

# Tocilizumab (Actemra® , Tofidence™ , and Tyenne®)

**Policy Number:** CS2024D0043AC  
**Effective Date:** September 1, 2024

[➔ Instructions for Use](#)

<b>Table of Contents</b>	<b>Page</b>
<a href="#">Application</a> .....	1
<a href="#">Coverage Rationale</a> .....	1
<a href="#">Applicable Codes</a> .....	5
<a href="#">Background</a> .....	15
<a href="#">Clinical Evidence</a> .....	15
<a href="#">U.S. Food and Drug Administration</a> .....	18
<a href="#">References</a> .....	19
<a href="#">Policy History/Revision Information</a> .....	20
<a href="#">Instructions for Use</a> .....	21

<b>Commercial Policy</b>
<ul style="list-style-type: none"> <li><a href="#">Actemra® (Tocilizumab) Injection for Intravenous Infusion</a></li> </ul>

## Application

This Medical Benefit Drug Policy does not apply to the states listed below; refer to the state-specific policy/guideline, if noted:

State	Policy/Guideline
Arizona	Refer to the state’s Medicaid clinical policy; use drug specific criteria found within the clinical policy if available for the specific product and formulation, otherwise this Medical Benefit Drug Policy applies
Indiana	Refer to the state’s Medicaid clinical policy
Kansas	Refer to the state’s Medicaid clinical policy
Louisiana	Refer to the state’s Medicaid clinical policy
North Carolina	None
Ohio	<a href="#">Actemra® (Tocilizumab) Injection for Intravenous Infusion (for Ohio Only)</a>
Pennsylvania	Refer to the state’s Medicaid clinical policy
Washington	Refer to the state’s Medicaid clinical policy

The [Preferred Product](#) language and the [Preferred Product Criteria](#) do not apply to the states of Michigan and Wisconsin.

## Coverage Rationale

This policy refers only to tocilizumab products administered by intravenous infusion. Tocilizumab for self-administered subcutaneous injection is obtained under the pharmacy benefit.

This policy refers to the following tocilizumab products:

- Actemra® (tocilizumab)
- Tofidence™ (tocilizumab-bavi)
- Tyenne® (tocilizumab-aazg)
- Any FDA-approved tocilizumab biosimilar not listed here\*

\*Any U.S. Food and Drug Administration approved and launched tocilizumab biosimilar product not listed by name in this policy will be considered non-preferred until reviewed by UnitedHealthcare.

Refer to the Medical Benefit Drug Policy titled [Oncology Medication Clinical Coverage](#) for updated information based upon the National Comprehensive Cancer Network (NCCN) Drugs & Biologics Compendium® (NCCN Compendium®) for oncology indications.

## Preferred Product

Tofidence™ (tocilizumab-bavi) and Tyenne® (tocilizumab-aazg) are the preferred tocilizumab products. Coverage will be provided for Tofidence™ and Tyenne® contingent on the coverage criteria in the [Diagnosis-Specific Criteria](#) section.

Coverage for Actemra® (tocilizumab) or other non-preferred tocilizumab products will be provided contingent on the criteria in this section and the coverage criteria in the [Diagnosis-Specific Criteria](#) section. In order to continue coverage, members already on Actemra® (tocilizumab) or other non-preferred tocilizumab products will be required to change therapy to Tofidence™ (tocilizumab-bavi) or Tyenne® (tocilizumab-aazg) unless they meet the criteria in this section.

## Preferred Product Criteria

**Treatment with Actemra® or other non-preferred tocilizumab biosimilar products is medically necessary for the indications outlined in this policy when both of the following criteria are met:**

- **One** of the following:
  - **Both** of the following:
    - History of a trial of adequate dose and duration of Tofidence™ or Tyenne® resulting in minimal clinical response to therapy and residual disease activity; **and**
    - Physician attests that, in their clinical opinion, the clinical response would be expected to be superior with Actemra® or other tocilizumab biosimilar product than experienced with Tofidence™ and Tyenne®
  - or**
  - **Both** of the following:
    - History of intolerance, contraindication, or adverse event to Tofidence™ or Tyenne®; **and**
    - Physician attests that, in their clinical opinion, the same intolerance, contraindication, or adverse event would not be expected to occur with Actemra® or other tocilizumab biosimilar product
- and**
- Patient has not had a loss of a favorable response after established maintenance therapy with Tofidence™, Tyenne® or other tocilizumab biosimilar product

## Diagnosis-Specific Criteria

“Tocilizumab” will be used to refer to all tocilizumab products.

### *Polyarticular Juvenile Idiopathic Arthritis*

**Tocilizumab is proven and medically necessary for the treatment of polyarticular juvenile idiopathic arthritis when all of the following criteria are met:**

- For **initial therapy**, **all** of the following:
  - Diagnosis of polyarticular juvenile idiopathic arthritis (PJIA); **and**
  - Tocilizumab is dosed according to U.S. Food and Drug Administration (FDA) labeled dosing for polyarticular juvenile idiopathic arthritis; **and**
  - Patient is not receiving tocilizumab in combination with either of the following:
    - Biologic disease-modifying antirheumatic drug (DMARD) [e.g., Enbrel (etanercept), Humira (adalimumab), Cimzia (certolizumab), Simponi (golimumab)]; **or**
    - Janus kinase inhibitor [e.g., Xeljanz (tofacitinib), Olumiant (baricitinib)]
  - and**
  - Prescribed by, or in consultation with, a rheumatologist; **and**
  - Initial authorization is for no more than 12 months
- For **continuation of therapy**, **all** of the following:
  - Patient has previously received tocilizumab injection for intravenous infusion; **and**
  - Documentation of positive clinical response to tocilizumab; **and**
  - Tocilizumab is dosed according to FDA labeled dosing for polyarticular juvenile idiopathic arthritis; **and**
  - Patient is not receiving tocilizumab in combination with either of the following:
    - Biologic disease-modifying antirheumatic drug (DMARD) [e.g., Enbrel (etanercept), Humira (adalimumab), Cimzia (certolizumab), Simponi (golimumab)]; **or**
    - Janus kinase inhibitor [e.g., Xeljanz (tofacitinib), Olumiant (baricitinib)]
  - and**
  - Authorization is for no more than 12 months

## ***Rheumatoid Arthritis***

**Tocilizumab is proven and medically necessary for the treatment of rheumatoid arthritis when all of the following criteria are met:**

- For **initial therapy**, all of the following:
  - Diagnosis of moderately to severely active rheumatoid arthritis (RA); **and**
  - **One** of the following:
    - History of failure or intolerance to a 3-month trial of one non-biologic disease modifying anti-rheumatic drug (DMARD) (e.g., methotrexate, leflunomide, sulfasalazine, hydroxychloroquine) at maximally indicated doses, unless contraindicated or clinically significant adverse effects are experienced; **or**
    - Patient has been previously treated with a biologic or targeted synthetic DMARD FDA-approved for the treatment of rheumatoid arthritis [e.g., Humira (adalimumab), Simponi (golimumab), Rinvoq (upadacitinib), Xeljanz (tofacitinib)]; **or**
    - Patient is currently on tocilizumab

**and**

  - Tocilizumab is dosed according to FDA labeled dosing for rheumatoid arthritis; **and**
  - Patient is not receiving tocilizumab in combination with either of the following:
    - Biologic DMARD [e.g., Enbrel (etanercept), Humira (adalimumab), Cimzia (certolizumab), Simponi (golimumab)]; **or**
    - Janus kinase inhibitor [e.g., Xeljanz (tofacitinib), Olumiant (baricitinib)]<sup>6</sup>

**and**

  - Prescribed by, or in consultation with a rheumatologist; **and**
  - Initial authorization is for no more than 12 months
- For **continuation of therapy**, all of the following:
  - Patient has previously received tocilizumab injection for intravenous infusion; **and**
  - Documentation of positive clinical response; **and**
  - Tocilizumab is dosed according to FDA labeled dosing for rheumatoid arthritis; **and**
  - Patient is not receiving tocilizumab in combination with either of the following:
    - Biologic DMARD [e.g., Enbrel (etanercept), Humira (adalimumab), Cimzia (certolizumab), Simponi (golimumab)]; **or**
    - Janus kinase inhibitor [e.g., Xeljanz (tofacitinib), Olumiant (baricitinib)]

**and**

  - Authorization is for no more than 12 months

## ***Systemic Juvenile Idiopathic Arthritis***

**Tocilizumab is proven and medically necessary for the treatment of systemic juvenile idiopathic arthritis when all of the following criteria are met:**

- For **initial therapy**, all of the following:
  - Diagnosis of systemic juvenile idiopathic arthritis (SJIA); **and**
  - Tocilizumab is dosed according to FDA labeled dosing for systemic juvenile idiopathic arthritis; **and**
  - Patient is not receiving tocilizumab in combination with either of the following:<sup>1</sup>
    - Biologic DMARD [e.g., Enbrel (etanercept), Humira (adalimumab), Cimzia (certolizumab), Simponi (golimumab)]; **or**
    - Janus kinase inhibitor [e.g., Xeljanz (tofacitinib), Olumiant (baricitinib)]<sup>6</sup>

