Erythropoietins Prior Authorization Program Summary

This program applies to Medicaid.

For Medicaid, the preferred products are the MN Medicaid Preferred Drug List (PDL) preferred drugs: Aranesp, Epogen, and Retacrit.

The BCBS MN Step Therapy Supplement also applies to this program for Medicaid.

POLICY REVIEW CYCLE

Effective Date	Date of Origin
6/1/2023	

FDA APPROVED INDICATIONS AND DOSAGE

Agent(s)	FDA Indication(s)	Notes	Ref#
Aranesp® (darbepoetin alfa) Injection for intravenous or subcutaneous use	• Anemia due to chronic kidney disease (CKD), including patients on dialysis and patients not on dialysis • Anemia in patients with non-myeloid malignancies where anemia is due to the effect of concomitant myelosuppressive chemotherapy, and upon initiation, there is a minimum of two additional months of planned chemotherapy Limitations of Use: • Aranesp has not been shown to improve quality of life, fatigue, or patient well-being Aranesp is not indicated for use • In patients with cancer receiving hormonal agents, biologic products, or radiotherapy, unless also receiving concomitant myelosuppressive chemotherapy • In patients with cancer receiving myelosuppressive chemotherapy when the anticipated outcome is cure • In patients with cancer receiving myelosuppressive chemotherapy in whom the anemia can be managed by transfusion • As a substitute for red blood cell transfusions in patients who require immediate correction of anemia		1
Epogen® (epoetin alfa) Injection for intravenous or subcutaneous use	• Anemia due to Chronic Kidney Disease (CKD), in patients on dialysis and those not on dialysis to decrease the need for red blood cell (RBC) transfusion • Treatment of anemia due to zidovudine administered at less than or equal to 4200 mg/week in HIV-infected patients with endogenous serum erythropoietin levels of less than or equal to 500 mUnits/mL • Anemia in patients with non-myeloid malignancies, where anemia is due to the effect of concomitant myelosuppressive chemotherapy, and upon initiation, there is a minimum of 2 additional months of planned chemotherapy		2

Agent(s)	FDA Indication(s)	Notes	Ref#
	• Reduce the need of allogeneic RBC transfusions among patients with perioperative hemoglobin greater than 10 to less than or equal to 13 g/dL who are at high risk for perioperative blood loss from elective, noncardiac, nonvascular surgery Limitations of Use: • Epogen has not been shown to improve quality of life, fatigue, or patient well-being Epogen is not indicated for use: • In patients with cancer receiving hormonal agents, biologic products, or radiotherapy, unless also receiving concomitant myelosuppressive chemotherapy • In patients with cancer receiving myelosuppressive chemotherapy when the anticipated outcome is cure • In patients with cancer receiving myelosuppressive chemotherapy in whom the anemia can be managed by transfusion • In patients scheduled for surgery who are willing to donate autologous blood • In patients undergoing cardiac or vascular surgery • As a substitute for RBC transfusions in patients who require immediate correction of anemia		
Mircera® (methoxypolyethylene glycol-epoetin beta) Injection for intravenous or subcutaneous use	• Anemia associated with chronic kidney disease (CKD) in adult patients on dialysis and not on dialysis • Anemia associated with chronic kidney disease in pediatric patients 5 to 17 years of age on hemodialysis who are converting from another erythropoiesis-stimulating agent (ESA) after their hemoglobin level was stabilized with an ESA Limitations of Use: • Mircera has not been shown to improve quality of life, fatigue, or patient well-being Mircera is not indicated and is not recommended for use: • In the treatment of anemia due to cancer chemotherapy • As a substitute for RBC transfusions in patients who require immediate correction of anemia		3
Procrit® (epoetin alfa) Injection for intravenous or subcutaneous use	• Anemia due to chronic kidney disease (CKD), in patients on dialysis and those not on dialysis to decrease the need for red blood cell (RBC) transfusion • Treatment of anemia due to zidovudine administered at less than or equal to 4200 mg/week in HIV-infected patients with endogenous serum erythropoietin levels of less than or equal to 500 mUnits/mL • Anemia in patients with non-myeloid malignancies, where anemia is due to the effect of concomitant myelosuppressive chemotherapy, and upon initiation, there is a minimum of 2 additional months of planned chemotherapy		4

