

Chapter 23 HEMOPOIETIC IMPAIRMENT

Introduction

This chapter provides criteria for assessing permanent impairment of the hemopoietic system. Hemopoietic impairment, for the purposes of this chapter, includes impairment in function of red blood cells, platelets and white blood cells.

Also rated within this chapter are malaria, Human Immunodeficiency Virus (HIV) infection, and splenectomy from any cause.

Impairment from pancytopenia is rated on individual merits.

Impairment associated with bone marrow transplant is rated on individual merits.

Impairment from malignant hemopoietic conditions is rated within Chapter 18, Malignant Impairment. Follow the steps contained within the Malignant Impairment chapter.

Rating Tables

This chapter contains three "Loss of Function" tables and two "Other Impairment" tables which will be used to rate entitled hemopoietic conditions.

The tables within this chapter are:

Table 23.1	Loss of Function - Anemia	This table is used to rate impairment from anemia.
Table 23.2	Loss of Function - Polycythemia	This table is used to rate impairment from polycythemia.
Table 23.3	Loss of Function - Thrombocytopenia	This table is used to rate impairment from thrombocytopenia.
Table 23.4	Other Impairment - Human Immunodeficiency Virus	This table is used to rate impairment from HIV/AIDS.
Table 23.5	Other Impairment - Malaria	This table is used to rate impairment from malaria.

Loss of Function - Anemia

Table 23.1 is used to rate impairment from anemia conditions. Only one rating may be selected for each entitled condition. If more than one rating is applicable for an entitled condition, the ratings are **compared** and the **highest** selected.

In the majority of cases, treatment will completely control or permanently correct anemia conditions. If activities of daily living are affected despite optimal treatment or if optimal treatment cannot be provided due to other medical conditions, a rating will be determined from Chapter 19, Activities of Daily Living. If a rating is applicable from both **Table 23.1** and Chapter 19, the ratings are **compared** and the **highest** selected.

When entitled anemia conditions result in permanent impairment of other organ systems, a consequential entitlement decision is required. If awarded, the resulting impairment of that organ system(s) will be rated using the applicable body system specific table(s).

If non-entitled conditions or conditions rated within another chapter/table of the Table of Disabilities are contributing to the overall impairment, then the Partially Contributing Table (PCT) must be applied to arrive at the rating which is due to the entitled condition(s) rated within this table.

Loss of Function - Polycythemia

Table 23.2 is used to rate impairment from polycythemia conditions. Only one rating may be selected. If more than one rating is applicable, the ratings are **compared** and the **highest** selected.

In the majority of cases, treatment will completely control or permanently correct polycythemia conditions. If activities of daily living are affected despite optimal treatment or if optimal treatment cannot be provided due to other medical conditions, a rating will be determined from Chapter 19, Activities of Daily Living. If a rating is applicable from both **Table 23.2** and Chapter 19, the ratings are **compared** and the **highest** selected.

When entitled polycythemia conditions result in permanent impairment of other organ systems, a consequential entitlement decision is required. If awarded, the resulting impairment of that organ system(s) will be rated using the applicable body system specific table(s).

If non-entitled conditions or conditions rated within another chapter/table of the Table of Disabilities are contributing to the overall impairment, then the Partially Contributing Table (PCT) must be applied to arrive at the rating which is due to the entitled condition(s) rated within this table.

Loss of Function - Thrombocytopenia

Table 23.3 is used to rate impairment from thrombocytopenia conditions. Only one rating may be selected for each entitled condition. If more than one rating is applicable for an entitled condition, the ratings are **compared** and the **highest** selected.

In the majority of cases, treatment will completely control or permanently correct thrombocytopenia conditions. If activities of daily living are affected despite optimal treatment or if optimal treatment cannot be provided due to other medical conditions, a rating will be determined from Chapter 19, Activities of Daily Living. If a rating is applicable from both **Table 23.3** and Chapter 19, the ratings are **compared** and the **highest** selected.

Splenectomy is usually rated at nil. Splenectomized individuals have impaired clearance of certain encapsulated bacteria, such as pneumococcus. Infection from pneumococcus can usually be prevented by vaccination. There is no increased risk of infection from viruses or nonencapsulated bacteria. Individual consideration will be needed in cases where repeated infections occur from encapsulated bacteria due to loss of the spleen.

