

PRIOR AUTHORIZATION POLICY

POLICY: Inflammatory Conditions – Adalimumab Products Prior Authorization Policy

- Humira® (adalimumab for subcutaneous injection – AbbVie)

REVIEW DATE: 12/02/2020

OVERVIEW

Adalimumab products are tumor necrosis factor inhibitors (TNFis) approved for the following uses:¹

- **Ankylosing spondylitis**, for reducing signs and symptoms in patients with active disease.
- **Crohn's disease**, in moderately to severely active disease for reducing signs and symptoms and inducing and maintaining clinical remission in:
 - Adults who have had an inadequate response to conventional therapy, including for reducing signs and symptoms and inducing clinical remission in these patients if they have also lost response to or are intolerant to Remicade® (infliximab intravenous infusion).
 - Pediatric patients 6 years of age and older who have had an inadequate response to corticosteroids or immunomodulators such as azathioprine, 6-mercaptopurine, or methotrexate.
- **Hidradenitis suppurativa**, for the treatment of moderate to severe disease in patients ≥ 12 years of age.
- **Juvenile idiopathic arthritis**, \pm methotrexate for reducing signs and symptoms of moderately to severely active polyarticular disease in patients 2 years of age and older.
- **Plaque psoriasis**, for the treatment of adults with moderate to severe chronic disease who are candidates for systemic therapy or phototherapy and when other systemic therapies are medically less appropriate.
- **Psoriatic arthritis**, \pm conventional synthetic disease-modifying antirheumatic drugs (DMARDs), for reducing the signs and symptoms of active arthritis, inhibiting the progression of structural damage, and improving physical function.
- **Rheumatoid arthritis**, \pm methotrexate or other conventional synthetic DMARDs to reduce the signs and symptoms, induce major clinical response, inhibit the progression of structural damage, and improve physical function in adult patients with moderately to severely active disease.
- **Ulcerative colitis**, for inducing and sustaining clinical remission of moderately to severely active disease in adults who do not respond to corticosteroids or other immunosuppressive drugs such as azathioprine or 6-mercaptopurine. However, efficacy has not been established in patients with ulcerative colitis who have lost response or were intolerant to another TNFi.
- **Uveitis**, in patients ≥ 2 years of age with noninfectious intermediate, posterior, and panuveitis.

Guidelines

TNFis feature prominently in guidelines for treatment of inflammatory conditions.

- **Crohn's Disease:** The American College of Gastroenterology (ACG) has guidelines for Crohn's disease (2018).⁴ TNFis are listed as an option for disease that is resistant to corticosteroids, severely active disease, perianal fistulizing disease, and maintenance of remission. In post-operative Crohn's disease, a TNFi should be started within 4 weeks of surgery to prevent recurrence.
- **Juvenile Idiopathic Arthritis (JIA):** There are guidelines from the American College of Rheumatology (ACR)/Arthritis Foundation for the treatment of JIA (2019) specific to juvenile non-systemic polyarthritis, sacroiliitis, and enthesitis.⁵ TNFis are the biologics recommended for polyarthritis, sacroiliitis, enthesitis. Actemra® (tocilizumab intravenous, tocilizumab subcutaneous) and Orencia® (abatacept intravenous, abatacept intravenous) are also among the biologics recommended for polyarthritis. Biologics are recommended following other therapies

(e.g., following DMARDs for active polyarthritis or following a nonsteroidal anti-inflammatory drug [NSAID] for active JIA with sacroiliitis or enthesitis). However, there are situations where initial therapy with a biologic may be preferred over other conventional therapies (e.g., if there is involvement of high-risk joints such as the cervical spine, wrist, or hip; high disease activity; and/or those judged to be at high risk of disabling joint damage). TNFis may also be used as second- or third-line treatment for systemic JIA.⁶