Agent(s)	FDA Indication(s)	Notes	Ref#
	• Reduce the need of allogeneic RBC transfusions among patients with perioperative hemoglobin greater than 10 to less than or equal to 13 g/dL who are at high risk for perioperative blood loss from elective, noncardiac, nonvascular surgery Limitations of Use: • Procrit has not been shown to improve quality of life, fatigue, or patient well-being Procrit is not indicated for use: • In patients with cancer receiving hormonal agents, biologic products, or radiotherapy, unless also receiving concomitant myelosuppressive chemotherapy • In patients with cancer receiving myelosuppressive chemotherapy when the anticipated outcome is cure • In patients with cancer receiving myelosuppressive chemotherapy in whom the anemia can be managed by transfusion • In patients scheduled for surgery who are willing to donate autologous blood • In patients undergoing cardiac or vascular surgery • As a substitute for RBC transfusions in patients who require immediate correction of anemia		
Retacrit® (epoetin alfa-epbx) Injection for intravenous or subcutaneous use	• Anemia due to Chronic Kidney Disease (CKD), in patients on dialysis and those not on dialysis to decrease the need for red blood cell (RBC) transfusion • Treatment of anemia due to zidovudine administered at less than or equal to 4200 mg/week in HIV-infected patients with endogenous serum erythropoietin levels of less than or equal to 500 mUnits/mL • Anemia in patients with non-myeloid malignancies, where anemia is due to the effect of concomitant myelosuppressive chemotherapy, and upon initiation, there is a minimum of 2 additional months of planned chemotherapy • Reduce the need of allogeneic RBC transfusions among patients with perioperative hemoglobin greater than 10 to less than or equal to 13 g/dL who are at high risk for perioperative blood loss from elective, noncardiac, nonvascular surgery Limitations of Use: • Retacrit has not been shown to improve quality of life, fatigue, or patient well-being Retacrit is not indicated for use: • In patients with cancer receiving hormonal agents, biologic products, or radiotherapy, unless also receiving concomitant myelosuppressive chemotherapy • In patients with cancer receiving myelosuppressive chemotherapy when the anticipated outcome is cure • In patients with cancer receiving myelosuppressive chemotherapy in whom the anemia can be managed by transfusion		5

Agent(s)	FDA Indication(s)	Notes	Ref#
	• In patients scheduled for surgery who are willing to donate autologous blood • In patients undergoing cardiac or vascular surgery • As a substitute for RBC transfusions in patients who require immediate correction of anemia		

See package insert for FDA prescribing information: https://dailymed.nlm.nih.gov/dailymed/index.cfm

CLINICAL RATIONALE

Anemia

The pathophysiologic origins of anemia can be grouped into three categories 1) decreased production of functional red blood cells (RBCs); 2) increased destruction of RBCs; and 3) blood loss. Anemia is characterized by a decrease in hemoglobin (Hb) concentration, RBC count, and/or hematocrit (Hct) to subnormal levels. Treatment of anemia depends on disease severity and etiology. Treatment options include vitamins and/or mineral supplementation, treatment with erythropoietin therapy, and blood transfusion.(10)

The National Cancer Institute categorizes anemia into 4 active grades:(10)

Grade	**Scale** (hemoglobin level in g/dL)
1 (mild)	10 - less than lower limit of normal
2 (moderate)	8 - less than 10
3 (severe)	6.5 - less than 8
4 (life threatening)	less than 6.5

Erythropoietin has the same biological effects as endogenous erythropoietin therefore, stimulates RBC production in the bone marrow.(2,4)

