

NEW FLOW CYTOMETRY PLATFORM Test Update

Effective June 21, 2021, Clinical Labs of Hawaii will be transitioning to a new automated flow cytometry platform as part of our ongoing commitment to excellence. The ten-color BD FACSLyric™ Flow Cytometry System is a new diagnostic standard for clinical cell analysis improving sensitivity, resolution, and turn-around time. As with all platform changes, we have performed extensive studies and are excited to offer this new state-of-the-art technology to aid in the diagnosis and treatment of your patients. Test codes will remain the same.

- 1) For testing of hematologic neoplasms, users will no longer need to specify a particular panel to run, as there will only be one choice that simultaneously evaluates for acute leukemias, lymphomas, and plasma cell neoplasms.
- 2) For CD34 enumeration, there will be no changes.
- 3) For lymphocyte subset panels performed on whole blood, the table below summarizes the new test information:

NEW TEST INFORMATION FOR LYMPHOCYTE SUBSET PANELS		
Specimen Requirements	<i>3ml whole blood in an EDTA (lavender top) tube only. Keep at room temperature [ACD (yellow top) tubes are no longer acceptable]</i>	
Specimen Stability	<i>48 hours**</i>	
Test Performed	<i>Daily, Monday to Friday (**specimens for Lymphocyte Subset Panels must be received in our Heights Flow Cytometry Lab on Oahu by 2:00pm to make the daily run)</i>	
Test	Age Group	New Reference Range (10th and 90th percentiles)
<i>CD3, Absolute Count (/μl)</i>	<i>0-3 months</i>	<i>2500 - 5500</i>
	<i>3-6 months</i>	<i>2500 - 5600</i>
	<i>6-12 months</i>	<i>1900 - 5900</i>
	<i>1-2 years</i>	<i>2100 - 6200</i>
	<i>2-5 years</i>	<i>1400 - 3700</i>
	<i>≥ 5 years</i>	<i>725 - 2624</i>
<i>CD3, Percent %</i>	<i>0-3 months</i>	<i>53 - 84</i>
	<i>3-6 months</i>	<i>51 - 77</i>
	<i>6-12 months</i>	<i>49 - 76</i>
	<i>1-2 years</i>	<i>53 - 75</i>
	<i>2-5 years</i>	<i>56 - 75</i>
	<i>≥ 5 years</i>	<i>60 - 86</i>
<i>CD4, Absolute Count (μ/l)</i>	<i>0-3 months</i>	<i>1600 - 4000</i>
	<i>3-6 months</i>	<i>1800 - 4000</i>
	<i>6-12 months</i>	<i>1400 - 4300</i>
	<i>1-2 years</i>	<i>1300 - 3400</i>
	<i>2-5 years</i>	<i>700 - 2200</i>
	<i>≥ 5 years</i>	<i>330 - 1671</i>
<i>CD4, Percent %</i>	<i>0-3 months</i>	<i>35 - 64</i>
	<i>3-6 months</i>	<i>35 - 56</i>
	<i>6-12 months</i>	<i>31 - 56</i>
	<i>1-2 years</i>	<i>32 - 51</i>
	<i>2-5 years</i>	<i>28 - 47</i>
	<i>≥ 5 years</i>	<i>22 - 61</i>

<i>CD8, Absolute Count (μ/l)</i>	<i>0-3 months</i>	<i>560 – 1700</i>
	<i>3-6 months</i>	<i>590 – 1600</i>
	<i>6-12 months</i>	<i>500 – 1700</i>
	<i>1-2 years</i>	<i>620 – 2000</i>
	<i>2-5 years</i>	<i>490 – 1300</i>
	<i>≥ 5 years</i>	<i>226 - 1281</i>
	<i>CD8 Percent %</i>	<i>0-3 months</i>
<i>3-6 months</i>		<i>12 – 23</i>
<i>6-12 months</i>		<i>12 – 24</i>
<i>1-2 years</i>		<i>14 – 30</i>
<i>2-5 years</i>		<i>16 – 30</i>
<i>≥ 5 years</i>		<i>12 - 44</i>

If you have any questions, please contact our Client Services Department at 808-677-7998 on Oahu or 1-866-281-6816 toll free.

Thank you for choosing Clinical Labs of Hawaii.

References:

- For ages 0 to 5 years old reference ranges: Shearer WT et al.; Pediatric AIDS Clinical Trials Group. Lymphocyte subsets in healthy children from birth through 18 years of age: the Pediatric AIDS Clinical Trials Group P1009 study. *J Allergy Clin Immunol.* 2003 Nov;112(5):973-80.
- For ages ≥5 years old reference ranges: internal study by Clinical Labs of Hawaii