

TherOZap(TM) Technology Test Results Prove Successful at Inhibiting Zika Virus During In-Vitro Tests

Toronto, Ontario--(Newsfile Corp. - September 4, 2019) - Therma Bright Inc. (TSXV: THRM) ("Therma" or the "Company"), a progressive medical device technology company, today announces that the TherOZap™ Technology proves successful at inhibiting the Zika virus during in-vitro tests.

Therma engaged a top Virology Research Laboratory in Canada to study Therma's **TherOZap™ technology's** ability to inactivate live Zika virus in culture media and to determine inhibition of the Zika virus infection *in-vitro* in selected cell cultures. The results demonstrated that the **TherOZap™ technology** which utilizes specialized materials, coatings and heat, was able to limit Zika virus ("ZIKV") replication in cell cultures. The researchers who completed the study stated that, "the in-vitro testing has shown that a short heat pulse from the **TherOZap™** device dramatically inhibits the production of infectious Zika virus in multiple cell types".

The study investigated the effects of the TherOZap™ technology in curtailing ZIKV infection in cell culture systems. The main aspect addressed in this study was the effect of heat produced by **TherOZap™ technology** in limiting viral replication at initial stages of infection. The effects were studied 2 hours post infection to mimic the early stages of localized virus replication following a mosquito bite. The key findings of this study are:

- **TherOZap™ technology** treatment at a specific temperature for 30 seconds reduced viral replication by 50% and titer by 85% respectively in Vero cells.
- **TherOZap™ technology** decreased viral count 100 fold with coated material tips with no harm to healthy cells.
- **TherOZap™ technology** decreased viral count 400 fold with uncoated material tips, a significant statistical decrease to viral count, with the study results showing no harm to healthy cells.
- The effect of **TherOZap™ technology** was cell line independent with similar reduction in replication and viral titer observed in A549 cells.
- Increasing the device temperature did not significantly improve the performance of the device.
- The **TherOZap™ technology** performed comparably well with both low concentration of viral count and high concentrations of viral count (inoculum of 100 and 1000 Plaque-Forming Units (PFUs))

From the above data the conclusion from the study was: "**TherOZap™ technology** indicates the application of heat at a specific temperature early (within 2 hours) during viral infection can significantly attenuate the viral replication and spread. Specifically, the combination of heat and uncoated material chosen to be tested by Therma displayed the greatest effect at significantly attenuating the viral replication and spread."

Eastern Equine Encephalitis (EEE)

According to Vector Disease Control International (VDCI.net or "VDCI"), recently there have been outbreaks of EEE virus in the US. Between three and fifteen cases of EEE were reported every year in the U.S. from 2009 to 2018. Florida (13), Massachusetts (10), New York (8), North Carolina (7), and Michigan (7) reported the highest number of cases during this time period.

VDCI states that EEE is a rare but very serious disease that involves inflammation and swelling of the brain. Fortunately, only 5% of human EEEV infections result in EEE. However, one out of three people who develop EEE will die, and many survivors have mild to severe brain damage. Of those who contract the EEE virus, the elderly (ages 50 and older) and young (ages 15 and younger) are at the greatest risk of developing encephalitis.

According to VDCI the EEE virus is spread by *Aedes* mosquitoes which have distinct black and white markings on their body and legs. They bite during the daytime only, with the highest levels of activity occurring in the early morning and evening hours. Members of the *Aedes* genus are known vectors of EEE, [Zika virus](#), [Dengue](#), [Yellow Fever](#), [West Nile virus](#), and [Chikungunya](#).

Future Directions

The data from this study indicate that the **TherOZap™ technology** significantly reduces ZIKV infection of primate cells *in-vitro*. Ideally, future studies should focus on further validating these findings in more physiologically relevant cell types or tissue models. Ultimately small animal model studies would be needed to demonstrate efficacy in-vivo. Finally, expanding the studies to cover other arboviruses (viruses transmitted by insects to humans) would broaden the potential market for **TherOZap™ technology**. Specifically:

1. Performing **TherOZap™ technology** studies in primary keratinocytes, fibroblasts and macrophages which are the primary target cells for arboviruses in skin tissue.
2. Testing the efficacy of **TherOZap™ technology** in a relevant small animal model (mouse) using infected mosquito vectors or small needle inoculation as route of infection.
3. Extending the scope of the study to other important arboviral pathogens including EEE, Dengue, West Nile and Chikungunya viruses.
4. Combining **TherOZap™ technology** with topical application of virucidal or antiviral compounds may synergize the effect.

Mr. Rob Fia, CEO, commented: "We are extremely pleased with the test results of our patent pending TherOZap™ technology to inhibit the Zika virus. We look forward to testing our technology further and to potentially investigate other applications of the TherOZap™ technology against other mosquito borne diseases. We will identify partners to work with in these new indications and will seek non-dilutive funding to help fund the research in these new areas."

About Therma Bright Inc.

Therma Bright is a progressive medical device technology company focused on providing consumers with quality medical devices that address their dermatological and healthcare needs. Clear and healthy skin for all is at the core of the Company's philosophy as is the belief that such outcomes should not be a privilege for only those who can afford costly procedures and treatments. The Company's breakthrough proprietary technology delivers effective, non-invasive and pain free skin care.

Therma Bright received a Class II medical device status from the FDA for its platform technology that is indicated for the relief of the pain, itch, and inflammation from over 20,000 different insect stings and bites, (including bees, wasps, hornets, mosquitoes, black flies and jellyfish). The Company received approval for the above claims from FDA (United States) in 1997.

Therma Bright Inc. trades on the TSXV (TSXV: THRM). For more information visit:

www.thermabright.com and www.coldsore.com

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FORWARD LOOKING STATEMENTS

Certain statements in this news release constitute "forward-looking" statements. These statements relate to future events or the Company's future performance and include future testing of the Company's **TherOZap™** technology against the Zika virus and potentially other mosquito borne diseases, all as described in the news release. All such statements involve substantial known and unknown risks, uncertainties and other factors which may cause the actual results to vary from those expressed or implied by such forward-looking statements. In addition to other risks, the Company may not complete all or any of the tests as described in this news on the timelines described. Forward-looking statements involve significant risks and uncertainties, they should not be read as guarantees of future performance or results, and they will not necessarily be accurate indications of whether or not such results will be achieved. Actual results could differ materially from those anticipated due to a number of factors and risks.

Although the forward-looking statements contained in this news release are based upon what management of the Company believes are reasonable assumptions on the date of this news release, the Company cannot assure investors that actual results will be consistent with these forward-looking statements. The forward-looking statements contained in this press release are made as of the date hereof and the Company disclaims any intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events or otherwise, except as required under applicable securities regulations.

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