MEDICAL POLICY

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MEDICAL POLICY DETAILS	
Medical Policy Title	**Serum Antibodies for the Diagnosis of Inflammatory Bowel Disease**
Policy Number	**2.02.19**
Category	**Technology Assessment**
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Committee Approval 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**
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Product Disclaimer	• *Services are contract dependent; 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 or Child Health Plus product), medical policy criteria apply to the benefit.* • *If a Medicaid product covers a specific service, and there are no New York State Medicaid guidelines (eMedNY) criteria, medical policy criteria apply to the benefit.* • *If a Medicare product (including Medicare HMO-Dual Special Needs Program (DSNP) 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.* • *If a Medicare HMO-Dual Special Needs Program (DSNP) product DOES NOT cover a specific service, please refer to the Medicaid Product coverage line.*

POLICY STATEMENT

I. Based upon our criteria and assessment of the peer-reviewed literature, serologic testing of biomarkers (e.g.; Prometheus IBD sgi Diagnostic testing), (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, therefore, is considered **not medically necessary** for **ALL** indications including, but not limited to:

   A. to diagnose and monitor patients with inflammatory bowel disease (IBD);
   B. to distinguish ulcerative colitis (UC) from Crohn's disease (CD).

POLICY GUIDELINE

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 diseases, ulcerative colitis (UC) and Crohn's disease (CD). Although UC and CD 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 in determining treatment and prognosis. The diagnostic work-up of patients with IBD is relatively complicated, and endoscopic exam and biopsy are currently crucial components 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 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, prediction of response to anti-tumor necrosis factor (TNF) therapy, and identification of 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) have been most commonly described in IBD and have been linked with UC. Other antibodies that have recently been associated with CD include anti-OmpC, anti-cBir1, Anti-I2, ACCA, ALCA, and AMCA. Increased amounts and levels of an antibody's response have been suggested to predict a more complicated course of disease. Large prospective studies are needed, to validate these findings.

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

The PROMETHEUS IBD sgi Diagnostic aims to help identify IBD and differentiates between UC and CD. It may also assess a patient's risk for more aggressive disease. The test includes the proprietary and patented serologic markers anti-CBir1, Anti-OmpC and DNAse-sensitive pANCA process as well as, the markers ASCA IgA (ACCA) and IgG (ALCA and AMCA). The sgi Diagnostic test also includes the ATG16L, ECM1, mkX2-3, and STAT3 genetics and inflammation markers such as VEGF, ICAM-1, VACAM-1, CRP, and SAA. The Smart Diagnostic Algorithm technology produces an IBD score; results are reported as consistent with IBD (consistent with ulcerative colitis, consistent with CD, or inconclusive for ulcerative colitis vs. CD) or not consistent with IBD. The test is intended for use in patients with clinical suspicion of IBD.

RATIONALE

While the specificity of these tests is 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 of serological markers for patients with IBD has not been 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 the 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.*
- *Code Key: Experimental/Investigational = (E/I), Not medically necessary/appropriate = (NMN).*

CPT Codes

Code	Description
There are no specific CPT codes for this testing. Codes 81479, 82397, 83516 83520, 86140, 88346 or 88350 may be used for billing PROMETHEUS IBD sgi Diagnostic; however, these codes are not specific to PROMETHEUS IBD.	

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

Based on our review, Serological Diagnosis of Inflammatory Bowel Disease or Prometheus IBD is not addressed in National or Regional Medicare coverage determinations or policies.