

ASX & Media Release

# Patrys Poster Presentation at the San Antonio Breast Cancer Symposium 2020

**Melbourne, Australia; 11 December 2020:** Patrys Limited (ASX: PAB, "**Patrys**" or the **Company**), a therapeutic antibody development company, is pleased to announce that data from preclinical studies which demonstrate the ability of its lead candidate, PAT-DX1 to cross the blood brain barrier, suppress metastatic tumour growth, and prolong survival are being presented at the San Antonio Breast Cancer Symposium.

The poster presenting these findings, entitled "An ENT2-dependent, cell-penetrating, and DNAdamaging lupus autoantibody crosses the blood-brain barrier to target breast cancer brain metastases" (PD 13-08), will be highlighted at the Spotlight Poster Discussion 13 – Brain Metastases Targets and Treatment – being held on Friday, December 11, 2020: 1:00 pm – 2:15 pm (US Central Time).

This poster provides further evidence confirming, in a mouse model of triple negative breast cancer (TNBC) brain metastases, that PAT-DX1 is able to cross the blood-brain barrier and reduce TNBC brain metastasis after a single week of treatment. Furthermore, mice treated for 4 weeks with PAT-DX1 showed 93% less brain metastasis than untreated mice. Animals treated with PAT-DX1 for 4 weeks survived 45% longer than untreated animals and no toxicity was associated with PAT-DX1 treatment.

**Patrys Chief Executive Officer and Managing Director, Dr. James Campbell said:** "The San Antonio Breast Cancer Symposium is one of the most important meetings in the breast cancer research calendar and is well-attended by thought-leading clinicians, researchers and pharmaceutical executives. We are delighted to have the opportunity to present PAT-DX1's unique mechanism of action at this forum. PAT-DX1's ability to cross the blood brain barrier, suppress tumour growth, and increase survival indicate that it has considerable potential as a new approach for treating secondary brain cancers. Patrys is currently establishing a scaled up manufacturing process for both PAT-DX1 and PAT-DX3, its full-sized IgG deoxymab, in order to complete the final preclinical studies and initiate anticipated first-in-man studies for its deoxymab technology in H1 2022."

## -Ends-

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 <u>www.patrys.com</u>.

## 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).