Results. The Aliquot BdAg ELISA showed 95.7% (22/23), 96.8% (61/63) and 96.5% (83/86) positive, negative and overall agreement with the MVDx BdAg EIA, respectively. Seventeen of the 22 samples positive for BdAg by both assays resulted positive by a H. capsulatum antigen ELISA (IMMY, Norton, OK). Of the five well-characterized patients, one was diagnosed with blastomycosis based on a positive B. dermatitidis immunodiffusion result; this patient was positive by both BdAg assays. All urine samples positive for S. pneumoniae or L. pneumophila antigen were negative by the Aliquot BdAg ELISA, while all five samples positive by the IMMY H. capsulatum antigen ELISA were also positive by the Aliquot BdAg assay.

Conclusions. The Aliquot BdAg ELISA demonstrated excellent agreement with the MVDx BdAg EIA. Cross-reactivity between B. dermatitidis and H. capsulatum antigen detection assays has been previously established and is a notable limitation to the Aliquot BdAg assay. Further evaluation of this assay using specimens from well-characterized patients with and without blastomycosis is warranted.

Disclosures. All authors: No reported disclosures.

2036. Plasma (1→3)-β-D-Glucan Levels Correlate with Neurocognitive Functioning in HIV-Infected Adults
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Background. Although antiretroviral therapy (ART) has improved survival and morbidity, HIV-infected adults still have higher rates of non-AIDS disorders, such as neurocognitive impairment, than HIV-uninfected adults. (1→3)-β-D-Glucan (BDG) is a fungal cell wall component which serves as a plasma biomarker for fungal infection and—in the absence of fungal infections—for gut barrier integrity failure and microbial translocation. The objective of this study was to determine whether higher plasma and cerebrospinal fluid (CSF) levels of BDG are associated with neurocognitive impairment [evaluated by global deficit score (GDS)] in HIV-infected adults.

Methods. We measured levels of BDG in paired plasma and CSF samples, and compared levels with GDS, soluble urokinase plasminogen activator receptor (suPAR), a marker of monocyte activation and chronic inflammation that has previously been associated with non-AIDS disorders) and plasma CD4/CD8 ratio in a cohort of 61 HIV+ adults on suppressive ART. Study samples were collected as part of the prospective CHARTER study between 2005 and 2015 at the University of California San Diego and were stored at −80°C on the day of collection. BDG testing of blood plasma and CSF supernatant was performed at the Associates of Cape Cod, Inc., research laboratories using the Fungitell assay.

Results. Median plasma BDG level was 18 pg/mL (range: 2–60 pg/mL), median CSF BDG level was 20 pg/mL (range: 0–830 pg/mL). Higher levels of plasma BDG were associated with non-AIDS disorders) and plasma CD4/CD8 ratio in a cohort of 61 HIV+ adults on suppressive ART. Study samples were collected as part of the prospective CHARTER study between 2005 and 2015 at the University of California San Diego and were stored at −80°C on the day of collection. BDG testing of blood plasma and CSF supernatant was performed at the Associates of Cape Cod, Inc., research laboratories using the Fungitell assay.

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Conclusion. Elevated plasma levels of BDG may be an indicator of gut barrier integrity failure and an independent biomarker associated with neurocognitive functioning in HIV+ adults on suppressive ART.

Disclosures. All authors: No reported disclosures.

2035. Detection of Blastomyces dermatitidis Antigen in Urine Using a Novel Quantitative Enzyme-Linked Immunosorbent Assay
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Background. Detection of Blastomyces dermatitidis antigen (BdAg) in clinical specimens offers a rapid and non-invasive means to both diagnose blastomycosis and monitor patient response to therapy. There are currently no BdAg detection assays commercially available and the majority of BdAg testing is performed at a single reference laboratory (MiraVista Diagnostics [MVDx], Indianapolis, IN). Here, we evaluated a novel, quantitative enzyme-linked immunosorbent assay (ELISA) based on a unique rabbit monoclonal antibody for detection of B. dermatitidis polysaccharide antigens in urine (Aliquot LLC, Gorham, Maine).

Methods. Clinical residual urine specimens collected from 86 unique patients with a previously negative (n = 63) or positive (n = 23) result by the MVDx Blastomyces Ag Quantitative EIA were evaluated by the Aliquot BdAg ELISA. Clinical information was available for five of these patients. In addition, analytical specificity was evaluated using 15 residual urine samples positive for Streptococcus pneumoniae (n = 5), Legionella pneumophila (n = 5) or Histoplasma capsulatum (n = 5) antigens.