

SEPTEMBER 2024 QUARTERLY ACTIVITY REPORT AND APPENDIX 4C – MEMPHASYS LIMITED (ASX: MEM)

Memphasys Limited (MEM or the Company) is a reproductive biotechnology company dedicated to advancing assisted reproductive technology (ART) through the development of innovative medical devices, diagnostics, and media for human and animal applications.

The Company's most advanced product, the Felix™ System, is commercially available in Japan and progressing toward broader market reach.

This report provides an overview of significant achievements, ongoing initiatives, and financial activities for the quarter ending 30 September 2024.

Highlights for the Quarter

- Continued Commercial application of Felix™ System in Japan:** Memphasys, in partnership with Vitrolife Japan KK, continued to expand commercial application of the Felix™ System in Japan, a significant ART market representing around 14.5% of global demand.
- Progress in Clinical Trials for Felix™ System:** The human ART clinical trial for the Felix™ System reached 90% completion, positioning the Company to initiate a CE mark submission for European market entry targeted for H2 FY25.
- Launch of a Comprehensive Equine Fertility Study:** The three-year study in collaboration with the University of Newcastle and EquiBreedUK Ltd aims to establish Felix™ as the premier sperm isolation technology in the global equine artificial insemination (AI) market valued at USD \$681 million.
- Advancement in Oxidative Stress Measurement Technology (RoXsta™):** Memphasys filed a patent for its RoXsta™ system, which is designed for rapid and accessible antioxidant assessment, expanding potential applications in fertility and veterinary health.

1. Operational Activities

Felix™ System – Commercial Sales in Japan and Distribution Agreements in Canada and New Zealand

Memphasys continued to expand commercial application of the Felix™ System in Japan, facilitated by an exclusive distribution agreement with Vitrolife Japan KK, part of the global Vitrolife Group. The Vitrolife Group, a world leader in medical devices and consumables for reproductive health, employs over 1,100 people and serves more than 125 countries.

The Company's distribution agreements with Vitrolife extend beyond Japan to Canada and New Zealand, positioning Memphasys for significant market access across these regions.

The Felix™ System, designed for gentle and efficient sperm selection in ART procedures, has gained early traction in Japan's ART sector. This market success reflects growing confidence in the Felix™ technology, which offers an effective alternative to traditional methods like density gradient centrifugation (DGC) and swim-up. The introduction of Felix™ aligns with Memphasys' strategy to enter high-potential early-access markets to establish brand presence and user confidence before broader global expansion.

Japan is one of largest markets in early access category and represents ~14.5% of global IVF Market. Currently, the addressable market for the Felix System in Japan is 20% of total market, as there is no Japanese insurance reimbursement category for Felix™ System. Vitrolife Japan KK and Memphasys working to access remaining addressable market once current clinical trial is completed.

Felix™ System – Human ART Clinical Trial and Regulatory Progress

Memphasys' clinical trial for the Felix™ System continued its positive trajectory, reaching 90% completion with active patient recruitment at Monash IVF Group sites across Australia. This trial compares the Felix™ System with established methods such as DGC and swim-up, focusing on metrics like DNA damage reduction and sperm motility improvement. The trial outcomes, expected by year-end, will underpin Memphasys' CE mark submission for Europe, targeted for H2 FY25. The CE mark would expedite access to European markets, setting the stage for rapid commercial expansion across key regulated regions.

Equine Fertility Study to Support Global Commercialisation of the Felix™ System

Memphasys commenced a strategic three-year equine fertility study in collaboration with the University of Newcastle and EquiBreedUK Ltd. Initial findings demonstrated that the Felix™ System significantly enhances sperm quality in frozen-thawed stallion samples by isolating viable, low-ROS-producing spermatozoa with improved motility and DNA integrity. These results are essential for ART success in equine breeding, particularly in AI and intracytoplasmic sperm injection (ICSI) applications.

The equine fertility study, supported by leading Australian thoroughbred studs, is expected to accelerate commercial adoption of Felix™ in the USD \$681 million global equine AI market. Commercial sales are anticipated within 12 months, initially targeting non-thoroughbred breeders.

Additionally, insights from this study will enhance Felix™'s applicability to broader animal fertility markets, including bovine ART.

Oxidative Stress Measurement System (RoXsta™)

During the quarter, Memphasys advanced the development of its RoXsta™ oxidative stress measurement system, a rapid and accessible assay designed to detect oxidative stress within six minutes. This innovation has broad implications across various fields, including fertility, chronic disease diagnostics, and animal health. With a newly filed patent, RoXsta™ differentiates itself by eliminating the need for laboratory-based sample processing, making it a practical, point-of-care solution.

Memphasys is actively engaging with industry partners to bring RoXsta™ to market. The system's versatility allows for the assessment of oxidative stress across multiple media, such as semen, blood, and saliva, providing healthcare professionals, researchers, and veterinarians with real-time point of care and high throughput configurations for diagnostic support.

2. Financial Overview

Capital Raising and Funding Initiatives

- **Subscription Agreement with Major Shareholder:** Major shareholder Mr. Andrew Goodall subscribed for 62.5 million shares at an issue price of 0.8 cents per share, raising \$500,000 (before costs) for the Company. These funds contribute directly to the advancement of Memphasys' operational initiatives.
- **R&D Tax Rebate Financing:** Memphasys secured a \$586,000 short-term loan backed by its R&D tax rebate, which was received in October 2024. The funds will support ongoing commercial activities for the Felix™ System in Japan, complete the Australian clinical trial, advance RoXsta™ system development, and address working capital needs.
- **A\$2.0 Million Capital Raising:** In September, Memphasys launched a capital raising initiative comprising a Placement and a Share Purchase Plan (SPP), with a target of A\$2.0 million. The Placement, aimed at raising A\$1.0 million, received strong support from both existing shareholders and new sophisticated investors, and is expected to complete in November 2024. The SPP offers eligible shareholders the opportunity to participate under the same terms as the Placement, aiming to raise up to an additional A\$1.0 million.

