



2020 LEAD Capstone Poster Session

Development of Phase 0/2 Trials for Brain Tumor Patients at UT Southwestern

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Abstract

- Glioblastoma is a type of brain tumor that is one of the most lethal solid cancers in humans.
- Standard of care hasn't changed in over 15 years, and the overall survival is 15 months.
- At UT Southwestern, we have a large catchment region for brain tumors and a substantial research and clinical infrastructure.
- By leveraging our existing resources, we have the capability of offering state-of-the-art, Phase 0/2 brain tumor trials to our patients.



Objectives

- To develop infrastructure for Phase 0/2 Brain Tumor Trials at UT Southwestern



Background Information

- Standard of care for glioblastoma includes surgical resection, 4-6 weeks of recovery, and then chemotherapy and radiation
- The window between surgery and treatment has not been commonly utilized to personalize drug treatment regimens
- Resecting tumor tissue, determining a tissue response in the lab, and making a treatment decision on that response is known as Phase 0/2 testing.

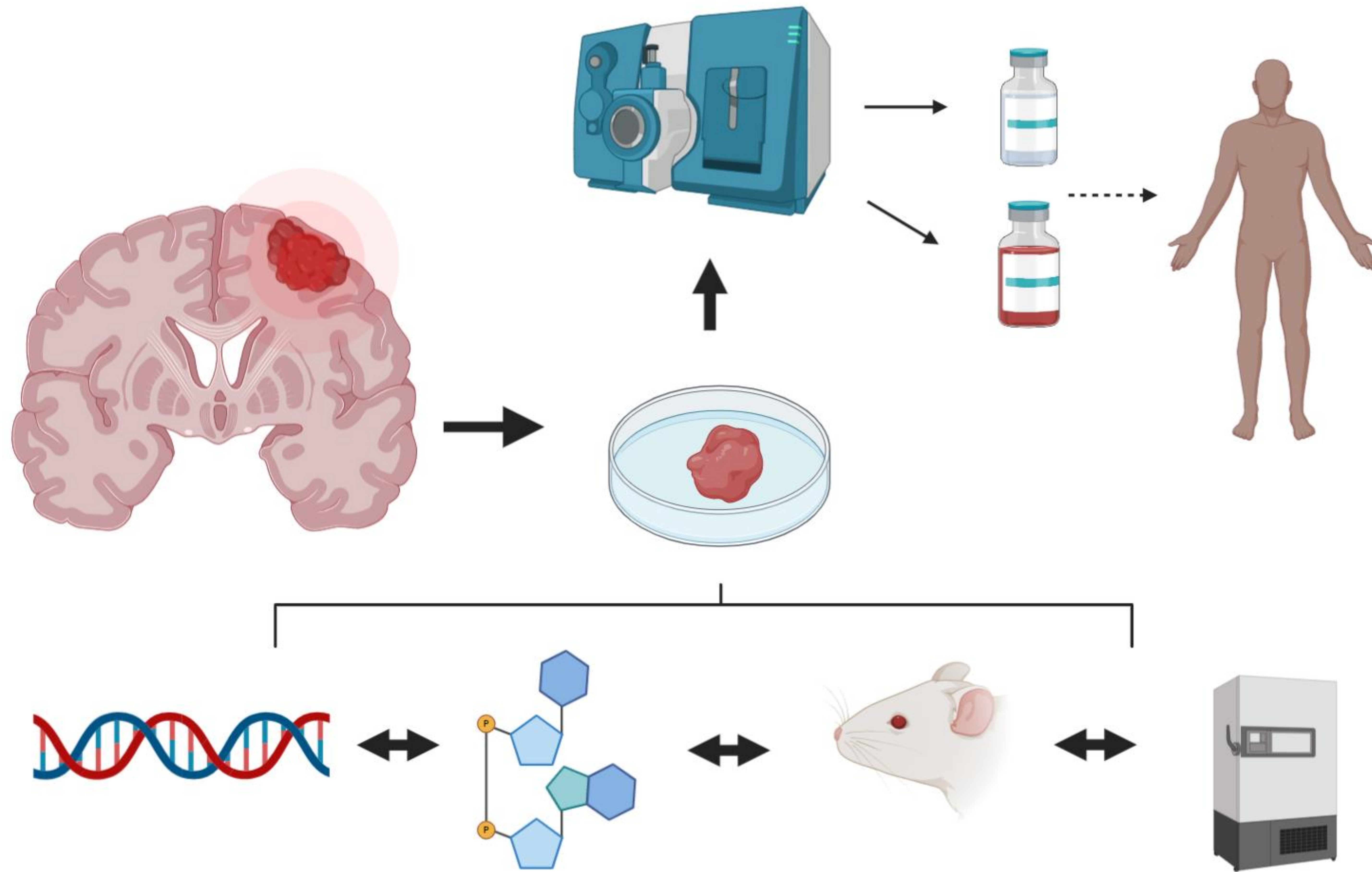


Specific Aims

- Use innovative technology developed at UT Southwestern to solidify necessary testing parameters for clinical use in patient-derived samples
- Develop an OR-to-bench testing system that efficiently determines personalized tumor response
- Build and maintain a patient-support and navigation pipeline to facilitate these and other trials



Project Plan





Application of What You Learned at LEAD

- Developing and implementing projects requires institutional, multi-stakeholder engagement
- In this project, that includes the Departments of Neurosurgery, Neuro-Oncology, Cancer Center, and Research Divisions



Proposed Budget

- Preclinical validation of clinical biomarkers: 150k over 1 year
- Clinical trial navigation infrastructure that prioritizes efficient enrollment, patient sample testing, and personalized treatment: 300k over 2 years



Innovation and Significance

- We have developed a new method of resecting patient's brain tumors and testing them in the lab that may allow for personalized treatment
- Our center has a large catchment but can further increase our patient volume by expanding our clinical trial portfolio to include personalized care and drug screening in patients with brain tumors