

BREAKTHROUGH PEPTIDE THERAPEUTICS

Operational update and conference call - September quarter

PERTH, Australia, 25th October 2017: Phylogica Limited (ASX:PYC) (**Phylogica** or the **Company**), developer of a leading intracellular drug delivery platform technology, is pleased to update shareholders on progress made during the September quarter in validating the platform technology and progressing specific cargoes. Progress highlights include:

- Identification of additional Functional Penetrating Peptides (FPP) from the company's Phylomer libraries with greater potency than our previous leading candidate from our platform delivery technology (designated as FPP01.1 in the diagram below);

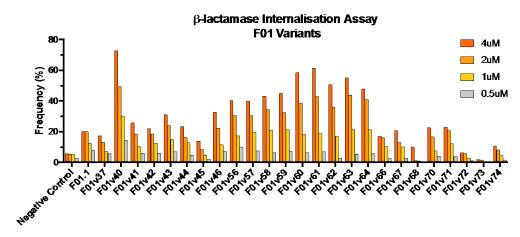


Figure 1: The performance of variants of our previous lead FPP, designated as F01.1 at a range of different concentrations (represented by different colour codes) ranging from 0.5uM (lowest dose) to 4uM (highest dose). Measured here is the ability of these FPPs to deliver a cargo, the enzyme beta-lactamase inside the cell (measured as a percentage in the vertical plane) against the control. The higher the bar in the chart, the greater the ability of the FPP to reach the inside of the cell.

- Successful optimisation of the drug like properties of our FPPs providing not only improved performance of our leading FPP candidates, but also proof of concept that these optimisation techniques are able to be applied to future generations of FPPs;
- Evaluation of additional target cells (in liver, muscle and T-cells) to expand the potential applications of the delivery technology to a wider range of cargoes;

- Further progression of our Stat5 oncology program identifying several proprietary Phylomer inhibitors of STAT5 (iSTATs), an important drug target in blood cancers such as chronic myelogenous leukaemia, with suitable properties across a range of assays. These iSTATs have now been confirmed to bind their target STAT5; and
- In-house operational improvements including automation of assays required to screen Phylogica's libraries for specific FPPs (for a particular cargo or cell line) enabling a more efficient evaluation of our ability to deliver future partners' cargoes.
- Granting of a US patent covering the identification of Phylomers with the ability to enter specific endothelial cells in the brain, demonstrating:
 - Phylogica's capability to develop and deliver bespoke screening services for pharmaceutical companies.
 - Value of Phylogica's Phylomer library which contains cell specific peptides that can target high value cells.

Relevance of Progress

The encouraging progress made in the areas of identifying and optimising FPPs is particularly important given that we will progress to *in vivo* assessment of our delivery technology for a range of cargoes in the first half of 2018.

Having identified more potent FPPs, we will now evaluate each FPP in a functional *in vitro* assay before selecting the FPPs that will be conjugated to each of the cargoes evaluated in the *in vivo* models.

These FPP-selection activities and preparation of the animal models for *in vivo* experiments represent the company's focus for the coming quarter (Q4 2017). Based on the results described above, the company expects to have multiple FPPs performing at 40-fold more efficient than the current gold standard delivery approach (Tat) for the critical *in vivo* evaluation of the company's core delivery technology in early 2018.

The operational improvements allow us to respond more efficiently to specific requests from future partners to target particular cell types within an organ and thereby provide a more attractive partnering skill set to complement our *in vivo* evaluation of the FPP delivery technology.

Phylogica's lead in-house proprietary Myc-inhibitor will be one of the cargoes evaluated in the upcoming *in vivo* experiments.

Conference call details

Shareholders are invited to join a conference being held at 11.30am AEST / 8.30am AWST on Thursday October 26, hosted by CEO, Stephanie Unwin and CSO, Dr Robert Hayes, to discuss activity during the quarter, followed by Q&A with participants.

To pre-register for the call, with diary note automatically sent to your calendar, <u>click</u> <u>here</u>.

