

Patient Risk Assessment for Chemotherapy-Induced Febrile Neutropenia (FN) and G-CSF Use

For patients on myelosuppressive chemotherapy:

- Conduct patient risk assessment of FN at the first and every cycle
- It may be important to document 1 or more patient risk factors when treating with regimens with clinically significant FN risk

Patient Name _____ Date _____

Regimen risk

- Chemotherapy regimens associated with a clinically significant risk of FN¹⁻³

Chemotherapy regimens _____

Treatment intent

- Curative/Adjuvant Palliative Setting

Patient risk factors and most common ICD-10 codes (see back for code descriptions)

Please write the specific ICD-10 code on the rule next to the risk factor.

Patient Status

- Age ≥ 65^{1,2}
- Poor performance status^{1,2}
- Poor nutritional status^{2,3}
(E40–E46*, E50–E64*)⁴ _____
- Preexisting or persistent neutropenia^{1,2}
(D61.81*, D70*)⁴ _____
- Open wound^{1,2}
(S01–S91*)⁴ _____
- Active infection²
(A00–B99*, M01*, T86*, Z22*)⁴ _____
- Bone marrow involvement with tumor^{1,2}
(C79.5, C79.52)⁴ _____
- Advanced disease² _____
- Chronic immunosuppression in the post-transplant setting, including organ transplant¹
(Z92.25, Z94*)⁴ _____

Treatment History

- Previous chemotherapy^{1,2}
- Previous radiation therapy^{1,2} (Z92.3)⁴ _____
- Recent surgery^{1,2} (Z40*, Z42*)⁴ _____

Comorbidities

- Poor renal function^{1,2}
(N17*, N18*, N19*, N25*, N28*, R80.9, R94.4)⁴ _____
- Liver dysfunction^{1,2}
(K70–K77*, R94.5)⁴ _____
- HIV infection^{1,2}
(Z21, B20)⁴ _____
- Cardiovascular disease²
(I10–I16*, I20–I25*, I26–I28*, I30–I52*, R94.3, Z95*)⁴ _____

Prescribe G-CSF?

- Yes No

If yes: Primary prophylactic use Secondary prophylactic use

Note whether changes to treatment plan cannot be considered and patient is still at risk of FN

Health Care Professional Signature _____ Date _____

Add this risk assessment to your patient's chart to help with prior authorizations for G-CSF use

* Subcodes exist for these risk factors.

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ICD-10 Codes for Febrile Neutropenia (FN) Risk Factors

For patients on myelosuppressive chemotherapy:

- Conduct patient risk assessment of FN at the first and every cycle
- It may be important to document 1 or more patient risk factors when treating with regimens with clinically significant FN risk

Patient Status

Age ≥ 65

(No codes)

Poor performance status

(No codes)

Poor nutritional status

- **E40–E46:*** Malnutrition⁴
- **E50–E64:*** Other nutritional deficiencies⁴

Preexisting or persistent neutropenia

- **D61.81:*** Pancytopenia⁴
- **D70:*** Neutropenia⁴
 - **D70.1:** Agranulocytosis secondary to cancer chemotherapy
 - **D70.2:** Other drug-induced agranulocytosis
 - **D70.3:** Neutropenia due to infection
 - **D70.4:** Cyclic neutropenia
 - **D70.9:** Neutropenia, unspecified

Open wound

NOTE: There are > 300 codes for this risk factor. Coding depends on the location of the open wound. The range below includes some of the many potential coding options.

- **S01–S91:*** Injury and certain other consequences of external causes⁴

Active infection

NOTE: There are > 300 codes for this risk factor. Coding depends on the source and type of infection. The range below includes some of the many potential coding options.

- **A00–B99:*** Certain infectious and parasitic diseases⁴
- **M01:*** Direct infections of joint in infectious and parasitic diseases classified elsewhere⁴
- **T86:*** Complications of transplanted organs and tissues⁴
- **Z22:*** Carrier of infectious disease⁴

Bone marrow involvement with tumor

- **C79.5:** Secondary malignant neoplasm of bone and bone marrow⁴
- **C79.52:** Secondary malignant neoplasm of bone marrow⁴

Advanced disease

NOTE: There are > 300 codes for this risk factor. Coding depends on clinician definition.

Chronic immunosuppression in the post-transplant setting, including organ transplant

- **Z92.25:** Personal history of immunosuppression therapy⁴
- **Z94:*** Transplanted organ and tissue status⁴

Treatment History

Previous chemotherapy

(No codes)

Previous radiation therapy

- **Z92.3:** Personal history of irradiation⁴

Recent surgery

- **Z40:*** Encounter for prophylactic surgery⁴
- **Z42:*** Encounter for plastic surgery and reconstructive surgery following medical procedure or healed injury⁴
 - **Z42.1:** Encounter for breast reconstruction following mastectomy
- **Z42.8:** Encounter for other plastic surgery and reconstructive surgery following medical procedure or healed injury

Comorbidities

Poor renal function

- **N17:*** Acute kidney failure⁴
 - **N17.9:** Acute kidney failure, unspecified
- **N18:*** Chronic kidney disease⁴
 - **N18.6:** End stage renal disease
 - **N18.9:** Chronic kidney disease, unspecified

- **N19:*** Unspecified kidney failure⁴
- **N25:*** Disorders resulting from poor renal tubular function⁴
- **N28:*** Other disorders of kidney and ureter, not classified elsewhere⁴
- **R80.9:** Proteinuria, unspecified⁴
- **R94.4:** Abnormal results of kidney function studies⁴

Liver dysfunction

- **K70–K77:*** Diseases of liver⁴
 - **K70.9:** Alcoholic liver disease, unspecified
 - **K71.9:** Toxic liver disease, unspecified
 - **K72.9:** Hepatic failure, unspecified
 - **K73.9:** Chronic hepatitis, unspecified
 - **K74:** Fibrosis & cirrhosis of liver
 - **K75.9:** Inflammatory liver disease, unspecified
 - **K76.9:** Liver disease, unspecified
- **R94.5:** Abnormal results of liver function studies⁴

HIV infection

- **Z21:** Asymptomatic human immunodeficiency virus [HIV] infection status⁴
- **B20:** Human immunodeficiency virus [HIV] disease⁴

Cardiovascular disease

- **I10–I16:*** Hypertensive diseases⁴
- **I20–I25:*** Ischemic heart diseases⁴
- **I26–I28:*** Pulmonary heart disease & diseases of pulmonary circulation⁴
- **I30–I52:*** Other forms of heart disease⁴
- **R94.3:** Abnormal result of cardiovascular function studies⁴
- **Z95:** Presence of cardiac & vascular implants and grafts⁴

* Subcodes exist for these risk factors.