

**Indiana Medicaid Therapeutics Committee**  
**Therapeutic Class Review Summary**

**Therapeutic Class:**

Ulcerative Colitis Agents

**Overview:**

Ulcerative colitis is an inflammatory bowel disease (IBD) that affects more than 500,000 Americans. This debilitating condition causes chronic inflammation of the digestive tract and sometimes leads to life-threatening complications. Ulcerative colitis influences men and women equally and can occur at any age; however it is often identified in the mid-30s. Approximately half of those diagnosed have mild symptoms, while others suffer frequent fevers, bloody diarrhea, nausea, and severe abdominal cramps. Additionally, arthritis, inflammation of the eye, liver disease, and osteoporosis may occur. The cause of ulcerative colitis is unknown, and though abnormalities of the immune system are evident, it is unclear whether these abnormalities induce or result from ulcerative colitis. Currently, there is no cure for this illness; however medical treatment may considerably increase symptom relief and improve quality of life through long-term remission.

Among the classes of medications used to treat ulcerative colitis, the aminosalicylates are commonly selected as initial therapy for mild to moderate episodes and for preventing cases of relapse. These anti-inflammatory agents include sulfasalazine, mesalamine, olsalazine, and balsalazide. The compounds sulfasalazine, olsalazine, and balsalazide are prodrugs for mesalamine. The mechanism of action for the aminosalicylates is unknown, however it has been rationalized that mesalamine diminishes inflammation by blocking production of arachidonic acid metabolites in the colon. Data also suggest that mesalamine can inhibit the activation of NF $\kappa$ B, a nuclear transcription factor that regulates the transcription of many genes for pro-inflammatory proteins. Aminosalicylates may be given orally, in a suppository, or through an enema depending on the location of the inflammation in the colon. Lialda™, an oral agent, is the only ulcerative colitis treatment that utilizes a new technology resulting in less frequent dosing compared to alternative mesalamine products.

Sulfasalazine often times leads to numerous side effects including nausea, vomiting, heartburn, and headache. Balsalazide, mesalamine, and olsalazine are associated with fewer adverse events and provide additional options. Compared to mesalamine, olsalazine has demonstrated a lower rate of treatment failure and balsalazide a more rapid onset of action. Though individual experiences with ulcerative colitis and treatment vary, the goal of therapy remains to induce and maintain remission and to improve quality of life.

Generic Name	Brand Name	Manufacturer	Generic Available
Balsalazide	Colazal®	Salix	Y
Mesalamine	Asacol® Canasa® Lialda™ Pentasa® Rowasa®	Proctor & Gamble Axcan Shire Shire Alaven	Y (Rowasa®)

Olsalazine	Dipentum <sup>®</sup>	UCB Pharma	N
Sulfasalazine	Azulfidine <sup>®</sup> Azulfidine <sup>®</sup> En-Tabs <sup>®</sup> Sulfazine <sup>®</sup> EC	Pfizer Pfizer Qualitest	Y

**Summary:**

Available data have demonstrated the efficacy of sulfasalazine, mesalamine, olsalazine, and balsalazide in the treatment of ulcerative colitis. However, compared to mesalamine, olsalazine has demonstrated a lower rate of treatment failure and balsalazide has demonstrated a more rapid onset of action. Lialda<sup>™</sup>, a mesalamine product, is the only ulcerative colitis treatment that utilizes a new technology resulting in less frequent dosing compared to alternative therapies. In addition, sulfasalazine is associated with more adverse events than the other agents discussed in this review. Selection for the preferred drug list should be based upon FDA-approved indications, efficacy, safety, and cost.