**and**

  - Prescribed by, or in consultation with, a rheumatologist; **and**
  - Initial authorization is for no more than 12 months
- For **continuation of therapy**, all of the following:
  - Patient has previously received tocilizumab injection for intravenous infusion; **and**
  - Documentation of positive clinical response; **and**
  - Tocilizumab is dosed according to FDA labeled dosing for systemic juvenile idiopathic arthritis; **and**
  - Patient is not receiving tocilizumab in combination with either of the following:<sup>1</sup>
    - Biologic DMARD [e.g., Enbrel (etanercept), Humira (adalimumab), Cimzia (certolizumab), Simponi (golimumab)]; **or**
    - Janus kinase inhibitor [e.g., Xeljanz (tofacitinib), Olumiant (baricitinib)]

**and**

  - Authorization is for no more than 12 months

## ***Giant Cell Arteritis***

**Tocilizumab is proven and medically necessary for the treatment of giant cell arteritis when all of the following criteria are met:**

- For **initial therapy**, all of the following:
  - Diagnosis of giant cell arteritis (GCA); **and**
  - Tocilizumab is dosed according to U.S. Food and Drug Administration (FDA) labeled dosing for giant cell arteritis; **and**
  - Patient is not receiving tocilizumab in combination with either of the following:
    - Biologic disease-modifying antirheumatic drug (DMARD) [e.g., Enbrel (etanercept), Humira (adalimumab), Cimzia (certolizumab), Simponi (golimumab)]; **or**
    - Janus kinase inhibitor [e.g., Xeljanz (tofacitinib), Olumiant (baricitinib)]**and**
  - Prescribed by, or in consultation with, a rheumatologist; **and**
  - Initial authorization is for no more than 12 months
- For **continuation of therapy**, all of the following:
  - Patient has previously received tocilizumab injection for intravenous infusion; **and**
  - Documentation of positive clinical response to tocilizumab; **and**
  - Tocilizumab is dosed according to FDA labeled dosing for giant cell arteritis; **and**
  - Patient is not receiving tocilizumab in combination with either of the following:
    - Biologic disease-modifying antirheumatic drug (DMARD) [e.g., Enbrel (etanercept), Humira (adalimumab), Cimzia (certolizumab), Simponi (golimumab)]; **or**
    - Janus kinase inhibitor [e.g., Xeljanz (tofacitinib), Olumiant (baricitinib)]**and**
  - Authorization is for no more than 12 months

## ***Cytokine Release Syndrome***

**Tocilizumab is proven and medically necessary for the treatment of cytokine release syndrome when all of the following criteria are met:**

- For **initial therapy**, all of the following:
  - Diagnosis of cytokine release syndrome (CRS); **and**
  - Patient has received treatment with **one** of the following:
    - Chimeric antigen receptor (CAR) T cell therapy [e.g., Kymriah (tisagenlecleucel), Yescarta (axicabtagene ciloleucel)]; **or**
    - CD3-directed therapy [e.g., Blincyto (blinatumomab), Tecvayli (teclistamab)]**and**
  - Tocilizumab is dosed according to FDA labeled dosing for CRS; **and**
  - Initial authorization is for no more than 4 doses
- For **continuation of therapy**, all of the following:
  - Documentation of positive clinical response; **and**
  - Patient continues to experience signs and symptoms of CRS; **and**
  - Tocilizumab is dosed according to FDA labeled dosing for CRS; **and**
  - Authorization is for no more than 4 doses

## ***Acute Graft-Versus-Host Disease (GVHD)***

**Tocilizumab is proven and medically necessary for the treatment of acute graft-versus-host disease (GVHD) when all of the following criteria are met:**

- For **initial therapy**, all of the following:
  - Diagnosis of steroid refractory acute GVHD; **and**
  - **One** of the following:
    - Patient is receiving tocilizumab in combination with systemic corticosteroids; **or**
    - Patient is intolerant to systemic corticosteroid therapy**and**
  - Initial authorization is for no more than 4 doses
- For **continuation of therapy**, all of the following:
  - Documentation of positive clinical response; **and**
  - Patient continues to experience acute GVHD; **and**
  - **One** of the following:
    - Patient is receiving tocilizumab in combination with systemic corticosteroids; **or**
    - Patient is intolerant to systemic corticosteroid therapy

and

- o Authorization is for no more than 4 doses

### ***Immune Checkpoint Inhibitor-Related Toxicities***

**Tocilizumab is proven and medically necessary for the treatment of immune checkpoint inhibitor-related toxicities when all of the following criteria are met:**<sup>67</sup>

- Patient has recently received checkpoint inhibitor therapy [e.g., Keytruda (Pembrolizumab), Opdivo (Nivolumab)]; **and**
- Diagnosis of severe immunotherapy-related inflammatory arthritis; **and**
- No symptom improvement after 7 days of starting high-dose corticosteroids; **and**
- History of failure, contraindication, or intolerance to infliximab; **and**
- **One** of the following:
  - o Patient is receiving tocilizumab in combination with systemic corticosteroids; **or**
  - o Patient is intolerant to systemic corticosteroid therapy
- and**
- Authorization is for no more than 4 doses

## **Applicable Codes**

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this policy does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by federal, state, or contractual requirements and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other Policies and Guidelines may apply.

<b>HCPCS Code</b>	<b>Description</b>
C9399	Unclassified drug or biological
J3262	Injection, tocilizumab, 1 mg
J3490	Unclassified drugs
J3590	Unclassified biologics
Q5133	Injection, tocilizumab-bavi (tofidence), biosimilar, 1 mg

<b>Diagnosis Code</b>	<b>Description</b>
D89.810	Acute graft-versus-host disease
D89.831	Cytokine release syndrome, grade 1
D89.832	Cytokine release syndrome, grade 2
D89.833	Cytokine release syndrome, grade 3
D89.834	Cytokine release syndrome, grade 4
D89.835	Cytokine release syndrome, grade 5
D89.839	Cytokine release syndrome, grade unspecified
M05.00	Felty's syndrome, unspecified site
M05.011	Felty's syndrome, right shoulder
M05.012	Felty's syndrome, left shoulder
M05.019	Felty's syndrome, unspecified shoulder
M05.021	Felty's syndrome, right elbow
M05.022	Felty's syndrome, left elbow
M05.029	Felty's syndrome, unspecified elbow
M05.031	Felty's syndrome, right wrist
M05.032	Felty's syndrome, left wrist
M05.039	Felty's syndrome, unspecified wrist
M05.041	Felty's syndrome, right hand
M05.042	Felty's syndrome, left hand

Diagnosis Code	Description
M05.049	Felty's syndrome, unspecified hand
M05.051	Felty's syndrome, right hip
M05.052	Felty's syndrome, left hip
M05.059	Felty's syndrome, unspecified hip
M05.061	Felty's syndrome, right knee
M05.062	Felty's syndrome, left knee
M05.069	Felty's syndrome, unspecified knee
M05.071	Felty's syndrome, right ankle and foot
M05.072	Felty's syndrome, left ankle and foot
M05.079	Felty's syndrome, unspecified ankle and foot
M05.09	Felty's syndrome, multiple sites
M05.20	Rheumatoid vasculitis with rheumatoid arthritis of unspecified site
M05.211	Rheumatoid vasculitis with rheumatoid arthritis of right shoulder
M05.212	Rheumatoid vasculitis with rheumatoid arthritis of left shoulder
M05.219	Rheumatoid vasculitis with rheumatoid arthritis of unspecified shoulder
M05.221	Rheumatoid vasculitis with rheumatoid arthritis of right elbow
M05.222	Rheumatoid vasculitis with rheumatoid arthritis of left elbow
M05.229	Rheumatoid vasculitis with rheumatoid arthritis of unspecified elbow
M05.231	Rheumatoid vasculitis with rheumatoid arthritis of right wrist
M05.232	Rheumatoid vasculitis with rheumatoid arthritis of left wrist
M05.239	Rheumatoid vasculitis with rheumatoid arthritis of unspecified wrist
M05.241	Rheumatoid vasculitis with rheumatoid arthritis of right hand
M05.242	Rheumatoid vasculitis with rheumatoid arthritis of left hand
M05.249	Rheumatoid vasculitis with rheumatoid arthritis of unspecified hand
M05.251	Rheumatoid vasculitis with rheumatoid arthritis of right hip
M05.252	Rheumatoid vasculitis with rheumatoid arthritis of left hip
M05.259	Rheumatoid vasculitis with rheumatoid arthritis of unspecified hip
M05.261	Rheumatoid vasculitis with rheumatoid arthritis of right knee
M05.262	Rheumatoid vasculitis with rheumatoid arthritis of left knee
M05.269	Rheumatoid vasculitis with rheumatoid arthritis of unspecified knee
M05.271	Rheumatoid vasculitis with rheumatoid arthritis of right ankle and foot
M05.272	Rheumatoid vasculitis with rheumatoid arthritis of left ankle and foot
M05.279	Rheumatoid vasculitis with rheumatoid arthritis of unspecified ankle and foot
M05.29	Rheumatoid vasculitis with rheumatoid arthritis of multiple sites
M05.30	Rheumatoid heart disease with rheumatoid arthritis of unspecified site
M05.311	Rheumatoid heart disease with rheumatoid arthritis of right shoulder
M05.312	Rheumatoid heart disease with rheumatoid arthritis of left shoulder
M05.319	Rheumatoid heart disease with rheumatoid arthritis of unspecified shoulder
M05.321	Rheumatoid heart disease with rheumatoid arthritis of right elbow
M05.322	Rheumatoid heart disease with rheumatoid arthritis of left elbow
M05.329	Rheumatoid heart disease with rheumatoid arthritis of unspecified elbow
M05.331	Rheumatoid heart disease with rheumatoid arthritis of right wrist
M05.332	Rheumatoid heart disease with rheumatoid arthritis of left wrist
M05.339	Rheumatoid heart disease with rheumatoid arthritis of unspecified wrist
M05.341	Rheumatoid heart disease with rheumatoid arthritis of right hand

