



ASX & Media Release

28 July 2022

Quarterly Activities Report and 4C Quarterly Cash Flow Report

Highlights:

- \$250,000 non-dilutive funding to support research by the Telethon Kids' Institute into potential therapeutic applications for Patrys' deoxymabs;
- New research published showing potential to use PAT-DX1 to regulate Neutrophil Extracellular Traps that play a role in cancer metastasis and inflammation;
- Update on research collaboration with Imagination to develop new targeted antibody-based imaging agents for brain cancer;
- Subsequent to the quarter, successful engineering run of PAT-DX1 completed and granting of Canadian deoxymab patent;
- Balance sheet capacity with closing cash balance of \$7.8M at 30 June 2022, with an additional \$2M in short-term investments.

Melbourne, Australia; 28 July 2022: Patrys Limited (ASX: PAB, "Patrys" or the "Company"), a therapeutic antibody development company, today released its Quarterly Activities Report and Appendix 4C Quarterly Cash Flow report for the quarter ended 30 June 2022.

Patrys Chief Executive Officer and Managing Director, Dr. James Campbell said: "Patrys has made substantial progress this quarter building out and expanding the base of evidence supporting the range of potential clinical applications for our deoxymabs. This culminated in the successful completion of the second engineering run for PAT-DX1 in early July which resolved the technical issues we experienced in the engineering run earlier this year. Pleasingly, we have ample material to conduct the remaining preclinical GLP toxicology studies, and are currently testing to confirm that it meets specifications. With this successful result, we now have a very clear line of sight for getting PAT-DX1 into the clinic in 2023 and with the recent appointment of Dr. Rebecca Tunstall as Vice President, Corporate Development, we are actively starting to resource Patrys to achieve that significant milestone for the Company."

R&D Update

In June, Patrys announced that the Telethon Kids Institute in Western Australia had been awarded \$250,000 in funding from the Clinical Accelerator fund of Cure Brain Cancer Foundation (CBCF) to



support a program of research focused on potential therapeutic applications for Patrys' PAT-DX1 and PAT-DX3 deoxymab for the treatment and management of brain cancers. This is the first award of funding from CBCF under this newly established initiative and will support a program of research that will be led by Professor Terence Johns. Professor Johns is internationally recognised for his strong track record in translational research in brain cancer, and is the Professor of Paediatric Cancer Research, the Head of Telethon Kids Cancer Centre, and the Co-Director of the Australian Brain Cancer Research Alliance (ABCARA). The research will initially focus on the potential to use PAT-DX1 and PAT-DX3 deoxymabs to increase the effectiveness of standard-of-care (SoC) treatment for high-grade glioma (HGG) such as radiotherapy and temozolomide.

Also in June, Patrys announced publication of a paper reporting results from a range of studies in the peer-reviewed journal *ImmunoHorizons* that identified a new mechanism by which PAT-DX1 potentially could be used to reduce cancer metastasis. These studies, which were conducted by Patrys academic collaborators Dr James Hansen of Yale School of Medicine and Dr Kim O'Sullivan of Monash University, showed that PAT-DX1 may be used to regulate the formation of Neutrophil Extracellular Traps, or NETs. NETs are structures that are composed of DNA strands and certain proteins produced by neutrophils (a type of white blood cell) which are believed to play an important role in the establishment and maintenance of cancer cells, cancer spreading (metastasis) and in regulating inflammation. These results open up the possibility that PAT-DX1 may have an even broader role in developing treatments for a range of indications from metastatic cancer through to chronic inflammatory diseases.

During the quarter, Patrys expanded its research collaboration with Imagination Biosystems (ASX: IBX). In May 2021 we first reported initiation of our collaboration with Imagination to explore combination of Imagination's MagSense® technology and Patrys' DNA-targeting PAT-DX1 to develop a highly effective imaging agent with high specificity for hard-to-diagnose cancers such as brain cancer. Both companies have recently engaged The University of Sydney to further explore the utility of our combined technologies as a diagnostic imaging marker in a patient derived animal model of Glioblastoma Multiforme. We expect to report on the progress of these studies in 2023.

Patrys is pleased to announce that Canadian patent number: 3,027,960, titled "*Antibody-mediated autocatalytic, targeted delivery of nanocarriers to tumors*" has been granted. This new patent provides protection until June 2037. This patent covers Patrys novel deoxymab 3E10 nanoparticle technology (for example PAT-DX1-NP) and includes specific claims around the use of nanocarriers conjugated to the 3E10 targeting moiety for diagnosis and treatment of multiple types of cancer. This patent expands Patrys' intellectual property portfolio. The Company now has six patents covering the unconjugated form of deoxymab 3E10 (and derivatives thereof) granted in Europe, Japan, China, and three in the USA, and three patents granted covering nanoparticle conjugation in Australia, India and now Canada. This provides the Company with a significant and material patent estate covering the use of its deoxymab antibodies

Subsequent to the end of the quarter, in early July, Patrys announced it had successfully completed a second manufacturing run which used an updated purification process to produce large scale quantities of clinical grade PAT-DX1. The updated purification process appears to have addressed the



technical issues that resulted in low recoveries of drug product in the first engineering run as the initial yield has exceeded what the Company was expected based on previous, smaller-scale production runs. Drug material from this production run still needs to complete testing to ensure it meets specification. However, as PAT-DX1 from all prior manufacturing runs to date have met specification, Patrys believes the drug product from this engineering run will be sufficient to complete the remaining preclinical GLP toxicology studies that are planned from Q4 CY2022 to Q2 CY2023.