- **Plaque Psoriasis:** Guidelines from the American Academy of Dermatologists (AAD) and National Psoriasis Foundation (NPF) [2019] recommend adalimumab as a monotherapy treatment option for adults with moderate to severe disease.⁷
- **Psoriatic Arthritis:** Guidelines from ACR (2019) recommend TNFis over other biologics for use in treatment-naïve patients with PsA and in those who were previously treated with an oral therapy.⁸
- **Rheumatoid Arthritis:** Guidelines from ACR (2015) have TNFis and non-TNF biologics, administered with or without methotrexate, equally positioned as a recommended therapy following a trial of a conventional synthetic DMARD (e.g., methotrexate, leflunomide, hydroxychloroquine, sulfasalazine).²
- **Spondyloarthritis:** Guidelines for ankylosing spondylitis and nonradiographic axial spondylitis are published by the American College of Rheumatology (ACR)/Spondylitis Association of America/Spondyloarthritis Research and Treatment Network (2019).³ TNFis are recommended for the initial biologic. In those who are secondary nonresponders to a TNFi, a second TNFi is recommended over switching out of the class.
- **Ulcerative Colitis:** Guidelines from the American College of Gastroenterology for UC (2019) note that the following agents can be used for induction of remission in moderately to severely active disease: Uceris tablets; Oral or intravenous systemic corticosteroids Entyvio, Xeljanz, or TNFis (adalimumab, Simponi subcutaneous, infliximab).⁹ Guidelines from the American Gastroenterological Association (2020) recommend Xeljanz only after failure of or intolerance to a TNFi.¹⁰ In addition to the approved indication, clinical guidelines for the management of pouchitis, published in 2009 indicate that first-line therapy for pouchitis is antibiotic therapy (e.g. metronidazole, ciprofloxacin).¹¹ Other treatment options include maintenance probiotics, oral or topical budesonide, anti-inflammatory drugs (e.g., mesalamine), or immunosuppressive drugs (e.g., Remicade).

Other Uses with Supportive Evidence

There are guidelines and/or published data supporting the use of adalimumab products in the following conditions:

- **Behcet's Disease:** The European Union Against Rheumatism (EULAR) recommendations (2018) include TNFis for initial or recurrent sight-threatening uveitis.¹³ For patients refractory to first-line treatments (e.g., corticosteroids), TNFis are among the treatment options for mucocutaneous manifestations, venous thrombosis, severe or refractory gastrointestinal disease, and recurrent/chronic joint involvement. Recommendations for the use of TNFis in ocular inflammatory disorders from the American Academy of Ophthalmology (AAO) [2014] note that TNFis may be used first-line in patients with ophthalmic manifestations of Behcet's disease and for acute exacerbations of pre-existing Behcet's disease.¹²
- **Ocular Inflammatory Disorders:** The American Academy of Ophthalmology (AAO) [2014] note that adalimumab may be used in patients with uveitis due to various causes (e.g., spondyloarthropathy-associated or human leukocyte antigen [HLA]-B27-associated uveitis, JIA-associated uveitis, and other posterior uveitides and panuveitis syndromes).¹² Adalimumab should be considered second-line in vision-threatening JIA-associated uveitis when methotrexate has failed or is not tolerated (strong recommendation) and may be used as corticosteroid-sparing treatment for vision-threatening chronic uveitis from seronegative spondyloarthropathy (strong recommendation). Adalimumab may also be considered in other patients who have vision-

threatening or corticosteroid-dependent disease who have failed first-line therapies. Adalimumab should be considered as a second-line immunomodulatory agent for severe ocular inflammatory conditions including chronic and severe scleritis.

- **Pyoderma Gangrenosum:** Although guidelines are not current, multiple topical and systemic therapies have been used for pyoderma gangrenosum. Oral prednisone is the most common initial immunosuppressant medication.¹⁴ Other systemic therapies include cyclosporine, methotrexate, azathioprine, cyclophosphamide, mycophenolate mofetil, and TNFis (i.e., infliximab, etanercept, and adalimumab products). In case reports, TNFis have been effective.
- **Sarcoidosis:** Recommendations for best practice in the management of pulmonary and systemic sarcoidosis recommend glucocorticoids as first-line therapy.¹⁵ Patients who cannot be weaned to a prednisone-equivalent dose of < 10 mg/day are appropriate candidates for steroid-sparing treatment with cytotoxic agents (e.g., methotrexate, azathioprine, leflunomide). If these agents fail or cause toxicity, adalimumab, infliximab, cyclophosphamide, or mycophenolate mofetil are proposed.

POLICY STATEMENT

Prior Authorization is recommended for prescription benefit coverage of adalimumab products. All approvals are for the duration noted below. Because of the specialized skills required for evaluation and diagnosis of patients treated with adalimumab products as well as the monitoring required for adverse events and long-term efficacy, initial approval requires the agent to be prescribed by or in consultation with a physician who specializes in the condition being treated.