Diagnosis Code	Description
M05.342	Rheumatoid heart disease with rheumatoid arthritis of left hand
M05.349	Rheumatoid heart disease with rheumatoid arthritis of unspecified hand
M05.351	Rheumatoid heart disease with rheumatoid arthritis of right hip
M05.352	Rheumatoid heart disease with rheumatoid arthritis of left hip
M05.359	Rheumatoid heart disease with rheumatoid arthritis of unspecified hip
M05.361	Rheumatoid heart disease with rheumatoid arthritis of right knee
M05.362	Rheumatoid heart disease with rheumatoid arthritis of left knee
M05.369	Rheumatoid heart disease with rheumatoid arthritis of unspecified knee
M05.371	Rheumatoid heart disease with rheumatoid arthritis of right ankle and foot
M05.372	Rheumatoid heart disease with rheumatoid arthritis of left ankle and foot
M05.379	Rheumatoid heart disease with rheumatoid arthritis of unspecified ankle and foot
M05.39	Rheumatoid heart disease with rheumatoid arthritis of multiple sites
M05.40	Rheumatoid myopathy with rheumatoid arthritis of unspecified site
M05.411	Rheumatoid myopathy with rheumatoid arthritis of right shoulder
M05.412	Rheumatoid myopathy with rheumatoid arthritis of left shoulder
M05.419	Rheumatoid myopathy with rheumatoid arthritis of unspecified shoulder
M05.421	Rheumatoid myopathy with rheumatoid arthritis of right elbow
M05.422	Rheumatoid myopathy with rheumatoid arthritis of left elbow
M05.429	Rheumatoid myopathy with rheumatoid arthritis of unspecified elbow
M05.431	Rheumatoid myopathy with rheumatoid arthritis of right wrist
M05.432	Rheumatoid myopathy with rheumatoid arthritis of left wrist
M05.439	Rheumatoid myopathy with rheumatoid arthritis of unspecified wrist
M05.441	Rheumatoid myopathy with rheumatoid arthritis of right hand
M05.442	Rheumatoid myopathy with rheumatoid arthritis of left hand
M05.449	Rheumatoid myopathy with rheumatoid arthritis of unspecified hand
M05.451	Rheumatoid myopathy with rheumatoid arthritis of right hip
M05.452	Rheumatoid myopathy with rheumatoid arthritis of left hip
M05.459	Rheumatoid myopathy with rheumatoid arthritis of unspecified hip
M05.461	Rheumatoid myopathy with rheumatoid arthritis of right knee
M05.462	Rheumatoid myopathy with rheumatoid arthritis of left knee
M05.469	Rheumatoid myopathy with rheumatoid arthritis of unspecified knee
M05.471	Rheumatoid myopathy with rheumatoid arthritis of right ankle and foot
M05.472	Rheumatoid myopathy with rheumatoid arthritis of left ankle and foot
M05.479	Rheumatoid myopathy with rheumatoid arthritis of unspecified ankle and foot
M05.49	Rheumatoid myopathy with rheumatoid arthritis of multiple sites
M05.50	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified site
M05.511	Rheumatoid polyneuropathy with rheumatoid arthritis of right shoulder
M05.512	Rheumatoid polyneuropathy with rheumatoid arthritis of left shoulder
M05.519	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified shoulder
M05.521	Rheumatoid polyneuropathy with rheumatoid arthritis of right elbow
M05.522	Rheumatoid polyneuropathy with rheumatoid arthritis of left elbow
M05.529	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified elbow
M05.531	Rheumatoid polyneuropathy with rheumatoid arthritis of right wrist
M05.532	Rheumatoid polyneuropathy with rheumatoid arthritis of left wrist
M05.539	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified wrist

Diagnosis Code	Description
M05.541	Rheumatoid polyneuropathy with rheumatoid arthritis of right hand
M05.542	Rheumatoid polyneuropathy with rheumatoid arthritis of left hand
M05.549	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified hand
M05.551	Rheumatoid polyneuropathy with rheumatoid arthritis of right hip
M05.552	Rheumatoid polyneuropathy with rheumatoid arthritis of left hip
M05.559	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified hip
M05.561	Rheumatoid polyneuropathy with rheumatoid arthritis of right knee
M05.562	Rheumatoid polyneuropathy with rheumatoid arthritis of left knee
M05.569	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified knee
M05.571	Rheumatoid polyneuropathy with rheumatoid arthritis of right ankle and foot
M05.572	Rheumatoid polyneuropathy with rheumatoid arthritis of left ankle and foot
M05.579	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified ankle and foot
M05.59	Rheumatoid polyneuropathy with rheumatoid arthritis of multiple sites
M05.60	Rheumatoid arthritis of unspecified site with involvement of other organs and systems
M05.611	Rheumatoid arthritis of right shoulder with involvement of other organs and systems
M05.612	Rheumatoid arthritis of left shoulder with involvement of other organs and systems
M05.619	Rheumatoid arthritis of unspecified shoulder with involvement of other organs and systems
M05.621	Rheumatoid arthritis of right elbow with involvement of other organs and systems
M05.622	Rheumatoid arthritis of left elbow with involvement of other organs and systems
M05.629	Rheumatoid arthritis of unspecified elbow with involvement of other organs and systems
M05.631	Rheumatoid arthritis of right wrist with involvement of other organs and systems
M05.632	Rheumatoid arthritis of left wrist with involvement of other organs and systems
M05.639	Rheumatoid arthritis of unspecified wrist with involvement of other organs and systems
M05.641	Rheumatoid arthritis of right hand with involvement of other organs and systems
M05.642	Rheumatoid arthritis of left hand with involvement of other organs and systems
M05.649	Rheumatoid arthritis of unspecified hand with involvement of other organs and systems
M05.651	Rheumatoid arthritis of right hip with involvement of other organs and systems
M05.652	Rheumatoid arthritis of left hip with involvement of other organs and systems
M05.659	Rheumatoid arthritis of unspecified hip with involvement of other organs and systems
M05.661	Rheumatoid arthritis of right knee with involvement of other organs and systems
M05.662	Rheumatoid arthritis of left knee with involvement of other organs and systems
M05.669	Rheumatoid arthritis of unspecified knee with involvement of other organs and systems
M05.671	Rheumatoid arthritis of right ankle and foot with involvement of other organs and systems
M05.672	Rheumatoid arthritis of left ankle and foot with involvement of other organs and systems
M05.679	Rheumatoid arthritis of unspecified ankle and foot with involvement of other organs and systems
M05.69	Rheumatoid arthritis of multiple sites with involvement of other organs and systems
M05.7A	Rheumatoid arthritis with rheumatoid factor of other specified site without organ or systems involvement
M05.70	Rheumatoid arthritis with rheumatoid factor of unspecified site without organ or systems involvement
M05.711	Rheumatoid arthritis with rheumatoid factor of right shoulder without organ or systems involvement
M05.712	Rheumatoid arthritis with rheumatoid factor of left shoulder without organ or systems involvement
M05.719	Rheumatoid arthritis with rheumatoid factor of unspecified shoulder without organ or systems involvement
M05.721	Rheumatoid arthritis with rheumatoid factor of right elbow without organ or systems involvement
M05.722	Rheumatoid arthritis with rheumatoid factor of left elbow without organ or systems involvement