Conference code: 516 836

Dial in numbers:

Australia Toll Free:1 800 558 698Australia (Alternate)02 9007 3187New Zealand Toll Free:0800 453 055Hong Kong:800 966 806Singapore:800 101 2785United Kingdom:0800 051 8245United States:(855) 881 1339

ENDS

For further information, please contact:

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About Phylogica

Phylogica Limited (ASX: PYC) is a biotech company focused on commercialising its intracellular drug delivery platform and panning its Phylomer libraries to identify drug cargoes for development against a wide range of disease targets. Phylogica controls access to the world's most structurally diverse source of peptides called Phylomers, which have the ability to act as effective drug delivery agents and drug cargoes, penetrating cell membranes to reach previously 'undruggable' targets across a range of disease types. Phylogica's platform of proprietary cell penetration peptides is showing promise in delivering a diverse range of drug cargoes into cells, and the company's lead asset program has identified a phylomer which can inhibit Myc, a protein responsible for the regulation of cancer cell growth. The company has had collaborations with several pharmaceutical companies including Roche, Medimmune, Pfizer, Janssen and is currently working with Genentech.

Forward looking statements

Any forward-looking statements in this ASX announcement have been prepared on the basis of a number of assumptions which may prove incorrect and the current intentions, plans, expectations and beliefs about future events are subject to risks, uncertainties and other factors, many of which are outside Phylogica's control. Important factors that could cause actual results to differ materially from assumptions or expectations expressed or implied in this ASX announcement include known and unknown risks. Because actual results could differ materially to assumptions made and Phylogica's current intentions, plans, expectations and beliefs about the future, you are urged to view all forward-looking statements contained in this ASX announcement with caution. Phylogica undertakes no obligation to publicly update any forward-looking statement whether as a result of new information, future events or otherwise.

This ASX announcement should not be relied on as a recommendation or forecast by Phylogica. Nothing in this ASX announcement should be construed as either an offer to sell or a solicitation of an offer to buy or sell shares in any jurisdiction.

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Phylogica Ltd

ABN 48 098 391 961

+Rule 4.7B

Appendix 4C

Quarterly report for entities subject to Listing Rule 4.7B

Introduced 31/03/00 Amended 30/09/01, 24/10/05, 17/12/10, 01/09/16

Name of entity

| PHYLOGICA LIMITED | |
|-------------------|-----------------------------------|
| ABN | Quarter ended ("current quarter") |
| 48 098 391 961 | 30 SEPTEMBER 2017 |

| 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 | | |
| | (a) research and development | (1,439) | (1,439) |
| | (b) product manufacturing and operating costs | - | - |
| | (c) advertising and marketing | - | - |
| | (d) leased assets | - | - |
| | (e) staff costs | (468) | (468) |
| | (f) administration and corporate costs | (236) | (236) |
| 1.3 | Dividends received (see note 3) | - | - |
| 1.4 | Interest received | 44 | 44 |
| 1.5 | Interest and other costs of finance paid | - | - |
| 1.6 | Income taxes paid | - | - |
| 1.7 | Government grants and tax incentives | - | - |
| 1.8 | R&D Rebate | - | - |
| 1.9 | Net cash from / (used in) operating activities | (2,099) | (2,099) |

| 2. | Cash flows from investing activities | | |
|-----|--------------------------------------|-----|-----|
| 2.1 | Payments to acquire: | | |
| | (a) property, plant and equipment | (8) | (8) |
| | (b) businesses (see item 10) | - | - |
| | (c) investments | - | - |
| | (d) intellectual property | - | - |
| | (e) other non-current assets | - | - |

