The Life Raft Group (LRG) is providing you with this information to let you know that comprehensive genomic profiling, also known as biomarker testing or molecular testing, is a crucial step in understanding the genomic factors that play a role in a GIST diagnosis.

There are different types of comprehensive genomic profiling tests: the most common tests are basic mutational testing and advanced next generation sequencing. These tests may help identify alterations, or changes, within DNA and/or RNA of cancer cells that determine how a tumor behaves or why it grows. Basic mutational testing only focuses on testing specific genes like c-KIT, PDGFRA, and BRAF. Advanced next generation sequencing tests a broader range of genes, usually between 5 -500+ genes, including neurotrophic receptor tyrosine (NTRK) gene fusions. The results can help healthcare providers match patients with the appropriate therapeutic treatment options or clinical trials. Finding the right therapeutic treatment and dosage can be a turning point in the response journey of a GIST patient.

The LRG has entered a collaborative research project to optimize access to genomic sequencing for GIST patients. This project aims to increase testing optimization by providing FREE Next-Generation Sequencing (NGS) to eligible patients. LRG has retained Tempus laboratory to provide the testing.

The criteria to participate:
• Must be a US resident
• Must be or become a part of the Life Raft Group GIST Patient Registry
• Must have a treating oncologist
• Must have not had any type of testing (basic mutational testing or advanced testing)
• Patients with wildtype KIT or PDGFRA results from basic mutational testing can also participate

Tempus Tests Available in the Program

**xT Solid Tumor + Normal Test**
Features:
• 648 gene DNA panel sequenced at average 500x depth of coverage
• Sequencing of FFPE tumor tissue and normal matched (through blood or saliva) specimens; includes reporting of 46 incidental germline findings
• MSI status and Tumor Mutational Burden (TMB)
• Full transcriptome by RNA sequencing w/ validated fusion detection
Specimen Types:
• FFPE tissue Slides or Blocks
• Normal match (blood or saliva)

**xT Tumor Only Test**
*recommended when unable to obtain normal matched specimen or if the normal matched specimen cannot be successfully sequenced*
Features:
• 648 gene panel sequenced at average 500x depth of coverage
• Sequencing of FFPE tumor tissue
• MSI status and Tumor Mutational Burden (TMB)
• Full transcriptome by RNA sequencing w/ validated fusion detection
Specimen Types:
• FFPE tissue Slides or Blocks

Note: Additional tests other than xT are not covered through this program.
The Life Raft Group will reach out to physicians to provide the patient’s LRG Sample ID and the Tempus requisition for the program.

1. Complete the test requisition form provided by The Life Raft Group via email. Submit the requisition form and any accompanying documents via email to, fax 800-893-0276, inside the kit, or via the Tempus Clinical Portal.
   a. To protect patients, please only provide the patient’s LRG Sample ID and Date of Birth.
2. Tempus and The Life Raft Group will manage tumor sample procurement.
   a. Optional: If you would like to send in a matched normal sample, please request a Tempus blood or saliva tissue kit via support@tempus.com. Following the instructions for use inside the blood sample kit, collect the sample, and submit to Tempus.
3. Await results while Tempus procures specimens, sequences, and generates the patient’s report. Reports are delivered in approximately 10-14 days from the time Tempus has received all the required information and the specimen(s).

Please direct any questions regarding testing or the ordering process to LRGProgram@tempus.com

Please direct any questions regarding The Life Raft Group’s registry and biobank programs to Denisse Montoya, Director of Patient Registry dmontoya@liferaftgroup.org