Lab Dept:	**Anatomic Pathology**
Test Name:	**GENE REARRANGEMENT, T & B CELLS, BONE MARROW**

General Information

Lab Order Codes:	GRBM
Synonyms:	Gene-T; T-Cell Receptor Rearrangement; Gene-B; Immunoglobulin Gene Rearrangement
CPT Codes:	81261 – IGH@, gene rearrangement analysis to detect abnormal clonal populations; amplified methodology 81342 – TRG@, gene rearrangement analysis, evaluation to detect abnormal clonal populations
Test Includes:	T-Cell: DNA amplification by PCR for detection of T-Cell receptor beta and gamma chain gene rearrangement. If requested, Southern transfer technique for analysis of T-Cell receptor beta, gamma, and delta chains performed at a separate charge. B-Cell: DNA amplification by PCR for detection of immunoglobulin heavy chain (JH framework 2 and 3), and bcl-2 gene rearrangement. Confirmation of bcl-2 allele specific oligonucleotide hybridization (slot blot) when appropriate. If requested, Southern transfer technique for analysis of immunoglobulin heavy (IgH), kappa, lambda chains, and/or bcl-2, c-myc and n-myc performed at separate charge

Logistics

Test Indications:	Evaluation for clonal rearrangement in lymphoma and leukemia.
Lab Testing Section:	Anatomic Pathology - Sendouts
Referred to:	Fairview University Diagnostic Laboratories
Phone Numbers:	MIN Lab: 612-813-6280 STP Lab: 651-220-6550
Test Availability:	For best results, specimens should arrive by 2:00 PM Friday
Turnaround Time:	Results available in 7-14 days.
Special Instructions:	Indicate on request form if Southern transfer technique is desired.

Specimen

Specimen Type:	Bone marrow
Container:	Syringe with ACD (or EDTA) solution
Draw Volume:	5 mL bone marrow
Processed Volume:	Same as Draw Volume
Collection:	Routine Bone marrow aspiration
Special Processing:	Lab Staff: Store at room temperature. **Do Not freeze**. Contact laboratory prior to shipping. Ship bone marrow at room temperature to arrive within 24-hours
Patient Preparation:	None
Sample Rejection:	Clotted bone marrow; frozen specimen; mislabeled or unlabeled specimens

Interpretive

Reference Range:	Results are reported as negative (germline or no rearrangement noted) or positive (clonal rearrangement indicating clonal cell populations present). Correlations with immunophenotypic, histopathologic, and cytogenetic data will be included with the interpretation of the molecular data when available.
Critical Values:	N/A
Limitations:	N/A
Methodology:	Amplification of DNA and confirmation by RFLP (restriction fragment length polymorphism) analysis using Southern transfer technique when appropriate.
References:	Fairview University Diagnostic Laboratory Web Page http://labguide.fairview.org/diagnostic.asp January 2012
Updates:	1/18/2006: CPT 2006 updates 1/10/2007: CPT 2007 updates 2/6/2013: CPT 2013 updates