FY2027 Sample Processing Laboratory Core Pricing

(Effective October 1st, 2026 through September 30th, 2027)

Service	Price Per Aliquot
Tier I Aliquot Production	$ 9.00
Tier 1 Storage/Retrieval/Shipping	$ 6.00
Tier II Aliquot Production	$ 12.00
Tier II Storage/Retrieval/Shipping	$10.00
Tier III Aliquot Production	$ 20.00
Tier III Storage/Retrieval/Shipping	$ 14.50
Tier IV Advanced Processing	$ 46.00
Streck Research Liquid Biopsy Processing	$ 28.00
Fresh Tissue Fixation	$50.00
Leukemia Tissue Bank Processing	$200.00
DNA Extraction Services	$65.00

Tier I Aliquot Production Services

- Assigned when samples require ***low complexity*** laboratory processing services as determined by the Director of Laboratory Services (or designee) during initial/ongoing review of the project requirements.

- The unit of service is the number of aliquot(s) generated.
- The list price will be multiplied per aliquot generated.
    - If an aliquot is not physically generated from a primary blood collection tube because the sample does not require additional processing, and the actual collected tube is the final product distributed from the SPL, the unit of service is one (1) blood collection tube.

- Requires less than 30 minutes of Research Technician time to complete processing responsibilities.
- Does not require the use of standard laboratory equipment.
- Does not require the use of standard laboratory consumables and reagents.

The following descriptions and examples would result in a project being classified as Tier I Aliquot Production.

Tier I Aliquot Production	
Description	**Examples**
Whole Blood Sample Handling	Commercially available vacutainers with varying anticoagulants (EDTA, PAXgene, Streck, CytoChex, ACD, etc.). Storage under ambient, refrigerated, or frozen conditions. Does not require the tube to be opened for aliquoting.
Urine Sample Handling	Single Collection – sterile urine container Timed Collection – 3L container Does not require chemical treatment or centrifugation.
CSF Sample Handling	Sterile Collection Container such as tube/cryovial. Does not require chemical treatment or centrifugation.
Frozen Tissue Sample Handling	Sterile Collection Container such as tube/cryovial. Sample(s) should be transported to SPL frozen, packaged in dry ice, for transfer into SPL freezers for future shipment *Refer to the "Fresh Tissue Fixation" service detailed below if requiring further processing of Fresh Tissue.*
Buccal Swab Sample Handling	Commercially available swab collection container (such as UTM, IsoHelix, etc.).
Peripheral Blood or Bone Marrow Smear Slide Handing	Slides must be provided to SPL already prepared. Handled according to requirements and packaged for shipment.

Tier II Aliquot Production Services

- Assigned when samples require ***moderate complexity*** laboratory processing services as determined in review by the Director of Laboratory Services (or designee) during initial/ongoing review of the project requirements.

- The unit of service is the number of aliquot(s) generated.
- The list price will be multiplied per aliquot generated.

- Requires approximately 30 to 60 minutes of Research Technician time to complete processing responsibilities.
- Requires the use of standard laboratory equipment (centrifuge, incubator, vortex).
- Requires the use of standard laboratory consumable materials (cryovials, disposable pipettes, MLA pipettes and tips, etc.).
- Does not require the use of standard laboratory reagents.

The following descriptions and examples would result in a project being classified as Tier II Aliquot Production.

Tier II Aliquot Production	
Description	**Examples**
A single one-time centrifugation of sample(s) in order to generate derivatives/aliquots.	Serum Plasma Supernatant (Urine, CSF, etc.) Cellular Pellet w/out Cryopreservation
Primary Sample Aliquoting	Whole Blood Urine CSF
Blood Spot Card Preparation	Centogene
37C Incubation of Sample(s)	QuantiFERON TB Processing Cold Agglutinin Patients

Tier III Aliquot Production Services

- Assigned when samples require ***high complexity*** laboratory processing services as determined in review by the Director of Laboratory Services (or designee) during initial/ongoing review of the project requirements.

- The unit of service is the number of aliquot(s) generated.
- The list price is multiplied per aliquot generated.

- Requires approximately 60 to 120 minutes of Research Technician time to process primary blood collection tube(s) into final aliquots.
- Requires the use of standard laboratory equipment (centrifuge, incubator, vortex, biological safety cabinet, aseptic technique, de-ionized water generation, analytical balance).
- Requires the use of standard laboratory reagents that are prepared by Research Technicians. Generally, no more than two reagents are required for processing. Reagents are "common stock reagents".
- Requires the use of standard laboratory consumable materials (cryovials, disposable pipettes, MLA pipettes and tips, etc.). Use of these materials is often double that of Tier II requirements.

