DRUG DETERMINATION POLICY

Title: DDP-12 Tumor Necrosis Factor (TNF) Inhibitors

Effective Date: 6/26/24



Physicians Health Plan PHP Insurance Company PHP Service Company

Important Information - Please Read Before Using This Policy

The following policy applies to health benefit plans administered by PHP and may not be covered by all PHP plans. Please refer to the member's benefit document for specific coverage information. If there is a difference between this general information and the member's benefit document, the member's benefit document will be used to determine coverage. For example, a member's benefit document may contain a specific exclusion related to a topic addressed in a coverage policy.

Benefit determinations for individual requests require consideration of:

- 1. The terms of the applicable benefit document in effect on the date of service.
- 2. Any applicable laws and regulations.
- 3. Any relevant collateral source materials including coverage policies.
- 4. The specific facts of the situation.

Contact PHP Customer Service to discuss plan benefits more specifically.

1.0 Policy:

This policy describes the determination process for coverage of specific drugs that require prior approval.

This policy does not guarantee or approve benefits. Coverage depends on the specific benefit plan. Drug Determination Policies are not recommendations for treatment and should not be used as treatment guidelines.

2.0 Background or Purpose:

Tumor Necrosis Factor (TNF) Inhibitors are specialty drugs indicated for several diagnoses and are associated with significant toxicity. These criteria were developed and implemented to ensure appropriate use for the intended diagnoses and mitigation of toxicity, if possible.

3.0 Clinical Determination Guidelines:

Document the following with chart notes:

- I. General considerations for use.
 - A. General consideration for use of tumor necrosis factor (TNF) Inhibitors.
 - 1. Claims processing and coverage by benefit type.
 - a. Self-injectable products must be processed on the Pharmacy benefit. Products include but are not limited to Enbrel subcutaneous (etanercept SQ), adalimumab-adaz SQ, Hadlima (adalimumab-bwwd SQ), Hyrimoz (adalimumab-adaz SQ).
 - b. Products that are not self-injectable must be processed on the Medical benefit. Products include but are not limited to Renflexis, Inflectra, unbranded Infliximab intravenous (infliximab IV), Simponi Aria intravenous (golimumab IV).
 - 2. Grandfather status: Patients currently established on excluded tumor necrosis factor inhibitors may continue therapy.

- 3. Required site-of-care as determined by the Health Plan (see DDP-08 Site of Care for Administration of Parenteral Specialty Medications).
- 4. Dose Rounding: Medication requests may be automatically rounded up or down by 10% of the requested dose in order to fit the nearest manufacturer strength of the requested medication for patients weighing above 10 Kg (see DDP-21 Dose Rounding and Wastage).
- B. Excluded agents: A trial of all preferred formulary agents is required unless all are contraindicated. Trial must result in an inadequate response after four consecutive months of use per medication or a severe adverse reaction.
 - 1. Cimzia subcutaneous (certolizumab SQ)
 - 2. Simponi subcutaneous (golimumab SQ).
 - 3. Select adalimumab subcutaneous products:
 - a. abrilada
 - b. adalimumab-aacf
 - c. adalimumab-adbm
 - d. adalimumab-fkjp
 - e. Amjevita
 - f. Cyltezo
 - g. Hulio
 - h. Humira
 - i. Idacio
 - j. Yuflyma
 - k. Yusimry
 - 4. Select infliximab intravenous and subcutaneous products:
 - a. Avsola
 - b. Remicade
- C. Exclusion: Concomitant therapy with other biologics.
- D. Pharmaceutical sample use: The Plan does not recognize samples as a medication trial or for continuation of therapy.
- E. Familial history, past or concomitant disease states.

