

Burkitt Lymphoma Genome Sequencing Project

The National Cancer Institute (NCI) has established a collaborative effort with the Foundation for Burkitt Lymphoma Research (FFBLR) to develop a genomic databank for Burkitt Lymphoma (BL). The Burkitt Lymphoma Genome Sequencing Project (BLGSP) will compile genetic changes present in BL tumors, analyze the data to identify diagnostic, prognostic, or therapeutic markers or targets, and publish the results. The ultimate goal of the BLGSP is to uncover ways to improve the detection and treatment of BL.

Project Information

- All subtypes of BL will be studied: sporadic (adult and pediatric), endemic, HIV-associated
- Complete sequence of genomes and transcriptomes (mRNA and miRNA) from case-matched tumor-normal pairs from BL patients will be generated
- Associations between clinical parameters and genetic abnormalities will be investigated
- Anticipated project timeline is 3-4 years:
 - **Phase 1:** Document development, investigator recruitment, and tissue accrual (2-3 years). *This phase is underway.*
 - **Phase 2:** Genome sequencing and analysis. *This phase will begin immediately when 12-20 cases have been accrued and be completed within 12 months after the last sample is obtained.*
 - **Phase 3:** Validation of findings in a new population cohort (6 months after the cases are identified)
 - **Phase 4:** Publication (3-6 months after the data are generated)

Institutional Requirements

Participating institutions (BLGSP Tissue Source Sites) will use standard operating procedures (SOPs) developed by the NCI Office of Cancer Genomics (OCG) to prospectively collect tissue from BL patients. Retrospective samples will be considered if those tissues meet the project requirements.

BLGSP Tissue Source Sites must:

- Obtain IRB approval for the BLGSP study protocol and patient consent forms- templates available in Office of Cancer Genomics [SOP manual: \(http://ocg.cancer.gov/sites/default/files/OCG_SOP_Manual.pdf\)](http://ocg.cancer.gov/sites/default/files/OCG_SOP_Manual.pdf)
- Follow BLGSP SOPs for tissue collection, storage, and pathology requirements
- Provide BLGSP-required clinical data

Tissue Source Site investigators will have the opportunity to participate in working group meetings as well as co-author the first manuscript generated from BLGSP data.

Tissue Requirements

The detailed tissue requirements for the BLGSP are included in the SOPs. Briefly, the BLGSP requires:

- Tumors from untreated patients diagnosed and confirmed by pathology as BL (100 mg of frozen tumor tissue)
- Case-matched normal tissue or DNA in sufficient quantities such as 10 mL blood, 3 buccal swabs, or ~100 mg of normal tissue
- Tumors with a minimum of 70% tumor nuclei and ~80% viable cells

Contact for more information
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