

## DECEMBER 2023 QUARTERLY ACTIVITY REPORT AND APPENDIX 4C – MEMPHASYS LIMITED (ASX: MEM)

Memphasys Limited (**ASX: MEM**) is a reproductive biotechnology company developing novel medical devices, diagnostics, and media with application to assisted reproduction technologies in humans and animals.

MEM's most advanced product, the Felix™ System, which is now being sold commercially in Japan, is a patented, automated device for quickly and gently separating sperm from a semen sample for use in human Assisted Reproductive Technology procedures. In addition, MEM is undertaking several other projects, most notably RoXsta and AI-Port, in conjunction with MEM's research partner, the University of Newcastle (UoN) to extend its product pipeline.

Memphasys encloses its Appendix 4C cash flow statement for the quarter ended 31 December 2023 (**Q2FY24**), along with the following update.

### BUSINESS ACTIVITIES IN THE DECEMBER QUARTER (Q2FY 2024)

Although there was no change in the activities of the Company during Q2FY24, there were changes in the board and management. Alison Coutts stepped down from her role of CEO and Managing Director in late November. Alison will continue working with Memphasys to provide consultancy services. Dr. David Ali has stepped into the role of Acting CEO and Managing Director. Andrew Goodall also retired from the board.

The receipt of \$1.3m R&D tax refund and \$2.1m placement in Q2FY24 allowed the Company to catch up with creditors (in particular, the University of Newcastle) and repay the R&D and bridging loans received to cover short-term funding gaps.

The Company has also received ongoing support from Peters Investments Pty Ltd, which has agreed to extend the maturity date for its 3m convertible notes to 15 February 2024.

Administration and corporate costs include the payment of non-executive director fees of \$56,757 and salaries and super of \$273,041 paid to Alison Coutts and Dr. David Ali, and part of termination payment to Alison Coutts.

During Q2FY24 MEM decreased consultants' fees, given that two senior executives could fill activities previously undertaken by these consultants.

### FELIX COMMERCIAL ROLL-OUT

#### VITROLIFE DISTRIBUTION AGREEMENT IN JAPAN

In Q1FY24, MEM signed an exclusive five-year distribution agreement with Vitrolife Japan KK (Vitrolife KK) to sell and distribute Felix™ in Japan, one of the top five addressable markets globally for Felix™ with a potential market opportunity exceeding A\$100 million.

During Q2FY24, Memphasys received a second order of 150 Felix cartridges for roll out to 5 new KOL clinics.

Vitrolife and Memphasys commenced discussions to implement a standing order system to smooth manufacturing and inventory to accommodate the anticipated growth in Felix™ uptake and commercial sales in 2024.

In Q2FY24, Memphasys executed additional five-year distribution agreements with Vitrolife in Canada and New Zealand. Orders are expected to be placed in Q3-Q4FY24. These markets present a strong opportunity for early

commercial access to build the Felix™ brand and access key opinion leaders in those markets. For these reasons, entry into markets with lower regulatory hurdles is an essential commercial pathway for products such as Felix™.

## **OTHER EARLY ACCESS JURISDICTIONS**

MEM is continuing to seek distribution in other early access jurisdictions with various potential distributors, including Vitrolife.

### **Australia**

While not a top five target market in terms of sales, Australia is MEM's home market and is important to obtaining regulatory clearance for Felix™, not only for Australian access, but also for access to other markets, notably India and various Asian and Middle Eastern countries.

In Q2FY24, MEM's clinical trial with Monash IVF Group Ltd (MVF) steadily gained momentum in the swim-up arm, which is now virtually complete. Based on current indications, MEM expects the trial to be completed by Q2FY25 and the results analysis and regulatory submission to be filed by Q3-Q4FY25. The results of the MVF clinical study will be filed as a formal regulatory submission with the Therapeutic Goods Administration (TGA).

MEM is evaluating the possibility of adding an international institution that predominantly uses DGC (Density Gradient Centrifugation). DGC is a common method used by clinics globally, but it is not a common sperm preparation method used by Monash IVF. It is expected that the addition of this institution will expedite the trial completion.

## **NEW PRODUCT DEVELOPMENT**

### **ROXSTA (FORMERLY ROSA)**

RoXsta is an in-vitro diagnostic device that assesses semen and other bodily fluids for oxidative stress load. Oxidative stress is linked to human infertility and is an underlying factor in Alzheimer's disease, diabetes, and heart disease. This diagnostic has an estimated addressable market size of more than A\$2 billion, just in the human fertility market application alone.

The development of RoXsta progressed in Q2FY24 with MEM's external design partner beginning to build a prototype. The initial focus has been modified to develop disposable cartridges ("cuvettes") rather than an entire device. This change will enable acceleration of the testing and validation of the four RoXsta assays at University of Newcastle. The work, by enabling significantly more rapid testing, will enable MEM to expedite broadening its current patent application to other fluids apart from semen.

Like Felix™, RoXsta's accuracy will also be independently tested and published by MEM's KOL partners to build a body of clinical data and support MEM's submission for regulatory clearance in high access markets.

MEM's initial focus for RoXsta's commercialisation will be the reproductive science research market, which has minimal regulatory hurdles and early access human fertility markets such as Japan.

MEM applied for a patent for RoXsta in the second half of the 2023 financial year and now plans to broaden the patent application by extending it to other bodily fluids apart from semen.

