

Titre	Étude de phase II évaluant le véliparib (ABT-888) et l'irradiation locale, suivis d'un traitement d'entretien par le véliparib et le témozolomide, chez des patients venant de recevoir un diagnostic de gliome de haut grade (GHG) sans mutation H3 K27M ni BRAFV600
Protocole ID	COG-ACNS1721
ClinicalTrials.gov ID	NCT03581292
Type(s) de cancer	Cerveau (SNC)
Phase	Phase II
Type étude	Traitement
Médicament	Veliparib + radiothérapie suivi de Veliparib + Temozolomide en maintien
Institution	CENTRE HOSPITALIER UNIVERSITAIRE SAINTE-JUSTINE
Ville	
Investigateur principal	Dr Yvan Samson
Coordonnateur	Valentine Pradet 514-345-4931
Statut	Fermé
But étude	<p>This phase II trial studies how well veliparib, radiation therapy, and temozolomide work in treating patients with newly diagnosed malignant glioma without H3 K27M or BRAFV600 mutations. Poly adenosine diphosphate (ADP) ribose polymerases (PARPs) are proteins that help repair DNA mutations. PARP inhibitors, such as veliparib, can keep PARP from working, so tumor cells can't repair themselves, and they may stop growing. Radiation therapy uses high energy x-rays to kill tumor cells and shrink tumors. Drugs used in chemotherapy, such as temozolomide, work in different ways to stop the growth of tumor cells, either by killing the cells, by stopping them from dividing, or by stopping them from spreading. Giving veliparib, radiation therapy, and temozolomide may work better in treating patients with newly diagnosed malignant glioma without H3 K27M or BRAFV600 mutations compared to radiation therapy and temozolomide alone.</p>
Critères d'éligibilité	<ul style="list-style-type: none">• Stratum 1 (IDH wild-type): Patients must be ≥ 3 years of age and ≤ 21 years of age at the time of enrollment• Stratum 2 (IDH mutant): Patients must be ≥ 3 years of age and ≤ 25 years of age at the time of enrollment• Patients must have eligibility confirmed by rapid central pathology and central molecular screening reviews performed on APEC14B1:• Newly-diagnosed high-grade glioma such as anaplastic astrocytoma or glioblastoma• Negative results for H3 K27M by immunohistochemistry (IHC)• Negative results for BRAFV600 mutation by next-generation sequencing (NGS)• Patients must have histological verification of diagnosis. Patients with M+ disease (defined as evidence of neuraxis dissemination) are not eligible. Cerebrospinal fluid (CSF) cytology is not required but may be obtained if clinically indicated prior to study enrollment. If cytology is positive, the patient would be considered to have metastatic disease and would, therefore, be ineligible• Pre-operative and post-operative brain magnetic resonance imaging (MRI) with and without contrast must be obtained. The requirement for a post-operative MRI is waived for patients who undergo biopsy only. A spine MRI is not required, but may be obtained if clinically indicated. If the spine MRI is positive, the patient would be considered to have M+ disease (defined as neuraxis dissemination) and would be ineligible• Patients must have a performance status corresponding to Eastern Cooperative Oncology Group (ECOG) scores of 0, 1, or 2. Use Karnofsky for patients > 16 years of age and Lansky for patients ≤ 16 years of age

- Peripheral absolute neutrophil count (ANC) $\geq 1,000/\mu\text{L}$ (within 7 days prior to enrollment)
- Platelet count $\geq 100,000/\mu\text{L}$ (transfusion independent) (within 7 days prior to enrollment)
- Hemoglobin $\geq 8.0 \text{ gm/dL}$ (can be transfused) (within 7 days prior to enrollment)
- Creatinine clearance or radioisotope glomerular filtration rate (GFR) $\geq 70 \text{ mL/min/1.73 m}^2$ OR a serum creatinine based on age/gender as follows (within 7 days prior to enrollment):
- 3 to < 6 years: 0.8 (male and female) maximum serum creatinine (mg/dL)
- 6 to < 10 years: 1 (male and female) maximum serum creatinine (mg/dL)
- 10 to < 13 years: 1.2 (male and female) maximum serum creatinine (mg/dL)
- 13 to < 16 years: 1.5 (male), 1.4 (female) maximum serum creatinine (mg/dL)
- ≥ 16 years: 1.7 (male), 1.4 (female) maximum serum creatinine (mg/dL)
- Total bilirubin $\leq 1.5 \times$ upper limit of normal (ULN) for age (within 7 days prior to enrollment)
- Serum glutamic-oxaloacetic transaminase (SGOT) (aspartate aminotransferase [AST]) or serum glutamate pyruvate transaminase (SGPT) (alanine aminotransferase [ALT]) $< 2.5 \times$ upper limit of normal (ULN) for age (within 7 days prior to enrollment)
- Patients with seizure disorder may be enrolled if seizures are well-controlled (i.e., patients must not have required rescue medications for uncontrolled seizures within 14 days prior to enrollment)
- Patients must be enrolled and protocol therapy must be projected to begin no later than 31 days after definitive diagnostic surgery (Day 0)
- All patients and/or their parents or legal guardians must sign a written informed consent
- All institutional, Food and Drug Administration (FDA), and National Cancer Institute (NCI) requirements for human studies must be met

Critères d'exclusion

- Patients with the following histologies:
 - Diffuse astrocytoma (grade 2)
 - Oligodendrogliomas (any grade)
 - Pleomorphic xanthoastrocytoma (PXA, any grade)
- Patients with primary tumor location of brainstem or spinal cord
- Patients with M+ disease (defined as neuraxis dissemination either by imaging or by cytology)
- Patients with treatment-related acute myeloid leukemia (AML) (t-AML)/myelodysplastic syndrome (MDS) or with features suggestive of AML/MDS
- Prior allogeneic bone marrow transplant or double umbilical cord blood transplantation
- Patients must not have received any prior tumor-directed therapy including radiation therapy, chemotherapy (tumor-directed therapy), molecularly targeted agents, or immunotherapy for the treatment of HGG other than surgical intervention and/or corticosteroids
- Lumbar CSF cytology is not required, but may be performed if clinically indicated prior to study enrollment. If lumbar CSF cytology is positive, the patient is considered to have M+ disease and is ineligible
- Note: False positive cytology can occur within 10 days of surgery
- Patients with gliomatosis cerebri type 1 or 2
- Patients who are not able to receive protocol specified radiation therapy
- Patients must not be currently receiving other anti-cancer agents
- Patients with known constitutional mismatch repair deficiency syndrome (CMMR-D)/biallelic mismatch repair deficiency (bMMRD)
- Female patients who are pregnant are ineligible due to risks of fetal and teratogenic adverse events as seen in animal/human studies
- Lactating females are not eligible unless they have agreed not to breastfeed their infants
- Female patients of childbearing potential are not eligible unless a negative pregnancy test result has been obtained
- Sexually active patients of reproductive potential are not eligible unless they have agreed to use an effective contraceptive method for the duration of their study participation and for 6 months after the last dose of protocol-specified chemotherapy