Trial Innovation Network Expression of Interest:
GlioDex

Study Title	**Conservative vs. Empiric Use of Perioperative Dexamethasone in Glioblastoma Patients (GlioDex)**
Funding I/C	**PCORI**
Study Description	Glioblastoma (GBM) is the most common and malignant brain cancer. Countless therapies have failed to improve the overall median survival of patients with GBM, which stagnates now at 15 months. Why therapies are effective in other cancers-like the revolutionary immune checkpoint inhibitors-fail in GBM patients is unknown. This proposal addresses a rising concern: Is therapy failure iatrogenic? Specifically, is dexamethasone (Dex) given commonly in large doses before and after the initial diagnostic surgery thwarting adjuvant therapies? This empiric perioperative Dex use before the diagnosis and adjuvant therapy is unique to GBM among all cancers and supported by meager data, lacking rigorous evidence. Dex is believed to control symptoms from peritumoral edema and post-surgical inflammation and improve patients' performance status before adjuvant therapy. However, emerging data suggest its pleiotropic effects like its potent immunosuppression and psychiatric effects cause therapy resistance, postoperative infections, psychocognitive disorders, and lower survival of GBM patients in the long term. Because there are no alternatives for Dex, its conservative use is endorsed by multiple disciplines and is equally effective in symptom control.
Study Design	Primary purpose of the intervention: To improve survival and functional status of GBM patients and to decrease postoperative infections. Study phase: 3 Number of arms: 2 Strategy for assigning interventions to participants: randomized at the individual patient level Allocation: 1:1 stratified age (<65 and ≥65-split at the median age of incidence) and preoperative ECOG performance status (0, 1, and 2) to balance these universally accepted predictors of overall survival known at screening. We will also stratify by site. Masking/blinding: Pragmatic, open-label, blinded-endpoint assessment
IRB	Vanderbilt University
Coordinating Center	Vanderbilt University Medical Center
Study Length	18 months (study start-up and feasibility assessments) + 60 months (full phase 3 study)
Study Enrollment #	570
Total # of Sites	15
Site Requirements	<u>Study sites will need to have the following at their site to be considered:</u> • The site surgically treats >20 newly diagnosed glioblastomas (GBMs) per year. • The site estimates to enroll >5 patients per year. • The site administers postoperative chemotherapy and radiation
Site Invesitgator Qualifications	<u>Site Invesitigators should have the following:</u> • Neurosurgeon who routinely performs glioma surgeries • Interest and experience in research