ASX & Media Release

New grant supports research alliance between Patrys and the Olivia Newton-John Cancer Research Institute

Melbourne, Australia; 13 July, 2020: Patrys Limited **(ASX: PAB)**, a therapeutic antibody development company, is pleased to announce that the Olivia Newton-John Cancer Research Institute (ONJCRI), as the La Trobe University School of Cancer Medicine, has been awarded a $50,000 Federal Government grant to support research at ONJCRI on Patrys' PAT-DX1 program. ONJCRI is one of Australian's leading biomedical research institutes with strengths in cancer biology, translational medicine and clinical trials.

The research will be led by Professor Robin Anderson, Head of ONJCRI's Translational Breast Cancer Program and the Metastasis Research Laboratory. Professor Anderson's research is focused on understanding the genetic regulation of metastasis, primarily in breast cancer, and is aimed at identifying new targets for molecular based therapy for patients with progressive disease.

The Federal Entrepreneur's Programme Innovation Connections grant of $50,000 will be used to determine the efficacy of PAT-DX1 in *in vivo* studies of breast cancer with DNA damage repair (DDR) defects. Beyond the grant, an ongoing collaboration is planned in which the expertise and resources of Professor Anderson's lab will be utilised to investigate the ability of PAT-DX1 to reach distant sites of breast cancer metastasis. The effect of PAT-DX1 on regression of primary and metastatic breast cancers will be assessed in combination with standard-of-care radio- and chemo-therapies. Looking forward, Patrys and the ONJCRI plan to expand this collaboration to include both PAT-DX1-NP, and anticipated new formats of the Deoxymab platform.

Patrys Chief Executive Officer and Managing Director, Dr. James Campbell said: "This exciting collaboration with Professor Anderson and her team will enhance our understanding of the activity of PAT-DX1, and further inform the therapeutic potential of PAT-DX1 as a treatment for metastatic breast cancer. We gratefully acknowledge the Federal Government's Innovation Connections scheme, and the role it has played in fostering this collaboration – this is invaluable research, particularly when you consider that metastatic breast cancer is generally considered incurable with only 27% of women surviving up to 5 years.

"This new Australian grant follows recent grants to our research partners Dr James Hansen and the Yale School of Medicine worth more than $A4.87M from the National Institutes of Health (NIH) and the Department of Defense (DoD) in United States. We are confident that Professor Anderson's research will complement that of Dr Hansen to build upon the strong foundations being laid by Patrys and its collaborators in the field of DDR therapeutics and synthetic lethality, and expect to report on the research findings in 2021."

Professor Anderson said, "We are excited to be working with Patrys to investigate the utility of PAT-DX1 in a range of different models of breast cancer. The Innovation Connections grant program helps promote innovation and collaboration between Australian businesses and the research sector with the potential for improving patient outcomes, and we look forward to a successful collaboration with the Patrys team."

About Deoxymab 3E10 and PAT-DX1

Patrys has a worldwide licence to develop and commercialise as anti-cancer agents a portfolio of pre-clinical novel anti-DNA antibodies and antibody fragments/variants and antibody-nanoparticle conjugates discovered at Yale University.

Deoxymab 3E10 is an autoantibody originally identified in models of lupus. Unlike normal antibodies that bind to foreign cells (e.g. pathogens) or aberrant cells (e.g. cancer cells) and trigger an immune response, autoantibodies bind to normal cells. Of particular interest with Deoxymab 3E10 is that whilst most antibodies bind to markers on the surface of cells, Deoxymab 3E10 penetrates cells' nuclei and binds directly to DNA. Having bound to the DNA, Deoxymab 3E10 inhibits DNA repair and damages DNA. Normal cells repair DNA damage utilising intact DNA repair processes, however Deoxymab 3E10 can kill cells that have mutations or deficiencies in DNA repair mechanisms as found in various cancer cells. As well as showing single agent therapeutic potential, Deoxymab 3E10 has been shown to significantly enhance the efficacy of both chemo- and radiotherapies. Further, 3E10 can be conjugated to nanoparticles to target delivery of chemotherapeutics to tumors.

Patrys has developed a humanised form of Deoxymab 3E10, PAT-DX1 which is significantly more effective than the original version of 3E10, and is progressing this, and a nanoparticle-conjugated form of 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. Patrys believes that PAT-DX1 may have application across a wide range of malignancies such as gliomas, melanomas, prostate, breast, pancreatic and ovarian cancers.

About the Entrepreneur's Programme: Innovation Connections

The Federal Government's Innovation Connections program provides small and medium sized businesses with support to collaborate with the research sector in developing new ideas with commercial potential.

About the Olivia Newton-John Cancer Research Institute

The Olivia Newton-John Cancer Research Institute, as the La Trobe University School of Cancer Medicine, is a leader in the development of experimental and breakthrough cancer treatments. We investigate and develop treatments for cancers of the breast, bowel and gastrointestinal tract, lung, skin, prostate, liver and brain. Our researchers and clinician scientists lead clinical trials, giving patients access to potential new treatments including immunotherapies and personalised medicine.

We are integrated within the Olivia Newton-John Cancer Centre, with research laboratories only metres away from where patients are cared for and receive treatment. This inspires and enables the rapid translation of our scientific discovery into clinical trial of new, better, cancer treatments.

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This announcement is authorised for release by the Board of Directors of Patrys Limited.

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About Patrys Limited
Based in Melbourne, Australia, Patrys (ASX:PAB) is focused on the development of its Deoxymab platform of cell-penetrating antibodies as therapies for a range of different cancers. More information can be found at www.patrys.com.

About Patrys' Deoxymab 3E10 platform – lead candidates 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 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 orthotopic models of both triple negative breast cancer brain metastases and glioblastoma. PAT-DX1 has also been shown to enhance the therapeutic effect of low dose radiation. 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.