

# PRACTICE EXAM 5: HPM CERTIFICATION SIMULATION (240 QUESTIONS)

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1. A 68-year-old man with squamous cell carcinoma of the lung develops progressive confusion, nausea, and constipation over 10 days. His corrected calcium is 14.8 mg/dL. His PTHrP is markedly elevated, and PTH is appropriately suppressed. After initiating aggressive IV normal saline, calcitonin is given as a bridge. Which agent should follow for sustained calcium reduction?

- A. Furosemide 40 mg IV every 6 hours for forced calciuresis as the definitive treatment strategy
- B. Zoledronic acid 4 mg IV — a bisphosphonate that inhibits osteoclast-mediated bone resorption with onset at 24–48 hours, nadir at 4–7 days, and sustained effect for 2–4 weeks
- C. Oral phosphate supplementation to bind calcium in the GI tract and reduce intestinal absorption
- D. Continued calcitonin every 12 hours indefinitely as the sole long-term calcium-lowering strategy

2. A 71-year-old woman with metastatic colon cancer is on hospice. She has been taking morphine SR 60 mg every 12 hours with morphine IR 20 mg every 3 hours PRN, using approximately 5 breakthrough doses per day. Her total 24-hour oral morphine is 220 mg. She develops complete dysphagia. The hospice team plans to convert to a continuous subcutaneous hydromorphone infusion. After converting 220 mg oral morphine to 73.3 mg parenteral morphine (3:1 ratio), then to 11 mg parenteral hydromorphone (equianalgesic table), and applying a 25% cross-tolerance reduction ( $11 \times 0.75 = 8.25$  mg/day), what is the correct hourly infusion rate?

- A. Approximately 0.69 mg/hour (16.5 mg/day — using an incorrect conversion)
- B. Approximately 0.56 mg/hour (13.5 mg/day — no reduction applied)
- C. Approximately 0.17 mg/hour (4.1 mg/day — applying a double reduction)
- D. Approximately 0.34 mg/hour ( $8.25 \text{ mg} \div 24 \text{ hours}$  — the correct final calculation)

3. A hospice medical director reviews a certification narrative that states: "82-year-old woman with CHF. Prognosis less than 6 months." He determines this is deficient. Which of the following is the PRIMARY reason?

- A. The narrative lacks specific clinical findings, functional status measures, disease-specific prognostic markers, and a clinical rationale connecting findings to the six-month prognosis — Medicare requires individualized, evidence-based documentation
- B. The abbreviation "CHF" is not accepted by Medicare and must be spelled out in full
- C. The narrative fails to include the patient's attending physician's NPI number
- D. Certification narratives cannot exceed two sentences under current CMS guidelines

4. A 65-year-old man with advanced pancreatic cancer is enrolled in hospice. He develops a UTI causing dysuria, suprapubic pain, and fever of 38.7°C. He is alert, enjoying visits from grandchildren, and has a prognosis of 2–3 months. Which antibiotic approach is most consistent with comfort-focused goals?

- A. Withhold all antibiotics because he is enrolled in hospice and infections should not be treated
- B. Transfer to the hospital for IV antibiotics, blood cultures, and infectious disease consultation
- C. Treat with an appropriate oral antibiotic — the UTI causes distressing symptoms that antibiotics can relieve, consistent with comfort goals in a patient with months of remaining quality life
- D. Prescribe a 30-day prophylactic antibiotic course to prevent recurrence after treatment

5. A palliative care physician meets a 58-year-old woman with metastatic ovarian cancer who has just learned her chemotherapy has failed. She is crying and says, "I can't do this to my kids. What will they do without me?" The physician wants to discuss hospice. Based on communication best practices, what should the physician do FIRST?

- A. Immediately outline hospice benefits to provide her with a concrete actionable plan
- B. Respond to the emotion before providing clinical information — acknowledge her pain, validate her concern about her children, and allow silence before any discussion of next steps
- C. Contact the social worker to handle the emotional aspects while the physician addresses medical planning
- D. Ask whether she prefers to discuss her feelings or treatment options to determine next steps

6. A 72-year-old man with end-stage heart failure on hospice has an ICD. He has received three painful shocks in the past two hours. He and his family want the shocks stopped. The device representative is unavailable for 6 hours. Which immediate intervention correctly suspends ICD shock delivery?

- A. Place a strong magnet over the ICD pulse generator and tape it securely — providing temporary shock suspension until the device representative arrives for permanent reprogramming
- B. Administer IV amiodarone 150 mg bolus to suppress the arrhythmia triggering the shocks
- C. Increase morphine infusion to sedate the patient through any subsequent shock events
- D. Disconnect any LVAD present, which will simultaneously disable the ICD shock function

7. A 74-year-old woman with metastatic breast cancer develops new headache, papilledema, and projectile vomiting. MRI shows four brain metastases with vasogenic edema. Ondansetron 8 mg IV has been ineffective. Based on the mechanism driving her emesis, which intervention is most targeted?

- A. Metoclopramide 10 mg IV for prokinetic improvement of gastric emptying
- B. Scopolamine patch for vestibular-mediated nausea associated with movement
- C. Lorazepam 1 mg IV for anticipatory nausea from cortical centers
- D. Dexamethasone 16 mg IV to reduce cerebral edema and the elevated intracranial pressure directly stimulating the vomiting center

8. A 70-year-old man with end-stage COPD is dying at home on hospice. He develops loud gurgling breathing 4 hours ago. He is unresponsive. Glycopyrrolate 0.2 mg SC was given 3 hours ago. The rattling continues. His wife is distressed. Which explanation best guides communication with the family?

- A. The glycopyrrolate has failed entirely and deep oropharyngeal suctioning should be performed
- B. The rattling indicates aspiration pneumonia requiring antibiotic treatment initiation at home
- C. Anticholinergic agents prevent NEW secretion production but cannot dry EXISTING pooled secretions — the noise will persist until previously accumulated secretions are reabsorbed or drain with repositioning, and the patient is almost certainly unaware of the sound
- D. A different anticholinergic agent must be substituted because glycopyrrolate is ineffective for death rattle

9. A 63-year-old woman with advanced cervical cancer on hospice develops bilateral ureteral obstruction. Her creatinine rises from 1.0 to 5.4 mg/dL over 10 days. She becomes confused and nauseated. Her oncologist proposes nephrostomy tubes. The decision should be guided primarily by which consideration?

- A. The patient's values, goals, and understanding that nephrostomy tubes relieve the obstruction and extend life but do not treat the cancer — she must weigh this extension against living with tubes for whatever time remains
- B. Whether interventional radiology determines the procedure is technically feasible
- C. Whether the hospice benefit covers the procedure under the current per diem rate
- D. The creatinine level, because values above 5.0 mg/dL mandate intervention regardless of goals

10. A 67-year-old man with advanced prostate cancer has been on hospice for five months. He is entering his third benefit period (first 60-day period). Which NEW requirement distinguishes this period from the first two 90-day periods?

- A. A second opinion from a palliative care specialist independent of the hospice program
- B. A face-to-face encounter with a hospice physician or nurse practitioner within 30 days before the start of the benefit period — required beginning with the third benefit period and all subsequent periods
- C. A mandatory psychiatric evaluation confirming continued acceptance of hospice enrollment
- D. Submission of a written appeal to Medicare justifying the extended hospice enrollment

11. A 59-year-old woman with advanced breast cancer develops bilateral lower extremity edema. Physical exam reveals non-pitting edema extending to mid-thighs, thickened woody-textured skin, and positive Stemmer's sign. She has no JVD, no crackles, and normal albumin. This presentation is most consistent with which of the following?

- A. Congestive heart failure exacerbation requiring aggressive diuretic therapy
- B. Deep vein thrombosis requiring urgent anticoagulation with heparin infusion
- C. Nephrotic syndrome causing edema from massive proteinuria and hypoalbuminemia
- D. Lymphedema from lymphatic obstruction — characterized by non-pitting edema, skin thickening, positive Stemmer's sign, and failure to respond to diuretics

12. A 64-year-old man with advanced melanoma develops a painful, fungating chest wall mass with severe malodor from anaerobic bacterial colonization. The odor prevents family visits. Which topical agent most effectively targets the malodor source?

