**HematoLogics, Inc.**

3161 Elliott Avenue, Suite 200, Seattle, WA 98121 Phone (800) 860-0934 Fax: (206) 223-5550 [www.hematologics.com](http://www.hematologics.com)

**MYD88/CXCR4 Testing**

HematoLogics **∆N:™ (Difference from Normal)** *Flow Cytometry* followed by ***Flow Cytometric Cell Sorting*** (FACS) of Plasma and Lymphoid cells increases the specificity of MYD88 L265P detection by 33% allowing for a more accurate diagnosis of Waldenström’s/Lymphoplasmacytic Lymphoma.

* MYD88 L265P is not restricted to an LPL/WM diagnosis, it can also be found in IgM monoclonal gammopathy of undetermined significance or Splenic Marginal Zone Lymphoma and other B-cell chronic lymphoproliferative disorders.
* A confirmed diagnosis of WM/LPL has MYD88 L265P mutations in both Lymphoid and Plasma cell populations.
* Magnetic Beads cannot be used because it does not give a pure enough sample.
* **HematoLogics** **FACS of Plasma and Lymphoid cells increases the sensitivity of CXCR4 detection by 63%**
* A mutation in CXCR4 may promote resistance to Ibrutinib, a Bruton’s tyrosine inhibitor used in the treatment of WM.

**MYD88 p.L265P analysis in B-cell (BC) vs plasma cell (PC) fractions**

  

**∆N:™ Flow Cytometry followed by FACS sorted B-lymphoid and plasma cells fractions**

**B-cell (IgH) gene rearrangement studies with identical monoclonal amplicons in BC and PC**

**Sanger sequencing analysis: MYD88 p.L265P detected in BC and PC**

 B. Burnworth et al. / Leukemia Research 51 (2016) 41–48

Best for Your Patient – Best for You