ALLINA HEALTH LABORATORY

Memo

To: Allina Health Laboratory outreach clients

From: Allina Health Laboratory outreach services

Date: November 5, 2021

Re: Flow Cytometry T cell tube changes

Quick Reference

On November 23, 2021, Allina Health Laboratory will transition the T Cell Leukemia/Lymphoma panel to a new flow cytometer with a modified panel configuration.

Details

Building on the T cell screen (T1) that was implemented earlier this year, the remaining four tubes in the T Cell Leukemia/Lymphoma panel will be reconfigured into a two-tube, 10-color format and acquired on the new BD FACSLyric flow cytometer. The change greatly improves efficiency and resolution of T and NK cells within a complex mixture of cells.

The reconfigured panel streamlines characterization of T cell neoplasms by separating markers into three tubes, each designed with a specific diagnostic focus. The T1 tube includes TRBC1, a novel antibody for detecting clonal T cells. The T2 tube contains markers necessary for classification of mature T cell clones detected in the T1, while T3 contains markers for classification of rare T lymphoblastic leukemias and other T-lineage malignancies. The majority of cases will be adequately assessed using the 16-marker T1/T2 combination (net decrease of 3 CPT charges per panel over previous T cell panels). The T3 tube will be reflexed for an additional charge, however, if immature or lymphoblastic features are detected in the T1 and/or T2 tubes for a total of 20 CPT charges per panel (decrease of one CPT charge).



Panel	Tubes	Markers	Standard charges*
T Cell Screen	T1	CD2, CD3, CD4, CD5, CD7, CD8, CD19, CD45, CD56, TCRγδ, TRBC1	88184 x 1 88185 x 10
T Cell Leukemia/Lymphoma	T1, T2	CD2, CD3, CD4, CD5, CD7, CD8, CD10, CD16, CD19, CD45, CD56, CD57, HLA-DR, TCRαβ, TCRγδ, TRBC1	88184 x 1 88185 x 15
T-ALL	T1, T2, T3	CD1a, CD2, CD3, CD3 (cyto), CD4, CD5, CD7, CD8, CD10, CD16, CD19, CD34, CD45, CD56, CD57, HLA-DR, TdT(n), TCRαβ, TCRγδ, TRBC1	88184 x 1 88185 x 19

^{*}Charges may vary based on immunophenotype of cells in the specimen