Darbepoetin differs from epoetin alfa only in two additional N-glycosylation sites which results in an increased half-life.(1) When given in equipotent dosing, efficacy between epoetin and darbepoetin is considered similar. A report by the Agency for Healthcare Research and Quality (AHRQ) comparing effectiveness of the two agents when used to manage anemia in patients undergoing cancer treatment concluded there were no clinically significant differences in hemoglobin response, transfusion reduction, or thromboembolic events.(6) The American Society of Clinical Oncology/American Society of Hematology (ASCO/ASH) clinical practice guideline considers epoetin beta and alfa, darbepoetin, and biosimilar epoetin alfa to be equivalent with respect to both efficacy and safety.(16) The National Comprehensive Cancer Network (NCCN) guidelines for Cancer- and Chemotherapy - induced anemia note that either darbepoetin or epoetin alfa can be used in ESA therapy.(10)

NCCN notes that a biosimilar is a biological product that is highly similar to the FDA-approved originator product with the exception of minor differences in clinically inactive components and no differences regarding efficacy, safety, and purity.

Biosimilars have the same amino acid sequence; however, they may differ at the protein level due to the nature and complexity of biologic products. If overall safety and efficacy remain unaffected, biosimilars may be approved for the same indications and can be substituted for the originator product.(9)

Although the equipotent doses have not been conclusively determined, the prescribing information for darbepoetin provides the following conversion chart from epoetin alfa to darbepoetin.(1)

Previous Weekly Epoetin alfa Dose (Units/week)	**Weekly darbepoetin dose (mcg/week)**	
	Adult	**Pediatric**
Less than 1500	6.25	The available data are insufficient to determine a darbepoetin dose
1500 to 2499	6.25	6.25
2500 to 4999	12.5	10
5000 to 10999	25	20
11000 to 17999	40	40
18000 to 33999	60	60
34000 to 89999	100	100
Greater than or equal to 90000	200	200

The Mircera prescribing information provides the following conversion chart from epoetin alfa or darbepoetin alfa to Mircera in patients with CKD.(3)

Previous Weekly Epoetin alfa Dose (units/week)	**Previous Weekly Darbepoetin alfa Dose (mcg/week)**	**Mircera Dose**	
		Once Monthly (mcg/month)	**Once Every Two Weeks (mcg/every two weeks)**
Less than 8000	Less than 40	120	60
8000-16000	40-80	200	100
Greater than 16000	Greater than 80	360	180

Anemia associated with Chronic Kidney Disease (CKD)	Anemia in patients with CKD occurs due the kidneys inability to produce sufficient amounts of erythropoietins. KDIGO (Kidney Disease Improving Global Outcomes) Clinical Practice guidelines recommend the following as it pertains to use of ESAs:(12) • For CKD patients NOT on dialysis (ND) and a Hb of greater than or equal to 10.0 g/dl, the agency does not recommend ESA therapy be initiated • For CKD ND patients with Hb less than 10.0 g/dl, the decision to use ESA should be patient specific and based on a risk/benefit ratio