Diagnosis Code	Description
M05.729	Rheumatoid arthritis with rheumatoid factor of unspecified elbow without organ or systems involvement
M05.731	Rheumatoid arthritis with rheumatoid factor of right wrist without organ or systems involvement
M05.732	Rheumatoid arthritis with rheumatoid factor of left wrist without organ or systems involvement
M05.739	Rheumatoid arthritis with rheumatoid factor of unspecified wrist without organ or systems involvement
M05.741	Rheumatoid arthritis with rheumatoid factor of right hand without organ or systems involvement
M05.742	Rheumatoid arthritis with rheumatoid factor of left hand without organ or systems involvement
M05.749	Rheumatoid arthritis with rheumatoid factor of unspecified hand without organ or systems involvement
M05.751	Rheumatoid arthritis with rheumatoid factor of right hip without organ or systems involvement
M05.752	Rheumatoid arthritis with rheumatoid factor of left hip without organ or systems involvement
M05.759	Rheumatoid arthritis with rheumatoid factor of unspecified hip without organ or systems involvement
M05.761	Rheumatoid arthritis with rheumatoid factor of right knee without organ or systems involvement
M05.762	Rheumatoid arthritis with rheumatoid factor of left knee without organ or systems involvement
M05.769	Rheumatoid arthritis with rheumatoid factor of unspecified knee without organ or systems involvement
M05.771	Rheumatoid arthritis with rheumatoid factor of right ankle and foot without organ or systems involvement
M05.772	Rheumatoid arthritis with rheumatoid factor of left ankle and foot without organ or systems involvement
M05.779	Rheumatoid arthritis with rheumatoid factor of unspecified ankle and foot without organ or systems involvement
M05.79	Rheumatoid arthritis with rheumatoid factor of multiple sites without organ or systems involvement
M05.8A	Other rheumatoid arthritis with rheumatoid factor of other specified site
M05.80	Other rheumatoid arthritis with rheumatoid factor of unspecified site
M05.811	Other rheumatoid arthritis with rheumatoid factor of right shoulder
M05.812	Other rheumatoid arthritis with rheumatoid factor of left shoulder
M05.819	Other rheumatoid arthritis with rheumatoid factor of unspecified shoulder
M05.821	Other rheumatoid arthritis with rheumatoid factor of right elbow
M05.822	Other rheumatoid arthritis with rheumatoid factor of left elbow
M05.829	Other rheumatoid arthritis with rheumatoid factor of unspecified elbow
M05.831	Other rheumatoid arthritis with rheumatoid factor of right wrist
M05.832	Other rheumatoid arthritis with rheumatoid factor of left wrist
M05.839	Other rheumatoid arthritis with rheumatoid factor of unspecified wrist
M05.841	Other rheumatoid arthritis with rheumatoid factor of right hand
M05.842	Other rheumatoid arthritis with rheumatoid factor of left hand
M05.849	Other rheumatoid arthritis with rheumatoid factor of unspecified hand
M05.851	Other rheumatoid arthritis with rheumatoid factor of right hip
M05.852	Other rheumatoid arthritis with rheumatoid factor of left hip
M05.859	Other rheumatoid arthritis with rheumatoid factor of unspecified hip
M05.861	Other rheumatoid arthritis with rheumatoid factor of right knee
M05.862	Other rheumatoid arthritis with rheumatoid factor of left knee
M05.869	Other rheumatoid arthritis with rheumatoid factor of unspecified knee
M05.871	Other rheumatoid arthritis with rheumatoid factor of right ankle and foot
M05.872	Other rheumatoid arthritis with rheumatoid factor of left ankle and foot
M05.879	Other rheumatoid arthritis with rheumatoid factor of unspecified ankle and foot

Diagnosis Code	Description
M05.89	Other rheumatoid arthritis with rheumatoid factor of multiple sites
M05.9	Rheumatoid arthritis with rheumatoid factor, unspecified
M06.0A	Rheumatoid arthritis without rheumatoid factor, other specified site
M06.00	Rheumatoid arthritis without rheumatoid factor, unspecified site
M06.011	Rheumatoid arthritis without rheumatoid factor, right shoulder
M06.012	Rheumatoid arthritis without rheumatoid factor, left shoulder
M06.019	Rheumatoid arthritis without rheumatoid factor, unspecified shoulder
M06.021	Rheumatoid arthritis without rheumatoid factor, right elbow
M06.022	Rheumatoid arthritis without rheumatoid factor, left elbow
M06.029	Rheumatoid arthritis without rheumatoid factor, unspecified elbow
M06.031	Rheumatoid arthritis without rheumatoid factor, right wrist
M06.032	Rheumatoid arthritis without rheumatoid factor, left wrist
M06.039	Rheumatoid arthritis without rheumatoid factor, unspecified wrist
M06.041	Rheumatoid arthritis without rheumatoid factor, right hand
M06.042	Rheumatoid arthritis without rheumatoid factor, left hand
M06.049	Rheumatoid arthritis without rheumatoid factor, unspecified hand
M06.051	Rheumatoid arthritis without rheumatoid factor, right hip
M06.052	Rheumatoid arthritis without rheumatoid factor, left hip
M06.059	Rheumatoid arthritis without rheumatoid factor, unspecified hip
M06.061	Rheumatoid arthritis without rheumatoid factor, right knee
M06.062	Rheumatoid arthritis without rheumatoid factor, left knee
M06.069	Rheumatoid arthritis without rheumatoid factor, unspecified knee
M06.071	Rheumatoid arthritis without rheumatoid factor, right ankle and foot
M06.072	Rheumatoid arthritis without rheumatoid factor, left ankle and foot
M06.079	Rheumatoid arthritis without rheumatoid factor, unspecified ankle and foot
M06.08	Rheumatoid arthritis without rheumatoid factor, vertebrae
M06.09	Rheumatoid arthritis without rheumatoid factor, multiple sites
M06.1	Adult-onset Still's disease
M06.20	Rheumatoid bursitis, unspecified site
M06.211	Rheumatoid bursitis, right shoulder
M06.212	Rheumatoid bursitis, left shoulder
M06.219	Rheumatoid bursitis, unspecified shoulder
M06.221	Rheumatoid bursitis, right elbow
M06.222	Rheumatoid bursitis, left elbow
M06.229	Rheumatoid bursitis, unspecified elbow
M06.231	Rheumatoid bursitis, right wrist
M06.232	Rheumatoid bursitis, left wrist
M06.239	Rheumatoid bursitis, unspecified wrist
M06.241	Rheumatoid bursitis, right hand
M06.242	Rheumatoid bursitis, left hand
M06.249	Rheumatoid bursitis, unspecified hand
M06.251	Rheumatoid bursitis, right hip
M06.252	Rheumatoid bursitis, left hip
M06.259	Rheumatoid bursitis, unspecified hip
M06.261	Rheumatoid bursitis, right knee

Diagnosis Code	Description
M06.262	Rheumatoid bursitis, left knee
M06.269	Rheumatoid bursitis, unspecified knee
M06.271	Rheumatoid bursitis, right ankle and foot
M06.272	Rheumatoid bursitis, left ankle and foot
M06.279	Rheumatoid bursitis, unspecified ankle and foot
M06.28	Rheumatoid bursitis, vertebrae
M06.29	Rheumatoid bursitis, multiple sites
M06.30	Rheumatoid nodule, unspecified site
M06.311	Rheumatoid nodule, right shoulder
M06.312	Rheumatoid nodule, left shoulder
M06.319	Rheumatoid nodule, unspecified shoulder
M06.321	Rheumatoid nodule, right elbow
M06.322	Rheumatoid nodule, left elbow
M06.329	Rheumatoid nodule, unspecified elbow
M06.331	Rheumatoid nodule, right wrist
M06.332	Rheumatoid nodule, left wrist
M06.339	Rheumatoid nodule, unspecified wrist
M06.341	Rheumatoid nodule, right hand
M06.342	Rheumatoid nodule, left hand
M06.349	Rheumatoid nodule, unspecified hand
M06.351	Rheumatoid nodule, right hip
M06.352	Rheumatoid nodule, left hip
M06.359	Rheumatoid nodule, unspecified hip
M06.361	Rheumatoid nodule, right knee
M06.362	Rheumatoid nodule, left knee
M06.369	Rheumatoid nodule, unspecified knee
M06.371	Rheumatoid nodule, right ankle and foot
M06.372	Rheumatoid nodule, left ankle and foot
M06.379	Rheumatoid nodule, unspecified ankle and foot
M06.38	Rheumatoid nodule, vertebrae
M06.39	Rheumatoid nodule, multiple sites
M06.8A	Other specified rheumatoid arthritis, other specified site
M06.80	Other specified rheumatoid arthritis, unspecified site
M06.811	Other specified rheumatoid arthritis, right shoulder
M06.812	Other specified rheumatoid arthritis, left shoulder
M06.819	Other specified rheumatoid arthritis, unspecified shoulder
M06.821	Other specified rheumatoid arthritis, right elbow
M06.822	Other specified rheumatoid arthritis, left elbow
M06.829	Other specified rheumatoid arthritis, unspecified elbow
M06.831	Other specified rheumatoid arthritis, right wrist
M06.832	Other specified rheumatoid arthritis, left wrist
M06.839	Other specified rheumatoid arthritis, unspecified wrist
M06.841	Other specified rheumatoid arthritis, right hand
M06.842	Other specified rheumatoid arthritis, left hand
M06.849	Other specified rheumatoid arthritis, unspecified hand