Automation: When available, the following ICD-10 codes for rheumatoid arthritis will be used to select for the diagnosis of rheumatoid arthritis: M05, M05.1* through M05.9, M06, M06.0* through M06.09, M06.8* through M06.9. If * is included in ICD-10 code, this indicates the inclusion of subheadings. After automation for the diagnosis through ICD-10 code identification through the Smart Coverage Review process, Prior Authorization criteria listed below in the Recommended Authorization Criteria Section for Rheumatoid Arthritis will be applied.

RECOMMENDED AUTHORIZATION CRITERIA

Coverage of adalimumab products is recommended in those who meet one the following criteria:

FDA-Approved Indications

1. **Ankylosing Spondylitis.** Approve for the duration noted if the patient meets ONE of the following (A or B):
 - A) Initial Therapy. Approve for 3 months if prescribed by or in consultation with a rheumatologist.
 - B) Patient is Currently Receiving an Adalimumab Product. Approve for 3 years if the patient had a response, as determined by the prescriber.

Note: Examples of a response to therapy include decreased pain or stiffness, or improvement in function or activities of daily living. Patient may not have a full response but there should be some response.
2. **Crohn's Disease.** Approve for the duration noted if the patient meets ONE of the following (A or B):
 - A) Initial Therapy. Approve for 3 months if the patient meets the following criteria (i, ii, and iii):
 - i. Patient is \geq 6 years of age; AND
 - ii. Patient meets ONE of the following conditions (a, b, c, or d):
 - a) Patient has tried or is currently taking corticosteroids, or corticosteroids are contraindicated in this patient; OR

Note: Examples of corticosteroids are prednisone, methylprednisolone.

- b) Patient has tried one other conventional systemic therapy for Crohn's disease; OR

Note: Examples of other agents for Crohn's disease include azathioprine, 6-mercaptopurine, or methotrexate. A previous trial of a biologic also counts as a trial of one other systemic therapy for Crohn's disease. Refer to [Appendix](#) for examples of biologics used for Crohn's disease. A trial of mesalamine does not count as a systemic agent for Crohn's disease.

- c) Patient has enterocutaneous (perianal or abdominal) or rectovaginal fistulas; OR

- d) Patient had ileocolonic resection (to reduce the chance of Crohn's disease recurrence);
AND

iii. The medication is prescribed by or in consultation with a gastroenterologist.

- B) Patient is Currently Receiving an Adalimumab Product. Approve for 3 years if the patient had a response, as determined by the prescriber.

Note: Patient may not have a full response but there should be some response.

3. Juvenile Idiopathic Arthritis (or juvenile rheumatoid arthritis) [regardless of type of onset].

Approve for the duration noted if the patient meets ONE of the following (A or B):

Note: This includes a patient with juvenile spondyloarthritis/active sacroiliac arthritis.

- A) Initial Therapy. Approve for 3 months if the patient meets the following criteria (i and ii):

i. Patient meets ONE of the following conditions (a, b, c, or d):

- a) Patient has tried one other systemic therapy for this condition; OR

Note: Examples of other systemic therapies for JIA include methotrexate, sulfasalazine, or leflunomide, and a nonsteroidal anti-inflammatory drug (NSAID) [e.g., ibuprofen, naproxen]. A previous trial of a biologic also counts as a trial of one systemic therapy for JIA. Refer to [Appendix](#) for examples of biologics used for JIA.

- b) Patient will be starting on therapy concurrently with methotrexate, sulfasalazine, or leflunomide; OR

- c) Patient has an absolute contraindication to methotrexate, sulfasalazine, or leflunomide; OR

Note: Examples of contraindications to methotrexate include pregnancy, breast feeding, alcoholic liver disease, immunodeficiency syndrome, blood dyscrasias.

- d) Patient has aggressive disease, as determined by the prescriber; AND

ii. The medication is prescribed by or in consultation with a rheumatologist.

- B) Patient is Currently Receiving an Adalimumab Product. Approve for 3 years if the patient had a response, as determined by the prescriber.

Note: Examples of a response include improvement in limitation of motion, less joint pain or tenderness, decreased duration of morning stiffness or fatigue, improved function or activities of daily living, reduced dosage of corticosteroids. Patient may not have a full response but there should be some response.

