

BiomeBurden™ Complete

Provider Panel Overview



Go Beyond Presence. Detect the Immune Response.

BiomeBurden™ Complete reveals how the immune system is reacting to bacteria, fungi, and related toxins—delivering clinically actionable data that helps tailor targeted interventions for chronic gut, neuroimmune, and autoimmune cases.

Why BiomeBurden™ Matters

Goes Beyond Presence

Understand not just what's in the gut, but what's triggering immune activation.

Uncovers Hidden Drivers

Detect immune responses to bacterial and fungal antigens, toxins, and cross reactive proteins.

Supports Personalized Plans

Reveal immune imbalances that can guide treatment — from diet to immune modulation.

MYCO, MICRO, & IMMUNE EVALUATION

BiomeBurden™ Complete

Ideal for patients with:



Persistent gut symptoms
(IBS, SIBO, dysbiosis)



Neuroinflammation
(brain fog, fatigue)



Autoimmune conditions



Unexplained chronic illness



The **BiomeBurden™** testing series offers flexible options for evaluating microbial immune reactivity and immune regulation.

Each level adds more insight—starting with Candida reactivity, expanding to molds and bacteria, and culminating in full immune cell profiling.

Myco-BiomeBurden™ (Foundational)

Candida Albicans Antigens*
Candida Tropicalis + C. Glabrata*
Candida Parapsilosis + Krusei*
Candida Auris*
Candidalysin*
Candida Germ Tube Protein*
Alpha-Enolase*

Micro-BiomeBurden™ (Expanded)

Saccharomyces Cerevisiae Glucan*
Saccharomyces Boulardii*
Food-derived Molds*
Aerobic Enteropathogens*
Anaerobic Enteropathogens*
Neutrophil Activation Factors*
Actin Peptide*
Ubiquitin*

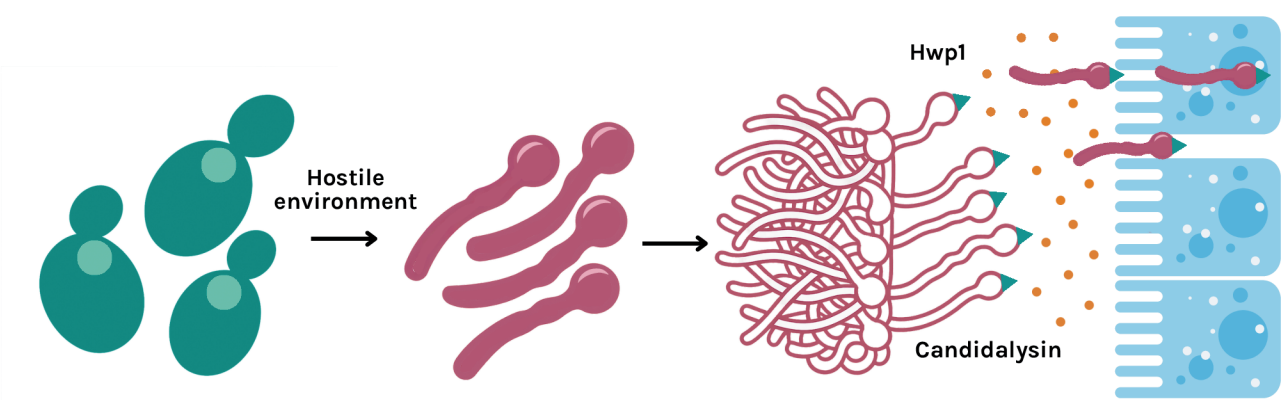
BiomeBurden™ Complete (Comprehensive)

WBC
Total Lymphocyte
Total T-Cell
Th1 Th2
Th1/Th2 ratio
Th17
T-Reg
Th17/T-Reg ratio

*Tested IgG and IgA Separately

From Commensal to Pathogen

This visual outlines how *Candida albicans* shifts from a benign resident of the microbiome to an invasive organism capable of triggering immune activation. Understanding this transformation—and the immune response it provokes—can help identify when *Candida* is contributing to mucosal disruption or systemic burden.



Yeast Form	Conversion	Biofilm Forms	Tissue Invaded	Entry
Commensal <i>Candida</i> in unicellular form, typically non-pathogenic.	In response to host stressors, transitions to hyphal form for immune evasion & tissue penetration.	Aggregates and expresses virulence factors (Hwp1, candidalysin) to enhance adherence and pathogenicity.	Disrupts epithelial integrity via paracellular and transcellular routes.	Hyphal proteins and toxins translocate into circulation, provoking IgA/IgG responses against virulence antigens.

How does the BiomeBurden™ Complete Compare?

	Standard Stool Tests	BiomeBurden™ Complete
Microbial Presence	✓	✗
Immune Reactivity	✗	✓
Autoimmune Insight	✗	✓
Long-Term Exposure	✗	✓
Dietary Implications	May guide prebiotic / probiotic choices	Helps personalize dietary strategies (yeast, mold, fermented)
Ideal Use	Acute GI, SIBO, Dysbiosis, Pathogen ID	Autoimmune, chronic inflammation, neuroinflammation

Getting Started with BiomeBurden™

BiomeBurden™ testing requires just two tubes—one whole blood and one serum—to yield clinically meaningful insights. This minimal draw enables a comprehensive view of the patient's immune reactivity across microbial, fungal, and human tissue antigens.

Elevated antibodies to components of the microbiome, mycobiome, neutrophil activation markers, or self-antigens may reflect early immune dysregulation—often years before clinical symptoms emerge. These immune markers can provide critical clues in cases of unresolved inflammation, persistent GI symptoms, or suspected autoimmunity.

By identifying immune reactivity patterns early, providers can take a proactive approach—modulating immune balance, targeting microbial or environmental triggers, and supporting long-term resilience before overt disease manifests.

Specimen Requirement for Serum Sample



Collect: 5 mL red top or tiger top

Transport: 2 mL serum

Multiple add-ons to existing orders will be accepted within 14 days of specimen receipt; after that time, specimens will be frozen and only one add-on request, which can consist of several arrays, can be processed between days 15-83. Specimens are stored for 90 days.

Specimen Requirement for Whole Blood Sample



Collect and transport filled K2 EDTA tube with whole blood.

Collect samples **Monday through Thursday – must ship same day for Next Day Early Delivery.**

NEVER REFRIGERATE OR FREEZE SPECIMEN



Scan to learn more about how **BiomeBurden™ Complete** fits into your practice. Visit **JoinCyrex.com** to view test options, download resources, and open a provider account.