Use of Proceeds

The proceeds from the Placement and SPP are strategically allocated to:

- Finalising the Felix™ clinical trial, advancing investor interest, and expediting distributor sales.
- Continuing the equine fertility study, where commercial outcomes are anticipated within the next 12 months.
- Conducting a study to establish baselines and thresholds for oxidative stress, which could play a critical role in reproductive performance assessment.

Convertible Note Extension and Cost-Reduction Measures

Peters Investments agreed to extend the maturity date of its Convertible Note until 30 June 2025, providing additional financial stability. In parallel, the Company continued implementing operational cost reductions to improve project development efficiency without affecting project timelines.

Related party payments

Payments to related parties amounting to \$83k are for salaries and superannuation.

3. Market Expansion and Strategic Partnerships

Distribution Partnerships and Market Expansion Strategy

Memphasys' distribution agreements with the Vitrolife Group extend across Japan, Canada, and New Zealand, establishing critical access to early-access ART markets. Vitrolife's established presence and reputation in the IVF sector provide a strong foundation for the commercialisation of Felix™ and support Memphasys' strategy to leverage leading distribution networks to build its market presence.

Animal Reproductive Health and Veterinary Markets

With the initiation of the equine fertility study, Memphasys is actively pursuing partnerships with global distributors to support Felix™'s entry into the equine breeding sector. The study's initial positive results position Felix™ as a leading sperm isolation technology in the animal fertility industry. The Company is exploring similar opportunities for RoXsta™'s oxidative stress measurement capabilities in animal health and veterinary applications.

This concludes Memphasys Limited's Quarterly Activities Report for Q1FY25. The Appendix 4C cash flow report accompanies this report.

Approved for release by the Board of Memphasys Limited

For further information, please contact:

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Appendix 4C

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

Name of entity

Memphasys Limited

ABN

33 120 047 556

Quarter ended ("current quarter")

30 September 2024

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers	-	-
1.2 Payments for		
research and development	(240)	(240)
product manufacturing and operating costs	(56)	(56)
advertising and marketing	-	-
leased assets	(14)	(14)
staff costs	(421)	(421)
administration and corporate costs	(143)	(143)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	-	-
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Other	-	-
1.9 Net cash from / (used in) operating activities	(874)	(874)

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3 months) \$A'000
2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	businesses	-	-
	property, plant and equipment	-	-
	investments	-	-
	intellectual property	-	-
	other non-current assets	(12)	(12)
2.2	Proceeds from disposal of:		
	(a) entities	-	-
	businesses	-	-
	property, plant and equipment	-	-
	investments	-	-
	intellectual property	-	-
	other non-current assets	43	43
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	31	31

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	500	500
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(35)	(35)
3.5	Proceeds from borrowings	950	950
3.6	Repayment of borrowings	(500)	(500)
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3 months) \$A'000
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	915	915

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	235	235
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(874)	(874)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	31	31
4.4	Net cash from / (used in) financing activities (item 3.10 above)	915	915
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	307	307

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	307	235
5.2	Call deposits	-	-
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)	307	235

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	83
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		Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
<i>Note: the term "facility" includes all forms of financing arrangements available to the entity.</i> <i>Add notes as necessary for an understanding of the sources of finance available to the entity.</i>			
7.1	Loan facilities	4,947	4,947
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	Total financing facilities	4,947	4,947
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.		
	Convertible Note \$3M plus interest; maturity date 31 December 2024. R&D loan \$586K plus interest, maturity date 30 November 2024. Short-term loan \$500K; fixed return by shares to the value of \$50K and free attaching options, repayable with 48 hours of a payment demand, which will occur either after the EGM (to be held on 25 October 2024) or on 30 October 2024.		

8. Estimated cash available for future operating activities		\$A'000
8.1	(a) Net cash from / (used in) operating activities (item 1.9)	(870)
8.2	(b) Cash and cash equivalents at quarter end (item 4.6)	307
8.3	(c) Unused finance facilities available at quarter end (item 7.5)	-
8.4	(d) Total available funding (item 8.2 + item 8.3)	307
	(e)	
8.5	Estimated quarters of funding available (item 8.4 divided by item 8.1)	0.35
	(f) <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>	

8.6 (g) 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: The company's net operating expenditure cashflows are expected to increase in the December quarter to pay normal and deferred operating expenses.

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: The Company received an R&D tax rebate of \$502k in October (after repayment of the \$586k R&D loan plus interest).

On 20 September 2024, the Company released a prospectus offering a capital raising of \$3M via a placement to sophisticated and professional investors to raise A\$1.0 million, a share purchase plan to raise up to A\$1.0 million, plus a potential top up offer of shares to raise a further \$1M.

It is expected that engagement with industry partners and new and existing shareholders will assist funding its operations.

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: Yes. The business expects to be able to continue its operations and meet its business objectives based on ongoing funding received to meet operational and product development activities.

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.

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: 30 October 2024

Authorised by: By the Board of Directors
(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 – e.g. 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.