### **ARTIFICIAL INSEMINATION-PORT (AI-PORT)**

This technology has been developed for the purpose of maintaining the viability of livestock semen for up to seven days at a temperature range of 22 – 25 degrees Celsius. This would enable collection and transportation of semen without needing cryopreservation and offers considerable efficiencies over current practice. AI-Port has an estimated addressable beef (non-dairy) market size of nearly A\$2.4 billion.

A field trial was run in November 2023 with four bulls across 146 cows at a farm in the NSW Hunter region. AI-Port pregnancies were significantly higher than those achieved in the initial pilot study conducted previously. However, AI-Port's results are not yet equivalent or superior to traditional AI. The results are believed to be heading in the right direction and offer valuable insights for improvement in identifiable areas. Media optimisation work will commence by University of Newcastle researchers during the period from January to June 2024.

MEM will be seeking partners with access to distribution networks both locally and internationally.

This concludes MEM's Quarterly Activities Report for Q2FY24. The Appendix 4C cashflow report is attached.

Approved for release by the Board of Memphasys Limited

**For further information, please contact:**

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Acting CEO and Managing Director  
Memphasys Limited  
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## Appendix 4C

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

**Name of entity**

Memphisys Limited

**ABN**

33 120 047 556

**Quarter ended ("current quarter")**

31 December 2023

<b>Consolidated statement of cash flows</b>	<b>Current quarter \$A'000</b>	<b>Year to date (6 months) \$A'000</b>
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	18	36
1.2 Payments for		
(a) research and development	(660)	(763)
(b) product manufacturing and operating costs	(98)	(101)
(c) advertising and marketing	(11)	(27)
(d) leased assets	(48)	(95)
(e) staff costs	(708)	(1,123)
(f) administration and corporate costs	(373)	(722)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	4	6
1.5 Interest and other costs of finance paid	(50)	(50)
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	1,315	1,315
1.8 Other	5	5
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(606)</b>	<b>(1,519)</b>
<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) businesses	-	-
(c) property, plant and equipment	(39)	(39)
(d) investments	-	-
(e) intellectual property	-	-
(f) other non-current assets	-	-

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
2.2	Proceeds from disposal of:		
	(a) entities	-	-
	(b) businesses	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(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)	-	-
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>(39)</b>	<b>(39)</b>
<b>3. Cash flows from financing activities</b>			
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	1,711	1,711
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	(150)	(150)
3.5	Proceeds from borrowings	323	679
3.6	Repayment of borrowings	(1,296)	(1,296)
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>588</b>	<b>944</b>
<b>4. Net increase / (decrease) in cash and cash equivalents for the period</b>			
4.1	Cash and cash equivalents at beginning of period	81	638
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(606)	(1,519)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(39)	(39)

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

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (6 months) \$A'000</b>
4.4	Net cash from / (used in) financing activities (item 3.10 above)	588	944
4.5	Effect of movement in exchange rates on cash held	-	-
<b>4.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>24</b>	<b>24</b>

<b>5.</b>	<b>Reconciliation of cash and cash equivalents</b> at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	<b>Current quarter \$A'000</b>	<b>Previous quarter \$A'000</b>
5.1	Bank balances	24	81
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
<b>5.5</b>	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>24</b>	<b>81</b>

<b>6.</b>	<b>Payments to related parties of the entity and their associates</b>	<b>Current quarter \$A'000</b>
6.1	Aggregate amount of payments to related parties and their associates included in item 1	313
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
<i>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.</i>		

<b>7. Financing facilities</b>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
<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>		
7.1 Loan facilities	3,934	3,934
7.2 Credit standby arrangements	-	-
7.3 Other (please specify)	-	-
<b>7.4 Total financing facilities</b>	<b>3,934</b>	<b>3,934</b>
<b>7.5 Unused financing facilities available at quarter end</b>		-
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.	<p>Convertible Note (\$3M) plus interest totalling \$3,695,043 (please refer to Resolution 1 in Notice of Meeting released to ASX on 10/01/2024).</p> <p>Related party short-term unsecured loans (including accrued interest) totalling \$238,836 (please refer to Resolutions 3 and 4 in Notice of Meeting released to ASX on 10/01/2024).</p>	

<b>8. Estimated cash available for future operating activities</b>	<b>\$A'000</b>
8.1 Net cash from / (used in) operating activities (item 1.9)	<b>(606)</b>
8.2 Cash and cash equivalents at quarter end (item 4.6)	<b>24</b>
8.3 Unused finance facilities available at quarter end (item 7.5)	-
8.4 Total available funding (item 8.2 + item 8.3)	<b>24</b>
<b>8.5 Estimated quarters of funding available (item 8.4 divided by item 8.1)</b>	<b>0.04</b>
<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 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?	
<p>Answer: No. The R&amp;D tax rebate is received annually in Q3 or Q4 of each calendar year. The company will, however, continue its research &amp; development program and increase production of Felix cartridges to meet increased demand from new markets in New Zealand and Canada which is in addition to the Japanese market, and increase marketing to expand into new low regulatory markets.</p>	
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?	
<p>Answer: Yes. The company has undertaken a non-renounceable rights issue to raise \$2.3M before costs, which was completed in January 2024.</p>	

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. In addition to the recent capital raise, the business expects to be able to continue its operations and meet its business objectives on the basis it has the necessary licences, agreements and technical personal in place to ensure the Company continues to advance the commercialisation of the Felix Device (and other technologies). The priority of new management is to expedite and complete the Felix study, enabling the company to proceed with TGA approval which will allow the company to expand into new markets, both locally and mainly in Asia.

*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: 25 January 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 – 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.