When entitled thrombocytopenia conditions result in permanent impairment of other organ systems, a consequential entitlement decision is required. If awarded, the resulting impairment of that organ system(s) will be rated using the applicable body system specific table(s).

If non-entitled conditions or conditions rated within another chapter/table of the Table of Disabilities are contributing to the overall impairment, then the Partially Contributing Table (PCT) must be applied to arrive at the rating which is due to the entitled condition(s) rated within this table.

Other Impairment - Human Immunodeficiency Virus

Table 23.4 is used to rate impairment from HIV infection/AIDS. Only one rating may be selected. If more than one rating is applicable, the ratings are **compared** and the **highest** selected.

AIDS defining opportunistic infections and non-AIDS defining infections that do not result in permanent impairment of other organ systems are considered to be included in the **Table 23.4** rating.

When entitled HIV infection/AIDS results in permanent impairment of other organ systems, a consequential entitlement decision is required. If awarded, the resulting impairment of that organ system(s) will be rated using the applicable body system specific table(s).

If non-entitled conditions or conditions rated within another chapter/table of the Table of Disabilities are contributing to the overall impairment, then the Partially Contributing Table (PCT) must be applied to arrive at the rating which is due to the entitled condition(s) rated within this table.

Other Impairment - Malaria

Table 23.5 is used to rate impairment from malaria. Only one rating may be selected. If more than one rating is applicable, the ratings are **compared** and the **highest** selected.

When pensioned malaria results in permanent impairment of other organ systems, a consequential entitlement decision is required. If awarded, the resulting impairment of that organ system(s) will be rated using the applicable body system specific table(s).

Table 23.1 - Loss of Function - Anemia

Only one rating may be given for each entitled condition from **Table 23.1**. If more than one rating is applicable for an entitled condition, the ratings are **compared** and the **highest** selected.

Each bullet (•) represents one criterion. In order for a rating to be established for **Table 23.1**, follow the “**and(s)**” and “**or(s)**”.

Table 23.1 - Loss of Function - Anemia

Rating	Criteria
Nil	<ul style="list-style-type: none"> • Asymptomatic; and • No interference with activities of daily living; and • No requirement for treatment; and • Hemoglobin greater than or equal to 100 g/L.
One	<ul style="list-style-type: none"> • Anemia requiring regular injections less than monthly; or • Anemia requiring intermittent oral medication.
Two	<ul style="list-style-type: none"> • Anemia requiring regular injections on a monthly basis.
Three	<ul style="list-style-type: none"> • Anemia requiring continuous oral medication; or • Anemia requiring regular injections more than once per month, but less than weekly.
Four	<ul style="list-style-type: none"> • Anemia requiring regular injections on a weekly basis; or • Hemoglobin less than 100 g/L, but greater than or equal to 70 g/L despite optimal treatment.
Nine	<ul style="list-style-type: none"> • Symptomatic* anemia is present despite optimal treatment but there is no difficulty with performing activities of daily living; or • Anemia requiring regular daily injections; or • Anemia requiring regular transfusions every 7 - 16 weeks; or • Hemoglobin less than 70 g/L despite optimal treatment.
Thirteen	<ul style="list-style-type: none"> • Anemia requiring regular transfusions every 4 - 6 weeks.
Eighteen	<ul style="list-style-type: none"> • Anemia requiring regular transfusions more frequently than every 4 weeks.

* Symptoms - shortness of breath, weakness, lethargy, lightheadedness, dizziness, fatigue, palpitations and throbbing headache.

Table 23.2 - Loss of Function - Polycythemia

Only one rating may be given from **Table 23.2**. If more than one rating is applicable, the ratings are **compared** and the **highest** selected.

Each bullet (•) represents one criterion. In order for a rating to be established for **Table 23.2**, follow the “**and(s)**” and “**or(s)**”.

Table 23.2 - Loss of Function - Polycythemia

Rating	Criteria
Nil	<ul style="list-style-type: none"> Asymptomatic; and No interference with activities of daily living; and No requirement for phlebotomy.
One	<ul style="list-style-type: none"> Regular phlebotomy required less often than once every 4 weeks.
Four	<ul style="list-style-type: none"> Regular phlebotomy required once every 4 weeks.
Nine	<ul style="list-style-type: none"> Symptomatic* despite optimal treatment but there is no difficulty in performing activities of daily living; or Regular phlebotomy required more often than once every 4 weeks.