- 1. Cancer: family history, past or current cancer is not a contraindication for tumor necrosis factor inhibitor therapy.
- F. Appropriate medication use [must meet all listed below]:
 - 1. Diagnosis: meets standard diagnostic criteria that designate signs, symptoms, and test results to support specific diagnosis.
 - 2. Food and Drug Administration (FDA) approval status [must meet one listed below]:
 - a. FDA approved: product, indication, and/or dosage regimen.
 - b. Non-FDA approved use: Compendium support (UpToDate[®] Lexidrug[™]) for use of a drug for a non-FDA approved indication or dosage regimen.
 - 3. Place in therapy: sequence of therapy supported by national or internationally accepted guidelines and/or studies (e.g., oncologic, infectious conditions).
- G. Dosage regimen [must meet both listed below]:
 - Within the Food and Drug Administration (FDA) approved labeling: titrate up based on symptoms and disease severity if adherence to the current dosage regimen is demonstrated.
 - 2. Greater than the FDA-approved labeling: based on disease symptoms and severity (except infliximab and adalimumab see II.B Therapeutic Drug Monitoring).
- H. Approval.
 - 1. Initial: six months.
 - 2. Re-approval: one year [must meet both listed below]:
 - a. Adherence [must meet one listed below]:
 - Medications processed under the pharmacy benefit: consistent (at least 80% of days covered) fill history electronically or verbally from the pharmacy.
 - ii. Medications processed under the medical benefit: consistent utilization (at least 80% of days covered) based on medical claims history or chart notes.
 - b. Decreased or sustained reduction in disease activity.
- II. Therapeutic Drug Monitoring: infliximab and adalimumab.
 - A. Indication: requests for dosage regimens greater than FDA-approved labeling.
 - Inflectra, Renflexis, or unbranded infliximab intravenous (infliximab IV): at or above 10 mg per kg every eight weeks (or equivalent dosage at a different frequency) or at or above 1,000 mg.

- 2. adalimumab-adaz, Hadlima, or Hyrimoz subcutaneous (adalimumab SQ): more frequent than 40mg twice monthly.
- B. Criteria [must meet all listed below]:
 - 1. The patient has received three stable maintenance doses.
 - 2. Trough drug and antibody levels drawn just prior to drug infusion (verify timing).
 - 3. Determine coverage based on drug and antibody level.

Infliximab (Renflexis, Inflectra)*					
Antibody Titer	Drug Level (quantitative limit < 0.4µg/ml)*				
(quantitation limit < 22ng/mL)	<u><</u> 3 µg/mI	>3 – 10 μg/ml	>10 - 25µg/ml	>25 mcg/ml	
Low: 22 – 200 ng/mL	Increase dose	Maintain or increase dose	Decrease or maintain dose	Decrease dose	
Intermediate: 201 - 1,000 ng/mL	Increase dose	Variable	Switch agent	Switch agent	
High: >1,001 ng/mL	Switch agent Switch agent Switch agent Switch agent				
Adalimumab (Humira/a	Adalimumab (Humira/adalimumab-adaz/Amjevita/Hadlima/Hyrimoz)				
Antibody Titer	Drug level (qua	ntitative limit <0.6	6 μg/ml)**		
(quantitation limit < 25 ng/mL)	<u><</u> 5 μg/ml	>5 – 8 µg/ml	> 8 – 20 µg/ml	>20m µg/ml	
Low: 25 - 200 ng/mL	Increase dose Maintain or Decrease or Decrease or increase dose maintain dose dose				
Intermediate: 201 - 1,000 ng/mL	Increase dose	Variable	Switch agent	Switch agent	
High: >1,001 ng/mL	Switch agent	Switch agent	Switch agent	Switch agent	

^{*} For Acute Severe Ulcerative Colitis: very high doses of infliximab are likely to be required to induce clinical and endoscopic responses.; **Drug target level may vary per assay utilized and lab facility

4. Determination action:

- a. Increase or maintain dose: approve current or requested increased frequency or dose (frequency preferred).
- b. Variable: approve current or requested increased dose or frequency.
- c. Decrease or maintain dose: approve previously approved dose.
- d. Decrease dose: decrease dose or frequency.
- e. Switch agent: deny.
- III. Inflammatory bowel disease [must meet all listed below]:
 - A. Age: at least six years.

