



Gliotarget: a Danish nationwide phase I/II platform trial focusing on individualized targeted treatment for newly diagnosed glioblastoma patients based on genomic profiling.

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Background:

The introduction of targeted treatments, which have improved survival in several cancers has yet to influence the treatment of glioblastoma¹.

In Gliotarget, we will individualize the targeted treatment, and give it in the primary setting alongside standard therapy with the intention to improve the likelihood of effect.

Trial Design

- Gliotarget is a biomarker enriched phase I/II platform trial with initially 4 predefined biomarker selected arms and one control arm.
- All patients receive standard therapy with concomitant radiochemotherapy and adjuvant temozolomide.
- The experimental treatment is given alongside the adjuvant temozolomide.
- Molecular analysis, including Whole Genome Sequencing (WGS), is performed on all patients, to identify actionable biomarkers.

Inclusion criteria:

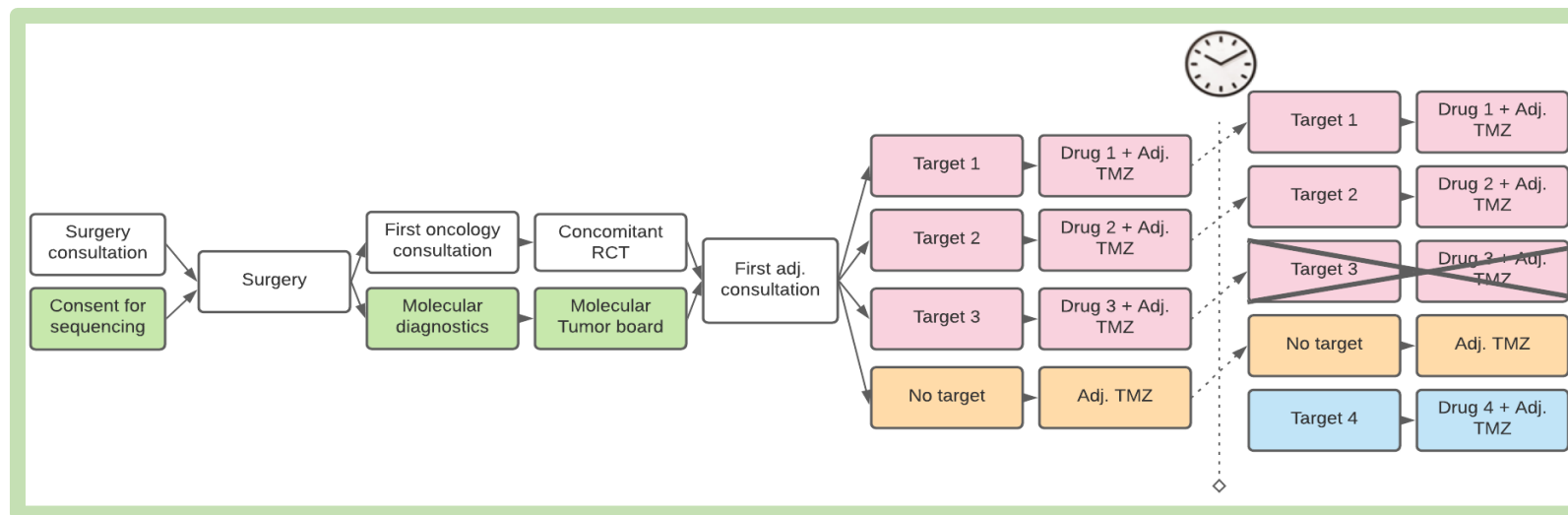
- Newly diagnosed IDH-wt glioblastoma resected surgically with a maximum safe resection
- Available WGS-results from a tumor sample resected at surgery
- At least 50% probability of being alive 12 months after initial surgery (according to a prognostic model developed at our institution²)

Survival endpoints:

- Exploratory endpoint: PFS 9 months

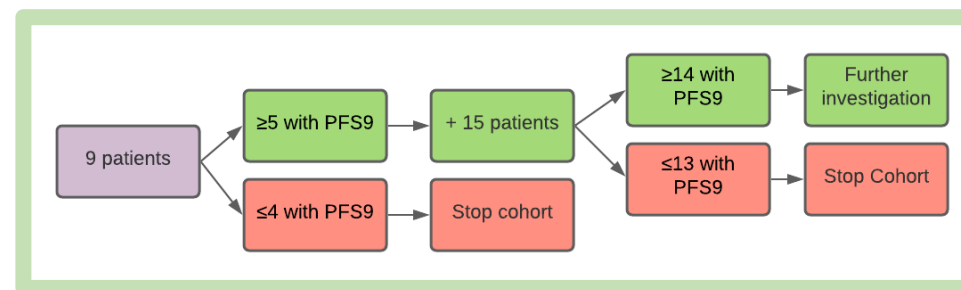
Translational objectives:

- Study the clonal evolution in paired samples with WGS
- Study the blood brain barrier penetrance of the experimental drugs



Statistics and sample size considerations:

The sample size is calculated with Simon's two-stage design using treatment effect at 9-months progression free survival (PFS9). We will include 9 patients for stage one and 24 in total, for each arm. Treatment effect is defined as 65% of the patients in an experimental arm reaching PFS9.



References:

- Le Rhun E, Preusser M, Roth P, Reardon DA, van den Bent M, Wen P, Reifenberger G, Weller M. Molecular targeted therapy of glioblastoma. *Cancer Treat Rev.* 2019 Nov;80:101896. doi: 10.1016/j.ctrv.2019.101896. Epub 2019 Sep 11. PMID: 31541850.
- Abedi AA, Grunnet K, Christensen IJ, et al. A Prognostic Model for Glioblastoma Patients Treated With Standard Therapy Based on a Prospective Cohort of Consecutive Non-Selected Patients From a Single Institution. *Front Oncol.* 2021;11. doi:10.3389/fonc.2021.597587