Diagnosis Code	Description
M06.851	Other specified rheumatoid arthritis, right hip
M06.852	Other specified rheumatoid arthritis, left hip
M06.859	Other specified rheumatoid arthritis, unspecified hip
M06.861	Other specified rheumatoid arthritis, right knee
M06.862	Other specified rheumatoid arthritis, left knee
M06.869	Other specified rheumatoid arthritis, unspecified knee
M06.871	Other specified rheumatoid arthritis, right ankle and foot
M06.872	Other specified rheumatoid arthritis, left ankle and foot
M06.879	Other specified rheumatoid arthritis, unspecified ankle and foot
M06.88	Other specified rheumatoid arthritis, vertebrae
M06.89	Other specified rheumatoid arthritis, multiple sites
M06.9	Rheumatoid arthritis, unspecified
M08.0A	Unspecified juvenile rheumatoid arthritis, other specified site
M08.00	Unspecified juvenile rheumatoid arthritis of unspecified site
M08.011	Unspecified juvenile rheumatoid arthritis, right shoulder
M08.012	Unspecified juvenile rheumatoid arthritis, left shoulder
M08.019	Unspecified juvenile rheumatoid arthritis, unspecified shoulder
M08.021	Unspecified juvenile rheumatoid arthritis, right elbow
M08.022	Unspecified juvenile rheumatoid arthritis, left elbow
M08.029	Unspecified juvenile rheumatoid arthritis, unspecified elbow
M08.031	Unspecified juvenile rheumatoid arthritis, right wrist
M08.032	Unspecified juvenile rheumatoid arthritis, left wrist
M08.039	Unspecified juvenile rheumatoid arthritis, unspecified wrist
M08.041	Unspecified juvenile rheumatoid arthritis, right hand
M08.042	Unspecified juvenile rheumatoid arthritis, left hand
M08.049	Unspecified juvenile rheumatoid arthritis, unspecified hand
M08.051	Unspecified juvenile rheumatoid arthritis, right hip
M08.052	Unspecified juvenile rheumatoid arthritis, left hip
M08.059	Unspecified juvenile rheumatoid arthritis, unspecified hip
M08.061	Unspecified juvenile rheumatoid arthritis, right knee
M08.062	Unspecified juvenile rheumatoid arthritis, left knee
M08.069	Unspecified juvenile rheumatoid arthritis, unspecified knee
M08.071	Unspecified juvenile rheumatoid arthritis, right ankle and foot
M08.072	Unspecified juvenile rheumatoid arthritis, left ankle and foot
M08.079	Unspecified juvenile rheumatoid arthritis, unspecified ankle and foot
M08.08	Unspecified juvenile rheumatoid arthritis, vertebrae
M08.09	Unspecified juvenile rheumatoid arthritis, multiple sites
M08.2A	Juvenile rheumatoid arthritis with systemic onset, other specified site
M08.20	Juvenile rheumatoid arthritis with systemic onset, unspecified site
M08.211	Juvenile rheumatoid arthritis with systemic onset, right shoulder
M08.212	Juvenile rheumatoid arthritis with systemic onset, left shoulder
M08.219	Juvenile rheumatoid arthritis with systemic onset, unspecified shoulder
M08.221	Juvenile rheumatoid arthritis with systemic onset, right elbow
M08.222	Juvenile rheumatoid arthritis with systemic onset, left elbow
M08.229	Juvenile rheumatoid arthritis with systemic onset, unspecified elbow

Diagnosis Code	Description
M08.231	Juvenile rheumatoid arthritis with systemic onset, right wrist
M08.232	Juvenile rheumatoid arthritis with systemic onset, left wrist
M08.239	Juvenile rheumatoid arthritis with systemic onset, unspecified wrist
M08.241	Juvenile rheumatoid arthritis with systemic onset, right hand
M08.242	Juvenile rheumatoid arthritis with systemic onset, left hand
M08.249	Juvenile rheumatoid arthritis with systemic onset, unspecified hand
M08.251	Juvenile rheumatoid arthritis with systemic onset, right hip
M08.252	Juvenile rheumatoid arthritis with systemic onset, left hip
M08.259	Juvenile rheumatoid arthritis with systemic onset, unspecified hip
M08.261	Juvenile rheumatoid arthritis with systemic onset, right knee
M08.262	Juvenile rheumatoid arthritis with systemic onset, left knee
M08.269	Juvenile rheumatoid arthritis with systemic onset, unspecified knee
M08.271	Juvenile rheumatoid arthritis with systemic onset, right ankle and foot
M08.272	Juvenile rheumatoid arthritis with systemic onset, left ankle and foot
M08.279	Juvenile rheumatoid arthritis with systemic onset, unspecified ankle and foot
M08.28	Juvenile rheumatoid arthritis with systemic onset, vertebrae
M08.29	Juvenile rheumatoid arthritis with systemic onset, multiple sites
M08.3	Juvenile rheumatoid polyarthritis (seronegative)
M08.80	Other juvenile arthritis, unspecified site
M08.811	Other juvenile arthritis, right shoulder
M08.812	Other juvenile arthritis, left shoulder
M08.819	Other juvenile arthritis, unspecified shoulder
M08.821	Other juvenile arthritis, right elbow
M08.822	Other juvenile arthritis, left elbow
M08.829	Other juvenile arthritis, unspecified elbow
M08.831	Other juvenile arthritis, right wrist
M08.832	Other juvenile arthritis, left wrist
M08.839	Other juvenile arthritis, unspecified wrist
M08.841	Other juvenile arthritis, right hand
M08.842	Other juvenile arthritis, left hand
M08.849	Other juvenile arthritis, unspecified hand
M08.851	Other juvenile arthritis, right hip
M08.852	Other juvenile arthritis, left hip
M08.859	Other juvenile arthritis, unspecified hip
M08.861	Other juvenile arthritis, right knee
M08.862	Other juvenile arthritis, left knee
M08.869	Other juvenile arthritis, unspecified knee
M08.871	Other juvenile arthritis, right ankle and foot
M08.872	Other juvenile arthritis, left ankle and foot
M08.879	Other juvenile arthritis, unspecified ankle and foot
M08.88	Other juvenile arthritis, vertebrae
M08.89	Other juvenile arthritis, multiple sites
M08.9A	Juvenile arthritis, unspecified, other specified site
M08.90	Juvenile arthritis, unspecified, unspecified site
M08.911	Juvenile arthritis, unspecified, right shoulder

Diagnosis Code	Description
M08.912	Juvenile arthritis, unspecified, left shoulder
M08.919	Juvenile arthritis, unspecified, unspecified shoulder
M08.921	Juvenile arthritis, unspecified, right elbow
M08.922	Juvenile arthritis, unspecified, left elbow
M08.929	Juvenile arthritis, unspecified, unspecified elbow
M08.931	Juvenile arthritis, unspecified, right wrist
M08.932	Juvenile arthritis, unspecified, left wrist
M08.939	Juvenile arthritis, unspecified, unspecified wrist
M08.941	Juvenile arthritis, unspecified, right hand
M08.942	Juvenile arthritis, unspecified, left hand
M08.949	Juvenile arthritis, unspecified, unspecified hand
M08.951	Juvenile arthritis, unspecified, right hip
M08.952	Juvenile arthritis, unspecified, left hip
M08.959	Juvenile arthritis, unspecified, unspecified hip
M08.961	Juvenile arthritis, unspecified, right knee
M08.962	Juvenile arthritis, unspecified, left knee
M08.969	Juvenile arthritis, unspecified, unspecified knee
M08.971	Juvenile arthritis, unspecified, right ankle and foot
M08.972	Juvenile arthritis, unspecified, left ankle and foot
M08.979	Juvenile arthritis, unspecified, unspecified ankle and foot
M08.98	Juvenile arthritis, unspecified, vertebrae
M08.99	Juvenile arthritis, unspecified, multiple sites
M31.5	Giant cell arteritis with polymyalgia rheumatica
M31.6	Other giant cell arteritis
T45.1X5A	Adverse effect of antineoplastic and immunosuppressive drugs, initial encounter
T45.1X5D	Adverse effect of antineoplastic and immunosuppressive drugs, subsequent encounter
T45.1X5S	Adverse effect of antineoplastic and immunosuppressive drugs, sequela
T80.82XA	Complication of immune effector cellular therapy, initial encounter
T80.82XD	Complication of immune effector cellular therapy, subsequent encounter
T80.82XS	Complication of immune effector cellular therapy, sequela
T80.89XA	Other complications following infusion, transfusion and therapeutic injection, initial encounter
T80.89XD	Other complications following infusion, transfusion and therapeutic injection, subsequent encounter
T80.89XS	Other complications following infusion, transfusion and therapeutic injection, sequela
T80.90XA	Unspecified complication following infusion and therapeutic injection, initial encounter
T80.90XD	Unspecified complication following infusion and therapeutic injection, subsequent encounter
T80.90XS	Unspecified complication following infusion and therapeutic injection, sequela
T81.89XA	Other complications of procedures, not elsewhere classified, initial encounter
T81.89XD	Other complications of procedures, not elsewhere classified, subsequent encounter
T81.89XS	Other complications of procedures, not elsewhere classified, sequela
T81.9XXA	Unspecified complication of procedure, initial encounter
T81.9XXD	Unspecified complication of procedure, subsequent encounter
T81.9XXS	Unspecified complication of procedure, sequela
T86.5	Complications of stem cell transplant
Z92.850	Personal history of Chimeric Antigen Receptor T-cell therapy