B. Diagnosis and severity: moderate to severe active Crohn's disease or ulcerative colitis.

C. Other therapies:

- 1. Crohn's Disease: A trial of one disease-modifying anti-rheumatic drug below is required unless all are contraindicated. Trial must result in an inadequate response after four consecutive months of use per medication or a severe adverse reaction.
 - a. Chronic traditional disease-modifying anti-rheumatic drug: azathioprine, methotrexate.
- Ulcerative Colitis: A trial of one conventional therapy and one disease-modifying antirheumatic drug below is required unless all are contraindicated. Trials must result in an inadequate response after four consecutive months of use per medication or severe adverse reactions.
 - a. Conventional therapy: mesalamine.
 - b. Chronic traditional disease-modifying anti-rheumatic drug: azathioprine.
- 3. Exceptions: skipping the requirements of "C. Other therapies" is allowed if a patient exhibits severe or fulminant disease (see Appendix I).

D. Dosage regimen.

1. adalimumab-adaz, Hadlima, or Hyrimoz subcutaneous (adalimumab SQ):

Age	Weight	Loading Dose	Maintenance Dose
Adult	Any	160 mg week 0 80 mg week 2	40 mg every 2 weeks
Pediatric	17 to <40 kg	80mg week 0 40mg week 2	20mg every 2 weeks
	≥40 kg	160 week 0 80mg week 2	40 mg every 2 weeks

- 2. Renflexis, Inflectra, or unbranded infliximab intravenous (infliximab IV): 5 mg per kg at week zero, two, and six, then 5 mg per kg every eight weeks.
 - a. Acute Severe Ulcerative Colitis: very high doses of infliximab are likely to be required to induce clinical and endoscopic responses.

IV. Inflammatory Joint Diseases.

A. Rheumatoid Arthritis

- 1. Diagnosis and severity: moderate to severe rheumatoid arthritis.
- 2. Other therapies: Trials of two disease-modifying anti-rheumatic drugs below are required unless all are contraindicated. Trial must result in an inadequate response after four consecutive months of use per medication or a severe adverse reaction.

- a. Disease-modifying anti-rheumatic drug therapies: methotrexate, leflunomide, hydroxychloroquine, sulfasalazine.
- 3. Dosage regimen: suggested in combination with methotrexate.
 - a. Enbrel subcutaneous (etanercept SQ): 50 mg per week or 25 mg two times per week.
 - b. adalimumab-adaz, Hadlima, or Hyrimoz subcutaneous (adalimumab SQ): 40 mg every two weeks.
 - c. Renflexis, Inflectra, or unbranded infliximab intravenous (infliximab IV): 3 mg per kg at week zero, two, and six, then every eight weeks.
 - d. Simponi Aria intravenous (golimumab IV): 2 mg per kg at week zero and four, then every eight weeks.
- B. Psoriatic Arthritis (usually exhibiting peripheral spondylarthritis)
 - 1. Diagnosis and severity: active moderate to severe Psoriatic Arthritis.
 - Other therapies: Trials of two disease-modifying anti-rheumatic drugs below are required unless all are contraindicated. Trial must result in an inadequate response after four consecutive months of use per medication or severe adverse reaction:
 - a. Disease-modifying anti-rheumatic drug therapies: methotrexate, leflunomide, sulfasalazine.
 - 3. Dosage regimen.
 - a. Enbrel subcutaneous (etanercept SQ): 50 mg per week or 25 mg two times per week.
 - b. adalimumab-adaz, Hadlima, or Hyrimoz subcutaneous (adalimumab SQ): 40 mg every two weeks.
 - c. Renflexis, Inflectra, or unbranded infliximab intravenous (infliximab IV): 5mg per kg at week zero, two, and six, then 5 mg per kg every 8 weeks.
 - d. Simponi Aria intravenous (golimumab IV):
 - i. Adult: 2 mg per kg at week zero and four, then every eight weeks.
 - ii. Child (at least two years old): 80 mg per m2 weeks zero and four, and then every eight weeks.
- C. Axial spondyloarthritis (Ankylosing Spondylitis and Nonradiographic Axial Spondyloarthritis)
 - 1. Diagnosis and severity: active axial spondyloarthritis.
 - 2. Other therapies: Trials of two agents from the appropriate category below are required unless all are contraindicated. Trial must result in an inadequate response after four consecutive months of use per medication or severe adverse reaction:

- a. Peripheral disease only: first line disease modifying anti-rheumatic drug therapy methotrexate, leflunomide, sulfasalazine.
- b. Axial disease: prescription non-steroidal anti-inflammatory drugs (NSAIDs).
- 3. Dosage regimen.
 - a. Enbrel subcutaneous (etanercept SQ): 50 mg per week or 25 mg two times per week.
 - b. adalimumab-adaz, Hadlima, or Hyrimoz subcutaneous (adalimumab SQ): 40 mg every two weeks.
 - Renflexis, Inflectra, or unbranded infliximab intravenous (infliximab IV): 5 mg per kg at week zero, two and six weeks, then 5 mg per kg every six weeks. (Ankylosing Spondylitis only)
 - d. Simponi Aria intravenous (golimumab IV): 2 mg per kg at week zero and four, then every eight weeks.
- D. Juvenile Idiopathic Arthritis.
 - 1. Age: at least two years.
 - 2. Diagnosis and severity: moderate to severe active polyarticular juvenile idiopathic arthritis.
 - 3. Other therapies: Trials of two disease-modifying anti-rheumatic therapies below are required unless all are contraindicated. Trial must result in an inadequate response after four consecutive months of use per medication or a severe adverse reaction.
 - a. Chronic traditional disease-modifying anti-rheumatic drugs: methotrexate, leflunomide.
 - 4. Dosage regimen.
 - a. Enbrel subcutaneous (etanercept SQ):

Age	Weight	Dose
2 years and older	<63 kg	0.8 mg per kg weekly
	≥ 63 kg	50 mg weekly

b. adalimumab-adaz, Hadlima, or Hyrimoz subcutaneous (adalimumab SQ):

Age	Weight	Dose
2 years and older	10 kg to <15kg	10 mg every 2 weeks
	15 kg to ≤ 30 kg	20 mg every 2 weeks
	≥ 30 kg	40 mg every 2 weeks

- c. Simponi Aria intravenous (golimumab IV): 80 mg per m² at week zero and four, then every eight weeks.
- V. Dermatological Diseases.

A. Plaque Psoriasis

- 1. Age: at least four years.
- 2. Diagnosis and severity: moderate to severe chronic plaque psoriasis.
 - a. Duration: chronic Plaque Psoriasis: at least six months.
 - b. Severity [must meet one listed below]:
 - i. Body surface area (BSA): at or above 10 percent
 - ii. Severe at localized high-impact or hard-to-treat sites and associated with significant functional impairment (e.g., face, palms, soles, flexures, and genitals).
- 3. Other therapies: Trials of two local therapies and one systemic therapy below are required unless all are contraindicated. Trial must result in an inadequate response after four consecutive months of use per medication or a severe adverse reaction.
 - a. Local therapies: topical (steroids, vitamin D analogs, coal tar, dithranol), phototherapy, photo-chemotherapy.
 - b. Systemic therapy: cyclosporine, methotrexate.
- 4. Dosage regimen.
 - a. Enbrel subcutaneous (etanercept SQ):

Age	Loading dose	Maintenance dose
Adult	50 mg twice weekly for 3 months	50 mg weekly
Pediatric	NA	0.8 mg per kg once weekly

- adalimumab-adaz, Hadlima, or Hyrimoz subcutaneous (adalimumab SQ): 80 mg at week zero and 40 mg at week one, then 40 mg every two weeks.
- c. Renflexis, Inflectra, or unbranded infliximab intravenous (infliximab IV): 5 mg per kg at week zero, two and six weeks, then 5 mg per kg every six weeks.

B. Hidradenitis Suppurativa

- 1. Age: at least 12 years
- 2. Diagnosis and severity: moderate to severe chronic Hidradenitis Suppurativa.
- 3. Other therapies: Trials of one local therapy and one systemic therapy below are required unless all are contraindicated. Trial must result in an inadequate response after four consecutive months of use per medication or a severe adverse reaction.
 - a. Local therapies: topical clindamycin (mild diagnosis), intra-lesional triamcinolone.