* Symptoms - headache, dizziness, paresthesia, fatigue, abdominal discomfort, night sweats, pruritus, weight loss, erythromelalgia, mental sluggishness.

Table 23.3 - Loss of Function - Thrombocytopenia

Only one rating may be given for each entitled condition from **Table 23.3**. If more than one rating is applicable for an entitled condition, the ratings are **compared** and the **highest** selected.

Each bullet (•) represents one criterion. In order for a rating to be established for **Table 23.3**, follow the “**and(s)**” and “**or(s)**”.

Table 23.3 - Loss of Function - Thrombocytopenia

Rating	Criteria
Nil	<ul style="list-style-type: none"> Asymptomatic; and No interference with activities of daily living; and Platelet count greater than or equal to 100,000/μl; or Splenectomy*.
One	<ul style="list-style-type: none"> Platelet count greater than or equal to 50,000/μl but less than 100,000/μl despite optimal treatment.
Four	<ul style="list-style-type: none"> Platelet count greater than or equal to 20,000/μl but less than 50,000/μl despite optimal treatment.
Nine	<ul style="list-style-type: none"> Symptomatic** despite optimal treatment, but there is no difficulty with performing activities of daily living; or Platelet count greater than or equal to 10,000/μl but less than 20,000/μl despite optimal treatment.
Eighteen	<ul style="list-style-type: none"> Platelet count less than 10,000/μl despite optimal treatment.

* In cases of repeated infections from encapsulated bacteria due to removal of the spleen, an assessment may be determined based on individual merits.

** Symptoms - easy/excessive bruising, abnormal bleeding from the gums, mouth, GI and/or urinary tract, epistaxis, petechiae/purpura, menorrhagia, prolonged bleeding after trauma.

Table 23.4 - Other Impairment - Human Immunodeficiency Virus

Only one rating may be given from **Table 23.4**. If more than one rating is applicable, the ratings are **compared** and the **highest** selected.

Each bullet (•) represents one criterion. In order for a rating to be established for **Table 23.4**, follow the “**and(s)**” and “**or(s)**”.

Table 23.4 - Other Impairment - Human Immunodeficiency Virus

Rating	Criteria
Four	<ul style="list-style-type: none"> Asymptomatic HIV infection with or without lymphadenopathy; and CD4 count greater than or equal to 350 cells/μl.
Nine	<ul style="list-style-type: none"> Intermittent clinical signs* (except lymphadenopathy) and/or constitutional symptoms; or CD4 count greater than or equal to 200 cells/μl but less than 350 cells/μl.
Thirteen	<ul style="list-style-type: none"> Persistent clinical signs* (except lymphadenopathy) and/or constitutional symptoms.
Twenty-one	<ul style="list-style-type: none"> CD4 count greater than or equal to 50 cells /μl but less than 200 cells /μl.
Thirty-four	<ul style="list-style-type: none"> Development of an AIDS defining opportunistic infection** ; or CD4 count less than 50 cells /μl.
Eighty-one	<ul style="list-style-type: none"> Development of ongoing essentially continuous AIDS defining opportunistic infections** ; or Development of an AIDS defining malignancy***; or Development of an AIDS defining central nervous system disorder****; or Development of AIDS wasting syndrome*****.

* Clinical signs and constitutional symptoms:

- fever
- night sweats
- malaise
- fatigue
- intermittent diarrhea
- lymphadenopathy
- arthralgia
- myalgia
- rash
- weight loss
- pruritus.

**AIDS defining opportunistic infections include:

- Candidiasis of bronchi, trachea, lungs, or esophagus
- Coccidioidomycosis, disseminated or extrapulmonary
- Cryptococcosis, extrapulmonary
- Cryptosporidiosis, chronic intestinal
- Cytomegalovirus (other than liver, spleen, or nodes)
- Herpes simplex (chronic ulcers, bronchitis, esophagitis)
- Histoplasmosis, disseminated or extrapulmonary
- Isosporiasis (chronic intestinal)
- *Mycobacterium avium* complex or *kansasii*, disseminated or extrapulmonary
- *Mycobacterium tuberculosis*, pulmonary or extrapulmonary
- *Mycobacterium*, other species (disseminated or extrapulmonary)
- *Pneumocystis carinii* pneumonia
- Pneumonia, recurrent
- *Salmonella septicemia*
- Toxoplasmosis of brain.