4. Hidradenitis Suppurativa. Approve for the duration noted if the patient meets ONE of the following (A or B):

- A) Initial Therapy. Approve for 3 months if the patient meets BOTH of the following (i and ii):

i. Patient has tried at least ONE other therapy; AND

Note: Examples include intralesional or oral corticosteroids (such as triamcinolone, prednisone), systemic antibiotics (e.g., clindamycin, dicloxacillin, erythromycin), or isotretinoin).

ii. The medication is prescribed by or in consultation with a dermatologist.

- B) Patient is Currently Receiving an Adalimumab Product. Approve for 3 years if the patient had a response, as determined by the prescriber.

Note: Patient may not have a full response but there should be some response.

- 5. Plaque Psoriasis.** Approve for the duration noted if the patient meets ONE of the following (A or B):
- A) Initial Therapy. Approve for 3 months if the patient meets the following criteria (i, ii, and iii):
- i. Patient is ≥ 18 years of age; AND
 - ii. Patient meets ONE of the following conditions (a or b):
 - a) Patient has tried at least at least one traditional systemic agent for psoriasis for at least 3 months, unless intolerant; OR
Note: Examples include methotrexate, cyclosporine, acitretin, or psoralen plus ultraviolet A light (PUVA). An exception to the requirement for a trial of one traditional systemic agent for psoriasis can be made if the patient has already has a 3-month trial or previous intolerance to at least one biologic. Refer to [Appendix](#) for examples of biologics used for psoriasis. A patient who has already tried a biologic for psoriasis is not required to “step back” and try a traditional systemic agent for psoriasis.
 - b) Patient has a contraindication to methotrexate, as determined by the prescriber; AND
 - iii. The medication is prescribed by or in consultation with a dermatologist.
- B) Patient is Currently Receiving an Adalimumab Product. Approve for 3 years if the patient had a response, as determined by the prescriber.
Note: Patient may not have a full response but there should be some response.
- 6. Psoriatic Arthritis.** Approve for the duration noted if the patient meets ONE of the following (A or B):
- A) Initial Therapy. Approve for 3 months if prescribed by or in consultation with a rheumatologist or a dermatologist.
- B) Patient is Currently Receiving an Adalimumab Product. Approve for 3 years if the patient had a response, as determined by the prescriber.
Note: Examples of a response include less joint pain, morning stiffness, or fatigue; improved function or activities of daily living; decreased soft tissue swelling in joints or tendon sheaths; improvements in acute phase reactants [for example, C-reactive protein [CRP]]. Patient may not have a full response but there should be some response.
- 7. Rheumatoid Arthritis.** Approve for the duration noted if the patient meets ONE of the following (A or B):
- A) Initial Therapy. Approve for 3 months if the patient meets BOTH of the following (i and ii):
- i. Patient has tried ONE conventional synthetic disease-modifying antirheumatic drug (DMARD) for at least 3 months; AND
Note: Examples include methotrexate (oral or injectable), leflunomide, hydroxychloroquine, and sulfasalazine. An exception to the requirement for a trial of one conventional synthetic DMARD can be made if the patient has already has a 3-month trial at least one biologic. Refer to [Appendix](#) for examples of biologics used for rheumatoid arthritis. A patient who has already tried a biologic for rheumatoid arthritis is not required to “step back” and try a conventional synthetic DMARD.
 - iv. The medication is prescribed by or in consultation with a rheumatologist.
- B) Patient is Currently Receiving an Adalimumab Product. Approve for 3 years if the patient had a response, as determined by the prescriber.
Note: Examples of a response include less joint pain, morning stiffness, or fatigue; improved function or activities of daily living; decreased soft tissue swelling in joints or tendon sheaths; improved laboratory values; reduced dosage of corticosteroids. Patient may not have a full response but there should be some response.
- 8. Ulcerative Colitis.** Approve for the duration noted if the patient meets ONE of the following (A or B):
- A) Initial Therapy. Approve for 3 months if the patient meets the following criteria (i, ii, and iii):
- i. Patient is ≥ 18 years of age; AND