	• For CKD patients in stage 5D, ESA use is recommended to prevent Hb falling below 9.0 g/dl. The agency recommends starting therapy when the hemoglobin is between 9.0 and 10.0 g/dl • In general, ESAs should not be used to maintain Hb greater than 11.5 g/dl in adults with CKD. • For pediatric patients, the recommendation to use ESA therapy should be patient specific and based on a risk/benefit ratio • For all pediatric CKD patients on ESA therapy, Hb concentration should be maintained in the range of 11.0-12.0 g/dl The KIDIGO guidelines suggest that for adult CKD non-dialysis patients with a hemoglobin concentration < 10 g/dL, the decision whether to initiate ESA therapy be individualized based on the rate of all of Hb concentration, prior response to iron therapy, the risk of needing a transfusion, the risks related to ESA therapy and the presence of symptoms attributable to anemia. ESA therapy should be used to avoid having the hemoglobin concentration fall below 9 g/dL by starting ESA therapy when the hemoglobin is between 9.0-10.0 g/dL. These guidelines state that in dialysis and non-dialysis patients with CKD receiving ESA therapy, the selected Hb target should generally be in the range of 10.0 to 12.0 g/dL.(12)
Chemotherapy Induced Anemia	Causes of anemia in patients with cancer are often multifactorial. Anemia may be attributed to underlying comorbidities such as bleeding, hemolysis, nutritional deficiencies, hereditary disease, renal insufficiency, hormone dysfunction, or a combination of these factors. The malignancy itself can also lead to or exacerbate anemia in several ways.(9) There is a wide variation in Hb levels among healthy subjects and a universal "normal level is difficult to define. According to the NCCN panel, an Hb level less than or equal to 11 g/dL should prompt an evaluation of anemia in a patient with cancer. For patient with a high baseline level, a drop greater tha or equal to 2 g/dL is also cause for concern and assessment. Any other cause of anemia that may be rectified independent of cancer therapy should be treated as indication. When no such etiology is identified, the effects of cancer-related inflammation and/or myelosuppressive chemotherapy (if applicable) should be considered the cause of anemia.(9) The decision regarding the best treatment option is dependent on many factors. While packed red blood cell transfusion is best for symptomatic patients requiring an immediate boost in Hb levels, consideration of ESA therapy and/or iron supplementation may be warranted for the long-term management of anemia in high-risk patients or in asymptomatic patients with comorbidities.(9) Special categories in considering ESA use from The National Comprehensive Cancer Network (NCCN) are:(9) ▪ Patients with cancer and CKD (moderate to severe): Consider treatment with ESAs by FDA dosing/dosing adjustments ▪ Patient undergoing palliative treatment: consider treatment with ESAs by FDA dosing/dosing adjustments, RBC transfusion, or clinical trial based on patient preferences ▪ Patients with cancer not receiving therapy, receiving non-myelosuppressive chemotherapy, or myelosuppressive chemotherapy with curative intent (e.g. early-stage breast cancer, Hodgkin lymphoma, non-Hodgkin's lymphoma,

	testicular cancer, early-stage non-small cell lung cancer, small cell lung cancer): ESAs not recommended ▪ The ESA dose should be adjusted for each patient to maintain the lowest hemoglobin level sufficient to avoid red blood transfusion and/or to bring about gradual improvement in anemia related symptoms ▪ Studies have reported decreased survival in patients with cancer receiving ESA for anemia where target Hb levels are greater than 12 g/dL ▪ Patients with ferritin values greater than 800 mg/mL or a transferrin saturation (TSAT) greater than or equal to 50% are not iron deficient and these patients do not require iron supplementation or ESA therapy ASCO/ASH guidelines recommend the following:(16) • ESAs may be offered to patients with chemotherapy-associated anemia whose cancer treatment is not curative in intent and whose HgB has declined to less than 10 g/dL. RBC transfusion is also an option, depending on the severity of the anemia or clinical circumstances • ESAs should not be offered to patients with chemotherapy-associated anemia whose cancer treatment is curative in intent • Before offering an ESA, clinicians should conduct an appropriate history, physical examination, and diagnostic tests to identify alternative causes of anemia aside from chemotherapy. Such cases should be appropriately addressed before considering the use of ESAs • Starting and modifying doses of ESAs follow FDA guidelines • Among adult patients who will receive an ESA for chemotherapy-associated anemia, HgB may be increased to the lowest concentration needed to avoid or reduce the need for RBC transfusions • ESAs should be discontinued in patients who do not respond to therapy (i.e., less than 1 to 2 g/dL increase in HgB or decrease in transfusion requirements) within 6 to 8 weeks • Iron replacement may be used to improve HgB response and reduce RBC transfusions for patients receiving ESA with or without iron deficiency
Myelodysplastic Syndrome	NCCN Clinical Practice Guideline for Myelodysplastic Syndromes states:(13) • ESA have been used safely in large numbers of adult MDS patients and have become important for symptomatic improvement of those affected by the anemia caused by this disease often with a decrease in RBC transfusion requirements. Studies assessing the long-term use of epoetin with or without G-CSF in MDS compared to historical or randomized controls haven't shown a negative impact on survival or AML evaluation. Studies have shown improved survival in low-risk MDS patients with low transfusion need treated with these agents • An alternative option to lenalidomide may include an initial trial of ESAs in patients with serum Epo levels of 500 mU/ml or less. Patients with normal cytogenetics and with less than 15% marrow ringed sideroblasts and serum Epo levels 500 mu/mL or less may respond to Epo if relatively high doses are used (40,000-60,000 units 1-3 times a week) To reduce the need for RBC transfusions, the ASCO/ASH guidelines recommend that ESAs not be offered to most patients with nonchemotherapy-associated anemia with the exception they may be offered to patients with lower-risk MDSs and a serum erythropoietin level less than or equal to 500 IU/mL.(16)
Surgery	Epoetin alfa is indicated for the treatment of anemic patients (hemoglobin greater than 10 to less than or equal to 13 g/dL) who are at high risk for perioperative blood loss from elective, noncardiac, nonvascular surgery to reduce the need for allogeneic blood transfusions.(2,3)