The following descriptions and examples would result in a project being classified as Tier III Aliquot Production.

Tier III Aliquot Production	
Description	**Examples**
Plasma processing requiring two(2) or more centrifugations.	Platelet Poor Plasma (Coagulation Samples) Cell Free DNA (Streck/EDTA)
Cell Isolation using commercially available vacutainers that do not require cell washing or cryopreservation.	CPT Vacutainer Processing Buffy Coats centrifuged without a centrifuge brake
Derivatives requiring chemical preservation	Tetrahydrouridine (THU) to Plasma Citric Acid to Plasma L-Ascorbic Acid to Plasma Triton X to Urine CHAPS to Urine
Non-standard blood collection tube processing	Monovettes TruCulture tubes

Tier IV Advanced Processing Services

- Assigned when samples require ***the most complex combination*** *of* laboratory processing services as determined in review by the Director of Laboratory Services (or designee) during initial/ongoing review of the project requirements.

- The unit of service is the number of aliquot(s) generated.
- The list price is multiplied per aliquot generated.

- Requires more than 120 minutes of Research Technician time to process primary blood collection tube(s) into final aliquots.
- Requires the use of standard laboratory equipment (multiple centrifugations, incubator, vortex, biological safety cabinet, aseptic technique, de-ionized water generation, analytical balance, automated fluorescent cell counter).
- Requires the use of standard laboratory reagents that are prepared by Research Technicians. Generally, three or more reagents are required. Reagents may be "common stock reagents". One time purchasing by the department of non-stocked reagents may be required. Occasionally, non-stock reagents will be purchased under the projects fund number if approved by the assigned Financial Analyst and/or PI.
- Requires the use of standard laboratory consumable materials (cryovials, disposable pipettes, MLA pipettes and tips, one time use cell counting chambers, fluorescence stain, etc.). Use of these materials is often double that of Tier III requirements.

The following descriptions and examples would result in a project being classified as Tier IV Aliquot Production.

Tier IV Aliquot Production	
Description	**Examples**
Isolating Mononuclear Cells Cell Washing Cell Counting Cryopreservation/Cryoprotecting of Cells Controlled Freezing Chamber	PBMC and/or BMMC LeucoSep Methodology CPT Vacutainer Methodology SepMate Methodology
Sterile filtration of samples	Uterine Lavage
Isolation of Cells from non-blood-based samples	Bronchoalveolar Lavage Sputum

SPL Storage/Retrieval/Shipping Tiering Criteria

- Storage/Retrieval/Shipping Tiered fees are invoiced as a multiple based on the number of aliquots that were generated in processing which would then be required to be stored, retrieved, and shipped (or internally transferred to another MGH laboratory) from the SPL.

The criteria for tiering Storage/Retrieval/Shipping levels are defined in the following table:

Criteria	Tier I	Tier II	Tier III
# Of Required Shipments	Single Shipment (One Package) Internal Distribution to MGH Investigator (MGB BioLift)	Duplicate Shipment (Two Packages) Primary/Backup Shipments	Multiple Shipments (>Two Packages) More than one (1) final destination (domestic) and/or more than one (1) required shipping temperature.
Temperature Conditions	Dry Ice (1 box) Refrig. (Cold Pack) Ambient	Dry Ice (2 boxes)	More than one required condition (dry ice, refrigerated, ambient) requiring multiple boxes per shipment.
Final Destination	Single Location (Domestic) Internal Distribution to MGH Investigator	Single Location (Domestic) Internal Distribution to MGH Investigator	Multiple Locations (Domestic) International Location (Customs Declaration and Bill of Lading Required)

Streck Research Liquid Biopsy Processing

- The service line item was created in an effort to provide MGH Principal Investigators (PI's) with subsidized pricing for a centralized "Research Liquid Biopsy" Processing service conducted by the SPL.
- The SPL provides processing of Streck Cell Free DNA Blood Collection tubes into various derivatives which include cell free plasma, mixed cellular pellets, and cryopreserved buffy coats. Derivatives are prepared into aliquots which are then distributed to PIs within the MGH network of research.
- SPL provides all resources: competent personnel, laboratory equipment, consumables, reagents, short term -80C storage of samples, dry ice, and packaging/shipping materials.
    - For transfers of samples to Charlestown Navy Yard (CNY), the MGB BioLift Courier Service, free of charge, will be utilized to courier samples from the main campus to CNY.
    - For some projects, a direct hand off of samples will be conducted from SPL personnel to the responsible project personnel in SPL physical space.
    - Alternative courier services (such as US Ground, RTD Logistics, etc.) must be secured by the PI or representative. Shipping resources such as airway bills must be provided to SPL.
    - Generally, transfer of samples will occur within 30 days of sample collection.

