

# THERATECHNOLOGIES UNVEILS NEW POSITIVE DATA FOR ITS INVESTIGATIONAL PEPTIDE-DRUG CONJUGATES TARGETING SORTILIN POSITIVE CANCERS

Significant inhibition of vasculogenic mimicry observed with TH1902 and TH1904

New peptide-curcumin conjugate, TH1901, shows 100 times greater anti-cancer cell proliferation activity than unconjugated curcumin in vitro

Results to be presented at American Association for Cancer Research (AACR)

Virtual Annual Meeting II

**Montreal, Canada – May 15, 2020** – Theratechnologies Inc. (Theratechnologies) (TSX: TH) (NASDAQ: THTX), a commercial-stage biopharmaceutical company, today announced new positive results for its investigational Sortilin (SORT1) targeting peptidedrug conjugates (PDCs) which will be presented in three posters during AACR's virtual annual meeting II on June 22, 2020.

"We are very pleased with the results being presented at AACR. The strong activity of our technology against various cancers is very promising. Furthermore, it has shown a significant impact on vasculogenic mimicry, a process which is known to be associated with treatment resistance, tumor progression and poorer prognosis for patients", said Dr. Christian Marsolais, Senior Vice President and Chief Medical Officer, Theratechnologies.

#### Inhibition of Vasculogenic Mimicry

Vasculogenic mimicry (VM) is the formation of microvascular channels in aggressive, metastatic and resistant cancers. Recently published studies indicate that the presence of VM is known to contribute to tumor progression, dissemination of cancer metastases and chemoresistance. It is associated with poorer prognosis in many types of aggressive cancers including ovarian and triple-negative breast cancers.

Results indicate that, *in vitro*, TH1904 (peptide-doxorubicin conjugate) stopped the formation of VM in an ovarian cancer model at very low doses whereas doxorubicin alone had no effect. Strong inhibition of VM in a triple-negative breast cancer model was also observed with very low doses of TH1902 (peptide-docetaxel conjugate) compared to docetaxel alone.

The abstract "Sortilin receptor-mediated novel cancer therapy: A targeted approach to inhibit VM in ovarian and breast cancers" is now available online at aacr.org.

### Peptide-Curcumin Conjugate (TH1901)

Various phytochemicals found in plants, such as curcumin, have been shown to have antiproliferative, antiangiogenic and apoptotic properties against various cancers such as colorectal, ovarian and breast cancers.

Curcumin was conjugated to Theratechnologies' investigational SORT1 targeting peptide. TH1901 was tested for its anti-proliferative effect against various cancer cells *in vitro* and compared to the effect of unconjugated curcumin.

Results indicate that TH1901 has up to 100 times greater anti-proliferation activity against cancer cells than curcumin. In addition, TH1901 induced cell apoptosis and it had a stronger effect on TNF-induced intracellular signaling pathways involved in proinflammation processes compared to curcumin alone.

"Results obtained with the peptide-curcumin conjugate demonstrate the versatility and potential broad applications of Theratechnologies' SORT1+ technology in cancer," added Dr. Marsolais.

Theratechnologies is currently evaluating the further development of TH1901.

The abstract "TH1901, a novel Curcumin-peptide conjugate for the treatment of Sortilin-positive (SORT1+) cancer" is now available online at <u>aacr.org</u>.

# TH1902 induced complete tumor regression in Triple-Negative Breast Cancer with no apparent decrease in neutrophil count

Triple-negative breast cancer (TNBC), which represents approximately 10 to 20% of breast cancers, does not express estrogen receptors, progesterone receptors or human epidermal growth factor receptor 2 (HER2). It is more aggressive than other breast cancers. It has been observed that TNBC overexpresses SORT1 receptors.

TH1902 was tested in vivo to assess its effect on TNBC compared to docetaxel alone.

Results indicate that docetaxel administered alone at one quarter of its maximum tolerated dose (MTD) (3.75 mg/kg/week) had no apparent effect on tumor burden in a mouse model. In contrast, TH1902 administered at a comparable dose led to strong and sustained tumor inhibition.

TH1902 has also demonstrated a better safety profile than the administration of docetaxel alone. While a single 15mg/kg dose of docetaxel induced neutropenia, no apparent change in neutrophil counts was observed in mice treated with equivalent doses of TH1902 for up to 6 cycles.