Anemia in HIV	The causes of HIV-related anemia are multifactorial. HIV may directly affect bone marrow stromal cell or cause cytokine secretion, leading to decreased production of red blood cells (RBCs) and other bone marrow elements. Many drugs used to treat HIV-related disorders are myelosuppressive but severe anemia is most often related to the use of zidovudine. Patients most likely to respond to ESA treatment have a serum erythropoietin level less than 500 iu/L.(14-15)
Safety	The prescribing information for the ESAs notes that in controlled trials, patients experienced a greater risk of death, serious adverse cardiovascular reactions, and stroke when given ESAs to a target hemoglobin level of greater than 11 g/dL. Additionally, no trial has identified a hemoglobin target level, ESA dose, or dosing strategy that does not increase these risks.(1-5) • Aranesp (darbepoetin alfa) is contraindicated in: o Uncontrolled hypertension o Pure red cell aplasia (PRCA) that begins after treatment with any ESA o Serious allergic reactions to Aranesp • Epogen (epoetin alfa) is contraindicated in: o Uncontrolled hypertension o Pure red cell aplasia (PRCA) that begins after treatment with any ESA o Serious allergic reactions to Epogen o Use of multi-dose vial in neonates, infants, pregnant women, and nursing mothers (contains benzyl alcohol) • Mircera (methoxy polyethylene glycol – epoetin beta) is contraindicated in: o Uncontrolled hypertension o Pure red cell aplasia (PRCA) that begins after treatment with Mircera or other erythropoietin protein drugs o History of serious or severe allergic reactions to Mircera (e.g. anaphylactic reactions, angioedema, bronchospasm, skin rash, and urticaria) • Procrit (epoetin alfa) is contraindicated in: o Uncontrolled hypertension o Pure red cell aplasia (PRCA) that begins after treatment with any ESA o Serious allergic reactions to Procrit o Use of multi-dose vial in neonates, infants, pregnant women, and nursing mothers (contains benzyl alcohol) • Retacrit (epoetin alfa-epbx) is contraindicated in: o Uncontrolled hypertension o Pure red cell aplasia (PRCA) that begins after treatment with Retacrit or other erythropoietin protein drugs o Serious allergic reactions to Retacrit or other epoetin alfa products o Use of multiple-dose vials containing benzyl alcohol in neonates, infants, pregnant women, and lactating women

REFERENCES

Number	Reference
1	Aranesp prescribing information. Amgen Inc. January 2019.
2	Epogen prescribing information. Amgen Inc. July 2018.
3	Mircera prescribing information. Genentech, Inc. June 2018.
4	Procrit prescribing information. Amgen Inc. July 2018.
5	Retacrit prescribing information. Pfizer Biosimilars. September 2020.
6	Grant MD, Piper M, Bohlius J, et al. Epoetin and Darbepoetin for Managing Anemia in Patients Undergoing Cancer Treatment: Comparative Effectiveness Update. Rockville (MD): Agency for Healthcare Research and Quality (US); 2013 Apr. Report No: 13-EHC077-EF.
7	~~KDOQI. National Kidney Foundation. Clinical practice recommendations for anemia in chronic kidney disease in children. *Am J Kidney Dis*. 2006;47(5 Suppl 3): s86-108.~~ Reference no longer used