- b. Systemic therapies: clindamycin plus rifampicin (both 300mg twice daily orally), acitretin, finasteride or spironolactone (female patients), cyclosporine, dapsone.
- 4. Dosage regimen.
 - a. adalimumab-adaz, Hadlima, or Hyrimoz subcutaneous (adalimumab SQ):

Age	Weight	Loading dose	Maintenance dose
Adult	Any	160 mg week 0 80 mg week 2	40 mg weekly
Pediatric	30 to < 60 kg	80 mg week 0	40 mg every 2 weeks (starting week 1)
	≥ 60 kg	160 mg week 0 80 mg week 2	40 mg weekly (starting week 4)

VI. Ocular.

A. Prescriber: ophthalmologist.

B. Uveitis.

- 1. Age: at least two years.
- 2. Diagnosis and severity: non-infectious intermediate, posterior, and panuveitis (not anterior).
- 3. Other therapies: Trials of one topical therapy, one ocular injection, and one systemic therapy below are required unless all are contraindicated. Trial must result in an inadequate response after four consecutive months of use per medication or a severe adverse reaction.
 - a. Topical: difluprednate 0.5%.
 - b. Ocular injection: periocular or intraocular triamcinolone or intraocular dexamethasone.
 - c. Systemic: cyclosporine, methotrexate, azathioprine, mycophenolate, tacrolimus.
- 4. Dosage regimen: adalimumab-adaz, Hadlima, or Hyrimoz subcutaneous (adalimumab SQ)

Age	Loading Dose	Maintenance Dose	
Adult	80 mg week 0	40 mg every 2 weeks	
Pediatric	NA	10 to <15 kg: 10 mg every 2 weeks	
		15 to <30 kg: 20 mg every 2 weeks	
		≥30 kg: 40 mg every 2 weeks	

4.0 Coding:

COVERED CODES				
HCPCS Code Brand Name Generic Name Billing Units Approval				
Q5103	Inflectra	Infliximab	10 mg	Y
Q5104	Renflexis	Infliximab	10 mg	Y
J1602	Simponi Aria	golimumab	1 mg	Y

Covered Product	Process through the pharmacy benefit	Process through the medical benefit
Adalimumab-adaz	X	
Enbrel	X	
Hadlima	X	
Hyrimoz	X	
Inflectra		X
Unbranded infliximab	Х	
Renflexis		X
Simponi Aria		X

EXCLUDED PRODUCTS			
Active Ingredient Name of Excluded Products		Benefit Plan Reference/Reason	
adalimumab	Abrilada	Not Preferred Agents	
	adalimumab-aacf]	
	adalimumab-aaty		
	adalimumab-adbm	7	
	adalimumab-fkjp		
	Amjevita		
	Cyltezo		
	Hulio		
	Humira		
	Idacio		
	Simlandi		
	Yuflyma		
	Yusimry		
certolizumab	Cimzia	Not a Preferred Agent	
infliximab	Avsola	Not Preferred Agents	
	Remicade		

