

ONCO-TRIAGE™

Oncology Emergency Cheat Sheet for APPs

A quick-reference guide for nurse practitioners & physician assistants in oncology. Not a substitute for clinical judgment or institutional protocols.

HYPERCALCEMIA OF MALIGNANCY

Recognize	Ca^{2+} >10.5–11 mg/dL (or ionized elevated) with symptoms: confusion, constipation, polyuria, dehydration, bone pain. Common with bone mets, PTHrP-secreting tumors, myeloma, breast/lung cancer.
First steps	Aggressive isotonic IVF. Calcitonin for rapid reduction. Bisphosphonate (zoledronic acid or pamidronate) for sustained control. Treat underlying malignancy.
Don't forget	Loop diuretics only after hydration. Check ECG for QT shortening/arrhythmias. Monitor renal function before bisphosphonates.

HYPOCALCEMIA

Recognize	Ionized Ca^{2+} low; perioral tingling, paresthesias, muscle cramps, Chvostek/Trousseau signs, QT prolongation, seizures. Risk post-thyroid/parathyroid surgery, post-radiation, or with hypomagnesemia.
First steps	Severe or symptomatic: calcium gluconate IV (cardiac monitoring). Replete magnesium aggressively — hypomagnesemia causes refractory hypocalcemia. Mild/asymptomatic: oral calcium ± vitamin D.
Don't forget	Check albumin/ionized calcium. Hypomagnesemia must be corrected first. Watch for rebound hypercalcemia if malignancy-related.

NEUTROPENIC FEVER

Recognize	Single oral temp $\geq 38.3^{\circ}\text{C}$ (101°F) OR $\geq 38.0^{\circ}\text{C}$ (100.4°F) for ≥ 1 hour + ANC $< 500/\mu\text{L}$ or expected to fall $< 500/\mu\text{L}$ within 48 hours.
First steps	This is an emergency. Blood cultures $\times 2$, urine culture, then empiric broad-spectrum antibiotics within 60 minutes. Antipseudomonal beta-lactam (e.g., cefepime, piperacillin-tazobactam, meropenem) per protocol.
Don't forget	Do not wait for culture results to treat. Risk-stratify (MASCC). Add vancomycin if line infection, skin/soft tissue, or hemodynamic instability suspected. G-CSF is not treatment for established fever.

GRADING TOXICITIES (CTCAE)

Recognize	Every toxicity is graded 1–5 using CTCAE v5.0. Grade 1 = mild; Grade 2 = moderate; Grade 3 = severe; Grade 4 = life-threatening; Grade 5 = death related to AE.
First steps	Grade before acting. Hold, modify, or dose-reduce per the protocol and grade. Document baseline and re-grade after intervention. Know your institution's dose-modification rules.
Don't forget	Some toxicities require mandatory reporting (SAEs). Patient-reported outcomes matter — fatigue and neuropathy are often under-graded. When in doubt, escalate to the oncology team.

IMMUNOTHERAPY TOXICITIES (irAEs)

Recognize	Colitis (diarrhea/abdominal pain), pneumonitis (dyspnea/cough), hepatitis (elevated LFTs), endocrinopathies (thyroiditis, hypophysitis, adrenal insufficiency), dermatitis/rash.
First steps	Hold immune checkpoint inhibitor for Grade ≥ 2 . Rule out infection first. Corticosteroids (e.g., prednisone 1–2 mg/kg) for moderate–severe irAEs. Consult GI, pulmonology, or endocrinology as needed.
Don't forget	Infliximab for steroid-refractory colitis. Endocrine irAEs may be permanent — hormone replacement is often lifelong. Re-challenge decisions require oncology input.

Remember the ONCO-TRIAGE™ loop: Look → Think → Triage → Act → Reassess → Educate → Follow Up.