ASX & Media Release

Stable Cell Line for Production of PAT-DX3 Established

- High yielding, stable cell line for production of PAT-DX3 established ahead of schedule
- Patrys to initiate process development program for commercial scale manufacture of GMP-grade PAT-DX3 deoxymab
- Potential for PAT-DX3 to be used as both therapeutic agent and as a targeting agent in ADC opens up several potential development and partnering opportunities

Melbourne, Australia; 28 February 2022: Patrys Limited (ASX: PAB, "**Patrys**" or the **Company**), a therapeutic antibody development company, is pleased to announce it has identified and selected an optimised stable cell line for production of its full-sized IgG deoxymab, PAT-DX3. This allows the Company to commence work on developing a commercial scale manufacturing process for GMP-grade (Good Manufacturing Practice) PAT-DX3 deoxymab that is required to commence its clinical development.

The establishment of a stable, PAT-DX3-producing cell line is an important milestone that Patrys has achieved ahead of its scheduled timeline. Patrys has established that the selected cell line is both stable and able to deliver reproducible and consistent production of PAT-DX3 protein over time. This cell line will be stored as a Master Cell Bank (MCB) which will form the basis for all future production of PAT-DX3.

Studies conducted to date have shown that PAT-DX3 is able to cross the blood brain barrier in animal models of brain cancer and penetrate cancer cells. PAT-DX3 appears to have a higher affinity for DNA than PAT-DX1, suggesting that it has the potential to be more efficacious. In addition, Patrys has reported that PAT-DX3 was able to be used as a targeting agent to successfully deliver an anticancer drug in an animal model of human breast cancer. In view of this potential, the Company is actively exploring partnering opportunities for PAT-DX3 to be used in antibody drug conjugates (ADCs) for the targeted intracellular delivery of cancer drugs and a range of other payloads such as nucleic acids.

Patrys Chief Executive Officer and Managing Director, Dr. James Campbell said: "We are delighted to have identified a high-yielding stable cell line for the production of PAT-DX3 significantly ahead of schedule. There is a lot of interest in PAT-DX3 both as a therapeutic agent in its own right and for the intracellular delivery of therapeutic payloads into brain and other cells. With this key reagent now identified and in hand, we can rapidly move into developing a commercial-scale production process to support both the clinical and partnering opportunities we have for PAT-DX3. Most of the therapeutic antibodies in the market today are full-sized IgGs which should provide a rich experience base for facilitating the development of a process for the large scale production of clinical grade PAT-DX3 deoxymab."

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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).