells. Deoxymab 3E10 has single agent therapeutic potential and has been shown to significantly enhance the efficacy of both chemo- and

radiotherapies. Further, Deoxymab 3E10 can be conjugated to nanoparticles to target delivery of chemotherapeutics to tumors.

Patrys has developed a humanized form of Deoxymab 3E10, PAT-DX1 with improved activity over the original version of 3E10, and is progressing this, and a nanoparticle-conjugated form (PAT-DX1-NP) towards the clinic. In a range of pre-clinical cancer models PAT-DX1 has shown significant ability to kill cancer cells in cell models, human tumor explants and xenograft models. PAT-DX1 has also been shown to work synergistically with the approved PARP inhibitor, olaparib. Patrys believes that PAT-DX1 may have application across a wide range of malignancies such as gliomas, melanomas, prostate, breast, pancreatic and ovarian cancers.

Patrys' rights to Deoxymab 3E10 are part of a worldwide license to develop and commercialize as anti-cancer and diagnostic agents a portfolio of novel anti-DNA antibodies and antibody fragments, variants and conjugates discovered at Yale University.

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For further information, please contact:

Patrys Limited:
James Campbell
Chief Executive Officer
P: +61 3 96703273
info@patrys.com

Patrys IR:
Ben Walsh
WE Buchan
P: +61 2 9237 2801
bwalsh@buchanwe.com.au

About Patrys Limited:
Based in Melbourne, Australia, Patrys (ASX: PAB) is focused on the development of antibodies as therapies for a range of different cancers. Patrys has a pipeline of anti-cancer antibodies for both internal development and as partnering opportunities. More information can be found at www.patrys.com.