



January 19, 2023

From: Chris Lough, M.D.  
Vice President of Medical Services  
Subject: Platelet Refractory Patient Workups

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In response to consistently increasing demand, LifeSouth is investing significant amounts of time and resources into enhancing our availability of specialty platelet products and testing capabilities. As a result, we are pleased to formally introduce our recommended platelet refractory patient workup algorithm. The algorithm is designed to minimize the time and cost to first platelet, while providing a complete assessment of immune causes of refractoriness for future transfusion needs. The algorithm is provided on the second page of this memo.

The initial screening approach is an HLA antibody screen and a platelet crossmatch in tandem. This parallel testing allows for rapid provision of initial, compatible products (if available) which can be quickly followed up with products found through utilization of the antibody avoidance strategy. In this manner, the difficulties of HLA matching and blind, extensive crossmatching can be avoided through strategic testing and selection.

In addition to HLA antibody identification and avoidance, LifeSouth has added capabilities to detect and avoid platelet specific antibodies (HPA antibodies). We are in the process of bringing large scale next generation sequencing online for our donors and expect our database of platelet antigen negative donors to increase rapidly over the next year.

To take advantage of this new protocol, you may order a "Platelet Refractory Patient Workup" in HemaControl instead of ordering the tests a la carte. Pricing for the individual tests is per your Fee Schedule and you will continue to get reports for each of the tests performed. Expected turn around times for advanced testing, such as HLA typing and antibody screening, is 3 days for STAT orders and 7 days for Routine.

Recommended sample type for submission:

2 EDTA Tubes, ≥4mL each  
For HLA Typing, WBC count must be  $>1 \times 10^3/\text{ul}$

If you have any questions or would like more information about our platelet refractory patient services, please feel free to contact the director of our HLA laboratory, Dr. Matt Montgomery, at [mmmontgomery@lifesouth.org](mailto:mmmontgomery@lifesouth.org) or the Manager of our Special Testing Laboratory, Kelly Anderson, at [klanderson@lifesouth.org](mailto:klanderson@lifesouth.org).