Corporate Update

In April, Patrys announced the appointment of Dr. Rebecca Tunstall as Vice President, Corporate Development. Dr. Tunstall spent thirteen years with the pharmaceutical company GlaxoSmithKline (GSK) Australia in a number of different leadership positions that were primarily focused on clinical cancer research and development. Dr. Tunstall will be a key member of Patrys' executive team focusing on preparations for Patrys' deoxymab clinical trials as well as broader executive functions.

During the quarter ended 30 June 2022, Patrys had net cash outflows from operating activities of A\$2,353k, with A\$1,915k invested in R&D activities. As Patrys progresses to the clinic expenditure on operating activities is anticipated to increase. At 30 June 2022, Patrys held A\$7.8M in cash and an additional A\$2M in short-term investments. Payments to related parties and their associates during the quarter, which are outlined in Section 6 of the accompanying Appendix 4C to this quarterly activity report, were A\$159k. These payments include non-executive director fees and consulting services as well as salary (including superannuation) for the CEO and Managing Director.

-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 www.patrys.com.



About Patrys' deoxymab platform:

Patrys' deoxymab platform is based on the deoxymab 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 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 can kill cancer cells, but appears to have little impact on normal cells. As a single agent, deoxymab has been shown to significantly enhance the efficacy of both chemo- and radiotherapies. Further, deoxymabs can be conjugated to nanoparticles to target delivery of chemotherapeutics and imaging agents to tumours.

Patrys has developed two humanised forms of deoxymab, both which have improved activity over the original deoxymab antibody. PAT-DX1 is a dimer (two joined subunits) of the short chain from the binding domain of deoxymab, 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.

Patrys has completed proof of concept studies showing that it is possible to conjugate small molecule payloads to PAT-DX3, and is advancing antibody drug conjugate (ADC) efforts using deoxymabs. In addition, 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 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. Six patents covering the unconjugated form of deoxymab (and derivatives thereof) have already been granted (Europe, Japan, China, and three in the USA), and three patent covering nanoparticle conjugation have been granted in Australia, India and Canada.

Appendix 4C

Quarterly cash flow report for entities subject to Listing Rule 4.7B

Name of entity

PATRYS LIMITED

ABN

97 123 055 363

Quarter ended ("current quarter")

30 June 2022

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	28
1.2	Payments for		
	(a) research and development	(1,915)	(7,883)
	(b) product manufacturing and operating costs	-	-
	(c) advertising and marketing	-	-
	(d) leased assets	-	-
	(e) staff costs*	(93)	(562)
	(f) administration and corporate costs	(267)	(1,169)
1.3	Dividends received	-	-
1.4	Interest received	3	11
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	1,189
1.8	Others - IP expenditure	(81)	(293)
1.9	Net cash from / (used in) operating activities	(2,353)	(8,679)
*A portion of staff costs are reallocated into payments for research and development.			

2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(g) entities	-	-
	(h) businesses	-	-
	(i) property, plant and equipment	(2)	(2)
	(j) investments in term deposits	(4)	(2,004)

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
	(k) intellectual property	-	-
	(l) other non-current assets	-	-
2.2	Proceeds from disposal of:		
	(a) entities	-	-
	(b) businesses	-	-
	(c) property, plant and equipment	-	-
	(d) investment in term deposits	-	4,000
	(e) intellectual property	-	-
	(f) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(6)	1,994

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	7,833
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	2	68
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	(345)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	2	7,556

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	10,158*	6,917*
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(2,353)	(8,679)

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(6)	1,994
4.4	Net cash from / (used in) financing activities (item 3.10 above)	2	7,556
4.5	Effect of movement in exchange rates on cash held	17	30
4.6	Cash and cash equivalents at end of period*	7,818*	7,818*

*In addition to the cash and cash equivalents balance above as at 30 June 2022, the Company holds an additional \$2million in term deposits (31 March 2022: \$2million and 30 June 2021: \$4million), classified in the statement of financial position as short-term investments.

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	5,813	8,153
5.2	Call deposits*	2,005*	2,005*
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	7,818**	10,158**

*The Call deposits included in item 5.2 above, have a maturity of 3 months.

**In addition to the cash and cash equivalents balance above as at 30 June 2022, the Company holds an additional \$2million in term deposits (31 March 2022: \$2million), classified in the statement of financial position as short-term investments.

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	159
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.		

7.	Financing facilities <i>Note: the term "facility" includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.</i>	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	Total financing facilities	-	-
7.5	Unused financing facilities available at quarter end		-
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well. N/A		

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(2,353)
8.2	Cash and cash equivalents at quarter end (item 4.6)	7,818
8.3	Unused finance facilities available at quarter end (item 7.5)	-
8.4	Total available funding (item 8.2 + item 8.3)	7,818
8.5	Estimated quarters of funding available (item 8.4 divided by item 8.1)	3.32
	<i>Note: if the entity has reported positive net operating cash flows in item 1.9, answer item 8.5 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.5.</i> <i>*In addition to the cash and cash equivalents balance noted above at 8.4, the Company holds an additional \$2 million in term deposits, classified in the statement of financial position as short-term investments, due to the maturity date being greater than 3 months. As a result, the estimated quarters of funding available will be greater than the figure provided in 8.5 due to holding these additional short-term investments. On a pro-forma basis with the \$2 million included, the Group would have estimated quarters of funding available amounting to 4.17.</i>	
8.6	If item 8.5 is less than 2 quarters, please provide answers to the following questions:	
	8.6.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
	Answer: N/A	
	8.6.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?	
	Answer: N/A	

	8.6.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?
	Answer: N/A
	<i>Note: where item 8.5 is less than 2 quarters, all of questions 8.6.1, 8.6.2 and 8.6.3 above must be answered.</i>

Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 28 July 2022

Authorised by: The Board.....
(Name of body or officer authorising release – see note 4)

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standard applies to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.