- A. Topical metronidazole 0.75% gel — specifically targeting the anaerobic bacteria producing the foul odor, with dramatic improvement typically within 24–48 hours
- B. Silver sulfadiazine cream applied daily for broad-spectrum antimicrobial coverage
- C. Hydrogen peroxide 3% solution for wound irrigation at each dressing change
- D. Povidone-iodine solution applied to the wound periphery for general antisepsis

13. A 73-year-old woman with end-stage heart failure is actively dying. Over the past 24 hours, she had a dramatic improvement — alert, eating, conversing with family, expressing gratitude. Her vitals remain abnormal and her trajectory is unchanged. This phenomenon is best described as which of the following?

- A. Evidence of clinical recovery requiring immediate hospital transfer for evaluation
- B. A medication interaction causing temporary CNS stimulation that needs correction
- C. A terminal rally — a transient, poorly understood period of improvement hours to days before death, not indicating recovery, typically followed by rapid decline
- D. Resolution of a concurrent infection that was suppressing her consciousness

14. A 60-year-old man with advanced gastric cancer on hospice has constipation refractory to senna 4 tablets BID and PEG 17 g daily. No BM in 11 days. Rectal exam: no impaction. Abdomen soft, no obstruction. He is on morphine for pain. Which is the most appropriate next step?

- A. Add docusate as the missing laxative component that will resolve the constipation
- B. Start methylnaltrexone 12 mg SC — a PAMORA blocking GI mu receptors without crossing the blood-brain barrier, indicated for OIC refractory to maximal conventional laxative therapy
- C. Discontinue all opioids to eliminate the constipation at the expense of pain management
- D. Add high-fiber diet with increased fluid intake as the definitive intervention

15. A 66-year-old woman with advanced lung cancer on hospice has been on morphine for five months with stable, well-controlled pain. She takes senna-docusate daily and has had regular bowel movements. She asks if she can stop the laxative. Which advice is most accurate?

- A. She can safely stop because five months of stable opioid therapy means her bowels have adapted

- B. Switch to fiber supplementation as a more natural long-term approach
- C. Stop senna but continue docusate alone as adequate maintenance therapy
- D. Continue the laxative — tolerance to opioid-induced constipation does NOT develop, and constipation will return if the laxative is stopped regardless of prior regularity

16. A hospice nurse visits a 78-year-old man with end-stage heart failure who is actively dying. She notes mottling extending to mid-thighs, absent radial pulses, anuria for 12 hours, mandibular breathing, and unresponsiveness. She should communicate to the family which of the following?

- A. The patient needs hospital transfer for evaluation of acute kidney injury and shock
- B. These signs are inconclusive — reassessment in 24 hours is indicated before any prognostic statement
- C. Death is likely within hours to a few days — these converging signs represent the progressive organ failure of active dying, and the family should be supported in using this time together
- D. The mottling is caused by cold room temperature and will resolve with warming blankets

17. A 62-year-old woman with advanced ovarian cancer on hospice has malignant ascites from peritoneal carcinomatosis (NOT portal hypertension). She has an indwelling catheter. After draining 5 liters, she asks about albumin. Which is most accurate?

- A. Albumin replacement is NOT routinely required for malignant ascites from peritoneal carcinomatosis — it is standard for cirrhotic portal hypertensive ascites, where post-paracentesis circulatory dysfunction is a specific hemodynamic concern with a different mechanism
- B. Albumin is always required after draining more than 3 liters regardless of mechanism
- C. Albumin must be given before drainage to improve oncotic gradient
- D. Albumin is mandatory for all home-based drainage procedures

18. A 65-year-old man with advanced hepatocellular carcinoma (Child-Pugh C) requires opioid therapy for abdominal pain. His GFR is 70 mL/min (normal). He is started on morphine at a reduced oral dose. Which pharmacokinetic principle most directly explains the dose reduction?

- A. Morphine is entirely renally excreted and his bilirubin interferes with clearance

- B. Reduced hepatic first-pass metabolism in severe liver disease increases oral morphine bioavailability — more drug reaches systemic circulation at any given dose, effectively increasing exposure
- C. Morphine binds to bilirubin creating toxic conjugates requiring lower doses
- D. Ascites increases volume of distribution requiring lower loading doses

19. A 69-year-old woman with advanced breast cancer on hospice develops a new DVT causing significant right leg pain and swelling. Prognosis is 3 months. Comfort measures. Which anticoagulation approach is most appropriate?

- A. Anticoagulation is categorically prohibited for all hospice patients regardless of symptoms
- B. Transfer to the hospital for IV heparin infusion and vascular surgery consultation
- C. Apply compression stockings as the sole intervention without any pharmacologic therapy
- D. Treat with SC LMWH if the symptoms (pain, swelling) are causing distress — the decision is based on whether treatment serves comfort goals, not on a blanket anticoagulation policy

20. A palliative care physician has cared for a 67-year-old woman with advanced pancreatic cancer for six months. After her peaceful death at home, the physician notices tearfulness reviewing the chart and persistent thoughts about this patient. This reaction is most accurately described as which of the following?

- A. Professional burnout requiring a leave of absence from clinical duties
- B. A boundary violation indicating inappropriate personal attachment
- C. Normal clinician grief — a natural, healthy response to losing a patient with whom the physician had a meaningful relationship, reflecting emotional engagement rather than pathology
- D. Compassion fatigue indicating the physician has exceeded her capacity for hospice work

21. A 72-year-old man with advanced prostate cancer on hospice develops acute back pain, bilateral leg weakness, and urinary retention over 48 hours. Dexamethasone 16 mg IV is given. MRI reveals single-level epidural metastasis at T9 with cord compression. Pre-event ECOG 1, expected survival 7 months. Based on the Patchell trial, which treatment offers the best neurologic outcome?

- A. Surgical decompression followed by postoperative radiation — demonstrated superior to radiation alone for single-level compression in patients with good performance status and expected survival exceeding three months
- B. Radiation therapy alone (30 Gy/10 fractions) as the universal standard for all MSCC
- C. High-dose corticosteroids as the sole definitive management without additional treatment
- D. Comfort measures only because spinal cord compression in cancer is always irreversible

22. A 56-year-old woman with stage IV non-small cell lung cancer has a painful bone metastasis in her right humerus. ECOG 2, expected survival 4 months. Her oncologist recommends palliative radiation. Based on the strongest evidence for uncomplicated painful bone metastases, which fractionation minimizes burden while providing equivalent relief?

- A. 40 Gy in 20 fractions over 4 weeks for maximum tumor response
- B. A single fraction of 8 Gy — multiple randomized trials demonstrate equivalent pain relief to multi-fraction regimens with significantly less treatment burden
- C. 30 Gy in 10 fractions as the only evidence-based palliative radiation regimen
- D. 20 Gy in 5 fractions as the minimum standard palliative course

23. A hospice bereavement coordinator contacts the 70-year-old husband of a patient who died 15 months ago. He has persistent intense yearning dominating daily life, inability to accept the death, avoidance of reminders, and functional impairment. He meets DSM-5-TR criteria for prolonged grief disorder. Which psychotherapy has the strongest evidence?

- A. Standard CBT for depression focused on behavioral activation
- B. Psychoanalytic psychotherapy exploring unconscious attachment dynamics
- C. Group supportive therapy as primary treatment without individual intervention
- D. Complicated Grief Treatment (CGT) — a 16-session manualized therapy with 50–70% response rates in randomized trials

24. A 61-year-old man with advanced colon cancer on hospice tells his chaplain, "What was the point of my life? Did any of it matter?" He is not clinically depressed. This existential questioning is best addressed through which of the following?

- A. Prescribing an anxiolytic to reduce existential anxiety driving his questioning
- B. Referral to psychiatry for evaluation of existential depression
- C. Continued spiritual care — dignity therapy, narrative life review, and exploration of meaning and legacy, which are evidence-based interventions for end-of-life existential suffering
- D. Dismissing the concerns as philosophical rumination with no clinical significance

25. A 69-year-old woman with advanced pancreatic cancer on hospice has persistent hiccups for six days. Her medications include dexamethasone 4 mg daily (started three weeks ago), morphine, ondansetron, and senna-docusate. Which medication is the most likely cause, and what is the most appropriate management?

