

ASX Announcement

22 May 2023

Avecho enters strategic partnership with Arthur Group, licensing TPM for development of enhanced cancer drugs

Highlights:

- Avecho has today signed a licensing and development agreement with the Arthur Group LLC, entering a strategic partnership for the development of a series of leading cancer drugs with TPM®, replacing the adverse solvents or surfactants normally required.
- The agreement includes rights to five separate oncology products, representing a combined US market of US \$2.92 billion.
- Under the terms of the agreement, Arthur Group will pay for all formulation, non-clinical and clinical development of the products – and Avecho will receive 30% of the revenue from licensing and 30% of the net profit from commercialisation of these products.
- Completion of initial formulation development is expected to take approximately 12-18 months.

Melbourne, Australia, 22 May 2023: [Avecho Biotechnology Limited](#) (ASX:AVE, "Avecho", or "the Company") has today announced it has secured a licensing and development agreement with Arthur Group, entering a strategic partnership for the development of a series of cancer drugs solubilised using TPM®.

Avecho has previously demonstrated that TPM can dissolve poorly-water soluble injectable drugs that require adverse solvents or surfactants to dissolve. Replacing adverse excipients with TPM, a form of Vitamin E, supports safer, clinician preferred dosage forms. A large number of high potency oncology drugs have poor aqueous solubility, and require adverse solvents such as cremophor, that come with a range of adverse side effects. These side effects include hypersensitivity, hyperlipidaemia, abnormal lipoprotein patterns, aggregation of erythrocytes and peripheral neuropathy.

Founded in December 2015, Arthur Pharma focuses on the research and development, manufacturing, and marketing of complex generic, 505B2, and NCE pharmaceutical products globally, with a focus on North American, European, and Asian market. The company has research and development centres in Princeton, and Monmouth Junction, New Jersey, USA, and Zhejiang, China, which can develop tablets, capsules, injections, semi-solid and other dosage forms. Through the CMO cooperation, the company has several API, oncology, PFS, injector pen cartridge, lyophilization injectable and oral solid manufacturing facilities in North America and Asia and has over one hundred development and marketing partners in Asia, the United States, Canada, and Europe. Arthur Group currently develops and manufactures 23 commercial oncology products.

Cremophor-free formulations hold promising potential for the oncology injection market. In addition to being safer, such innovative formulations are expected to boost productivity levels in hospitals, as cremaphor prevents the use of standard hospital equipment such as polyvinyl chloride infusion bags. Cremophor-free formulations are expected to simplify patient management by eliminating the need for premedication to prevent hypersensitivity. It is anticipated that cremaphor free oncology products, made possible using TPM, could displace existing oncology products that contain the adverse excipient.

Arthur Group CEO, Dr Isaac Liu, said: *"We are very interested to begin formulation work with TPM. Should it prove possible to replace cremaphor or other adverse excipients in existing oncology therapies with a form of vitamin E that is safe for injection, we would anticipate the product to have significant global interest. We are interested in extending the cooperation into a portfolio of cancer drugs."*

Arthur Group CSO, Dr Gopi Chand Inti, said: *"After learning about TPM, we thought it should help to reduce the adverse reactions and risks associated with existing oncology medications. We already have significant experience in the development of injectable products using standard excipients, so we are confident we can complete the development of new formulations using TPM."*

The agreement is a promising extension of Avecho's TPM business development program and will initially encompass five oncology drugs. The combined market in the US for these commercial products is approximately US \$2.92 billion¹. Arthur Group will pay for all formulation, non-clinical and clinical development of the products. Avecho will receive 30% of any revenue from licensing and 30% of the net profit from commercialisation of these products in the future.

Avecho CEO, Dr Paul Gavin, said: *"Working with credible third parties like Arthur Group to leverage the tested capabilities of TPM in enhancing the performance of its cancer drug portfolio, is deeply rewarding for our team and supportive of our Company's current commercial focus. Arthur Group will start with initial formulation screening of its licensed drugs to determine which are most compatible with TPM – the most receptive drugs to be prioritised first."*

The Arthur Group has already determined the research and development work required for each molecule across four stages; formulation development, non-clinical testing, clinical trials and registration. It is anticipated that the initial formulation step will take 12-18 months.

For enquiries, please contact

Paul Gavin
Chief Executive Officer
+61 3 9002 5000

Questions related to the announcement are welcome via our [InvestorHub platform](#).

This announcement has been authorised by the Board of Directors of Avecho Biotechnology Limited.

About Avecho

Avecho Biotechnology Limited (ASX: AVE) develops and commercialises innovative Human and Animal Health products using its proprietary drug delivery system called TPM® (Tocopherol Phosphate Mixture). TPM® is derived from Vitamin E using unique, proprietary and patented processes and is proven to enhance the solubility and oral, dermal and transdermal absorption of drugs and nutrients.

Avecho's major projects include delivering TPM® enhanced injectable, oral and topical products for the human health market, including the recently announced application of TPM® to cannabinoids. The Company is also developing TPM® to enhance feed efficiency and health of livestock.

See more here - avecho.com.au

Forward-Looking Statements

Certain statements in this announcement are forward looking statements. Forward looking statements can generally be identified by the use of words such as "anticipate", "estimate", "expect", "project", "intend", "plan", "believe", "target", "may", "assume" and words of similar import. These forward-looking statements speak only as at the date of this announcement. These statements are based on current expectations and beliefs and, by their nature, are subject to a number of known and unknown risks and uncertainties that could cause the actual results, performances and achievements to differ materially from any expected future results, performance or achievements expressed or implied by such forward looking statements.

¹ IQVIA market data 17 May 2023.

For personal use only

No representation, warranty or assurance (express or implied) is given or made by Avecho that the forward-looking statements contained in this announcement are accurate, complete, reliable or adequate or that they will be achieved or prove to be correct. Except for any statutory liability which cannot be excluded, Avecho and its respective officers, employees and advisers expressly disclaim any responsibility for the accuracy or completeness of the forward-looking statements and exclude all liability whatsoever (including negligence) for any direct or indirect loss or damage which may be suffered by any person as a consequence of any information in this announcement or any error or omission therefrom.

Subject to any continuing obligation under applicable law or relevant listing rules of the ASX, Avecho disclaims any obligation or undertaking to disseminate any updates or revisions to any forward-looking statements in these materials to reflect any change in expectations in relation to any forward-looking statements or any change in events, conditions or circumstances on which any statement is based. Nothing in these materials shall under any circumstances create an implication that there has been no change in the affairs of Avecho since the date of the announcement.

For personal use only