

Assessing Disease Severity in Ulcerative Colitis

- Multiple severity scales available
- Mayo Score – Combination of patient reported outcomes, PGA, and endoscopy¹

Variable	Symptoms	Score
Stool Frequency	1-2 more bowel movements/day than normal	0
	3-4 more bowel movements/day	1
	5-6 more bowel movements/day	2
	>6 more bowel movements/day	3
Rectal Bleeding	None	0
	<50% of stools	1
	>50% of stools	2
	Blood only	3

Variable	Symptoms	Score
Endoscopy	Normal/inactive colitis	0
	Erythema, decreased vascularity	1
	Friability, marked erythema, erosions	2
	Ulcerations, severe friability, spontaneous bleeding	3
PGA	Normal	0
	Mild	1
	Moderate	2
	Severe	3

Common Severity Thresholds for Full Score (not validated) ^{1,2}	
Score	Severity
Remission	<2
Mild	2-5
Moderate-to-Severe	6-12

Both Modified and Partial Mayo Scores correlate with full scores²

- Modified Mayo Score – no PGA, useful for clinical trials
- Partial Mayo Score – no endoscopy, useful in clinical practice

PGA, physician's global assessment.

1. Feurstein JD, et al. *Gastroenterology*. 2020;158(5):1450-61; 2. Naegeli AN, et al. *Crohns Colitis 360*. 2021;3(1):otab007.

Proposed Ulcerative Colitis Activity Index

Proposed American College of Gastroenterology Ulcerative Colitis Activity Index				
	Remission	Mild	Moderate-to-Severe	Fulminant
Stools (No./d)	Formed stools	<4	>6	>10
Blood in stools	None	Intermittent	Frequent	Continuous
Urgency	None	Mild, occasional	Often	Continuous
Hemoglobin	Normal	Normal	<75% of normal	Transfusion required
ESR	<30	<30	>30	>30
CRP (mg/L)	Normal	Elevated	Elevated	Elevated
FC (µg/g)	<100-200	>150-200	>150-200	>150-200
Endoscopy (Mayo score)	0-1	1	2-3	3
UCEIS	0-1	2-4	5-8	7-8

General guides—with the exception of remission, all the factors are not needed for a patient to be considered in a specific category

Assessing Disease Severity in Crohn's Disease

- Crohn's Disease Activity Index (CDAI) is commonly used in clinical trials¹
- Includes multiple parameters, assessed over past 7 days:²
 - Stool pattern
 - Abdominal pain
 - General well-being
 - Complications
 - Finding of abdominal mass
 - Anemia
 - Weight change

Severity Thresholds ¹	
Score	Severity
Remission	<150
Mild	150-220
Moderate	>220-450
Severe	>450

Individualized Treatment and Disease Characteristics

Disease Severity

More aggressive therapy recommended for greater severity¹⁻⁴

- Step-up approach not recommended for moderate-to-severe CD or UC
- Biologics or small-molecule therapies recommended for first-line treatment; anti-TNF- α drugs are the most extensively studied

Additional Considerations

Complications/Risk of complications¹
eg, include antibiotic co-therapy for patients with CD and perianal fistulas

Risk factors^{3,5}
eg, risk of infection should be considered with immunomodulatory therapy

Patient preference⁵
eg, delivery route and cost

Comorbidities and concurrent medications⁵

Previous Treatments

- Previous history with biologics influences treatment choice¹
 - Vedolizumab associated with greater clinical and/or endoscopic remission in anti-TNF- α naïve patients than in those with previous exposure
 - After anti-TNF- α primary or secondary nonresponse, a second anti-TNF- α agent is less likely to achieve clinical remission

AGA recommended **first-line** therapy for moderate-to-severe IBD

CD – infliximab, adalimumab, or ustekinumab²
UC – infliximab or vedolizumab³

AGA recommended therapy **following anti-TNF- α nonresponse** for moderate-to-severe IBD

CD – ustekinumab or adalimumab
(adalimumab for primary nonresponse only)²
UC – ustekinumab or tofacitinib*³

*Tofacitinib was the only Janus kinase inhibitor available at time of guidelines publication. AGA, American Gastroenterological Association.

1. Bressler B. *Therap Adv Gastroenterol*. 2023;16:17562848231159452; 2. Feurstein JD, et al. *Gastroenterology*. 2021;160(7):2496-2508; 3. Feurstein JD, et al. *Gastroenterology*. 2020;158(5):1450-61.