5.0 References, Citations & Resources:

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- 2. Hidradenitis Suppurativa: A review of cause & treatment. Current opinions in Infectious disease 2011:24;118-123.
- 3. Meta-analysis of the efficacy and safety of adalimumab, etanercept, and infliximab for the treatment of rheumatoid arthritis. Pharmacotherapy 2010; 30(4);339-53.
- 4. Agency for Healthcare research and Quality (AHRQ) National Guideline Clearing House accessed April 2017:
 - a. Clinical practice guidelines for the treatment of patients with axial spondyloarthritis & psoriatic arthritis
 - b. 2013 update of the 2011 American College of Rheumatology recommendations for the treatment of JIA: recommendations for medical therapy of children w systemic JIA.
 - c. 2012 update of the 2008 American College of Rheumatology recommendation for the use of disease-modifying anti-rheumatic drugs & biologic agents in the treatment of rheumatoid arthritis
 - d. Ulcerative Colitis. Management in adults, children and young people.
 - e. American Gastroenterological Association institute guidelines on the use of thiopurines, methotrexate and anti-TNF biological drugs for the induction and maintenance of remission in inflammatory Crohn's disease.
 - Psoriasis: The assessment & management of psoriasis.
- 5. Trough concentrations of infliximab guide dosing for patients with IBD. Gastroenterology.2015;148;1133-9.
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- 7. British Association of Dermatologists guidelines for the biological therapy for psoriasis 2017;177(3):628-36.
- 8. Clinical Practice Guidelines for the treatment of patients with axial spondyloarthritis and psoriatic arthritis. Madrid, (Spain): Spanish Society of Rheumatology (SER);2015.
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- 10. Current practice for Therapeutic Drug Monitoring of Biopharmaceuticals in Rheumatoid Arthritis. The Drug Monit 2017;39(4): 364-367.
- 11. Labcorp https://www.labcorp.com/test-menu/18766/adalimumab-concentration-and-anti-adalimumab-antibody--serial-monitor accessed on November 6, 2018.
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- 13. Higher infliximab trough levels are associated with perianal fistula healing in patients with Crohn's disease. Aliment. Pharmacol. Ther. 2017;45: 933-940.
- 14. 2019 Update of the American College of Rheumatology/Spondylitis Association of America/Spondyloarthritis Research and Treatment Network Recommendations for the Treatment of Ankylosing Spondylitis and Nonradiographic Axial Spondyloarthritis. Wiley Online Library. September 26, 2019. Accessed June 22, 2023. https://onlinelibrary.wiley.com/doi/10.1002/art.41042.
- 15. Therapeutic Drug Monitoring of Infliximab in Acute Severe Ulcerative Colitis. J Clin Med 2023.12 (3378) https://doi.org/10.3390/jcm12103378

6.0 Appendices:

See pages 13 - 14.

7.0 Revision History:

Original Effective Date: July 12, 2006

Next Review Date: 09/01/2025

Revision Date	Reason for Revision
4/19	Moving to new format
7/19	Released for P & T committee review, replaced abbreviations, clarified other
1/19	therapies and completed coding table
	Off cycle review per 4/1 P&T change to prefer infliximab biosimilars. Excluding
3/20	Remicade; clarify other therapy and excluded language; replacing abbreviations,
	added trial duration, added IBD acute therapy
	Annual review: changed preferred to Renflexis with Remicade excluded, added
- /	acute treatment to IBD, replaced abbreviations, removed other therapies trial
6/20	duration from each section (is in general section); Inflammatory bowel disease,
	Juvenile arthritis, Plaque psoriasis, HS and uveitis - revised age, added/changed
	pediatric dosage, approved by P&T Committee 8/26/20.
3/21	Off-cycle review added Simponi for pediatric JIA/PA diagnosis, added
	appropriate use section, modified dosage section
0/04	Annual review clarified criteria instructions, added compendium used for non-
6/21	FDA approved indications, added an asterisk to target trough level table,
0/04	updated Appendix II FDA approved indications
9/21	Added codes for Humira, Enbrel and Cimzia
7/22	Clarified peripheral vs. Axial Spondyloarthritis, clarified other treatment of IBD;
	infliximab AS dose to every 6 weeks Annual review added specific agents to the excluded section in general
6/23	considerations section, updated other therapies language
	Off-cycle review added covered Humira biosimilars adalimumab-
	adaz/Amjevita/Hadlima/Hyrimoz. Called out specifically excluded adalimumab
11/23	products: Abrilada, Adalimumab-aacf, Adalimumab-adbm, Adalimumab-fkjp,
11/20	Cyltezo, Hulio, Idacio, Yuflyma, Yusimry. Called out specifically excluded
	infliximab prodcuts: Avsola, Remicade, Unbranded infliximab
	Off-cycle review; Changed unbranded infliximab to a preferred formulary agent,
5/24	changed Humira and Amjevita to excluded agents, added disclaimer that there
	may be a need for very high doses for acute severe acute UC

Appendix I: Definitions of Disease Activity in Crohn's Disease and Ulcerative colitis⁷

Supplementary Table 1. International Definitions of Disease Activity in Crohn's Disease and Ulcerative Colitis