Number	Reference
8	~~KDOQI. National Kidney Foundation. Clinical practice recommendations for anemia in chronic kidney disease in adults. *Am J Kidney Dis*. 2006;47(5 Suppl 3): s16-85.~~ Reference no longer used
9	NCCN Clinical Practice Guidelines in Oncology. Hematopoietic Growth Factors. Version 1.2023.
10	Rizzo JD, Brouwers M, Hurley P, et al. American Society of Hematology/American Society of Clinical Oncology clinical practice guideline update on the use of epoetin and darbepoetin in adult patients with cancer. *Blood* 2010; 116: 4045-4059.
11	~~KDOQI Clinical Practice Guideline and Clinical Practice Recommendations for Anemia in Chronic Kidney Disease: 2012 Update of Hemoglobin Target.~~ Reference no longer used
12	KDIGO Clinical Practice Guidelines for Anemia in Chronic Kidney Disease. Kidney Int Suppl 2012 Aug;2(4):279-335.
13	NCCN Clinical Practice Guidelines in Oncology. Myelodysplastic syndromes. Version 1.2023.
14	Claster S. Biology of Anemia, differential diagnosis, and Treatment Options in Human Immunodeficiency Virus Infection. The Journal of Infectious diseases, Volume 185, Issue Supplement_2, 15 May 2002, Pages S105-S109.
15	Volberding PA, Levine AM, Dieterich D, et al. Anemia in HIV Infection: Clinical Impact and Evidence-Based Management Strategies. Clinical Infectious Diseases. 2004;38:1454-63.
16	Bohlius J, Bohlke K, Casteli R, et al. Management of Cancer-Associated Anemia With Erythropoiesis-Stimulating Agents: ASCO/ASH Clinical Practice Guideline Update. J clin Oncol 37:1336-1351.

POLICY AGENT SUMMARY PRIOR AUTHORIZATION

Target Brand Agent(s)	Target Generic Agent(s)	Strength	Targeted MSC	Available MSC	Preferred Status	Effective Date
Aranesp albumin free	darbepoetin alfa soln inj	100 MCG/ML ; 200 MCG/ML ; 25 MCG/ML ; 40 MCG/ML ; 60 MCG/ML	M ; N ; O ; Y	N		
Aranesp albumin free	darbepoetin alfa soln prefilled syringe	10 MCG/0.4ML ; 100 MCG/0.5ML ; 150 MCG/0.3ML ; 200 MCG/0.4ML ; 25 MCG/0.42ML ; 300 MCG/0.6ML ; 40 MCG/0.4ML ; 500 MCG/ML ; 60 MCG/0.3ML	M ; N ; O ; Y	N		
Epogen ; Procrit	epoetin alfa inj	10000 UNIT/ML ; 2000 UNIT/ML ; 20000 UNIT/ML ; 3000 UNIT/ML ; 4000 UNIT/ML ; 40000 UNIT/ML	M ; N ; O ; Y	M ; N		
Retacrit	epoetin alfa-epbx inj	10000 UNIT/ML ; 2000 UNIT/ML ; 20000 UNIT/2ML ; 20000 UNIT/ML ; 3000 UNIT/ML ; 4000 UNIT/ML ; 40000 UNIT/ML	M ; N ; O ; Y	M ; N		
Mircera	methoxy peg-epoetin beta soln prefilled syr	100 MCG/0.3ML ; 150 MCG/0.3ML ; 200 MCG/0.3ML ; 30 MCG/0.3ML ; 50 MCG/0.3ML ; 75 MCG/0.3ML	M ; N ; O ; Y	N		

