MEDICAL POLICY

MEDICAL POLICY DETAILS	
Subject	**SERUM ANTIBODIES FOR THE DIAGNOSIS OF INFLAMMATORY BOWEL DISEASE**
Policy Number	**2.02.19**
Category	**Laboratory Tests**
Effective Date	**05/21/03**
Revised Date	**04/15/04, 02/17/05, 01/21/10, 11/17/11, 12/20/12, 12/19/13, 11/20/14, 11/19/15, 11/17/16**
Archived Date	**11/16/17**
Edited Date	**12/20/18**
Deleted Date	**(10/20/05-01/21/10)**
Product Disclaimer	• *If a product excludes coverage for a service, it is not covered, and medical policy criteria do not apply.* • *If a commercial product (including an Essential Plan product) or a Medicaid product covers a specific service, medical policy criteria apply to the benefit.* • *If a Medicare product covers a specific service, and there is no national or local Medicare coverage decision for the service, medical policy criteria apply to the benefit.*

POLICY STATEMENT

Based upon our criteria and review of the peer-reviewed literature, the use of serologic markers (including, but not limited to anti-neutrophil cytoplasmic antibodies (ANCA) and/or anti-*Saccharomyces cerevisiae* (ASCA), antibodies of outer membrane porin C of the bacteria *Eschericia coli* (anti-OmpC), *Pseudomonas* fluorescens-associated sequence I2 (anti-I2), flagellin CBir1 (anti-cBir1), *antichitobioside* antibodies (ACCA IgA), *antilaminaribioside* antibodies (ALCA IgG), and *antimannobioside* antibodies (AMCA IgG)) has not demonstrated a benefit to patient outcomes and is considered **not medically necessary** for all indications including, but not limited to:

I. In the diagnosis and monitoring of patients with inflammatory bowel disease; and
II. To distinguish ulcerative colitis from Crohn's disease.

POLICY GUIDELINES

Laboratories performing clinical tests must be certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA).

DESCRIPTION

Inflammatory bowel disease (IBD) is a chronic disease of the gastrointestinal tract that consists of two related entities, ulcerative colitis (UC) and Crohn's disease (CD). Although ulcerative colitis and Crohn's disease are generally considered distinctive forms of IBD, their clinical presentations commonly overlap. Furthermore, for approximately 10-15% of patients with IBD, the distinction between UC and CD cannot be made with certainty. These patients are given a diagnosis of indeterminate colitis (IC). A correct diagnosis of IBD, especially the differentiation between CD and UC is highly important toward treatment and prognosis. The diagnostic work-up of patients with IBD is relatively complicated and endoscopic exam and biopsy is currently a crucial component of the diagnosis. Less invasive, accurate diagnostic tools to distinguish between UC, CD, and cases of indeterminate colitis are needed.

It has been proposed that serological markers for IBD can be utilized both to differentiate UC from CD and also to define patient subgroups (e.g., location of the disease such as proximal versus distal bowel involvement). Other potential uses include determination of disease severity, predicting response to anti-tumor necrosis factor (TNF) therapy and to identify the susceptibility to IBD among family members of an affected individual. Anti-neutrophil cytoplasmic antibodies

(ANCA) and anti-*Saccharomyces cerevisiae* antibodies (ASCA) have been the most extensively studied serological markers for use in the diagnosis of IBD. ANCA are a group of antibodies, which are specific for granulocyte antigens. Anti-neutrophil cytoplasmic antibodies with perinuclear staining (pANCA) has been most commonly described in IBD and has been linked with ulcerative colitis. Other antibodies which have recently been associated with CD include anti-OmpC, anti-cBir1, Anti-I2, ACCA, ALCA, and AMCA. Increased amounts and levels of the antibodies response have been suggested to predict a more complicated course of disease. Large prospective studies are needed to validate these findings.

Recent data suggest the presence of serological biomarkers might represent a genetic susceptibility because patients who have positive antibodies more or less often carry mutations in the NOD2/CARD15 gene or in toll-like receptor genes. However, future studies with larger cohorts with well-defined clinical characteristics and patient populations are needed to determine the validity of this relationship.

PROMETHEUS® IBD markets the Serology 7 to help identify IBD and differentiates between ulcerative colitis and Crohn's disease. This test includes the proprietary and patented markers anti-CBir1, anti-OmpC and DNAse-sensitive pANCA process as well as, the markers ASCA IgA (ACCA) and IgG (ALCA and AMCA) that help identify patients with IBD. The Smart Diagnostic Algorithm* technology is utilized to improve predictive accuracy. In addition to offering assay values, PROMETHEUS® IBD Serology 7 provides a diagnostic prediction on every test and prognostic information that may guide treatment decisions. The PROMETHEUS® IBD sgi Diagnostic™ is the next generation IBD test and includes the same markers at the Serology 7 as well as other markers. The tests are available only through Prometheus Laboratories.

RATIONALE

While the specificity of these tests are relatively high (82-100%), the sensitivity is low (32 -50%), which indicates that a negative result will not be clinically helpful. The ANCA and/or ASCA test results alone or in combination with the new serological markers cannot be relied upon for confirmation of a diagnosis, thus patients will often still require the standardized work-up, including colonoscopy and biopsy. Studies do not demonstrate any correlation between the presence of these antibodies and disease activity or duration.

The use serological markers for patients with IBD have not shown to improve health outcomes by reducing the need for other tests nor has it been proven to increase the accuracy of diagnosis for these patients. Large-scale prospective studies are required to ascertain the predictive value and cost effectiveness of the use of these serology markers in screening and monitoring of IBD patients.

CODES

- *Eligibility for reimbursement is based upon the benefits set forth in the member's subscriber contract.*
- *CODES MAY NOT BE COVERED UNDER ALL CIRCUMSTANCES. PLEASE READ THE POLICY AND GUIDELINES STATEMENTS CAREFULLY.*
- *Codes may not be all inclusive as the AMA and CMS code updates may occur more frequently than policy updates.*

CPT Codes

Code	Description
There are no specific CPT codes for this test; 83516 and 88346 or 88350 may be used for billing PROMETHEUS® IBD Serology 7.	
81479	Unlisted molecular pathology procedure

HCPCS Codes

Code	Description
No specific code	

ICD10 Codes

Code	Description
K50.00-K50.919	Crohn's disease [regional enteritis] (code range)
K51.00-K51.919	Ulcerative colitis (code range)

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*Key Article

KEY WORDS

Anti-neutrophil cytoplasmic antibodies, ANCA, Anti-*Saccharomyces cerevisiae*, ASCA, Crohn's disease, Inflammatory bowel disease, Prometheus Labs, Serological markers, Ulcerative colitis.

CMS COVERAGE FOR MEDICARE PRODUCT MEMBERS

There is currently no National Coverage Determination (NCD) or Local Coverage Determination (LCD) for Serological Diagnosis of Inflammatory Bowel Disease.