## Background

Tocilizumab is a recombinant humanized anti-human interleukin 6 (IL-6) receptor monoclonal antibody. It binds specifically to both soluble and membrane-bound IL-6 receptors and has been shown to inhibit IL-6-mediated signaling through these receptors. IL-6 is a pro-inflammatory cytokine and has been shown to be involved in diverse physiological processes such as T-cell activation, induction of immunoglobulin secretion, initiation of hepatic acute phase protein synthesis, and stimulation of hematopoietic precursor cell proliferation and differentiation. IL-6 is also produced by synovial and endothelial cells leading to local production of IL-6 in joints affected by inflammatory processes such as rheumatoid arthritis.<sup>1</sup>

## Clinical Evidence

### Rheumatoid Arthritis

Huizinga et al. published the analysis for the 2-year and 3-year results of the double-blind, placebo-controlled, parallel-group ACT-RAY trial that assessed the efficacy and safety of tocilizumab (TCZ) plus methotrexate/placebo (MTX/PBO) and the course of disease activity in patients who discontinued TCZ due to sustained remission.<sup>8</sup> During the first 24 weeks, all patients (n = 556) were randomized either to continue oral MTX with the addition of open-label TCZ 8 mg/kg intravenously every 4 weeks (add-on strategy) or switch to TCZ alone with PBO (switch strategy). Between weeks 24 and 52, treatment with TCZ plus blinded MTX/PBO continued unchanged; however, if the Disease Activity Score, in 28 joints based on erythrocyte sedimentation rate (DAS28-ESR), was > 3.2 at week 24, an open-label conventional synthetic disease-modifying antirheumatic drug (csDMARD) (sulfasalazine, leflunomide, hydroxychloroquine or azathioprine; choice and dose at investigator's discretion) was added. If DAS28-ESR was > 3.2 at week 36 with an added csDMARD, the patient was moved to the maintenance arm (TCZ+blinded MTX/PBO+open-label csDMARD) for the remainder of the study, with the option to receive an additional open-label csDMARD per the investigator's discretion. Between weeks 52 and 104, open-label treatment was adapted based on response every 12 weeks, and patients continued the study in one of four treat-to-target strategies. The primary endpoint has previously been published.<sup>9</sup> Secondary endpoints included rate and time to TCZ-free and drug-free remission, time to flare after TCZ-free remission, and time to restart of treatment after TCZ-free remission. Radiographic endpoints included progression of joint destruction based on the Genant-modified Sharp Score (GSS) at weeks 24, 52, and 104 among others. Of the randomized patients, 76% (472) completed year 2, where 50.4% discontinued TCZ by week 104, with no significant difference between treatment groups [129 (53.1%) add-on vs. 109 (47.6%) switch patients; p = 0.170]. Twenty-eight (11.8%) of 238 patients achieved total drug-free remission due to sustained achievement of DAS28-ESR < 2.6. A significantly higher proportion of patients in the add-on arm achieved drug-free remission compared with patients in the switch arm [21/243 (8.6%) vs. 7/229 (3.1%); p = 0.010]. A total of 200 patients subsequently flared following TCZ-free remission, with 82.5% (95% CI 75.4% to 88.5%) and 88.5% (95% CI 81.5% to 93.7%) of patients in the add-on and switch arms, respectively, experiencing flare within 52 weeks after achieving TCZ-free remission. At week 104, the majority of patients demonstrated minimal progression of radiographic structural damage. The adjusted mean change in total GSS was 0.35 for add-on and 0.95 for switch (p = 0.034). The overall safety profile was similar for both treatment groups. The frequencies of adverse events (AE), serious AE (SAE), and discontinuations due to AEs were similar between the two treatment groups. The investigators concluded that treat-to-target strategies could be successful with TCZ to achieve a sustained free remission after discontinuation. TCZ free remission was maintained on average of three months prior to flaring, which then was controlled with resumption of TCZ.

### NCCN Recommended Uses

According to the NCCN Drugs & Biologics Compendium, NCCN recommends (2A) tocilizumab for the treatment of:

- Acute lymphoblastic leukemia:
  - Consider as supportive care for patients who develop refractory cytokine release syndrome (CRS) related to blinatumomab therapy
- Castleman's Disease:
  - Subsequent therapy as a single agent for multicentric Castleman's Disease (CD) that has progressed following treatment of relapsed/refractory or progressive disease
  - Second-line therapy as a single agent for relapsed or refractory unicentric CD for patients who are human immunodeficiency virus-negative and human herpes virus-8-negative
- Acute Graft-Versus-Host Disease (GVHD) - As additional therapy in conjunction with systemic corticosteroids following no response (steroid-refractory disease) to first-line therapy options:
  - Therapy for steroid refractory acute GVHD is often used in conjunction with the original immunosuppressive agent
- Immune Checkpoint Inhibitor-Related Toxicities - Consider adding tocilizumab for the management of immunotherapy-related:

- Severe immunotherapy-related inflammatory arthritis if symptoms do not improve within 1 week of starting high-dose corticosteroids or if unable to taper corticosteroids by week 2
- CAR T-Cell-Related Toxicities:
  - Prolonged (> 3 days) G1 cytokine release syndrome (CRS) in patients with significant symptoms and/or comorbidities
    - Assess need for subsequent dosing after each dose (no more than 3 doses in 24 hours up to a maximum of 4 doses)
  - G2-4 cytokine release syndrome (CRS)
    - Assess need for subsequent dosing after each dose (no more than 3 doses in 24 hours up to a maximum of 4 doses)
  - G1-4 neurotoxicity as additional single-dose therapy if concurrent CRS
    - Repeat dosing as needed (no more than 3 doses in 24 hours up to a maximum of 4 doses) if not responsive to IV fluids or increasing supplemental oxygen

## Professional Societies

### *Rheumatoid Arthritis*

The 2021 American College of Rheumatology (ACR) RA updated treatment guideline addresses the use of DMARDs, including conventional synthetic DMARDs, biologic DMARDs, and targeted synthetic DMARDs, glucocorticoids, and the use of DMARDs in certain high-risk populations (i.e., those with liver disease, heart failure, lymphoproliferative disorders, previous serious infections, and nontuberculosis mycobacterial lung disease). The guideline recommendations apply to common clinical situations, since the panel considered issues common to most patients, not exceptions.

Recommendations are classified as either strong or conditional. A strong recommendation means that the panel was confident that the desirable effects of following the recommendation outweigh the undesirable effects (or vice versa), so the course of action would apply to most patients, and only a small proportion would not want to follow the recommendation. A conditional recommendation means that the desirable effects of following the recommendation probably outweigh the undesirable effects, so the course of action would apply to the majority of patients, but some may not want to follow the recommendation. As a result, conditional recommendations are preference sensitive and warrant a shared decision-making approach.

Recommendations for DMARD-naïve patients:

- A treat-to-target approach is strongly recommended over usual care for patients who have not been previously treated with bDMARDs or tsDMARDs regardless of disease activity level.
- A minimal initial treatment goal of low disease activity is conditionally recommended over a goal of remission.
- Moderate-to-high disease activity:
  - Methotrexate is strongly recommended over hydroxychloroquine or sulfasalazine.
  - Methotrexate is conditionally recommended over leflunomide.
  - Methotrexate monotherapy is strongly recommended over bDMARD or tsDMARD monotherapy.
  - Methotrexate monotherapy is conditionally recommended over dual or triple csDMARD therapy.
  - Methotrexate monotherapy is conditionally recommended over methotrexate plus a tumor necrosis factor (TNF) inhibitor.
  - Initiation of a csDMARD without short-term (< 3 months) glucocorticoids is conditional recommended over initiation of a csDMARD with short-term glucocorticoids.
  - Initiation of a csDMARD without longer term (≥ 3 months) glucocorticoids is strongly recommended over initiation of a csDMARD with longer-term glucocorticoids.
  - Low disease activity
  - Hydroxychloroquine is conditionally recommended over other csDMARDs, sulfasalazine is conditionally recommended over methotrexate, and methotrexate is conditionally recommended over leflunomide.

Recommendations for DMARD-experienced patients:

- A treat-to-target approach is conditionally recommended over usual care for patients who have had an inadequate response to bDMARDs or tsDMARDs.
- Methotrexate monotherapy is conditionally recommended over the combination of methotrexate plus a bDMARD or tsDMARD.
- Oral methotrexate is conditionally recommended over subcutaneous methotrexate for patients initiating methotrexate.
- Initiation/titration of methotrexate to a weekly dose of at least 15 mg within 4 to 6 weeks is conditionally recommended over initiation/ titration to a weekly dose of less than 15 mg.
- A split dose of oral methotrexate over 24 hours or weekly subcutaneous injections, and/or an increased dose of folic/foinic acid, is conditionally recommended over switching to alternative DMARD(s) for patients not tolerating oral weekly methotrexate.



- Switching to subcutaneous methotrexate is conditionally recommended over the addition of/ switching to alternative DMARD(s) for patients taking oral methotrexate who are not at target.