Crohn's	disease (international definitions base	d on CDAI parameters ¹)			
ACG ²	Symptomatic remission	Mild-moderate	Moderate-severe	Severe/fulminant	
	CDAI <150	CDAI 150-220	CDAI 220-450	CDAI >450	
	Asymptomatic/without symptomatic inflammatory sequelae	Ambulatory Able to tolerate oral alimentation without	Failed to respond to treatment for mild-moderate disease	Persistent symptoms des corticosteroids/biologic	•
	May have responded to medical or	manifestations of dehydration, systemic	or	or	
	surgical therapy and have no residual active disease	toxicity (high fevers, rigors, and prostration), abdominal tenderness,	Has more prominent symptoms of fever, significant weight loss, abdominal pain	Has high fevers, persister intestinal obstruction, s	•
	Does not include patients who require corticosteroids	painful mass, intestinal obstruction, or >10% weight loss	or tenderness, intermittent nausea or vomiting (without obstructive findings),	signs, cachexia, or abs	scess
ECCO ³	Communication remission	Mild	or significant anemia	Severe	
ECCO	Symptomatic remission CDAI < 150	Mild CDAI 150–220	Moderate CDAI 220-450	CDAI >450	
	OBAI < 130	Ambulatory	Intermittent vomiting or weight loss >10%	Cachexia or evidence of	obetruction/abecess
		Eating and drinking	Treatment for mild disease ineffective or	Persistent symptoms des	
		<10% weight loss	tender mass	CRP increased	spite intensive treatment
		No obstruction, fever, dehydration,	No overt obstruction	Or II moreasea	
		abdominal mass, or tenderness	CRP increased above ULN		
		CRP increased above ULN			
Ulcerati	ve colitis (international definitions base				
ACG ⁵	Symptomatic remission	Mild	Moderate	Severe	Fulminant
	•	<4 stools/d (with or without blood)	≥4 stools/d	≥6 bloody stools/d	≥10 stools/d
		No systemic signs of toxicity	Minimal signs of toxicity	Signs of toxicity (fever,	Continuous bleeding
		Normal ESR		tachycardia, anemia)	Toxicity
				Increased ESR	Abdominal tenderness
					and distension
					Blood transfusion
					requirement
					Colonic dilation on
				- h	abdominal plain films
ECCO ⁶	Symptomatic remission	Mild	Moderate ^a	Severe ^b	
	<4 stools/d without bleeding	<4 bloody stools/d	≥4 bloody stools/d <i>if</i>	≥6 bloody stools/d and	
	or urgency	Pulse <90 bmp	Pulse ≤90 bmp	Pulse >90 bmp	
		Temperature <37.5°C	Temperature ≤37.8°C	Temperature >37.8°C	
		Hemoglobin >11.5 g/dL	Hemoglobin ≥10.5 g/dL	Hemoglobin <10.5 g/dL	00
		ESR <20 mm/h or normal CRP	ESR \leq 30 mm/h or CRP \leq 30 mg/dL	ESR >30 mm/h or CRP :	>30 mg/aL

Appendix II: FDA Approved Indications

FDA Approved Indication	Rheumatoid Arthritis (RA)	Psoriatic Arthritis (PA)	Ankylosing Spondylitis (AS)	Juvenile Idiopathic Arthritis (JIA)	Crohn's Disease (CD)	Ulcerative Colitis (UC)	Plaque Psoriasis (PP)	Uveitis
Cimzia SC**	Х	X	Х		Х	X	Х	
Enbrel SC	X	X	Х	X (P)			X (P)	
Humira SC and biosimilars *	X	X	X	X (P)	X (P)	X (P)	X	X (P)
Remicade IV and biosimilars	X	Х	Х		X (P)	X (P)	Х	
Simponi Aria IV	Х	X (P)	Х	X (P)		X (P)		
Simponi SC	Х	Х	Х			Х		

⁽P) - Pediatric indication

^{*} Humira and biosimilars are the only TNF Inhibitor FDA approved for use in Hidradenitis suppurativa

^{**} Cimzia is the only TNF Inhibitor FDA approved for use in Nonradiographic Axial Spondyloarthritis