

NEW DATA SHOW THERATECHNOLOGIES' SORT1+ TECHNOLOGY IS EFFECTIVE IN MANY TREATMENT-RESISTANT CANCERS

Peptide-drug conjugates TH1902 and TH1904 show significant reduction in the formation of vasculogenic mimicry by targeting the sortilin receptor

Curcumin shows increased anticancer activity when conjugated to proprietary peptide

SORT1+ technology significantly widens therapeutic window of traditional cytotoxic cancer treatments

Montreal, Canada – June 22, 2020 – Theratechnologies Inc. (Theratechnologies) (TSX: TH) (NASDAQ: THTX), a commercial-stage biopharmaceutical company, is pleased to announce that new data featuring its investigational sortilin 1 (SORT1)-targeting peptide-drug conjugate technology will be presented in three posters at the American Association for Cancer Research's virtual annual meeting II.

"We believe that our SORT1+ technology is one of the most promising advances in the treatment of cancer in many years. As our oncology programs progress through clinical development, we hope to continue to demonstrate that our SORT1+ technology could become a new paradigm in cancer treatment," said Dr. Christian Marsolais, Senior Vice President and Chief Medical Officer, Theratechnologies.

Inhibition of Vasculogenic Mimicry

The formation of microvascular channels leads to aggressive, metastatic and resistant cancer cells and is known as vasculogenic mimicry (VM). VM is believed to be associated with tumor growth, resistance and poor prognosis in many types of aggressive cancers including ovarian and triple-negative breast cancer (TNBC).

Results presented at AACR indicate that SORT1 is highly expressed in cancer cells involved in the VM process in both ovarian cancer and TNBC. In addition, CD133, a gene associated with cancer stem cells, is also highly expressed during VM formation. Theratechnologies' SORT1-targeting peptide-drug conjugates TH1902 (peptide-docetaxel conjugate) and TH1904 (peptide-doxorubicin conjugate) strongly inhibit VM at very low doses. When administered alone, docetaxel and doxorubicin show no effect at therapeutic doses.

"The data presented in this study demonstrate that by targeting SORT1, TH1902 and TH1904 have the potential to inhibit VM and cancer cell growth. This ground-breaking approach could lead to better efficacy in the treatment of resistant cancers," continued Dr. Marsolais.

The poster "Sortilin receptor-mediated novel cancer therapy: A targeted approach to inhibit vasculogenic mimicry in ovarian and breast cancers" is now available online at <u>aacr.org</u>.

Optimizing the potential of known natural anticancer agents

Science has identified several compounds in nature that have cancer-fighting potential. However, these compounds are often unstable or need to be taken in quantities that are unrealistic.

Phytochemicals found in plants, such as curcumin, are proven to have antiproliferative, antiangiogenic and apoptotic properties against various cancers such as colorectal, ovarian and breast cancers. However, when administered alone, these phytochemicals have low bioavailability and are rapidly degraded and poorly absorbed through the gastro-intestinal tract.

The results of a preclinical study, where curcumin was conjugated with Theratechnologies' proprietary peptide (peptide-curcumin conjugate) and delivered directly to cancer cells, show that TH1901 has 50 to 100 times greater anti-cancer activity than curcumin alone in ovarian, breast, melanoma and colorectal cancer models *in vitro*.

"In several *in vitro* cancer models, TH1901 significantly increases the penetration of curcumin inside cancer cells thereby reducing inflammation and inhibiting tumor growth. These results demonstrate the improved efficacy of only one of many natural compounds that could be studied using our SORT1+ technology and indicate how truly versatile this technology is," concluded Dr. Marsolais.

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

Better efficacy and absence of neutropenia with TH1902 in 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 and it has been observed that TNBC overexpresses SORT1 receptors.

In a poster presented at AACR, preclinical data demonstrate that *in vitro* TH1902 leads to significantly better efficacy at a lower dose when compared to docetaxel alone. In the same study, TH1902 also shows similar efficacy to therapeutic doses of docetaxel when administered only at one-quarter of the indicated dose of docetaxel. When administered alone, docetaxel showed no treatment effect at the one-quarter dose.

In addition, the safety profile of TH1902 was superior to docetaxel as it did not induce neutropenia even after six treatment cycles. A single 15mg/kg dose of docetaxel alone was enough to induce neutropenia.

The poster "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 <u>www.theratech.com</u>, on SEDAR at <u>www.sedar.com</u> and on EDGAR at <u>www.sec.gov</u>

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' SORT1-targeting peptide-drug conjugate technology on the potential treatment of various types of cancer and the timelines to initiate a first-in-human clinical trial with TH1902 in patients with cancer.

Forward-looking statements are based upon a number of assumptions and include, but are not limited to, the following: all SORT1-targeting peptide-drug conjugates will be as effective and safe in humans as in mice and *in vitro* and *in vivo* results obtained thus far and will be replicated into humans leading us to pursue the development of these peptide-drug conjugates, and no event will occur resulting in a delay in initiating a first-in-human clinical trial with TH1902 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 our SORT1-targeting peptide-drug conjugates into humans are different than into mice; difficulty in recruiting patients to begin a phase I clinical trial; further results using our SORT1-

targeting peptide-drug conjugates may not replicate the results obtained thus far which could lead 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 SORT1-targeting peptide-drug conjugates for could prove safer and more effective than our peptides.

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 <u>www.sec.gov</u> 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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