CLIENT SUMMARY – PRIOR AUTHORIZATION

Target Brand Agent Name(s)	Target Generic Agent Name(s)	Strength	Client Formulary
Aranesp albumin free	darbepoetin alfa soln inj	100 MCG/ML ; 200 MCG/ML ; 25 MCG/ML ; 40 MCG/ML ; 60 MCG/ML	Medicaid
Aranesp albumin free	darbepoetin alfa soln prefilled syringe	10 MCG/0.4ML ; 100 MCG/0.5ML ; 150 MCG/0.3ML ; 200 MCG/0.4ML ; 25 MCG/0.42ML ; 300 MCG/0.6ML ; 40 MCG/0.4ML ; 500 MCG/ML ; 60 MCG/0.3ML	Medicaid

Target Brand Agent Name(s)	Target Generic Agent Name(s)	Strength	Client Formulary
Epogen ; Procrit	epoetin alfa inj	10000 UNIT/ML ; 2000 UNIT/ML ; 20000 UNIT/ML ; 3000 UNIT/ML ; 4000 UNIT/ML ; 40000 UNIT/ML	Medicaid
Mircera	methoxy peg-epoetin beta soln prefilled syr	100 MCG/0.3ML ; 150 MCG/0.3ML ; 200 MCG/0.3ML ; 30 MCG/0.3ML ; 50 MCG/0.3ML ; 75 MCG/0.3ML	Medicaid
Retacrit	epoetin alfa-epbx inj	10000 UNIT/ML ; 2000 UNIT/ML ; 20000 UNIT/2ML ; 20000 UNIT/ML ; 3000 UNIT/ML ; 4000 UNIT/ML ; 40000 UNIT/ML	Medicaid

PRIOR AUTHORIZATION CLINICAL CRITERIA FOR APPROVAL

Module	Clinical Criteria for Approval
	Evaluation **For Medicaid, the preferred products are the MN Medicaid Preferred Drug List (PDL) preferred drugs** **Preferred Agents** Aranesp (darbepoetin alfa) Epogen (epoetin alfa) Retacrit (epoetin alfa-epbx) **Nonpreferred Agents** Mircera (methoxy polyethylene glycol – epoetin beta) Procrit (epoetin alfa) **Target Agent(s)** will be approved when BOTH of the following are met: 1. The patient's hemoglobin was measured within the previous 4 weeks **AND** 2. ONE of the following: A. The patient will use the requested agent as part of dialysis AND ONE of the following: 1. The patient is initiating an erythropoietin stimulating agent (ESA) AND the patient's hemoglobin level is less than 10 g/dL **OR** 2. The patient is stabilized on an ESA AND the patient's hemoglobin is less than or equal to 11 g/dL **OR** B. ALL of the following: 1. ONE of the following: A. The requested agent is being prescribed to reduce the possibility of allogeneic blood transfusion in a surgery patient AND the patient's hemoglobin level is greater than 10 g/dL but less than or equal to 13 g/dL **OR** B. The requested agent is being prescribed for anemia due to myelosuppressive chemotherapy for a non-myeloid malignancy AND ALL of the following: 1. The requested agent is NOT Mircera **AND** 2. ONE of the following: A. The patient is initiating an erythropoietin stimulating agent (ESA) AND the patient's hemoglobin level is less than 10 g/dL **OR** B. The patient is stabilized on an ESA AND the patient's hemoglobin is less than or equal to 12 g/dL **AND**