- ii. Patient meets ONE of the following conditions (a or b):
 - a) Patient has tried one systemic therapy; OR
Note: Examples include 6-mercaptopurine, azathioprine, cyclosporine, tacrolimus, or a corticosteroid such as prednisone or methylprednisolone. A previous trial of a biologic also counts as a trial of one systemic therapy. Refer to [Appendix](#) for examples of biologics used for ulcerative colitis.
 - b) Patient meets BOTH of the following [(1) and (2)]:
 - (1) Patient has pouchitis; AND
 - (2) Patient has tried an antibiotic, probiotic, corticosteroid enema, or Rowasa® (mesalamine) enema; AND
Note: Examples of antibiotics include metronidazole and ciprofloxacin. Examples of corticosteroid enemas include hydrocortisone enema (Cortenema, generics).
 - iii. The medication is prescribed by or in consultation with a gastroenterologist.
- B) Patient is Currently Receiving an Adalimumab Product.** Approve for 3 years if the patient had a response, as determined by the prescriber.
Note: Examples of a response include decreased stool frequency or rectal bleeding. Patient may not have a full response but there should be some response.
- 9. Uveitis (including other posterior uveitides and panuveitis syndromes).** Approve for the duration noted if the patient meets ONE of the following (A or B):
- A) Initial Therapy.** Approve for 3 months if the patient meets the following criteria (i and ii):
- i. Patient has tried ONE of the following therapies: periocular, intraocular, or systemic corticosteroids; AND
Note: Examples of corticosteroids include prednisolone, triamcinolone, betamethasone, methylprednisolone, and prednisone. Examples of immunosuppressives include methotrexate, mycophenolate mofetil, azathioprine, and cyclosporine. An exception to the requirement for a trial of one of these therapies can be made if the patient has already tried an etanercept or infliximab product for uveitis. A patient who has already tried a biologic for uveitis is not required to try another therapy.
 - ii. The medication is prescribed by or in consultation with an ophthalmologist.
- B) Patient is Currently Receiving an Adalimumab Product.** Approve for 3 years if the patient had a response, as determined by the prescriber.
Note: Examples of a response include decreased inflammation, reduced use of steroids or immunomodulators, and improvement in visual acuity. Patient may not have a full response but there should be some response.

Other Uses with Supportive Evidence

- 10. Behcet's Disease.** Approve for the duration noted if the patient meets ONE of the following criteria (A or B):
- A) Patient meets BOTH of the following (i and ii):**
- i. **Initial Therapy.** Approve for 3 months if the patient meets ONE of the following conditions (a or b):
 - a) Patient has tried at least ONE conventional therapy; OR
Note: Examples include systemic corticosteroids (e.g., methylprednisolone), immunosuppressants (e.g., azathioprine, methotrexate, mycophenolate mofetil, cyclosporine, tacrolimus, Leukeran® [chlorambucil], cyclophosphamide, interferon alfa). An exception to the requirement for a trial of one conventional therapy can be made if the patient has already had a trial of at least one tumor necrosis factor inhibitor (e.g., an etanercept or infliximab product). A patient who has already tried a biologic for Behcet's disease is not required to “step back” and try a conventional therapy.

14. Spondyloarthritis, Other Subtypes. Approve for the duration noted if the patient meets ONE of the following (A or B):

Note: This includes undifferentiated arthritis, non-radiographic axial spondyloarthritis, Reactive Arthritis (Reiter's disease), arthritis associated with inflammatory bowel disease. For Ankylosing Spondylitis or Psoriatic Arthritis, refer to the respective criteria under FDA-approved indications.

A) Initial Therapy. Approve for 3 months if the patient meets BOTH of the following (i and ii):

i. Patient meets one of the following conditions (a or b):

- a)** Patient has arthritis primarily in the knees, ankles, elbows, wrists, hands, and/or feet AND has tried at least ONE conventional synthetic disease-modifying antirheumatic drug (DMARD) has been tried; OR

Note: Examples include methotrexate, leflunomide, and sulfasalazine.

- b)** Patient has axial spondyloarthritis AND has objective signs of inflammation, defined as at least one of the following [(1) or (2)]:

(1) C-reactive protein (CRP) elevated beyond the upper limit of normal for the reporting laboratory; OR

(2) Sacroiliitis reported on magnetic resonance imaging (MRI); AND

ii. The medication is prescribed by or in consultation with a rheumatologist.

B) Patient is Currently Receiving an Adalimumab Product. Approve for 1 year if the patient had a response, as determined by the prescriber.