- A. Dexamethasone is a well-recognized cause of persistent hiccups — reduce the dose or switch corticosteroids, and initiate baclofen 5 mg TID for hiccup-specific treatment
- B. Morphine causes hiccups through direct phrenic nerve stimulation requiring opioid rotation
- C. Ondansetron triggers hiccups through 5-HT<sub>3</sub> receptor blockade requiring discontinuation
- D. The hiccups are idiopathic and should be treated with chlorpromazine as the only FDA-approved agent

26. A 73-year-old man with end-stage renal disease who discontinued dialysis 9 days ago is obtunded. His family notices intermittent jerking of his hands and arms. The hospice nurse identifies this as uremic myoclonus. Which medication is most appropriate for symptomatic management?

- A. Phenytoin loading dose for presumed epileptic seizure activity
- B. Lorazepam 0.5–1 mg SL every 6–8 hours or clonazepam 0.5 mg BID — benzodiazepines effectively suppress uremic myoclonus without anticonvulsant loading
- C. Haloperidol 2 mg SC every 6 hours for dopaminergic suppression
- D. Morphine dose increase to achieve sedation suppressing the myoclonic movements

27. A 62-year-old woman with advanced breast cancer on hospice has been on morphine SR 60 mg every 12 hours. She develops new confusion, hallucinations, and myoclonus. Her creatinine has risen from 0.9 to 3.5 mg/dL. The most appropriate opioid management is which of the following?

- A. Continue morphine at current dose with increased monitoring
- B. Increase morphine dose because worsening symptoms indicate undertreated pain
- C. Rotate to meperidine, specifically recommended for renal-impaired patients
- D. Rotate to fentanyl — no active metabolites accumulate in renal failure; morphine's metabolite M6G is renally excreted and is causing the neurotoxicity she is experiencing

28. A hospice quality improvement committee reviews data: 43% of patients die within 7 days of enrollment, median LOS 10 days. This pattern most strongly indicates which quality concern?

- A. Late referrals deny patients and families the full benefit of hospice — symptom management, psychosocial support, spiritual care, and caregiver preparation all require time to provide effectively
- B. The program enrolls patients too early and provides unnecessary services
- C. The death rate indicates suboptimal symptom management hastening death
- D. The program's referral patterns meet industry benchmarks requiring no improvement

29. A 55-year-old man with advanced melanoma on ipilimumab develops severe watery diarrhea (11 stools/day), cramping, and bloody stool. Stool studies are negative for *C. difficile*. Symptoms began 9 days after his last infusion. The most appropriate treatment is which of the following?

- A. Loperamide 4 mg then 2 mg after each stool as the sole intervention
- B. Empiric metronidazole for presumed undetected *C. difficile* infection
- C. Systemic corticosteroids (prednisone 1–2 mg/kg/day) for immune-related colitis, with immunotherapy held and infliximab considered if steroid-refractory
- D. Octreotide 150 mcg SC three times daily for secretory diarrhea control

30. A 70-year-old man with advanced COPD on hospice has been on morphine for dyspnea. His SpO<sub>2</sub> is 84% on 2 L/min. Despite morphine and a fan, dyspnea remains significant. The family asks about increasing oxygen. Which recommendation is most evidence-based?

- A. Discontinue oxygen entirely because it never benefits dyspnea
- B. This patient IS hypoxemic (SpO<sub>2</sub> 84%, below 90%) — unlike non-hypoxemic patients where oxygen adds no benefit over room air, documented hypoxemia may benefit from increased supplemental oxygen for dyspnea relief

- C. Replace oxygen with heliox for all COPD patients with dyspnea
- D. Increase only if the patient specifically requests more oxygen

31. A 74-year-old woman with advanced heart failure on hospice has been on furosemide 80 mg daily. Dyspnea has worsened. She has crackles, JVD, and increased edema. The physician considers adding metolazone. Which pharmacologic principle explains this combination?

- A. Metolazone has direct bronchodilating properties reducing dyspnea independently
- B. Metolazone replaces furosemide as a more potent loop diuretic
- C. Metolazone provides positive inotropic cardiac support improving output
- D. Sequential nephron blockade — metolazone blocks distal tubular sodium reabsorption, overcoming the compensatory reabsorption that limits furosemide's effectiveness alone

32. A hospice team reviews a 75-year-old man with end-stage liver disease on lactulose for encephalopathy. Lactulose significantly reduces his confusion and agitation. The pharmacy questions whether lactulose is covered under hospice. The most accurate response is which of the following?

- A. Lactulose directly relieves distressing symptoms (confusion, agitation) related to the terminal diagnosis — clinical purpose determines coverage, not drug classification, so it is covered under the hospice per diem
- B. Lactulose must be discontinued because all disease-modifying therapies are excluded
- C. The patient must pay out of pocket because lactulose is not on the hospice formulary
- D. Lactulose requires individual medical director approval for each refill

33. A 59-year-old woman with advanced ovarian cancer on hospice asks about medical aid in dying. She is in a state where MAID is legal. Pain is controlled, she is not depressed, and she wants "control over timing." Which initial response is most appropriate?

- A. Provide the prescription immediately since she meets criteria and has a clear wish
- B. Refuse to discuss the topic because it conflicts with the physician's personal beliefs

C. Explore driving factors deeply, assess for depression thoroughly, ensure she understands legal requirements, and either participate or refer to a willing provider if the physician has a conscientious objection

D. Inform her that MAID is unavailable to patients enrolled in hospice under any circumstances

34. A 64-year-old man with advanced colon cancer on hospice develops nausea significantly worsened by position changes and head movement. It is unrelated to meals or medication timing. Based on this positional pattern, which antiemetic class is most appropriately targeted?

A. A dopamine antagonist (haloperidol) for chemoreceptor trigger zone nausea

B. An antihistamine or anticholinergic (meclizine or scopolamine) for vestibular-mediated nausea — the movement and position-change pattern is the diagnostic hallmark

C. A prokinetic (metoclopramide) for gastroparesis-related postprandial nausea

D. A serotonin antagonist (ondansetron) for peripheral GI-mediated nausea

35. A 71-year-old man with advanced COPD on hospice tells his physician, "I'm terrified of suffocating at the end." Which response best addresses his fear?

A. "We have very effective medications — morphine for the sensation of air hunger and medications for anxiety. Our team will be with you through this, and keeping you comfortable is our commitment. Can you tell me more about what frightens you most?"

B. "I guarantee you will feel absolutely nothing — there is zero risk of discomfort."

C. "That's something we'll deal with when it comes. Let's focus on today for now."

D. "Suffocation is a possible complication and I cannot promise you won't experience distress."

36. A 58-year-old woman with advanced breast cancer on hospice develops new right upper quadrant pain from hepatic metastases causing capsule distension. Her opioid provides partial relief. Which non-opioid most directly targets the mechanism?

A. Gabapentin 300 mg TID for neuropathic pain pathway modulation

B. Acetaminophen 1000 mg every 6 hours for general analgesic augmentation

C. An NSAID for prostaglandin-mediated inflammatory effect at the tumor site

D. Dexamethasone 8 mg daily — reducing hepatic inflammation and peritumoral edema directly decreases the capsular stretch causing her pain

37. A 73-year-old man with metastatic prostate cancer on hospice develops hypercalcemia (corrected calcium 15.2 mg/dL) with confusion, constipation, nausea, and polyuria. After IV saline, which medication provides the most sustained calcium reduction?

A. Calcitonin 4 IU/kg SC every 12 hours for rapid and sustained lowering

B. Furosemide 40 mg IV for forced calciuresis as the primary strategy

C. Zoledronic acid 4 mg IV — inhibiting osteoclast-mediated bone resorption with onset at 24–48 hours, nadir at 4–7 days, and duration of 2–4 weeks

D. Oral phosphate supplementation to bind calcium in the GI tract

38. A 60-year-old woman with advanced lung cancer on hospice tells her nurse, "I want to go to my son's graduation next month." The nurse's response should reflect which core hospice principle?

A. "Travel is too risky. You should stay home where we can manage your symptoms."

B. "Absolutely — we'll plan medications, arrange equipment, and ensure your comfort. Living fully on hospice is exactly what we support."