The abstract "A novel Sortilin-targeted docetaxel peptide conjugate (TH1902), for the treatment of Sortilin-positive (SORT1+) triple-negative breast cancer" is now available online at <u>aacr.org</u>.

### About Theratechnologies' SORT1+ technology

Theratechnologies has developed a peptide which specifically targets Sortilin (SORT1) receptors. SORT1 is overexpressed in ovarian, triple-negative breast, skin, lung, colorectal and pancreatic cancers, among others. SORT1 plays a significant role in protein internalization, sorting and trafficking, making it an attractive target for drug development.

Commercially available anticancer drugs, like docetaxel, doxorubicin or tyrosine kinase inhibitors are conjugated to Theratechnologies' investigational novel peptide to

specifically target Sortilin receptors. This could potentially improve the efficacy and safety of those agents.

Theratechnologies intends to submit an IND to the FDA for a first in-human clinical trial for TH1902 before the end of 2020.

The Canadian Cancer Society and the Government of Quebec, through the *Consortium Québécois sur la découverte du medicament* (CQDM), will contribute a total of 1.4 million dollars towards some of the research currently being conducted for the development of Theratechnologies' targeted oncology platform.

### **About Theratechnologies**

Theratechnologies (TSX: TH) (NASDAQ: THTX) is a commercial-stage biopharmaceutical company addressing unmet medical needs by bringing to market specialized therapies for people with orphan medical conditions, including those living with HIV. Further information about Theratechnologies is available on the Company's website at <a href="https://www.secarcom">www.secarcom</a> and on EDGAR at <a href="https://www.secarcom">www.secarcom</a> and on EDGAR at <a href="https://www.secarcom">www.secarcom</a>

## Forward-Looking Information

This press release contains forward-looking statements and forward-looking information, or, collectively, forward-looking statements, within the meaning of applicable securities laws, that are based on our management's beliefs and assumptions and on information currently available to our management. You can identify forward-looking statements by terms such as "may", "will", "should", "could", "would", "outlook", "believe", "plan", "envisage", "anticipate", "expect" and "estimate", or the negatives of these terms, or variations of them. The forward-looking statements contained in this press release include, but are not limited to, statements regarding the effects, safety and efficacy of Theratechnologies' peptide-conjugates derived from its oncology platform on the potential treatment of various types of cancer and timelines to initiate a first-in-human clinical trial with TH1902 in cancer patients .

Forward-looking statements are based upon a number of assumptions and include, but are not limited to, the following: TH1902 will be as effective and safe in humans as in mice and *in vitro* and *in vivo* results obtained thus far will be replicated into humans leading us to pursue the development of this peptide-conjugate, as well as other peptide-drug conjugates, and no event will occur resulting in a delay in initiating a clinical trial by the end of 2020.

Forward-looking statements are subject to a variety of risks and uncertainties, many of which are beyond our control that could cause our actual results to differ materially from those that are disclosed in or implied by the forward-looking statements contained in this press release. These risks and uncertainties include, among others, the risk that results (whether safety or efficacy, or both) obtained through the administration of TH1902 as well as our other peptide-drug conjugates into humans are different than into mice; difficulty in recruiting patients to begin a phase I clinical trial; further results using TH1902 as well as our other peptide-drug conjugates may not replicate *in vivo* results leading us to delay or to stop the pursuit of additional studies; and discovery or introduction of new treatments on the market for the treatment of cancer that we intend to develop our peptide-drug conjugates for could prove safer and more effective than TH1902 or TH1904.

We refer potential investors to the "Risk Factors" section of our annual information form dated February 24, 2020 available on SEDAR at www.sedar.com and on EDGAR at <a href="https://www.sec.gov">www.sec.gov</a> as an exhibit to our report on Form 40-F dated February 25, 2020 under Theratechnologies' public filings for additional risks regarding the conduct of our business and Theratechnologies. The reader is cautioned to consider these and other risks and uncertainties carefully and not to put undue reliance on forward-looking statements. Forward-looking statements reflect current expectations regarding future events and speak only as of the date of this press release and represent our expectations as of that date.

We undertake no obligation to update or revise the information contained in this press release, whether as a result of new information, future events or circumstances or otherwise, except as may be required by applicable law.

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