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	3. The patient is concurrently treated with chemotherapy (with or without radiation) **AND** 4. Chemotherapy is being used for palliative intent **AND** 5. The patient's serum ferritin and transferrin saturation have been evaluated within the previous 4 weeks AND BOTH of the following: A. The patient's serum ferritin is NOT greater than 800 ng/mL **AND** B. The patient's transferrin saturation is NOT greater than 50% **OR** C. The requested agent is being prescribed for anemia associated with chronic kidney disease in a patient NOT on dialysis AND ALL of the following: 1. ONE of the following: A. The patient is initiating an erythropoietin stimulating agent (ESA) AND the patient's hemoglobin level is less than 10 g/dL OR B. The patient is stabilized on an ESA AND the patient's hemoglobin is less than or equal to 11 g/dL **AND** 2. The rate of hemoglobin decline is likely to result in a red blood cell (RBC) transfusion **AND** 3. The intent of therapy is to reduce the risk of alloimmunization and/or other RBC transfusion related risks **OR** D. The requested agent is being prescribed for anemia due to myelodysplastic syndrome, or for anemia resulting from zidovudine treatment of HIV infection AND ONE of the following: 1. The patient is initiating an erythropoietin stimulating agent (ESA) AND the patient's hemoglobin level is less than 12 g/dL **OR** 2. The patient is stabilized on an ESA AND the patient's hemoglobin is less than or equal to 12 g/dL **OR** E. The requested agent is being prescribed for another FDA approved indication or another indication that is supported in compendia AND the patient's hemoglobin level is within the FDA labeling or compendia recommended range for the requested indication for patients initiating ESA therapy OR for patients stabilized on therapy for the requested indication **AND** 2. The patient's serum ferritin and transferrin saturation have been evaluated within the previous 4 weeks **AND** 3. ONE of the following: A. The patient's serum ferritin is greater than or equal to 100 ng/mL AND the patient's transferrin saturation is greater than or equal to 20% **OR** B. The patient has started supplemental iron therapy **AND** 4. If the patient has an FDA approved indication, ONE of the following: A. The patient's age is within FDA labeling for the requested indication for the requested agent **OR** B. The prescriber has provided information in support of using the requested agent for the patient's age for the requested indication **AND** 5. ONE of the following: A. The requested agent is a preferred agent in the Minnesota Medicaid Preferred Drug List (PDL) **OR** B. The request is for a non-preferred agent in the Minnesota Medicaid Preferred Drug List (PDL) and ONE of the following: 1. The patient is currently being treated with the requested agent and is experiencing a positive therapeutic outcome AND the prescriber provides documentation that switching the member to a preferred drug is expected to cause

Module	Clinical Criteria for Approval
	harm to the member or that the preferred drug would be ineffective **OR** 2. The patient has tried and had an inadequate response to two preferred chemically unique agents within the same drug class in the Minnesota Medicaid Preferred Drug List (PDL) as indicated by BOTH of the following: A. ONE of the following: 1. Evidence of a paid claim(s) **OR** 2. The prescriber has stated that the patient has tried the required prerequisite/preferred agent(s) **AND** B. ONE of the following: 1. The required prerequisite/preferred agent(s) was discontinued due to lack of effectiveness or an adverse event **OR** 2. The prescriber has submitted an evidence-based and peer-reviewed clinical practice guideline supporting the use of the requested agent over the prerequisite/preferred agent(s) **OR** 3. The patient has a documented intolerance, FDA labeled contraindication, or hypersensitivity to the preferred agents within the same drug class in the Minnesota Medicaid Preferred Drug List (PDL) that is not expected to occur with the requested agent **OR** 4. The prescriber has provided documentation that the required prerequisite/preferred agent(s) cannot be used due to a documented medical condition or comorbid condition that is likely to cause an adverse reaction, decrease ability of the patient to achieve or maintain reasonable functional ability in performing daily activities or cause physical or mental harm **OR** 5. The prescriber has submitted documentation supporting the use of the non-preferred agent over the preferred agent(s) **AND** 6. The patient does NOT have any FDA labeled contraindications to the requested agent **Compendia Allowed:** CMS Approved Compendia **Length of Approval**: 1 month for allogenic blood transfusion in a surgery patient; 6 months for anemia due to myelosuppressive chemotherapy for a non-myeloid malignancy 12 months for anemia associated with chronic kidney disease in patients on/not on dialysis, anemia due to myelodysplastic syndrome, anemia resulting from zidovudine treatment of HIV infection 6 months for all other diagnoses

