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**Press Release - March 22, 2021**

# Positive preliminary clinical results for the treatment of glioblastoma developed by Hemerion

**On Saturday, March 20, 2021, the Journal of Neuro-Oncology published the first clinical results of the technology developed by Hemerion for the treatment of glioblastoma, one of the most common and aggressive brain cancers.**

**These results demonstrate high tolerance of the treatment and are very encouraging in terms of efficacy: a validation that paves the way for phase II clinical trials.**

With more than 25,000 newly diagnosed glioblastomas per year in Europe and the United States and a median overall survival of 15 months, this condition remains a major public health problem.

Current treatments aim at destroying the tumor with a combination of three therapies: surgery (resection of the tumor), chemotherapy, and radiotherapy. These treatments slow down the tumor's progression but fail to completely remove it. In addition, they damage healthy cells and leave infiltrated tumor cells. The aggressive nature of glioblastoma almost always results in local tumor recurrence and reduces patient's life expectancy.

The technology proposed by Hemerion for the treatment of glioblastoma is based on the unprecedented combination of a photosensitizing drug and an innovative photonic device: dedicated laser light and illumination equipment suitable for brain surgery.

Its objective: destroy residual cancer cells, in addition to existing treatments to limit recurrence, extend survival, and improve quality of life.

The paper published in the Journal of Neuro-Oncology reports the results from the phase I clinical trial (assessment of feasibility and toxicity) entitled INDYGO (intraoperative photodynamic therapy for glioblastomas). The clinical trial was carried out by a research lab from the University of

Lille and Inserm (OncoThAI U1189 Lab) and the neurosurgery department of the Lille University Hospital, sponsor of the clinical trial.

10 patients with recently diagnosed glioblastoma, were enrolled and treated between May 2017 and June 2018 at the University Hospital of Lille.

This treatment, being developed by Hemerion, was seamlessly applied during surgery. Each patient received a dose of photosensitizer, a drug that penetrates and accumulates in cancer cells only a few hours before the operation.

During surgery, after the tumor is resected, the photonic device diffuses a controlled laser light, which activates the photosensitizer and causes reactions that result in the destruction of remaining cancer cells. The tumor is eliminated wherever the light enters.

The patients were monitored by the investigative team of the University Hospital of Lille every 3 months after the surgery, in order to assess the safety and to evaluate preliminary efficacy endpoints of this brand-new therapy.

Regarding safety and tolerance, the results were highly positive: no side effects attributable to the treatment were noticed during the monitoring.

On the other hand, the preliminary efficacy results of this study are very encouraging: half of the patients treated have a progression-free survival of over 17 months and an overall survival of over 23 months.

These findings allow Hemerion to quickly launch more in-depth clinical trials to precisely assess the effectiveness of this innovative treatment.

## **About Hemerion**

[www.hemerion.com](http://www.hemerion.com)

Hemerion was created in 2020, after more than 10 years of academic research in an Inserm Lab at the University of Lille and the Lille University Hospital. The company gathers complementary profiles to develop innovative therapeutic solutions. Its first breakthrough technology addresses glioblastoma as a complement to neurosurgery. Its efficacy is currently being evaluated in clinical trials.

## **About the Lille University Hospital**

[www.chu-lille.fr](http://www.chu-lille.fr)

The Lille University Hospital provides inpatient and outpatient care to 1.4 million patients each year, thanks to its state-of-the-art medical and technical platform and its medical expertise in many areas. With nearly 16,000 professionals and 11 hospitals grouped together on a single campus, this healthcare facility is one of the 4 largest hospitals in France, and one of the largest in Northern Europe.

## About the Lille University

[www.univ-lille.fr](http://www.univ-lille.fr)

The University of Lille is one of the largest French universities: it gathers a community of nearly 75,000 students and over 6,200 staff. With more than 62 research Labs, it is a major player in the Hauts-de-France region in research and innovation. In particular, through the University of Lille Foundation, it actively participates in research projects, especially medical innovations, and strives to disseminate and promote the results.

## About OncoThAI

[www.oncothai.fr](http://www.oncothai.fr)

OncoThAI is a fundamental and clinical research lab which associates the French National Institute of Health and Medical Research (Institut National de la Santé et de la Recherche Médicale - INSERM) and the Lille University Hospital. OncoThAI is dedicated to laser-assisted therapies and immunotherapy. Its research aims to develop innovative approaches for the treatment of cancer for whom no further therapeutic options are available.

Journal of Neuro-Oncology article:

[https://link.springer.com/epdf/10.1007/s11060-021-03718-6?sharing\\_token=SsTDi90SICeS1\[...\]5EhgHkXFbPZB-DIIWqGk8-GUA-kUfrMlwdYPIYKEOuv0x9Mj353\\_fHYExY%3D](https://link.springer.com/epdf/10.1007/s11060-021-03718-6?sharing_token=SsTDi90SICeS1[...]5EhgHkXFbPZB-DIIWqGk8-GUA-kUfrMlwdYPIYKEOuv0x9Mj353_fHYExY%3D)

<https://link.springer.com/article/10.1007/s11060-021-03718-6>