C. "You'll need physician clearance before leaving your registered residence."

D. "Attending events isn't recommended because it interferes with nursing visit schedules."

39. A 67-year-old man with advanced gastric cancer on hospice develops nausea worst after meals with early satiety and bloating. Not positional. No obstruction on exam. Which antiemetic most directly addresses the mechanism?

A. Metoclopramide 10 mg before meals — combining antiemetic D2 antagonism with prokinetic 5-HT<sub>4</sub> agonism to improve opioid-related gastroparesis

B. Scopolamine transdermal for vestibular nausea

C. Ondansetron for serotonin-mediated GI nausea

D. Dexamethasone for centrally mediated nausea from presumed ICP elevation

40. A hospice nurse visits a 79-year-old woman with end-stage COPD. Her husband, the sole caregiver, has lost weight, has dark circles, and says, "I'm fine — just focus on her." The most appropriate initial response is which of the following?

- A. Focus exclusively on the patient because the husband is not enrolled in hospice
- B. Arrange for immediate mandatory hospitalization of the husband
- C. Document the observation and address it at the next team meeting in one week
- D. Gently express concern, normalize caregiving difficulty, explore respite or additional support, and communicate to the IDT — caregiver collapse directly threatens the patient's care plan

41. A 66-year-old man with advanced pancreatic cancer on hospice has been on morphine with stable dosing for six weeks. He develops new confusion, hallucinations, and myoclonus. His creatinine has risen from 1.0 to 3.8 mg/dL from dehydration. The most appropriate management is which of the following?

- A. Continue morphine with increased monitoring since symptoms may be transient
- B. Increase morphine because the symptoms indicate undertreated pain
- C. Accumulation of M6G from declining renal function is causing the neurotoxicity — rotate to fentanyl, which has no active metabolites
- D. Switch to meperidine, which is safer in renal failure than morphine

42. A 69-year-old woman with advanced breast cancer on hospice develops a pathologic fracture of her left humerus. ECOG 2, expected survival 5 months. Which management is most appropriate?

- A. Conservative management with sling and increased opioids as definitive treatment
- B. Surgical fixation followed by palliative radiation — appropriate given adequate performance status and months of expected survival, restoring function and preventing non-healing
- C. Palliative radiation alone without surgical stabilization
- D. Amputation to eliminate the pain source

43. A palliative care physician is meeting with a 70-year-old man with advanced lung cancer. He asks, "How much time do I have?" Which response is most appropriate?

- A. "I wish I could give you an exact number, but single-point estimates are almost always inaccurate. What I can tell you is we're likely looking at weeks to a few months. I want to help you use that information to plan for what matters most."
- B. "Based on statistical averages, you have exactly 3.6 months to live."
- C. "Medicine cannot predict anything about your prognosis under any circumstances."
- D. "You have plenty of time — don't worry about planning right now."

44. A 57-year-old woman with advanced sarcoma on hospice is on morphine SR 120 mg every 12 hours and duloxetine 60 mg daily. Tramadol 50 mg every 6 hours is added for new pain. Within 48 hours, she develops agitation, hyperthermia, clonus, diaphoresis, and hyperreflexia. Which diagnosis is most likely, and which feature distinguishes it from NMS?

- A. Neuroleptic malignant syndrome from an interaction between morphine and duloxetine
- B. Opioid-induced hyperalgesia from tramadol causing paradoxical pain worsening
- C. An allergic reaction to tramadol requiring epinephrine
- D. Serotonin syndrome from tramadol (serotonin reuptake inhibitor) plus duloxetine (SNRI) — distinguished from NMS by clonus, which is present in serotonin syndrome but absent in NMS

45. A 74-year-old man with end-stage heart failure on hospice has a mechanical aortic valve and has been on warfarin for 18 years. Prognosis is 4 weeks. Unlike patients anticoagulated for AF alone (where short-term risk is negligible), why does his warfarin warrant continuation?

- A. Warfarin provides direct symptom relief for his heart failure-related dyspnea
- B. Medicare mandates warfarin continuation for all mechanical valve patients on hospice
- C. Mechanical valves without anticoagulation carry significant, immediate risk of valve thrombosis and systemic embolization — the short-term risk of stopping is much higher than with AF alone
- D. Stopping warfarin causes immediate mechanical valve failure requiring emergency surgery

46. A 61-year-old woman with advanced ovarian cancer on hospice has refractory pelvic pain. She is on OME 450 mg/day with persistent pain and intolerable side effects. Her specialist recommends an intrathecal pump. Using the 300:1 oral-to-intrathecal ratio, what is the approximate daily intrathecal dose?

- A. Approximately 1.5 mg intrathecal morphine per day ( $450 \div 300 = 1.5$  mg)
- B. 45 mg intrathecal per day (incorrect 10:1 ratio)
- C. 15 mg intrathecal per day (incorrect 30:1 ratio)
- D. 4.5 mg intrathecal per day (incorrect 100:1 ratio)

47. A 63-year-old man with advanced esophageal cancer has complete dysphagia. He is on morphine SR 90 mg every 12 hours (180 mg oral/day). The team converts to SC hydromorphone. Step 1:  $180 \div 3 = 60$  mg parenteral morphine. Step 2:  $60/10 \times 1.5 = 9$  mg parenteral hydromorphone. Step 3: 25% reduction:  $9 \times 0.75 = 6.75$  mg/day. The correct hourly rate is which of the following?

- A. 0.56 mg/hour (no reduction applied)
- B. Approximately 0.28 mg/hour ( $6.75 \div 24$  hours — the correct calculation)
- C. 1.12 mg/hour (incorrect conversion applied)
- D. 0.14 mg/hour (double reduction applied in error)

48. A hospice physician completes a death certificate for a 73-year-old man who died of aspiration pneumonia from advanced Parkinson's disease. Which Part I cause-of-death sequence is correctly formatted?

- A. Line a: "Cardiac arrest" — Line b: "Old age" — Line c: "Natural causes"
- B. Line a: "Parkinson's disease" with no additional lines
- C. Line a: "Natural causes" — Line b: "Neurodegenerative disease"
- D. Line a: "Aspiration pneumonia" — Line b: "Dysphagia" — Line c: "Parkinson's disease" — correctly tracing the causal chain

49. A 76-year-old man with advanced COPD on hospice has been having "good days and bad days." His wife asks whether the good days mean he is recovering. Which explanation is most accurate?

- A. His good days indicate medications are working and he may no longer need hospice
- B. The fluctuating pattern requires hospital transfer for further diagnostic evaluation
- C. Fluctuating function within an overall declining trajectory is the characteristic organ failure pattern — good days do not indicate recovery but rather the natural variability of COPD

D. The good days represent a terminal rally suggesting imminent death within 48 hours

50. A 61-year-old man with advanced melanoma on nivolumab develops fatigue, constipation, cold intolerance, weight gain. TSH is 52 mIU/L, free T4 undetectable. This irAE is managed by which of the following?

A. Levothyroxine replacement — immune-related thyroiditis progressing to hypothyroidism is managed with hormone replacement and typically does NOT require immunotherapy discontinuation

B. High-dose corticosteroids and permanent immunotherapy discontinuation

C. Urgent surgical thyroidectomy to prevent further destruction

D. Radioactive iodine ablation of remaining thyroid tissue

51. A 68-year-old woman with advanced lung cancer on hospice develops new seizures from brain metastases. Given her polypharmacy (opioids, antiemetics, corticosteroids), which anticonvulsant is most appropriate?

A. Phenytoin for its long clinical track record and established efficacy

B. Levetiracetam — minimal hepatic metabolism, few drug interactions, IV and liquid formulations available, ideal for palliative care polypharmacy

C. Carbamazepine for additional neuropathic pain benefit alongside seizure control

D. Valproic acid for broad-spectrum anticonvulsant activity

52. A hospice aide notices handgrip-pattern bruising on an 82-year-old patient with dementia. The patient's caregiver son has a substance use history. The aide reports to the hospice nurse. The most appropriate action is which of the following?

