ASX & Media Release

Patrys Establishes Stable Cell Line for Production of PAT-DX1

Melbourne, Australia; 10 February 2021: Patrys Limited (ASX: PAB, "**Patrys**" or the **Company**), a therapeutic antibody development company, is pleased to announce it has selected an optimised stable cell line for its lead asset PAT-DX1. This important step allows the company to establish large-scale production of PAT-DX1 deoxymab for final preclinical studies, first-in-man studies, and partnering activities.

Patrys Chief Executive Officer and Managing Director, Dr. James Campbell said: "Establishing a stable, high-yield cell line suitable for commercial production of clinical-grade material is one of the critical steps of any antibody development program. Today's announcement marks a major de-risking step for the Company as it moves towards an anticipated first-in-man study of PAT-DX1 in H1 2022."

The establishment of a stable, PAT-DX1-producing cell line by Patrys is the culmination of a manufacturing development and optimisation program that was initiated in mid-2019. The development program included modification of PAT-DX1's protein back-bone to improve its properties for use in human therapeutic applications. Cell lines expressing the modified PAT-DX1 were developed and an extensive selection processes was conducted to identify single, clonal cell lines that produced high yields of high quality PAT-DX1. The final step was to ensure that the cell line was stable and able to deliver reproducible and consistent production of PAT-DX1 protein over time. Over the past months Patrys evaluated six different optimised cell lines and has selected a best performer from these studies. The cell line that has been selected will be stored as a Master Cell Bank (MCB) which will form the basis for all future production of PAT-DX1.

Patrys Chief Executive Officer and Managing Director, Dr. James Campbell said: "Now that we have a stable cell line and resultant Master Cell Bank in hand, Patrys' is focused on completing the final two milestones required for us to initiate first-in-man studies for PAT-DX1, namely; scaling-up the production of PAT-DX1 in large fermenters (H1, 2021), and initiating GLP toxicology studies (H2, 2021). I'd like to pay credit to the Patrys team, and to our international CRO, who have worked tirelessly on developing this key reagent for us."

The selection of a stable cell line for producing PAT-DX1 means that all future studies undertaken by either Patrys or its partners and collaborators can be based on suitably qualified product, including supporting ongoing research effort being conducted around the globe on this technology. Having a consistent and qualified product means that data can potentially be leveraged from a broad range of studies covering applications such as therapeutics, nanoparticle drug delivery, antibody-drug conjugation and diagnostic imaging agents.

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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:

Patrys' deoxymab platform is based on the deoxymab 3E10 antibody that was first identified as an autoantibody in a mouse model of the human disease systemic lupus erythematosus (SLE). While 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. Cancer cells often have high levels of mutations and underlying deficiencies in the DNA repair mechanisms. For these reasons, the additional inhibition of the DNA repair processes by deoxymab 3E10 can kill cancer cells, but appears to have little impact on normal cells. As a single agent, deoxymab 3E10 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 tumours.

Patrys has developed two humanised forms of deoxymab 3E10, both which have improved activity over the original deoxymab 3E10 antibody. PAT-DX1 is a dimer (two joined subunits) of the short chain from the binding domain of deoxymab 3E10, while PAT-DX3 is a full-sized IgG antibody. In a range of pre-clinical studies, PAT-DX1 has shown significant ability to kill cancer cells in cell models, human tumour explants, xenograft and orthotopic models. PAT-DX1 has been shown to cross the blood brain barrier, reduce tumour size, and increase survival in multiple animal models of brain cancer, other cancers, and cancer metastases. PAT-DX1 is tumour-agnostic, meaning that it can target many different tumour types in the body, regardless of specific tumour antigens. Patrys believes that PAT-DX1 may have application across a wide range of cancers including gliomas, melanomas, prostate, breast, pancreatic and ovarian cancers.

Deoxymabs, such as PAT-DX1 and PAT-DX3, can be used to target nanoparticles carrying a payload of anti-cancer drugs specifically to tumours. This allows specific delivery of cancer drugs to multiple types of cancer while having minimal impact on normal, healthy cells.

Patrys' rights to deoxymab 3E10 are part of a worldwide license to develop and commercialise a portfolio of novel anti-DNA antibodies and antibody fragments, variants and conjugates discovered at Yale University as anti-cancer and diagnostic agents. Five patents covering the unconjugated form of deoxymab 3E10 (and derivatives thereof) have already been granted (Europe, Japan, China, and 2 in the USA), and one patent covering nanoparticle conjugation has been granted (Australia).