Theralase Increases GBM Brain Cancer Survival by 925%

Toronto, Ontario – October 28, 2016, Theralase Technologies Inc. ("Theralase®” or the “Company”) (TLT:TSXV) (TLTFF:OTC), a leading biotech company focused on the commercialization of medical laser systems to eliminate pain and the development of light activated Photo Dynamic Compounds (“PDCs”) to destroy cancer, announced today an ability of its Photo Dynamic Therapy (“PDT”) technology to increase survival by 925% in a very aggressive form of brain cancer, known as Glioblastoma Multiforme (“GBM”).

In an orthotopic rat model (GBM established in brain tissue), Theralase was able to demonstrate that the animal treated by the laser activated Theralase PDC Rutherrin® (TLD-1433 + transferrin) technology survived for a total of 41 days post treatment (37 days longer than untreated animals) resulting in a 925% survival increase. The current survival rate for untreated animals is approximately 4 days.

The current median survival in humans without treatment is approximately 8.1 months or 0.7 years\(^1\).

The current median survival in humans with extensive treatment (maximal surgical resection, radiotherapy and concomitant and adjuvant chemotherapy with temozolomide) is approximately 14.1 months or 1.2 years\(^2\).

GBM, also known as glioblastoma and grade IV astrocytoma (malignant brain tumor made up of star-shaped cells), is the most common and most aggressive cancer that begins within the brain. GBM kills > 85% of those diagnosed within 5 years.

The National Cancer Institute (“NCI”) estimates that in the US, 22,850 adults (12,630 men and 10,280 women) were diagnosed with brain and other nervous system cancer in 2015. It also estimates that in 2015, 15,320 of these diagnoses resulted in death (67% mortality rate).

NCI estimates that GBM accounts for 52 percent of all primary brain tumors and occurs primarily in adults between the ages of 45 and 70.

The PDT treatment methodology has not been optimized and was completed only on one animal suggesting that further optimizations with additional animals may significantly increase the efficacy of this treatment.

Future experiments are planned that will optimize:

1) the dose of the PDC injected
2) the dose of laser light used to activate the PDC
3) the wavelength of laser light used for application
4) dwell time after injection to activate the PDC
5) multiple treatment approach

to investigate whether further increases in efficacy are attainable.
Arkady Mandel, MD, Ph.D., D.Sc., Chief Scientific Officer at Theralase stated that, “The data obtained from this established orthotopic brain cancer model is extremely encouraging. My team and I look forward to optimizing the Theralase PDT technology in this application over the next 6 months, to allow us sufficient data to design a Phase Ib human clinical study for patients inflicted with GBM.”

**About Theralase Technologies Inc.**
Theralase Technologies Inc. (“Theralase®” or the “Company”) (TSXV: TLT) (TLTFF: OTC) in its Therapeutic Laser Technology (“TLT”) Division designs, manufactures, markets and distributes patented super-pulsed laser technology indicated for the: elimination of pain, reduction of inflammation and dramatic acceleration of tissue healing for numerous nerve, muscle and joint conditions. Theralase’s Photo Dynamic Therapy (“PDT”) Division researches and develops specially designed molecules called Photo Dynamic Compounds (“PDCs”), which are able to localize to cancer cells and then when laser light activated, effectively destroy them.

Additional information is available at [www.theralase.com](http://www.theralase.com) and [www.sedar.com](http://www.sedar.com).

This press release contains forward-looking statements, which reflect the Company’s current expectations regarding future events. The forward-looking statements involve risks and uncertainties. Actual results could differ materially from those projected herein. The Company disclaims any obligation to update these forward-looking statements.

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**For More Information:**
Roger Dumoulin-White
President & CEO
1.866.THE.LASE (843-5273) ext. 225
416.699.LASE (5273) ext. 225
rwhite@theralase.com
[www.theralase.com](http://www.theralase.com)
