



ASX & Media Release

Preliminary PAT-DX1 pharmacokinetics

Melbourne, Australia; 5 July, 2018: Patrys Limited (**ASX: PAB**), a therapeutic antibody development company, is pleased to announce preliminary pharmacokinetics data for its drug candidate PAT-DX1. PAT-DX1 is Patrys' humanized version of the 3E10 anti-DNA antibody.

Drs. James Hansen and Jiangbing Zhou of the Yale School of Medicine have confirmed that as a single agent PAT-DX1 localizes into xenograft triple negative breast cancer (TNBC) tumors in mice. Mice with TNBC tumors were treated with systemic administration of PAT-DX1, and at varying time points afterwards tumors were excised and examined for the presence of PAT-DX1. Preliminary pharmacokinetic analysis indicates that PAT-DX1 exhibited significant tumor penetration 8 hours after administration.

"We are very pleased that PAT-DX1 is confirmed to target TNBC tumors, with clear tumor penetration 8 hours after administration. These results provide a foundation for more extensive studies of the effect of PAT-DX1 on TNBC, both as a single agent and in combination with various drugs such as DNA-damaging chemotherapies and PARP inhibitors," said Dr. James Campbell, Chief Executive Officer and Managing Director of Patrys.

"More complete pharmacokinetic profiling of PAT-DX1 in TNBC is ongoing and will be disclosed when complete", added Dr. Campbell.

About Deoxymab 3E10 and PAT-DX1

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 and imaging agents 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, xenograft and orthotopic models. Treatment with PAT-DX1 has been shown to significantly improve survival in an orthotopic model of glioblastoma. 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.

About Triple Negative Breast Cancer

Breast cancer is a leading cause of cancer death in women, and approximately 1.67 million¹ new cases are diagnosed worldwide each year. Subtypes of breast cancer are stratified in accordance with their expression of estrogen, progesterone, and HER2 receptors. Tumors that lack all three receptors are referred to as "triple negative breast cancer (TNBC)", and this subtype makes up 15-20% of all breast cancer cases and is the most aggressive and difficult to treat. TNBC is associated with BRCA mutations or a "BRCAness" phenotype of impaired homologous recombination that makes these cancer cells vulnerable to inhibition of DNA damage repair such as that mediated by PAT-DX1.

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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.

¹ <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/global-cancer-facts-and-figures/global-cancer-facts-and-figures-3rd-edition.pdf>