A. Document and reassess at the next scheduled visit in one week

B. Confront the son directly about the bruising

C. Attribute the bruising to anticoagulant therapy without investigation

D. Assess for elder abuse — private evaluation, look for additional signs, document, and report to adult protective services if suspected, as all providers are mandatory reporters

53. A 71-year-old man with end-stage heart failure on hospice has an ICD whose shock function was permanently reprogrammed to "off" by the device representative last month. His family asks whether the magnet placed earlier is still needed. Which is most accurate?

- A. The magnet must remain permanently because reprogramming only partially disables shocks
- B. The magnet should remain as a backup in case the reprogramming reverses
- C. The magnet can be removed — permanent reprogramming disabled shocks definitively, and the magnet (which provided only temporary suspension before reprogramming) is no longer needed
- D. The magnet cannot be removed until the device is surgically explanted

54. A 63-year-old woman with advanced breast cancer on hospice has a new lytic lesion in her right femoral neck with 60% cortical destruction. She is ambulatory with a walker, ECOG 2, expected survival 4 months. In addition to analgesics and radiation, which intervention is most strongly indicated?

- A. Prophylactic surgical fixation — a lytic lesion with >50% cortical destruction in a weight-bearing bone carries high fracture risk, and fixation prevents the catastrophic complication in a patient with adequate performance status
- B. Strict bed rest until the lesion heals spontaneously
- C. A hip brace for external structural support during ambulation
- D. Systemic bisphosphonate therapy as the sole bone-targeted intervention

55. A 60-year-old man with advanced gastric cancer on hospice has been comfortable. He develops new confusion, nausea, constipation, and polyuria. Corrected calcium is 14.9 mg/dL. His family attributed symptoms to disease progression. Which is the most important clinical implication?

- A. The hypercalcemia is incidental and unrelated to his symptoms
- B. The hypercalcemia explains multiple symptoms simultaneously and represents a potentially reversible cause of suffering — treating it (if consistent with goals) could improve confusion, nausea, constipation, and polyuria at once
- C. Hypercalcemia treatment is categorically prohibited in hospice
- D. The calcium is mildly elevated and will self-correct without intervention

56. A 66-year-old woman with advanced pancreatic cancer on hospice has severe epigastric pain radiating to the back, refractory to high-dose opioids. Her pain specialist recommends celiac plexus neurolysis. Which statement is most accurate?

- A. Celiac plexus neurolysis should only be a last resort after all other options fail
- B. Pain relief lasts only 48 hours and must be repeated weekly
- C. The procedure is contraindicated in patients already on opioid therapy
- D. Celiac plexus neurolysis achieves significant relief in 70–90% of pancreatic cancer patients, substantially reduces opioid requirements, and evidence supports early consideration

57. A 74-year-old man with end-stage heart failure is dying at home. His breathing has become agonal — gasping breaths every 30–40 seconds. His daughter asks, "Is he suffering?" Which response is most accurate?

- A. "He is struggling to breathe and needs increased medications immediately"
- B. "These are seizures requiring anticonvulsant medication from the comfort kit"
- C. "The gasping is a brainstem reflex — not conscious effort. Your father is not aware of these movements and is not suffering. This is normal and expected in the final stage of dying."
- D. "Call 911 because agonal breathing indicates a cardiac emergency"

58. A hospice bereavement coordinator contacts the 68-year-old wife of a patient who died six months ago. She has returned to activities but still cries daily and reaches for her husband in bed. She asks, "Shouldn't I be over this?" Which response is most appropriate?

- A. "What you describe is completely normal grief. There is no timeline. Crying daily and missing him at six months is expected. Your return to activities shows healthy adaptation — not that you should be 'over it.'"
- B. "Six months is long — I'd recommend grief counseling for your daily crying"
- C. "Daily crying suggests developing prolonged grief disorder requiring evaluation"
- D. "Stay busy and avoid thinking about him to speed your recovery"

59. A 54-year-old man with advanced sarcoma on hospice has pain with both somatic (deep, aching) and neuropathic (burning, shooting) components. His opioid relieves the aching partially but has minimal effect on the burning. Which strategy best addresses both mechanisms?

- A. Increase opioid alone because higher doses address all pain mechanisms equally
- B. Combine adequate opioid for somatic component with an adjuvant (gabapentin or duloxetine) for neuropathic component — neither alone optimally addresses both mechanisms
- C. Discontinue opioids and use gabapentin monotherapy for both types
- D. Replace all medications with topical lidocaine as sole intervention

60. A 69-year-old man with advanced lung cancer on hospice has been on morphine and gabapentin 600 mg TID. His confusion and ataxia have worsened over a week. Creatinine rose from 1.0 to 3.0 mg/dL. Which medication requires the MOST urgent dose adjustment?

- A. Morphine is the sole priority because opioid toxicity always supersedes everything
- B. Both medications require identical urgency with no priority distinction
- C. Neither medication is affected by renal function
- D. Gabapentin — entirely renally excreted, it accumulates most rapidly with declining GFR, causing dose-dependent sedation, confusion, and ataxia; while morphine also warrants attention, gabapentin's exclusively renal clearance makes adjustment most urgent

61. A 72-year-old man with advanced prostate cancer on hospice has diffuse bone metastases. His physician recommends adding a non-opioid specifically targeting bone pain. Which is most appropriate?

- A. Acetaminophen 1000 mg every 6 hours for general analgesic augmentation
- B. Gabapentin 300 mg TID for neuropathic modulation at the bone-nerve interface
- C. An NSAID (celecoxib 200 mg daily or ibuprofen 600 mg TID) — specifically effective for bone pain through prostaglandin synthesis inhibition at the metastatic site, where tumor-produced prostaglandins sensitize nociceptors
- D. Duloxetine 60 mg daily for dual analgesic and antidepressant benefit

62. A 64-year-old woman with advanced ovarian cancer on hospice has MBO managed medically. Despite octreotide, glycopyrrolate, and dexamethasone, she vomits 500 mL daily. A venting gastrostomy is placed. She asks if she can eat. Which response is most accurate?

- A. She may eat and drink small amounts for pleasure — food enters the stomach and is experienced (taste, texture), then drains through the gastrostomy rather than entering the obstructed bowel
- B. She must remain NPO because any oral intake worsens the obstruction
- C. She may eat full meals because the gastrostomy bypasses the obstruction entirely
- D. Clear liquids only because solid food will block the gastrostomy tube

63. A hospice program conducts a Medicare compliance review. Volunteer utilization is 3.8% of total care hours. Which is the regulatory significance?

- A. The program is compliant because there is no volunteer minimum under Medicare
- B. The program is below the Medicare-mandated 5% minimum and must increase volunteer services to achieve compliance
- C. The volunteer requirement applies only to non-profit programs
- D. The program exceeds the 2% volunteer requirement

64. A palliative care team meets the family of a 71-year-old man with end-stage heart failure in the ICU. His advance directive states he does not want life-prolonging treatment without hope of meaningful recovery. His son angrily says, "You're giving up on him!" The most effective initial response is which of the following?

- A. "Let me present the medical data so you understand why treatment is futile."
- B. "You're welcome to seek a second opinion — I'll prepare transfer paperwork."
- C. "The medical facts are clear and we need to accept reality."
- D. "I can hear how frightened you are, and I understand — you love your father. Can you tell me what worries you most? I want to make sure we're doing what's best for him together."

65. A 57-year-old woman with advanced cervical cancer on hospice has severe neuropathic pain — burning, shooting, electric-shock-like — from sacral nerve root invasion. Her opioid provides partial relief. Which adjuvant class should be added?

- A. An NSAID for prostaglandin-mediated anti-inflammatory relief
- B. A benzodiazepine for the anxiety amplifying her pain perception
- C. A gabapentinoid (gabapentin or pregabalin) or SNRI (duloxetine) — first-line adjuvant classes for neuropathic pain, targeting voltage-gated calcium channels or descending inhibitory pathways
- D. An acetaminophen-codeine combination for enhanced general opioid analgesia

66. A 73-year-old woman with advanced dementia (FAST 7E) on hospice develops fever and tachypnea — her fifth aspiration pneumonia in 14 months. The antibiotic decision should be most strongly influenced by which consideration?