#### Recommendations for treatment modification:

- Addition of a bDMARD or tsDMARD is conditionally recommended over triple therapy (i.e., addition of sulfasalazine and hydroxychloroquine) for patients taking maximally tolerated doses of methotrexate who are not at target.
- Switching to a bDMARD or tsDMARD of a different class is conditionally recommended over switching to a bDMARD or tsDMARD belonging to the same class for patients taking a bDMARD or tsDMARD who are not at target.
- Addition of/switching to DMARDs is conditionally recommended over continuation of glucocorticoids for patients taking glucocorticoids to remain at target.
- Addition of/switching to DMARDs [with or without intraarticular (IA) glucocorticoids] is conditionally recommended over the use of IA glucocorticoids alone for patients taking DMARDs who are not at target.
- Continuation of all DMARDs at their current dose is conditionally recommended over a dose reduction of a DMARD, dose reduction is conditionally recommended over gradual discontinuation of a DMARD, and gradual discontinuation is conditionally recommended over abrupt discontinuation of a DMARD for patients who are at target for at least 6 months.
- Gradual discontinuation of sulfasalazine is conditionally recommended over gradual discontinuation of hydroxychloroquine for patients taking triple therapy who wish to discontinue a DMARD.
- Gradual discontinuation of methotrexate is conditionally recommended over gradual discontinuation of the bDMARD or tsDMARD for patients taking methotrexate plus a bDMARD or tsDMARD who wish to discontinue a DMARD.

#### Recommendations for specific patient populations:

- Subcutaneous nodules
  - Methotrexate is conditionally recommended over alternative DMARDs for patients with subcutaneous nodules who have moderate-to-high disease activity. Switching to a non-methotrexate DMARD is conditionally recommended over continuation of methotrexate for patients taking methotrexate with progressive subcutaneous nodules.
- Pulmonary disease
  - Methotrexate is conditionally recommended over alternative DMARDs for the treatment of inflammatory arthritis for patients with clinically diagnosed mild and stable airway or parenchymal lung disease, or incidental disease detected on imaging, who have moderate-to-high disease activity.
- Lymphoproliferative disorder
  - Rituximab is conditionally recommended over other DMARDs for patients who have a previous lymphoproliferative disorder for which rituximab is an approved treatment and who have moderate-to-high disease activity.
- Heart failure
  - Addition of a non-TNF inhibitor bDMARD or tsDMARD is conditionally recommended over addition of a TNF inhibitor for patients with New York Heart Association (NYHA) class III or IV heart failure and an inadequate response to csDMARDs.
  - Switching to a non-TNF inhibitor bDMARD or tsDMARD is conditionally recommended over continuation of a TNF inhibitor for patients taking a TNF inhibitor who develop heart failure.
- Hepatitis B
  - Prophylactic antiviral therapy is strongly recommended over frequent monitoring of viral load and liver enzymes alone for patients initiating rituximab who are hepatitis B core antibody positive (regardless of hepatitis B surface antigen status).
  - Prophylactic antiviral therapy is strongly recommended over frequent monitoring alone for patients initiating any bDMARD or tsDMARD who are hepatitis B core antibody positive and hepatitis B surface antigen positive.
  - Frequent monitoring alone of viral load and liver enzymes is conditionally recommended over prophylactic antiviral therapy for patients initiating a bDMARD other than rituximab or a tsDMARD who are hepatitis B core antibody positive and hepatitis B surface antigen negative.
- Nonalcoholic fatty liver disease (NAFLD)
  - Methotrexate is conditionally recommended over alternative DMARDs for DMARD-naive patients with NAFLD, normal liver enzymes and liver function tests, and no evidence of advanced liver fibrosis who have moderate-to-high disease activity.
  - Persistent hypogammaglobulinemia without infection
  - In the setting of persistent hypogammaglobulinemia without infection, continuation of rituximab therapy for patients at target is conditionally recommended over switching to a different bDMARD or tsDMARD.
- Serious infections

- Addition of csDMARDs is conditionally recommended over addition of a bDMARD or tsDMARD for patients with a serious infection within the previous 12 months who have moderate-to-high disease activity despite csDMARD monotherapy.
- Addition of/switching to DMARDs is conditionally recommended over initiation/dose escalation of glucocorticoids for patients with a serious infection within the previous 12 months who have moderate-to-high disease activity.
- Lung disease
  - Use of the lowest possible dose of glucocorticoids (discontinuation if possible) is conditionally recommended over continuation of glucocorticoids without dose modification for patients with NTM lung disease. This recommendation is based on studies suggesting an increased risk of NTM lung disease in patients receiving either inhaled or oral glucocorticoids.
  - Addition of csDMARDs is conditionally recommended over addition of a bDMARD or tsDMARD for patients with NTM lung disease who have moderate-to-high disease activity despite csDMARD monotherapy. This recommendation is based on the lower expected risk of NTM lung disease associated with csDMARDs compared to bDMARDs and tsDMARDs.
  - Abatacept is conditionally recommended over other bDMARDs and tsDMARDs for patients with NTM lung disease who have moderate-to-high disease activity despite csDMARDs.

### ***Juvenile Idiopathic Arthritis***

The 2019 American College of Rheumatology (ACR) and Arthritis Foundation guideline for the treatment of juvenile idiopathic arthritis includes the use of tocilizumab.<sup>7</sup>

- General medication recommendations for children and adolescents with JIA and polyarthritis:
  - Biologic DMARDs:
    - In children and adolescents with JIA and polyarthritis initiating treatment with a biologic (etanercept, adalimumab, golimumab, abatacept, or tocilizumab) combination therapy with a DMARD is conditionally recommended over biologic monotherapy.
- General guidelines for the initial and subsequent treatment of children and adolescents with JIA and polyarthritis:
  - Subsequent therapy: Moderate/high disease activity (cJADAS-10 > 2.5)
    - If patient is receiving DMARD monotherapy: Adding a biologic to original DMARD is conditionally recommended over changing to a second DMARD. Adding a biologic is conditionally recommended over changing to triple DMARD therapy.
    - If patient is receiving first TNFi (±DMARD): Switching to a non-TNFi biologic (tocilizumab or abatacept) is conditionally recommended over switching to a second TNFi. A second TNFi may be appropriate for patients with good initial response to their first TNFi (i.e., secondary failure).
    - If patient is receiving second biologic: Using TNFi, abatacept, or tocilizumab (depending on prior biologics received) is conditionally recommended over rituximab.

### ***Giant Cell Arteritis***

The 2021 American College of Rheumatology and Vasculitis Foundation guideline for the management of giant cell arteritis and Takayasu arteritis includes the use of tocilizumab.<sup>10</sup>

- Recommendations and ungraded position statements for the management of giant cell arteritis (GCA):
  - For patients with newly diagnosed GCA, the use of oral glucocorticoids with tocilizumab over oral glucocorticoids alone is conditionally recommended.
  - For patients with GCA with active extracranial large vessel involvement, treatment with oral glucocorticoids combined with a nonglucocorticoid immunosuppressive agent (e.g., tocilizumab, methotrexate) over oral glucocorticoids alone is conditionally recommended.
  - For patients with GCA who experience disease relapse with cranial symptoms while receiving glucocorticoids, adding tocilizumab and increasing the dose of glucocorticoids over adding methotrexate and increasing the dose of glucocorticoids is conditionally recommended.

## **U.S. Food and Drug Administration (FDA)**

This section is to be used for informational purposes only. FDA approval alone is not a basis for coverage.

Actemra® is an interleukin-6 (IL-6) receptor antagonist indicated for:<sup>1</sup>

- **Rheumatoid Arthritis:** Treatment of adult patients with moderately to severely active rheumatoid arthritis who have had an inadequate response to one or more disease-modifying anti-rheumatic drugs (DMARDs). For this indication, Actemra may be used alone or in combination with methotrexate or other DMARDs.

- **Juvenile Idiopathic Arthritis:** Treatment of active polyarticular juvenile idiopathic arthritis and active systemic juvenile idiopathic arthritis in patients 2 years of age and older. For these indications, Actemra may be used alone or in combination with methotrexate.
- **Giant Cell Arteritis:** Treatment of giant cell arteritis (GCA) in adult patients. Actemra is recommended to be used in combination with a tapering course of glucocorticoids and may be used alone following discontinuation of glucocorticoids.
- **Cytokine Release Syndrome:** Actemra is also indicated for the treatment of chimeric antigen receptor (CAR) T cell-induced severe or life-threatening cytokine release syndrome in adults and pediatric patients 2 years of age and older. Actemra may be used alone or in combination with corticosteroids.

Tofidence™ (tocilizumab-bavi) and Tyenne® (tocilizumab-aazg) are biosimilar\* to Actemra. Tofidence and Tyenne are interleukin-6 (IL-6) inhibitors indicated for:<sup>12,13</sup>

- **Rheumatoid Arthritis:** Treatment of adult patients with moderately to severely active rheumatoid arthritis who have had an inadequate response to one or more Disease-Modifying Anti-Rheumatic Drugs (DMARDs).
- **Juvenile Idiopathic Arthritis:** Treatment of active polyarticular juvenile idiopathic arthritis and active systemic juvenile idiopathic arthritis in patients 2 years of age and older.