⁺ See chapter 19 for defined terms

| Cons | solidated statement of cash flows | Current quarter \$A'000 | Year to date (3 months) \$A'000 |
|------|---|----------------------------|---------------------------------------|
| 2.2 | Proceeds from disposal of: | | |
| | (a) property, plant and equipment | - | - |
| | (b) businesses (see item 10) | - | - |
| | (c) investments | - | - |
| | (d) intellectual property | - | - |
| | (e) 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 | (8) | (8) |
| 3. | Cash flows from financing activities | | |
| 3.1 | Proceeds from issues of shares | - | - |
| 3.2 | Proceeds from issue of convertible notes | - | - |
| 3.3 | Proceeds from exercise of share options | 135 | 135 |
| 3.4 | Transaction costs related to issues of shares, convertible notes or options | - | - |
| 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 | 135 | 135 |
| 4. | Net increase / (decrease) in cash and cash equivalents for the period | | |
| 4.1 | Cash and cash equivalents at beginning of quarter/year to date | 9,940 | 9,940 |
| 4.2 | Net cash from / (used in) operating activities (item 1.9 above) | (2,099) | (2,099) |
| 4.3 | Net cash from / (used in) investing activities (item 2.6 above) | (8) | (8) |
| 4.4 | Net cash from / (used in) financing activities (item 3.10 above) | 135 | 135 |
| 4.5 | Effect of movement in exchange rates on cash held | - | - |
| 4.6 | Cash and cash equivalents at end of quarter | 7,968 | 7,968 |

⁺ See chapter 19 for defined terms 1 September 2016

| 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 | 91 | 914 |
| 5.2 | Call deposits | 7,877 | 9,026 |
| 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) | 7,968 | 9,940 |

| 6. | Payments to directors of the entity and their associates | Current quarter \$A'000 |
|-----|--|----------------------------|
| 6.1 | Aggregate amount of payments to these parties included in item 1.2 | 468 |
| 6.2 | Aggregate amount of cash flow from loans to these parties included in item 2.3 | - |

6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2

Directors Fees and Superannuation

| 7. | Payments to related entities of the entity and their associates | Current quarter \$A'000 |
|-----|---|----------------------------|
| 7.1 | Aggregate amount of payments to these parties included in item 1.2 | - |
| 7.2 | Aggregate amount of cash flow from loans to these parties included in item 2.3 | - |
| 7.3 | Include below any explanation necessary to understand the transaction items 7.1 and 7.2 | ons included in |

| 8. | Financing facilities available Add notes as necessary for an understanding of the position | Total facility amount at quarter end \$A'000 | Amount drawn at quarter end \$A'000 |
|-----|--|--|---|
| 8.1 | Loan facilities | - | - |
| 8.2 | Credit standby arrangements | - | - |
| 8.3 | Other (please specify) | - | - |
| | 1 | Programme and the second secon | |

8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.

| N/A | | |
|-----|--|--|
| | | |
| | | |

⁺ See chapter 19 for defined terms

| 9. | Estimated cash outflows for next quarter | \$A'000 |
|-----|---|---------|
| 9.1 | Research and development | 1,800 |
| 9.2 | Product manufacturing and operating costs | - |
| 9.3 | Advertising and marketing | - |
| 9.4 | Leased assets | - |
| 9.5 | Staff costs | 260 |
| 9.6 | Administration and corporate costs | 250 |
| 9.7 | Other: Consulting – business strategy and execution | 1,500 |
| 9.8 | Total estimated cash outflows | 3,810 |

| 10. | Acquisitions and disposals of business entities (items 2.1(b) and 2.2(b) above) | Acquisitions | Disposals |
|------|---|--------------|-----------|
| : | Name of entity | - | - |
| 10.2 | Place of incorporation or registration | - | - |
| 10.3 | | - | - |
| 10.4 | Total net assets | - | - |
| 10.5 | Nature of business | - | - |

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.

Sign here:

(Company secretary)

Date: 25th October 2017

Notes

Print name: Kevin Hart

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.

2. If this quarterly 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 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.

⁺ See chapter 19 for defined terms

| 2 | Dividends received may be elegated either as each flows from energing activities or each flows from |
|----|--|
| 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. |
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⁺ See chapter 19 for defined terms 1 September 2016