- The fee of $33 dollars will be applied for each patient submission. This is regardless of the number of blood collection tubes submitted, the type of derivative prepared, and the number of aliquots distributed.

The current list of projects, their respective collection protocol, and responsible principal investigator that will receive this level of pricing are detailed in the following table:

Project Name	IRB Protocol #	PI Name
RLB-GI	14-046, 13-416, 02-240, 14-046-01, 18-144, 13-505, 19-538, 19-587, 18-380, 17-012, 18-397, 20-256, 20-452, 39-355, 24-643	Harsh Singh Sam Klempner Aparna Parikh
RLB-Breast	2018P001865	Laura Spring
RLB-Genetics	93-085, 13-325	Leif Ellisen
RLB-Whitney	2018P001865	Leif Ellisen
21-350	21-350	David Ting Colin Weekes
Thoracic Collections	13-416 02-180	Ibiayi Dagogo-Jack
RLB-TBCRC067	RLB-TBCRC067	Leon Pappas
13-416 XB628	13-416	Leon Pappas

Additional projects will be evaluated on a case-by-case basis to determine if criteria are met to receive this internal pricing by the Laboratory Director or designee.

Fresh Tissue Fixation

- Fresh Tissue requests collected as part of MGBCI Clinical Trials Office (CTO) Administered Trials, whether required or optional collections, may require processing and accessioning by SPL Personnel over weekends and/or MGB observed holidays.
    - Samples will be processed according to tissue fixation requirements of laboratory manuals, protocols, or other written compendiums. This includes allowing biopsy samples to fix across a time bound requirement in solution, washing/rinsing tissue if required, placing tissue into a cassette, accessioning in SPL records, and delivering the sample to other MGB Research Cores for histology workflows.
    - The fee of $50 dollars will be applied for each patient submission for sample handling and temporary storage/transfer to MGB Research Cores. This fee includes purchasing various supplies necessary for processing and tech labor time.

Leukemia Tissue Bank Processing

- The SPL provides sample processing services to the Leukemia Tissue Bank organized by Dr. Andrew Brunner at MGH. Sample collections are performed under the IRB Protocol 13-583.

- The following sample types are collected under 13-583 and submitted to SPL for processing:
  - Peripheral Blood collected in Lavender EDTA Vacutainers; processed to cryopreserved peripheral blood mononuclear cells (PBMC) and plasma.
  - Bone Marrow Aspirate collected in Lavender EDTA Vacutainers; processed to cryopreserved bone marrow mononuclear cells (BMMC).
  - Buccal Swabs
  - Fresh Skin Tissue

- Peripheral Blood and Bone Marrow Aspirate samples are technically categorized as Tier IV Aliquot production, however due to patient conditions (i.e. markedly elevated white blood cells) these samples typically result in a high number of aliquots. The SPL Expense for preparing additional aliquots for these samples is not equitable in relation to invoicing for Tier IV aliquot services multiplied by the number of aliquots produced. Therefore, these types of samples will receive a one-time per collection charge regardless of the number of aliquots produced. There will not be an associated charge for storage/retrieval/shipping of these sample types. This allows 13-583 administrators to budget appropriately for collections, assuming that each collection of Peripheral Blood or Bone Marrow Aspirate will result in a "Leukemia Tissue Bank Processing" charge from the SPL.

- Buccal Swabs will be categorized as Tier I Aliquot production. There will not be an associated charge for storage/retrieval/shipping for these sample types.

- Fresh Skin Tissue will be categorized as Tier I Aliquot production. There will not be an associated charge for storage/retrieval/shipping for these sample types.

- Final aliquots are transferred from SPL custody through an Investigator Directed Clinical Research Coordinator from GRJ1028/GRJ1014 to GRJ1004A. This process requires a very minimal amount of SPL Labor. This process does not require shipping supplies such as dry ice or an insulated shipping box.

DNA Extraction Services

- The SPL provides DNA Extraction Services to the PETAL Consortium organized by Dr. Salvia Jain at MGH.

- DNA Extraction is performed using the Qiagen QIAamp Circulating Nucelic Acid extraction kits, reagents, and manifold equipment.

- Plasma samples are provided by the PETAL Consortium team to the SPL for performing the extraction procedures in batches. Final aliquots post extraction runs are transferred back to the PETAL Consortium team.

- Each sample is invoiced for $65 dollars to cover the costs of consumable materials and personnel labor.