- A. Whether the recurrent pattern reflects the natural trajectory of advanced dementia — each antibiotic treats the infection but does not change the aspiration risk — and whether continued treatment serves comfort or prolongs dying
- B. The specific organism and its antibiotic sensitivity from sputum culture
- C. Whether the temperature exceeds 39.5°C, mandating treatment regardless of goals
- D. The cost of the antibiotic relative to the hospice per diem budget

67. A 61-year-old man with advanced hepatocellular carcinoma on hospice is on lactulose for encephalopathy and morphine for pain. A team member asks whether they are compatible. Which is most accurate?

- A. Lactulose is contraindicated with opioids due to severe electrolyte disturbance risk
- B. Lactulose serves a dual purpose — treating encephalopathy (reducing ammonia) AND functioning as an osmotic laxative counteracting opioid-induced constipation, making them complementary
- C. Morphine must be stopped before lactulose can be started to prevent synergistic sedation
- D. Lactulose chemically inactivates morphine through direct GI binding

68. A hospice social worker conducts bereavement follow-up with the 50-year-old son of a patient who died three months ago. He has returned to work but reports sudden intense grief waves triggered by reminders. He asks, "Is this normal?" Which response is most appropriate?

- A. "Three months should be enough to resolve acute grief — I'd recommend psychiatric evaluation."
- B. "The sudden episodes suggest developing panic disorder requiring medication."
- C. "You should avoid all triggering situations to prevent the grief waves."
- D. "Grief waves triggered by reminders are completely normal and can occur for months to years. Functioning well between waves shows healthy adaptation. There is no timeline for grief."

69. A 70-year-old man with advanced lung cancer on hospice tells his chaplain, "I don't believe in God. I don't need spiritual care." Which chaplain response is most appropriate?

- A. "I'll note your decline and won't visit again."
- B. "Everyone needs spiritual support — let me explain why you should reconsider."
- C. "Spiritual care addresses meaning, purpose, and legacy — not just religion. I'm here to support whatever matters to you without imposing beliefs. Would it help to talk about what gives your life meaning?"
- D. "Perhaps reconsider your beliefs given your current situation."

70. A 66-year-old woman with advanced breast cancer on hospice develops opioid-induced pruritus after her last morphine dose increase. Bilirubin and renal function are normal. After failing antihistamines, which opioid rotation best addresses the pruritus?

- A. Fentanyl — minimal histamine-releasing properties make it the preferred choice when pruritus is the rotation indication
- B. Codeine for lower histamine release than morphine
- C. Hydromorphone, which has identical histamine-releasing properties to morphine
- D. Meperidine, historically recommended for opioid-induced pruritus patients

71. A palliative care team debriefs after a difficult case. A nurse states, "I knew the patient needed sedation earlier, but the attending wanted to try another medication. I felt powerless." This is best described as which of the following?

- A. Compassion fatigue from empathic absorption of patient suffering
- B. Moral distress — knowing the ethically right action but feeling unable to carry it out due to hierarchical barriers
- C. Professional burnout from administrative overwork
- D. Normal job dissatisfaction that resolves spontaneously

72. A 62-year-old woman with advanced ovarian cancer on hospice develops a new vertebral compression fracture at L1 causing severe pain (9/10). ECOG 2, expected survival 5 months. In addition to opioid optimization, which procedure provides the most rapid targeted relief?

- A. Palliative radiation (single 8 Gy) with expected onset in 2–4 weeks
- B. External thoracolumbar brace as primary analgesic intervention
- C. Epidural corticosteroid injection at L1
- D. Vertebroplasty or kyphoplasty — providing relief in 70–90% of patients within 24–72 hours through mechanical stabilization of the fractured vertebral body

73. A 64-year-old man with advanced colon cancer on hospice has been on warfarin for AF. Prognosis 2 weeks. No stroke history. The most appropriate anticoagulation management is which of the following?

- A. Continue warfarin because AF requires lifelong anticoagulation regardless of prognosis
- B. Switch to a direct oral anticoagulant for easier monitoring
- C. Discontinue warfarin — the absolute risk reduction over 2 weeks is negligible while bleeding risk continues and monitoring burden is unjustified
- D. Increase warfarin for enhanced stroke protection during the terminal phase

74. A 59-year-old man with advanced gastric cancer on hospice develops acute pulmonary edema. He is on morphine and furosemide 40 mg daily. Exam: bilateral crackles, JVD, S3, SpO<sub>2</sub> 80%. Comfort measures, DNR. The most appropriate management is which of the following?

- A. Morphine bolus AND increased furosemide to 80 mg IV — addressing both symptom (morphine) and treatable cause (diuresis for volume overload) consistent with comfort goals
- B. Continue current medications unchanged
- C. Morphine alone without diuretic adjustment because diuretics are disease-directed
- D. Hospital transfer for BiPAP despite comfort measures designation

75. A hospice program is audited. GIP was billed for a patient admitted for "caregiver exhaustion and respite." This billing error exists because of which of the following?

- A. GIP can only be provided in acute care hospitals
- B. GIP is for acute symptom management requiring inpatient-level care — caregiver respite is the indication for IRC, not GIP; billing the higher-reimbursement GIP for a respite need constitutes incorrect billing
- C. GIP requires a 14-day minimum stay
- D. GIP requires 30-day CMS pre-authorization

76. A 54-year-old woman with advanced breast cancer on hospice has CIPN neuropathic pain. She is on tamoxifen. Which adjuvant should be AVOIDED?

- A. Gabapentin, which has no CYP interactions and is safe with tamoxifen
- B. Pregabalin, which is renally excreted without hepatic metabolism
- C. Nortriptyline at low doses for combined pain and sleep benefit
- D. Duloxetine — it inhibits CYP2D6, the enzyme converting tamoxifen to endoxifen, potentially reducing tamoxifen's anticancer efficacy

77. A 57-year-old woman with advanced sarcoma on hospice is on high-dose opioids (OME 700 mg/day). Her specialist recommends methadone rotation. Which unique property requires specific monitoring?

- A. Direct hepatotoxicity requiring weekly LFT monitoring
- B. Complete absence of respiratory depression making it safest for escalation

C. QTc prolongation with risk of torsades de pointes — requiring ECG at baseline, after stabilization, and periodically; the only commonly used opioid with this cardiac risk

D. Severe thrombocytopenia requiring CBC monitoring every 48 hours

78. A 71-year-old man with advanced prostate cancer on hospice is transitioning from IV hydromorphone 0.6 mg/hour (14.4 mg/24h IV) to oral hydromorphone at home. Using the 5:1 parenteral-to-oral ratio, the correct daily oral dose is which of the following?

A. 72 mg oral per day ( $14.4 \times 5 = 72$  mg — the correct 5:1 ratio for hydromorphone)

B. 14.4 mg oral per day (incorrect 1:1 conversion)

C. 43.2 mg oral per day (incorrect 3:1 ratio)

D. 28.8 mg oral per day (incorrect 2:1 ratio)

79. A 65-year-old man with end-stage COPD on hospice develops acute respiratory distress. SpO<sub>2</sub> 78%, RR 32, severe anxiety. POLST: comfort measures only. The most appropriate immediate intervention is which of the following?

A. Call 911 for emergency intubation

B. Morphine bolus, midazolam for anxiety, increase O<sub>2</sub> (he IS hypoxemic), position upright, fan to face — comprehensive symptom management consistent with comfort goals

C. Withhold opioids because respiratory depression could worsen his oxygenation

D. Oxygen only with observation for 60 minutes before pharmacologic intervention

80. A hospice physician reviews a death certificate listing Part I, Line a: "Cardiac arrest." This is problematic because of which of the following?

A. "Cardiac arrest" is only appropriate when witnessed by a cardiologist

B. "Cardiac arrest" must be accompanied by the specific ECG terminal rhythm

C. "Cardiac arrest" is acceptable for all deaths and requires no correction

D. "Cardiac arrest" is the mechanism common to all deaths — it provides no disease-specific information, and the certificate should specify the actual disease process

81. A 70-year-old woman with advanced pancreatic cancer on hospice develops diabetes from tumor destruction and dexamethasone. Fasting glucose consistently >350. She has polyuria disrupting sleep, thirst, and blurred vision preventing reading. Treatment is justified because of which of the following?