Tyenne® (tocilizumab-aazg) is also indicated for:<sup>13</sup>

- **Giant Cell Arteritis (GCA):** Treatment of adult patients with giant cell arteritis.

\*Biosimilar means that the biological product is approved based on data demonstrating that it is highly similar to an FDA-approved biological product, known as a reference product, and that there are no clinically meaningful differences between the biosimilar product and the reference product.

Reference Product	Biosimilar Product
Actemra	Tofidence, Tyenne

## References

1. Actemra [package insert]. South San Francisco, CA: Genentech, Inc; December 2022.
2. Saag KG, Teng GG, Patkar NM, et al. American College of Rheumatology 2008 Recommendations for the Use of Nonbiologic and Biologic Disease-Modifying Antirheumatic Drugs in Rheumatoid Arthritis. *Arthritis Care & Research. Arthritis Rheum.* 2008;59(6):762-84.
3. Singh JA, Furst DE, Bharat A, et al. 2012 Update of the 2008 American College of Rheumatology Recommendations for the Use of Disease-Modifying Antirheumatic Drugs and Biologic Agents in the Treatment of Rheumatoid Arthritis. *Arthritis Care & Research.* 2012 May;64(5):625-639. DOI 10.1002/acr.21641.
4. 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 Care Res (Hoboken).* 2019 Jun;71(6):717-734.
5. 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 Oct;65(10):2499-512.
6. Huizinga TW, Conaghan PG, Martin-Mola E, et al. Clinical and radiographic outcomes at 2 years and the effect of tocilizumab discontinuation following sustained remission in the second and third year of the ACT-RAY study. *Ann Rheum Dis* 2015;74:35-43.
7. Dougados M, Kissel K, Sheeran T, et al. Adding tocilizumab or switching to tocilizumab monotherapy in methotrexate inadequate responders: 24-week symptomatic and structural results of a 2-year randomized controlled strategy trial in rheumatoid arthritis (ACT-RAY). *Ann Rheum Dis* 2013;72:43-50.
8. Singh JA, Saag KG, Bridges SL, et al. 2015 American College of Rheumatology Guideline for the Treatment of Rheumatoid Arthritis. *Arthritis Care & Research. Arthritis Rheum.* 2016;68(1):1-26.
9. Maz M, Chung S, Abril A, et al. 2021 American College of Rheumatology/Vasculitis Foundation Guideline for the Management of Giant Cell Arteritis and Takayasu Arteritis. *Arthritis Care & Research.* 2021; 73(8):1071-1087.
10. NCCN Drugs & Biologics Compendium® (NCCN Compendium®). Available at [www.nccn.org](http://www.nccn.org). Accessed October 30, 2023.

11. Fraenkel L, Bathon JM, England BR, et al. 2021 American College of Rheumatology Guideline for the Treatment of Rheumatoid Arthritis. *Arthritis Rheumatol.* 2021 Jul;73(7):1108-1123. doi: 10.1002/art.41752. Epub 2021 Jun 8. PMID: 34101376.
12. Tofidence [package insert]. Cambridge, MA: Biogen MA, Inc; September 2023.
13. Tyenne [package insert]. Lake Zurich, Illinois: Fresenius Kabi USA, LLC; March 2024.

## Policy History/Revision Information

Date	Summary of Changes
09/01/2024	<p><b>Title Change</b></p> <ul style="list-style-type: none"> <li>• Previously titled <i>Actemra® (Tocilizumab) Injection for Intravenous Infusion</i></li> </ul> <p><b>Application</b></p> <p><b>Arizona</b></p> <ul style="list-style-type: none"> <li>• Replaced instruction to “use drug specific criteria found within the clinical policy if available for the specific formulation” with “use drug specific criteria found within the clinical policy if available for the specific <i>product and</i> formulation”</li> </ul> <p><b>Michigan and Wisconsin</b></p> <ul style="list-style-type: none"> <li>• Added language to indicate the [guidelines noted in the] <i>Preferred Product</i> and <i>Preferred Product Criteria</i> [sections of the policy] do not apply to the states of <b>Michigan</b> and <b>Wisconsin</b></li> </ul> <p><b>Coverage Rationale</b></p> <ul style="list-style-type: none"> <li>• Replaced language indicating: <ul style="list-style-type: none"> <li>○ “This policy refers only to <i>Actemra (tocilizumab) injection</i> for intravenous infusion” with “this policy refers only to tocilizumab <i>products administered</i> by intravenous infusion”</li> <li>○ “<i>Actemra (tocilizumab)</i> for self-administered subcutaneous injection is obtained under the pharmacy benefit” with “tocilizumab for self-administered subcutaneous injection is obtained under the pharmacy benefit”</li> </ul> </li> <li>• Added language to indicate: <ul style="list-style-type: none"> <li>○ This policy refers to the following tocilizumab products: <ul style="list-style-type: none"> <li>▪ Actemra® (tocilizumab)</li> <li>▪ Tofidence™ (tocilizumab-bavi)</li> <li>▪ Tyenne® (tocilizumab-aazg)</li> <li>▪ Any FDA-approved tocilizumab biosimilar not listed here; any U.S. Food and Drug Administration approved and launched tocilizumab biosimilar product not listed by name in this policy will be considered non-preferred until reviewed by UnitedHealthcare</li> </ul> </li> </ul> </li> </ul> <p><b>Preferred Product</b></p> <ul style="list-style-type: none"> <li>○ Tofidence™ (tocilizumab-bavi) and Tyenne® (tocilizumab-aazg) are the preferred tocilizumab products; coverage will be provided for Tofidence™ and Tyenne® contingent on the coverage criteria in the <i>Diagnosis-Specific Criteria</i> section [of the policy]</li> <li>○ Coverage for Actemra® (tocilizumab) or other non-preferred tocilizumab products will be provided contingent on the criteria in the <i>Preferred Product Criteria</i> section [of the policy] and the coverage criteria in the <i>Diagnosis-Specific Criteria</i> section [of the policy]</li> <li>○ In order to continue coverage, members already on Actemra® (tocilizumab) or other non-preferred tocilizumab products will be required to change therapy to Tofidence™ (tocilizumab-bavi) or Tyenne® (tocilizumab-aazg) unless they meet the criteria in the <i>Preferred Product Criteria</i> section [of the policy]</li> </ul> <p><b>Preferred Product Criteria</b></p> <ul style="list-style-type: none"> <li>○ Treatment with Actemra® or other non-preferred tocilizumab biosimilar products is medically necessary for the indications outlined in this policy when both of the following criteria are met: <ul style="list-style-type: none"> <li>▪ One of the following: <ul style="list-style-type: none"> <li>– Both of the following: <ul style="list-style-type: none"> <li>• History of a trial of adequate dose and duration of Tofidence™ or Tyenne® resulting in minimal clinical response to therapy and residual disease activity</li> <li>• Physician attests that, in their clinical opinion, the clinical response would be expected to be superior with Actemra® or other tocilizumab biosimilar product than experienced with Tofidence™ and Tyenne®</li> </ul> </li> <li>– Both of the following:</li> </ul> </li> </ul> </li> </ul>

Date	Summary of Changes
	<ul style="list-style-type: none"> <li>• History of intolerance, contraindication, or adverse event to Tofidence™ or Tyenne®</li> <li>• Physician attests that, in their clinical opinion, the same intolerance, contraindication, or adverse event would not be expected to occur with Actemra® or other tocilizumab biosimilar product <ul style="list-style-type: none"> <li>▪ Patient has not had a loss of a favorable response after established maintenance therapy with Tofidence™, Tyenne® or other tocilizumab biosimilar product</li> </ul> </li> </ul> <p><b>Diagnosis-Specific Criteria</b></p> <ul style="list-style-type: none"> <li>○ “Tocilizumab” will be used to refer to all tocilizumab products</li> </ul> <p><b>Applicable Codes</b></p> <ul style="list-style-type: none"> <li>• Added HCPCS codes C9399, J3490, J3590, and Q5133</li> </ul> <p><b>Supporting Information</b></p> <ul style="list-style-type: none"> <li>• Updated <i>FDA</i> and <i>References</i> sections to reflect the most current information</li> <li>• Archived previous policy version CS2024D0043AB</li> </ul>

## Instructions for Use

This Medical Benefit Drug Policy provides assistance in interpreting UnitedHealthcare standard benefit plans. When deciding coverage, the federal, state or contractual requirements for benefit plan coverage must be referenced as the terms of the federal, state or contractual requirements for benefit plan coverage may differ from the standard benefit plan. In the event of a conflict, the federal, state or contractual requirements for benefit plan coverage govern. Before using this policy, please check the federal, state or contractual requirements for benefit plan coverage. UnitedHealthcare reserves the right to modify its Policies and Guidelines as necessary. This Medical Benefit Drug Policy is provided for informational purposes. It does not constitute medical advice.

UnitedHealthcare may also use tools developed by third parties, such as the InterQual® criteria, to assist us in administering health benefits. The UnitedHealthcare Medical Benefit Drug Policies are intended to be used in connection with the independent professional medical judgment of a qualified health care provider and do not constitute the practice of medicine or medical advice.