What is IPerGlio?

IPerGlio is a Europe-wide project comprising health research centers in Norway, Luxembourg, Italy, Spain, and Germany. It is funded under the frame of the European Research Area consortium "ERA PerMed". We aim to use Artificial Intelligence (AI) to identify biomarkers that can improve the treatment of glioblastoma.

How are we doing this?

We collect samples from the brain tumors and blood of glioblastoma patients, and gather data on their demographics and lifestyle. This data is then pseudonymized, meaning that only the designated project clinician, not other researchers, can link the data to an individual.

Afterwards, the data is analyzed and evaluated using AI to identify potential patterns. The results are published on a public dashboard.

What do we hope to achieve?

We hope to identify previously unknown patterns, which will enable us to better assess the likelihood of treatment success for individual patients and tailor treatments to their specific needs.

By making this data publicly available, we aim to educate patients and their loved ones about our research and the disease.



Contact

For further Informartion please contact your physician.

Name:	
E-Mail:	
Tel.:	

IPerGlio

A Public Dashboard on Glioblastoma Research







What is Glioblastoma?

Glioblastoma (sometimes called GBM) is an aggressive type of brain cancer that starts in the brain's 'Glial' cells, which support and protect nerve cells. Unfortunately, it grows quickly and is difficult to treat because the cancer cells spread into nearby brain tissue. GBM is one of the most challenging brain tumors to treat due to its location, aggressive nature, and the way it resists most treatments.



What are Biomarkers?

Biomarkers are measurable indicators in the body that can show what's happening with our health. Some of these biomarkers might be found in tumor tissue or a patient's blood. For example, specific proteins or molecules can give doctors clues about how the cancer behaves or might respond to treatment. These biomarkers can help diagnose the cancer, predict how aggressive it is, and decide which treatment might work best.



How can AI help in treating glioblastoma?

Al can be a game-changer in GBM treatment because it can process huge amounts of data quickly and efficiently, identifying patterns that humans might not easily see.



Why a Public Dashboard?

public dashboard is an interactive web-application that will display the results of our research in an easily accessible manner that makes sense to lay people without a background in medicine.

We aim to educate patients, their loved ones, and the general public about GBM. We want to show the power of Al-assisted research and show patients who donated their data to research that their help makes a difference.

How does the data journey work?



The journey of your data

- 1. Recruitment: Patients diagnosed with GBM are invited to participate in the IPerGlio project. Participation is entirely voluntary and patients receive detailed information on how their data will be used and stored, as well as their rights under data protection regulations.
- 2. Sample collection and pseudonymization: The attending physician collects biological samples (e.g. blood). A code is assigned to the sample and a list is created linking the code to the patient's identity. This list is stored securely at the clinical site. From this point on, no other project team member working with the samples or the data can identify the patient.

- 3. Sample processing and initial data generation: The samples are processed at the clinic using the assigned codes. Initial data is generated without reference to patient identity.
- 4. Further data analysis and storage: The pseudonymized data and processed material is shared

with IPerGlio partners for further analysis, including analysis of data by an AI specifically designed by project researchers. All data is stored securely by project partners in Europe and in compliance with the European General Data Protection Regulation (GDPR).

5. Data Publication: IPerGlio researchers will publish their findings in scientific journals. Further, a user-friendly public dashboard will be created to make key results available to everyone. We follow FAIR principles that ensure the data is findable, accessible, interoperable, and reusable. Only pseudonymized data is ever made public, meaning no names or other direct identifiers that could be used to link the data to individual patients are shared. Additionally, we are slightly modifying the dashboard data before publication as an extra safeguard for confidentiality.



How does this help you?

The primary purpose of the IPerGlio public dashboard is to educate and inform users about GBM, its treatments, and related research. It aims to provide accessible, reliable, and clear information to patients, caregivers, healthcare professionals, and the public, fostering greater understanding of this aggressive disease and the potential advancements in care. The dashboard is intended as an educational tool, not a substitute for medical advice. While the dashboard offers valuable insights, it cannot provide personalized medical advice or guidance. Patients should consult their healthcare providers for any decisions regarding their care or treatment.