Theratechnologies Presents New In Vivo TH1902 Preclinical Data Demonstrating Tumor Growth Inhibition of Human Cancer Stem-Like Cells (CD133+) in Both Triple-Negative Breast and Ovarian Cancers AACR Annual Meeting 2022

April 8, 2022

Two Additional Preclinical Proof-of-concept Posters in Ovarian and Metastatic Lung Cancer Models Also Presented at the Meeting

MONTREAL, April 08, 2022 (GLOBE NEWSWIRE) -- Theratechnologies Inc. ("Theratechnologies" or "the Company") (TSX: TH) (NASDAQ: THTX), a biopharmaceutical company focused on the development and commercialization of innovative therapies, today announced the Company's participation in three poster presentations at the 2022 Annual Meeting of the American Association for Cancer Research (AACR) to be held April 8-13, 2022 at the Ernest N. Morial Convention Center in New Orleans, Louisiana.

Christian Marsolais, Ph.D., Senior Vice President and Chief Medical Officer, Theratechnologies commented, "The exciting new data in triple negative breast and ovarian cancer demonstrate remarkable promise of TH1902 in preclinical studies as a potential treatment for these sortilin expressing cancers. The presence of cancer stem cells (CSCs) is associated with aggressive disease, unregulated tumor growth, increased migration of cancer cells, invasion, self renewal and resistance to standard chemotherapy and radiation. Failure to eliminate these cells with current treatments leads to resistance and progression and there are few therapies that have been shown to target CSCs. In preclinical models treated with TH1902, there was marked tumor growth inhibition of cancer stem-like cells with no impact on healthy tissue. This further validates our hypothesis that TH1902 may be effective in hard-to-treat, resistant cancers."

Highlights of the poster presentations included:

AACR Poster #1853 - TH1902, a SORT1 docetaxel peptide-drug conjugate, inhibits tumor growth of human cancer stem-like cells (CD133+) from both triple-negative breast cancers and ovarian cancers

Cancer stem cells, typically associated with CD133 expression, represent a small proportion of cells residing within most tumors and which have high metastatic potential and enhanced drug resistance. In cancer indications such as triple negative breast and ovarian cancers, CSC have also been shown to be involved in vasculogenic mimicry. The study examined the efficacy of TH1902 against cancer stem-like cells and its ability to circumvent some of the known drug resistance phenotypes associated with CSCs. Results included:

The proprietary peptide TH19P01 – Uptake of TH19P01 was exhibited in both cancer stem-like cell lines, but was inhibited by either sortilin ligands or gene silencing, suggesting that the peptide is highly targeted to sortilin expression which is absent in healthy cells.

In vitro – TH1902 induced a marked increase in cell apoptosis - In contrast to docetaxel alone, not only did TH1902 induce cell apoptosis but also produced cell cycle arrest but did not affect healthy tissue.

In vitro — TH1902 bypasses the P-gp efflux pump – Where P-gp inhibitors can restore cell cycle arrest induced by docetaxel, TH1902 was unaffected.

In vivo — triple negative breast and ovarian cancer models - TH1902 significantly inhibited growth of cancer stem-like cell tumor when administered weekly for 3 cycles at a dose equivalent to the MTD of docetaxel and TH1902 treated mice exhibited an increased tolerability when compared to those treated with docetaxel alone.

TH1902 demonstrated better efficacy at doses equivalent to docetaxel - As a single agent in breast and ovarian cancer stem-like cell xenograft tumor models, TH1902 showed better efficacy as compared to docetaxel alone. Better efficacy was also observed in the ovarian tumor model for the TH1902-carboplatin combination as compared to paclitaxel- or docetaxel-carboplatin combinations.

An 80% decrease in tumor growth was observed in TH1902 treated models while tumor volumes diminished about 35% in docetaxel mouse models – The results demonstrated that TH1902 exerts superior anticancer activity as compared to docetaxel alone in CD133+ triple negative breast and ovarian cancer stem-like cell animal models.

AACR Poster #1076 - The peptide-drug conjugate TH1902 inhibits growth of subcutaneous melanoma xenografts and formation of lung metastases in a syngeneic mouse model

Highlights of the study demonstrated Theratechnologies' proprietary peptide-drug conjugate, TH1902, demonstrated better and sustained efficacy in melanoma subcutaneous xenograft models at doses equivalent to the MTD of docetaxel. Mice treated with TH1902 showed prolonged survival by up to 263%, whereas docetaxel alone increased survival by only 19%.

In a lung B16-F10 metastasis model, different regimens of TH1902 significantly reduced the number of lung metastatic nodules when compared to docetaxel alone.

AACR Poster #1079 - Anti-cancer efficacy of TH1902, a SORT1 docetaxel peptide-drug conjugate, against ovarian and endometrial cancers xenografts alone or in combination with carboplatin

Highlights of the poster detailed efficacy of TH1902 against SORT1+ ovarian (ES-2, SKOV-3. A-2780) and endometrial (AN3-CA) tumor models. In vitro, TH1902 enabled a more than twofold increase in apoptosis (cell death) as compared to docetaxel alone. In vivo xenograft tumor models, mice treated with TH1902 over two weeks exhibited a statistically significant 78% decrease in tumor size. Highlights demonstrated TH1902 treated mice showed prolonged tumor regression as compared to mice treated with docetaxel alone.

Mice treated with TH1902 in combination with carboplatin demonstrated better efficacy than other combinations. Results indicated that TH1902 possesses an in-vivo efficacy superior to that of docetaxel against ovarian and endometrial cancers in the animals tested and that TH1902 can be safely combined with carboplatin to reach optimal inhibition of tumor growth.

All three posters will be available on our website following the conclusion of the meeting.

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 potential treatment of sortilin-expressing cancers such as triple negative breast cancer and ovarian cancer using TH1902.

Forward-looking statements are based upon a number of assumptions and include, but are not limited to, the following: pre-clinical in vitro and in vivo results will be replicated in humans, we will rapidly complete Phase 1A of our trial studying TH1902 and we will soon begin enrollment of patients in the Phase 1B of such trial, treatment with TH1902 will be efficacious and safe in various types of cancer and no serious adverse side effects will be discovered from the administration of TH1902 to patients.

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 the Covid-19 pandemic materially adversely affect the conduct of our Phase 1 trial using TH1902, results obtained from the administration of TH1902 in humans are materially adversely different from those observed during our pre-clinical studies and do not allow the pursuit of additional clinical trials, discovery of serious adverse side effects, difficulty in recruiting patients leading to delays in the enrollment of patients or completion of our Phase 1 trial using TH1902 and non-performance by our third-party contract suppliers of their covenants, obligations or undertakings under the terms of our agreements with them.

We refer potential investors to the "Risk Factors" section of our annual information form dated February 23, 2022 available on SEDAR at www.sedar.com and on EDGAR at www.sec.gov as an exhibit to our report on Form 40-F dated February 24, 2022 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.

About Theratechnologies

Theratechnologies (TSX: TH) (NASDAQ: THTX) is a biopharmaceutical company focused on the development and commercialization of innovative therapies addressing unmet medical needs. Further information about Theratechnologies is available on the Company's website at www.theratech.com, on SEDAR at www.sedar.com and on EDGAR at www.sec.gov

For media inquiries:
Philippe Dubuc
Senior Vice President and Chief Financial Officer
communications@theratech.com
514-336-7800