

## ADx TEST UPDATES – *An update of ADx testing services*

### TLR-defect screening assay (TLR)

A single test to determine if a Toll-like receptor (TLR) defect exists. TNF $\alpha$  release is measured following stimulation of peripheral blood mononuclear cells with various TLR ligands. TLR defects have only recently been identified as significant contributors to the immunodeficiency disease spectrum.

### Extended B cell phenotyping panel (XBCP)

A new flow cytometry panel to complement the Advanced Diagnostic Laboratories (ADx) *memory B cell phenotyping panel (IgD, CD27)*. Together these panels are recommended for suspected common variable immune deficiency (CVID) to identify the defect in B cell development. The new panel consists of CD20, CD38, CD21, and IgM.

### B cell signaling defect assays

**BAFFR, CD40, ICOS, and CD40L**

New flow cytometry assays to identify specific B cell signaling defects. These tests add further comprehension to the B cell flow menu for primary immunodeficiency (PIDD) patient diagnostic work up.

### T cell characterization assays

**(ALPS) panel (CD95(Fas) and double negative  $\alpha\beta$ + T cells)**

**Regulatory T cell panel (CD4/CD25/FoxP3)**

**CD4 + RTE: Recent thymic emigrants (CD45RA/CD31) (CD4RTE)**

New flow cytometry assays to characterize specific T cell populations, as well as identify specific defects. With the available ADx menu, provides broad coverage of T cell deficits in patients with suspected immune-dysregulation or PIDD.

### TH1/TH2 cytokine panels

Cytokines are critical early mediators of the inflammatory and overall immune response. ADx has created two panels to measure circulating cytokines released by Type 1 and Type 2 helper T cells, as an aid in the assessment of immune status. This supplements the large menu of individual serum, plasma, intracellular and sputum cytokine assays from ADx.

**TH1/TH2 Panel A:** IL-2, IL-4, IL-6, IL-10, IL-12, IFN- $\gamma$ , TNF- $\alpha$

**TH1/TH2 Panel B:** IL-2, IL-4, IL-5, IL-10, IFN- $\gamma$ , TNF- $\alpha$

### C2 Type I deficiency

C2 deficiency is the most common inherited complement deficiency in Caucasians: 1/140 individuals has one C2 null gene. Between 80-90% of cases of C2D are Type I C2D, caused by a 28 base-pair deletion that stops C2 production. Patients present with recurrent infections or lupus-like disease. Our test detects the 28 bp deletion by agarose gel analysis to establish the diagnosis of homozygous or heterozygous Type I C2 deficiency.

For more detail on any of these tests

- Visit [NJlabs.org](http://NJlabs.org)
- Call client services at ext 2603 (press 6)