- A. Strict HbA1c <7% prevents long-term microvascular complications
- B. All hospice patients with glucose >300 must receive insulin per Medicare regulation
- C. Treatment is for symptom relief — polyuria, thirst, and blurred vision directly impair comfort and quality of life
- D. Insulin is excluded from the hospice benefit under all circumstances

82. A palliative care physician conducts ACP with a 63-year-old man with stage IV colon cancer. He names his wife as DPAHC. The physician emphasizes naming alone is insufficient. Which additional step is most critical?

- A. The patient must have a detailed conversation with his wife about his values, goals, fears, and treatment preferences — a surrogate who doesn't know the patient's values cannot exercise substituted judgment
- B. The DPAHC must be notarized by an attorney for legal enforceability
- C. The form must be filed with the county courthouse for public record
- D. The wife must complete a formal medical decision-making course

83. A 72-year-old man with advanced COPD on hospice has worsening dyspnea despite morphine 15 mg oral every 4 hours. SpO<sub>2</sub> 91%. He is anxious with accessory muscle use. Morphine was given 30 minutes ago with minimal improvement. Which is the most appropriate next step?

- A. Increase O<sub>2</sub> to 5 L/min because saturation must exceed 95%
- B. Add lorazepam 0.5–1 mg SL for the anxiety-breathlessness cycle — when opioid alone fails and anxiety is prominent, benzodiazepine addresses the component opioid cannot control
- C. Switch to hydromorphone for superior dyspnea efficacy
- D. Nebulized albuterol as the sole additional intervention

84. A 72-year-old man with advanced lung cancer on hospice has a 12-year-old son who has been refusing to visit, fighting at school, and telling his teacher "My dad is fine." Based on developmental understanding, this behavior most likely represents which of the following?

- A. A conduct disorder unrelated to his father's illness
- B. Evidence that the child has not been informed about the illness
- C. Normal pre-adolescent rebellion unconnected to the family situation
- D. Anticipatory grief — denial, avoidance, and acting out are common in school-age children who understand death's permanence but lack mature coping skills

85. A 67-year-old woman with advanced lung cancer on hospice develops seizures from brain metastases. Her oncologist recommends prophylactic anticonvulsant therapy for her OTHER (non-seizing) brain lesions. Based on current evidence, which recommendation is most appropriate?

- A. Start phenytoin prophylactically for all patients with brain metastases
- B. Start levetiracetam prophylactically because it has the fewest interactions
- C. Prophylactic anticonvulsants are NOT recommended for brain metastasis sites that have not seized — randomized trials show no benefit, and the medications carry significant side effect risks
- D. Start valproic acid because dexamethasone increases seizure risk

86. A 59-year-old man with advanced colon cancer on hospice develops a new DVT causing severe right calf pain and swelling. Prognosis 2 months. Comfort measures. Which management is most appropriate?

- A. Treat with SC LMWH if symptoms are causing distress — the decision serves comfort goals, not a blanket anticoagulation policy
- B. Anticoagulation is categorically prohibited for all hospice patients with DVT
- C. No treatment needed because DVT is a natural part of dying
- D. Transfer to hospital for duplex ultrasound and IV heparin

87. A 73-year-old woman with advanced heart failure on hospice develops worsening dyspnea. Furosemide is 80 mg daily. She has crackles, JVD, 5 kg weight gain, and edema. Which medication adjustment is most appropriate?

- A. Discontinue furosemide because diuretics are disease-directed therapies
- B. Increase furosemide and/or add metolazone — directly addressing the volume overload causing dyspnea, a symptom-directed intervention consistent with comfort goals
- C. Replace furosemide with morphine as sole dyspnea treatment
- D. Maintain current dose unchanged and add morphine only

88. A 65-year-old man with advanced gastric cancer on hospice develops nausea — constant, non-positional, non-meal-related, gradually improving over 3 days since starting morphine. This pattern is most consistent with which mechanism?

- A. Gastroparesis requiring indefinite prokinetic therapy
- B. Allergic reaction requiring immediate opioid discontinuation
- C. Bowel obstruction requiring octreotide and anticholinergics
- D. CTZ stimulation from the opioid — tolerance develops within 3–7 days (explaining the improving trajectory), managed with a short haloperidol course as a bridge

89. A 56-year-old woman with advanced cervical cancer on hospice has refractory pelvic pain. Her specialist recommends a superior hypogastric plexus block. This block targets which structures?

- A. Upper abdominal visceral organs via the T12-L1 ganglia (celiac plexus territory)
- B. Perineum and rectum via the sacrococcygeal ganglion impar
- C. Pelvic visceral organs (uterus, cervix, bladder, rectum) — the superior hypogastric plexus transmits visceral afferent pain from these structures
- D. Lower extremities via the lumbar sympathetic chain

90. A hospice program reviews bereavement services. Medicare COP require bereavement support for how long after death?

- A. At least 13 months — including periodic contacts, memorial events, support groups, and counseling referrals when indicated
- B. Services end on the day of death
- C. A single contact at 30 days is the only requirement

D. Bereavement is recommended but not mandated under Medicare

91. A 61-year-old woman with advanced breast cancer on hospice asks, "Can I travel to see my sister in another state?" Which response is most appropriate?

A. "Hospice patients cannot leave their registered residence."

B. "Yes — we'll coordinate care, ensure adequate medications, arrange services at your destination, and plan for contingencies. Let's make this happen."

C. "You'd need to revoke hospice before crossing state lines."

D. "Travel is medically inadvisable for terminal patients."

92. A 69-year-old man with advanced lung cancer on hospice has been on morphine SR 120 mg every 12 hours. He develops complete dysphagia. Total oral morphine is 240 mg/day. Converting to SC morphine using the 3:1 ratio, the correct infusion rate is which of the following?

A. 10 mg/hour (no conversion applied)

B. 1.7 mg/hour (incorrect 6:1 ratio)

C. 5 mg/hour (incorrect 2:1 ratio)

D. Approximately 3.3 mg/hour ( $240 \div 3 = 80$  mg SC/day  $\div 24 = 3.3$  mg/hour — correct calculation)

93. A 73-year-old woman with end-stage heart failure has been declining. Yesterday she was suddenly alert, ate, talked to family. Today she is unresponsive again. This is best described as which of the following?

A. Evidence of recovery requiring hospital transfer

B. Medication interaction causing temporary alertness

C. A terminal rally — transient improvement hours to days before death, not indicating recovery, typically followed by rapid decline

D. Resolution of concurrent infection

94. A 58-year-old man with advanced gastric cancer on hospice has constipation refractory to senna 4 BID and PEG daily. No BM in 12 days. No impaction, no obstruction. The most appropriate next step is which of the following?

- A. Methylnaltrexone 12 mg SC — a PAMORA blocking GI mu receptors without crossing the blood-brain barrier, indicated for OIC refractory to maximal conventional therapy
- B. Discontinue opioids to eliminate constipation
- C. High-fiber diet with increased fluids as definitive treatment
- D. Add docusate as the missing component

95. A 64-year-old man with advanced colon cancer on hospice has cancer-related fatigue. Hemoglobin 10.7, thyroid normal, depression screening negative. Non-pharmacologic measures implemented. Which medication has the strongest evidence?

- A. Modafinil for sustained wakefulness promotion
- B. Methylphenidate 5 mg morning and noon — CNS stimulant with rapid onset and strongest evidence for cancer-related fatigue
- C. Dexamethasone for long-term energy improvement
- D. Erythropoiesis-stimulating agent to treat mild anemia

96. A palliative care physician cares for a 71-year-old man with advanced pancreatic cancer. His wife asks, "After he dies, will you still be available?" Which response most accurately describes bereavement obligations?

- A. "Our services end when your husband passes."
- B. "We provide a single call at 30 days."
- C. "Bereavement support is only available privately."
- D. "Our program provides support for at least 13 months — contacts, events, groups, and counseling referrals. We can also help you prepare now."

97. A 57-year-old woman with advanced ovarian cancer on hospice develops opioid-induced pruritus after a morphine dose increase. Bilirubin and renal function normal. After failing antihistamines, the best opioid rotation is which of the following?

- A. Codeine for lower histamine release
- B. Hydromorphone, which has identical histamine properties to morphine
- C. Fentanyl — minimal histamine-releasing properties make it the preferred rotation when pruritus is the indication
- D. Meperidine, historically used for pruritus

98. A 71-year-old man with advanced heart failure on hospice has an ICD. He agrees to deactivate shocks but maintain pacing. Which statement is most accurate?