Note: Examples of a response include decreased pain or stiffness, improved function or activities of daily living. Patient may not have a full response but there should be some response.

CONDITIONS NOT RECOMMENDED FOR APPROVAL

Coverage of adalimumab products is not recommended in the following situations:

- 1. Concurrent Use with a Biologic or with a Targeted Synthetic Disease-Modifying Antirheumatic Drug (DMARD).** An adalimumab product should not be administered in combination with another biologic or with a targeted synthetic DMARD used for an inflammatory condition (see [Appendix](#) for examples). Combination therapy is generally not recommended due to a potentially higher rate of AEs with combinations and lack of data supportive of additional efficacy.

Note: This does NOT exclude the use of conventional synthetic DMARDs (e.g., methotrexate, leflunomide, hydroxychloroquine, and sulfasalazine) in combination with an adalimumab product.

- 2. Polymyalgia Rheumatica (PMR).** EULAR/ACR guidelines for the management of PMR (2015) strongly recommend against the use of TNFis for treatment of PMR.¹⁷ This recommendation is based on lack of evidence for benefit as well as considerable potential for potential harm.

- 3.** Coverage is not recommended for circumstances not listed in the Recommended Authorization Criteria. Criteria will be updated as new published data are available.

REFERENCES

1. Humira® injection [prescribing information]. North Chicago, IL: AbbVie Inc.; March 2020.
2. Singh JA, Saag KG, Bridges SL Jr, et al. 2015 American College of Rheumatology Guideline for the treatment of rheumatoid arthritis. *Arthritis Rheumatol.* 2016;68(1):1-26.
3. Ward MM, Deodhar A, Gensler LS, et al. 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. *Arthritis Rheumatol.* 2019;71(10):1599-1613.
4. Lichtenstein GR, Loftus EV, Isaacs KL, et al. ACG Clinical Guideline: Management of Crohn's Disease in Adults. *Am J Gastroenterol.* 2018;113(4):481-517.

5. Ringold S, Angeles-Han ST, Beukelman T, et al. 2019 American College of Rheumatology/Arthritis Foundation Guideline for the treatment of juvenile idiopathic arthritis: therapeutic approaches for non-systemic polyarthritis, sacroiliitis, and enthesitis. *Arthritis Rheumatol.* 2019;71(6):846-863.
6. Ringold S, Weiss PF, Beukelman T, et al. 2013 update of the 2011 American College of Rheumatology recommendations for the treatment of juvenile idiopathic arthritis: recommendations for the medical therapy of children with systemic juvenile idiopathic arthritis and tuberculosis screening among children receiving biologic medications. *Arthritis Rheum.* 2013;65(10):2499-2512.
7. Menter A, Strober BE, Kaplan DH, et al. Joint AAD-NPF guidelines of care for the management and treatment of psoriasis with biologics. *J Am Acad Dermatol.* 2019;80(4):1029-1072.
8. Singh JA, Guyatt G, Ogdie A, et al. 2018 American College of Rheumatology/National Psoriasis Foundation Guideline for the treatment of psoriatic arthritis. *Arthritis Care Res (Hoboken).* 2019;71(1):2-29.
9. Rubin DT, Ananthakrishnan AN, Siegel CA, et al. ACG clinical guideline: ulcerative colitis in adults. *Am J Gastroenterol.* 2019;114(3):384-413.
10. Feuerstein JD, Isaac s KL, Schneider Y, et al. AGA clinical practice guidelines on the management of moderate to severe ulcerative colitis. *Gastroenterology.* 2020;158:1450-1461.
11. Pardi DS, D'Haens G, Shen B, et al. Clinical guidelines for the management of pouchitis. *Inflamm Bowel Dis.* 2009;15(9):1424-1431.
12. Levy-Clarke G, Jabs DA, Read RW, et al. Expert panel recommendations for the use of anti-tumor necrosis factor biologic agents in patients with ocular inflammatory disorders. *Ophthalmology.* 2014;121(3):785-796.
13. Hatemi G, Christensen R, Bang D, et al. 2018 update of the EULAR recommendations for the management of Behçet's syndrome. *Ann Rheum Dis.* 2018;77(6):808-818.
14. Dabade TS, Davis MD. Diagnosis and treatment of the neutrophilic dermatoses (pyoderma gangrenosum, Sweet's syndrome). *Dermatol Ther.* 2011;24(2):273-284.
15. Amin EN, Closser DR, Crouser ED. Current best practice in the management of pulmonary and systemic sarcoidosis. *Thor Adv Respir Dis.* 2014;8(4):111-132.
16. DeJaco C, Singh YP, Perel P, et al. 2015 Recommendations for the management of polymyalgia rheumatica: a European League Against Rheumatism/American College of Rheumatology Collaborative Initiative. *Arthritis Rheumatol.* 2015;67(10):2569-2580.

