Study to Evaluate ABI-009 (nab-Rapamycin) in Patients with High Grade Glioma

Official Title: A Phase 2, Open-label Study of ABI-009 (nab-Rapamycin) in Bevacizumab-naïve Patients with Recurrent High-grade Glioma and in Patients with Newly Diagnosed Glioblastoma

**ABI-009 (nab-rapamycin)** - nanoparticle form of human albumin-bound rapamycin. The nab technology may enhance tumor penetration and accumulation via the albumin receptor-mediated (gp60) endothelial transcytosis. Albumin is highly soluble, has long plasma half-life, broad binding affinity, making it an ideal candidate for drug delivery. Importantly, albumin has been shown to be able to penetrate the blood-brain barrier (BBB) and highly accumulate in GBM. Therefore, albumin may facilitate the efficient delivery of nab-rapamycin into GBM tumors, making it a useful treatment option for GBM.

In patients with Newly diagnosed GBM, ABI-009 will be combined with standard of care Temozolomide and Radiation.

In patients with Recurrent High—grade Glioma, five cohorts will include: (1) ABI-009 as a single agent (2) ABI-009 + Temozolomide (3) ABI-009 + Bevacizumab (4) ABI-009 + Lomustine and (5) ABI-009 + Marizomab

**Key Inclusion Criteria:**
- Karnofsky Performance Status ≥ 70%
- No investigational agent within 4 weeks prior to the first dose of study drug
- Adequate hematological, renal, and hepatic function
- Patients must be without seizures for at least 14 days prior to enrollment
- If Newly Diagnosed: must have confirmed GBM, no prior treatment with mTOR inhibitors, and no prior local or systemic therapy for GBM
- If Recurrent: Must have histologic evidence of high grade glioma (WHO Grade 3 or 4), and no prior treatment with mTOR inhibitors

**Key Exclusion Criteria:**
- Use of strong inhibitors and inducers of CYP3A4 within the 14 days prior to receiving the first dose of ABI-009