

Seizure/Status Epilepticus¹ Management in Cancer Patients

Disclaimer: This algorithm has been developed for UT MD Anderson using a multidisciplinary approach considering circumstances particular to UT MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. This algorithm should not be used to treat pregnant women.

0-5 Minutes: Stabilization

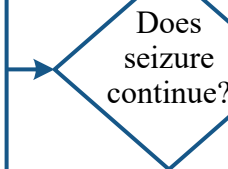
Patient presents
with seizure

Assessment/interventions:

- Open and maintain airway
- If inpatient, call MERIT (713-792-7090)
- Notify provider
- Place on cardiac monitoring and continuous pulse oximetry
- Complete comprehensive neurology exam
- Note time of seizure from onset
- STAT point of care (POC) glucose screen and initiate Clinical Parameter: Hypoglycemia Order Set if POC glucose is $< 70 \text{ mg/dL}^2$
- Place peripheral IV or access existing vascular access device
- Initiate nasal cannula oxygen and titrate for goal SpO_2 as ordered
- Obtain labs to evaluate electrolytes, hematology, toxicology screen and anticonvulsant drug levels as indicated

Consults:

- Neuro-Oncology – General Neurology



Yes

No

A

5-20 Minutes: Initial Therapy

STAT IV Benzodiazepines

- Lorazepam 0.1 mg/kg IV (range 1-4 mg; maximum 4 mg); may repeat in 3-5 minutes if seizures continue
- If lorazepam IV is not available, alternatives include³:
 - Diazepam 0.15 mg/kg IV (maximum 10 mg); may give 5 mg IV once, then repeat in 3-5 minutes if seizures continue **or**
 - Midazolam 0.1-0.2 mg/kg IV (maximum dose 5 mg); may give 2.5 mg IV once, then repeat in 3-5 minutes if seizures continue **or**
- If IV access is not immediately available, midazolam 0.2 mg/kg IM (maximum 10 mg); may give 5 mg IM once, then repeat in 3-5 minutes if seizures continue

STAT IV Anticonvulsant (Loading Dose)

- Levetiracetam 20-60 mg/kg IV (maximum 4.5 grams); consider higher dose of 40-60 mg/kg IV for status epilepticus **or**
- Lacosamide 200-400 mg IV **or**
 - Monitor for bradyarrhythmias
- Fosphenytoin 20 mg PE/kg IV (maximum dose 2 grams) **or**
 - Monitor for arrhythmias and/or hypotension; avoid in toxicologic causes of seizure
- Valproate 20-40 mg/kg IV (maximum dose 3 grams) **or**
- Phenobarbital⁴ 10-20 mg/kg IV
 - Doses $\geq 15 \text{ mg/kg IV}$ require ICU care with respiratory support available

Other medications:

- Consider thiamine 100 mg IV once if patient requiring D50W

Treat underlying cause

- Symptomatic medical care and disposition per responding team
- Treat underlying cause
- Consider EEG if patient not back to baseline or per treating provider

See [Page 2](#)

Yes

Does seizure continue?

No

EEG = electroencephalogram PE = phenytoin equivalents

¹ Status epilepticus is defined as continuous seizure lasting > 5 minutes **or** 2 or more seizures within a 5-minute period without return to neurological baseline in between

² Refer to [Hypoglycemia Management algorithm](#)

³ Refer to Intravenous Push Medication Guidelines for Adult and Pediatric Patients policy (#CLN0548)

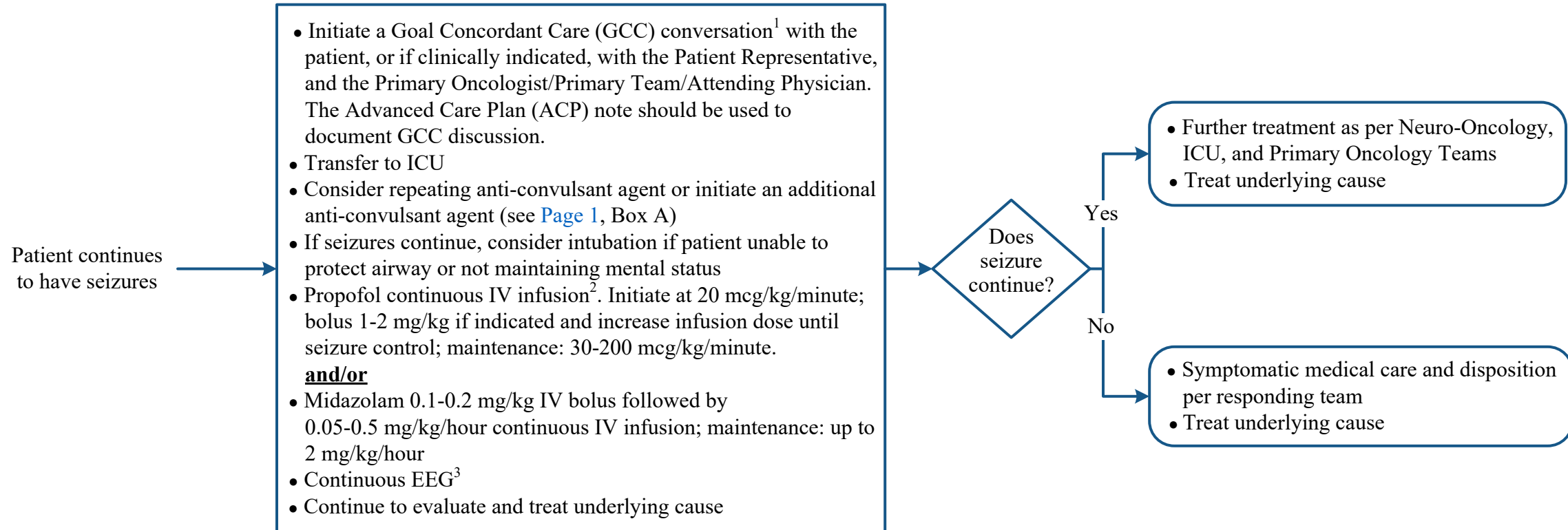
⁴ Reserve phenobarbital for refractory seizures or at discretion of specialist

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PRESENTATION

20-60 Minutes: Second Therapy

Greater than 60 Minutes



¹ Refer to [GCC home page](#) (for internal use only)

² Monitor for propofol infusion syndrome (PRIS) including unexplained metabolic acidosis, rhabdomyolysis, EKG changes, and hyperkalemia. PRIS is associated with infusions longer than 48 hours or at doses > 85 mcg/kg/minute.

³ If continuous EEG not available, consider extended intermittent EEG or transfer to higher level of care, e.g., comprehensive epilepsy center

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SUGGESTED READINGS

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- National Institute for Health and Care Excellence (NICE) guideline. (2025). *Epilepsies in children, young people, and adults*. <https://www.nice.org.uk/guidance/ng217>
- UT MD Anderson Institutional Policy #CLN0548 - Intravenous Push Medication Guidelines for Adult and Pediatric Patients Policy
- UT MD Anderson Institutional Policy #CLN1202 - Advance Care Planning Policy
Advance Care Planning (ACP) Conversation Workflow (ATT1925)

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DEVELOPMENT CREDITS

This practice consensus statement is based on majority opinion of the Improving Neuro Services, Clinical Operations, and Practice Efficiency (INSCOPE) experts at The University of Texas MD Anderson Cancer Center for the patient population. These experts included:

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