APPENDIX

	Mechanism of Action	Examples of Inflammatory Indications for Products*
Biologics		
Adalimumab SC Products (Humira®, biosimilars)	Inhibition of TNF	AS, CD, JIA, PsO, PsA, RA, UC
Cimzia® (certolizumab pegol SC injection)	Inhibition of TNF	AS, CD, nr-axSpA, PsO, PsA, RA
Etanercept SC Products (Enbrel®, biosimilars)	Inhibition of TNF	AS, JIA, PsO, PsA
Infliximab IV Products (Remicade®, biosimilars)	Inhibition of TNF	AS, CD, PsO, PsA, RA, UC
Simponi®, Simponi® Aria™ (golimumab SC injection, golimumab IV infusion)	Inhibition of TNF	SC formulation: AS, PsA, RA, UC IV formulation: AS, PJIA, PsA, RA
Actemra® (tocilizumab IV infusion, tocilizumab SC injection)	Inhibition of IL-6	SC formulation: PJIA, RA, SJIA IV formulation: PJIA, RA, SJIA
Kevzara® (sarilumab SC injection)	Inhibition of IL-6	RA
Orencia® (abatacept IV infusion, abatacept SC injection)	T-cell costimulation modulator	SC formulation: JIA, PSA, RA IV formulation: JIA, PsA, RA
Rituximab IV Products (Rituxan®, biosimilars)	CD20-directed cytolytic antibody	RA
Kineret® (anakinra SC injection)	Inhibition of IL-1	JIA ^A , RA
Stelara® (ustekinumab SC injection, ustekinumab IV infusion)	Inhibition of IL-12/23	SC formulation: CD, PsO, PsA, UC IV formulation: CD, UC
Siliq™ (brodalumab SC injection)	Inhibition of IL-17	PsO
Cosentyx™ (secukinumab SC injection)	Inhibition of IL-17A	AS, nr-axSpA, PsO, PsA
Taltz® (ixekizumab SC injection)	Inhibition of IL-17A	AS, nr-axSpA, PsO, PsA
Ilumya™ (tildrakizumab-asmn SC injection)	Inhibition of IL-23	PsO
Skyrizi™ (risankizumab-rzza SC injection)	Inhibition of IL-23	PsO
Tremfya™ (guselkumab SC injection)	Inhibition of IL-23	PsO
Entyvio™ (vedolizumab IV infusion)	Integrin receptor antagonist	CD, UC
Targeted Synthetic DMARDs		

Otezla [®] (apremilast tablets)	Inhibition of PDE4	PsO, PsA
Olumiant [®] (baricitinib tablets)	Inhibition of JAK pathways	RA
Rinvoq [®] (upadacitinib extended-release tablets)	Inhibition of JAK pathways	RA
Xeljanz [®] (tofacitinib tablets)	Inhibition of JAK pathways	RA, PJIA, PsA, UC
Xeljanz [®] XR (tofacitinib extended-release tablets)	Inhibition of JAK pathways	RA, PsA, UC

* Not an all-inclusive list of indication (e.g., oncology indications and rare inflammatory conditions are not listed). Refer to the prescribing information for the respective agent for FDA-approved indications; SC – Subcutaneous; TNF – Tumor necrosis factor; IV – Intravenous, IL – Interleukin; PDE4 – Phosphodiesterase 4; JAK – Janus kinase; AS – Ankylosing spondylitis; CD – Crohn’s disease; JIA – Juvenile idiopathic arthritis; PsO – Plaque psoriasis; PsA – Psoriatic arthritis; RA – Rheumatoid arthritis; UC – Ulcerative colitis; nr-axSpA – Non-radiographic axial spondyloarthritis; ^ Off-label use of Kineret in JIA supported in guidelines; DMARDs – Disease-modifying antirheumatic drug.