*** AIDS defining malignancies include:

- Cervical cancer, invasive
- Kaposi's sarcoma
- Lymphoma (non-Hodgkin's).

**** AIDS defining central nervous system disorders include:

- Encephalopathy, HIV-related
- Progressive multifocal leukoencephalopathy.

*****AIDS wasting syndrome - involuntary loss of more than 10% of pre-illness body weight, plus more than 30 days of either diarrhea, or weakness and fever.

Table 23.5 - Other Impairment - Malaria

Only one rating is selected from **Table 23.5**.

Each bullet (•) represents one criterion. In order for a rating to be established for **Table 23.5** all criteria designated at that rating level must be met.

Table 23.5 - Other Impairment - Malaria

Rating	Criteria
Nil	• History of malaria, asymptomatic.
Four	• Intermittent or relapsing symptoms due to malaria as supported by laboratory evidence despite optimal treatment.

Steps to Determine the Anemia Assessment

- Step 1:** Determine the rating from **Table 23.1** (Loss of Function - Anemia).
- Step 2:** Does the Partially Contributing Table apply? If **yes**, then apply to rating at Step 1.
- Step 3:** Determine the Quality of Life rating.
- Step 4:** Add the ratings at Step 2 and Step 3.
- Step 5:** If partial entitlement exists, apply to the Step 4 rating.
- Step 6:** If activities of daily living are affected despite optimal treatment, determine the rating from Chapter 19, Activities of Daily Living.
- Step 7:** **Compare** ratings at Step 5 and Step 6 (if applicable) and select the **highest**.

This is the Disability Assessment.

Steps to Determine the Polycythemia Assessment

- Step 1:** Determine the rating from **Table 23.2** (Loss of Function - Polycythemia).
- Step 2:** Does the Partially Contributing Table apply? If **yes**, then apply to rating at Step 1.
- Step 3:** Determine the Quality of Life rating.
- Step 4:** Add the ratings at Step 2 and Step 3.
- Step 5:** If partial entitlement exists, apply to the Step 4 rating.
- Step 6:** If activities of daily living are affected despite optimal treatment, determine the rating from Chapter 19, Activities of Daily Living.
- Step 7:** **Compare** the Step 5 rating with the Step 6 rating (if applicable). Select the **highest**.

This is the Disability Assessment.

Steps to Determine the Thrombocytopenia Assessment

- Step 1:** Determine the rating from **Table 23.3** (Loss of Function - Thrombocytopenia).
- Step 2:** Does the Partially Contributing Table apply? If **yes**, then apply to rating at Step 1.
- Step 3:** Determine the Quality of Life rating.
- Step 4:** Add the ratings at Step 2 and Step 3.
- Step 5:** If partial entitlement exists, apply to the Step 4 rating.
- Step 6:** If activities of daily living are affected despite optimal treatment, determine the rating from Chapter 19, Activities of Daily Living.
- Step 7:** **Compare** the Step 5 rating with the Step 6 rating (if applicable). Select the **highest**.

This is the Disability Assessment.

Steps to Determine the Human Immunodeficiency Virus (HIV)/AIDS Assessment

- Step 1:** Determine the rating from **Table 23.4** (Other Impairment - Human Immunodeficiency Virus [HIV/AIDS]).
- Step 2:** Does the Partially Contributing Table apply? If **yes**, then apply to rating at Step 1.
- Step 3:** Determine the Quality of Life rating.
- Step 4:** Add the ratings at Step 2 and Step 3.
- Step 5:** If partial entitlement exists, apply to the Step 4 rating.

This is the Disability Assessment.

Steps to Determine the Malaria Assessment

- Step 1:** Determine the rating from **Table 23.5** (Other Impairment - Malaria).
- Step 2:** Does the Partially Contributing Table apply? If **yes**, then apply to rating at Step 1.
- Step 3:** Determine the Quality of Life rating.
- Step 4:** Add the ratings at Step 2 and Step 3.
- Step 5:** If partial entitlement exists, apply to the Step 4 rating.

This is the Disability Assessment.