- A. Shock and pacing can be independently programmed — deactivating shocks while maintaining pacing is standard practice, preventing painful shocks while preserving hemodynamically beneficial pacing
- B. Shocks and pacing cannot be independently controlled
- C. Deactivating shocks automatically disables pacing
- D. Maintaining pacing is incompatible with hospice enrollment

99. A 64-year-old man with advanced lung cancer on hospice tells his nurse, "I've been thinking about taking all my morphine at once. I haven't done anything — just the thought." Pain is 4/10. No active plan. Which is the most appropriate response?

- A. Report to law enforcement for suicidal ideation
- B. Take it seriously — explore driving factors, assess for depression, optimize symptoms, secure medications, involve the IDT
- C. Remove all opioids immediately without replacement
- D. Dismiss as a normal expression requiring no clinical attention

100. A palliative care physician meets a family before delivering a medical update about a 75-year-old man in the ICU. The physician asks, "What is your understanding of what's been happening?" This serves which purpose?

- A. Shifting responsibility for the update to the family
- B. Testing the family's medical knowledge level
- C. Determining whether they can intellectually participate in decisions
- D. Assessing current understanding — the "Perception" step of SPIKES — revealing gaps, misconceptions, and providing a starting point for the update

101. A 66-year-old woman with advanced pancreatic cancer on hospice has been on dexamethasone 8 mg daily for six weeks. She develops proximal muscle weakness. This is most consistent with which of the following?

- A. Spinal cord compression requiring emergent MRI
- B. Brain metastasis progression causing new motor deficits
- C. Steroid-induced proximal myopathy — dose-dependent, duration-dependent, affecting hip and shoulder girdle muscles, distinguished from cord compression by proximal pattern without sensory level
- D. Deconditioning requiring physical therapy only

102. A 58-year-old man with advanced gastric cancer on hospice develops MBO. He is not surgical. The standard medical management combination is which of the following?

- A. Octreotide (reducing secretions) plus glycopyrrolate (reducing secretions and colicky pain) plus dexamethasone (reducing peritumoral edema) plus parenteral opioids
- B. Metoclopramide plus high-dose oral laxatives for bowel stimulation
- C. TPN as primary intervention for nutritional support
- D. High-fiber diet with aggressive oral hydration for natural resolution

103. A 73-year-old woman with metastatic colon cancer develops new back pain, bilateral leg weakness, and urinary retention. MRI: epidural cord compression at T8. Dexamethasone given. Pre-event ECOG 2, expected survival 4 months. The MOST critical factor determining neurologic outcome is which of the following?

- A. The radiation fractionation schedule chosen

- B. Her neurologic status at the time treatment is initiated — ambulatory patients have >80% chance of remaining ambulatory; paraplegic patients have <10% chance of recovery
- C. The histologic type and radiosensitivity of her cancer
- D. Her age as the primary determinant of recovery

104. A 64-year-old man with advanced lung cancer on hospice asks, "My neighbor had lung cancer and lived two years. Why can't I?" Which response is most appropriate?

- A. "Your neighbor probably had a less aggressive type — don't compare yourself."
- B. "You could definitely live two years — it's possible."
- C. "I can't discuss prognosis because medicine cannot predict individual outcomes."
- D. "Every person's cancer is different. What I can tell you is what I see with your disease and what the typical course looks like. Would it help to talk about what to expect so we can plan together?"

105. A 59-year-old woman with advanced ovarian cancer on hospice develops opioid-induced nausea — constant, non-positional, not meal-related, improving over 3 days. Based on this trajectory, the most likely mechanism is which of the following?

- A. Gastroparesis requiring indefinite prokinetic therapy
- B. Allergic reaction requiring immediate discontinuation
- C. CTZ stimulation — tolerance develops within 3–7 days (explaining the improving trajectory), managed with a short haloperidol course as a bridge
- D. Bowel obstruction requiring octreotide and anticholinergics

106. A hospice nurse visits a 69-year-old man with end-stage heart failure. His wife asks, "Can he still hear us? He hasn't responded in hours." Which response is most accurate?

- A. "We believe hearing may be the last sense preserved. While we can't know with certainty, I encourage you to keep talking, holding his hand, and saying whatever you need to say."
- B. "Once unresponsive, all sensory function has ceased."
- C. "He can hear everything — be careful what you discuss."

D. "His hearing has been replaced by hallucinations."

107. A 57-year-old woman with advanced sarcoma on hospice says, "I feel like a burden to my family. They'd be better off without me." PHQ-9 is 20. No suicidal ideation. The most important clinical implication is which of the following?

- A. This is a normal grief expression requiring no intervention
- B. Perceived burdensomeness is strongly associated with desire for hastened death and is a red flag for depression — her PHQ-9 of 20 confirms severe depression requiring treatment
- C. Her statement accurately reflects her family situation
- D. She needs social work referral for caregiver support without depression treatment

108. A hospice team discusses cultural care for a newly enrolled Hindu patient. Which post-death practice is most consistent with Hindu tradition?

- A. Immediate embalming with multi-day visitation before burial
- B. The body should not be left alone, with burial within 24 hours (Jewish shemira)
- C. Placement in a plain pine casket without cosmetic preparation
- D. Hindu tradition generally favors cremation, with family members potentially washing and preparing the body with specific prayers and rituals

109. A 67-year-old man with advanced prostate cancer on hospice is entering his fourth benefit period (second 60-day period). Which requirement applies to this recertification that distinguishes it from the first two periods?

- A. A second opinion from an independent specialist
- B. A mandatory psychiatric evaluation
- C. A face-to-face encounter with a hospice physician or NP within 30 days before the benefit period — required beginning with the third period and all subsequent periods
- D. Submission of a formal Medicare appeal

110. A 54-year-old woman with advanced sarcoma on hospice asks her physician about what happens to her family after her death. The most accurate description of bereavement obligations is which of the following?

- A. "Our program provides bereavement support for at least 13 months — periodic contacts, memorial events, support groups, and counseling referrals. We can also help prepare your family now."
- B. "Services end when you pass away."
- C. "Support is only available privately."
- D. "We provide a single call at 30 days."

111. A 71-year-old man with advanced colon cancer on hospice has bone metastases. His physician recommends a bone-targeted agent acting through RANKL inhibition. Which agent uses this mechanism?

- A. Zoledronic acid, a bisphosphonate inhibiting osteoclasts via the mevalonate pathway
- B. Denosumab — a monoclonal antibody blocking RANKL to prevent osteoclast differentiation and activation
- C. Calcitonin, directly inhibiting osteoclasts through receptor activation
- D. Pamidronate, a first-generation IV bisphosphonate

112. A 65-year-old man with advanced hepatocellular carcinoma on hospice is on morphine. His liver function deteriorates (bilirubin 5→17 mg/dL over 2 weeks). He becomes more somnolent despite no dose change. GFR is 68 (normal). The most critical adjustment is which of the following?

- A. Increase morphine because somnolence indicates undertreated pain
- B. Switch to meperidine, which is safer in hepatic impairment
- C. Discontinue all medications because liver failure makes all drugs unpredictable
- D. Reduce morphine — worsening liver function reduces first-pass metabolism, increasing oral bioavailability and drug exposure at the same prescribed dose

113. A 72-year-old woman with end-stage heart failure on hospice develops confusion and muscle cramps. Na 125, K 2.7. She is on furosemide 80 mg daily (recently increased). These abnormalities are most likely caused by which of the following?

- A. Heart failure progression causing SIADH-mediated dilutional hyponatremia
- B. Morphine toxicity causing SIADH with secondary electrolyte disturbances
- C. Diuretic-induced electrolyte derangements — furosemide causes sodium and potassium wasting, producing hyponatremia and hypokalemia manifesting as confusion and muscle cramps
- D. Hepatic encephalopathy from undiagnosed concurrent liver disease

114. A 69-year-old man with advanced prostate cancer on hospice develops a seizure-like episode (rhythmic jerking, followed by confusion). He is on morphine SR 90 mg every 12 hours. Creatinine was normal one week ago. The most important initial consideration is which of the following?

- A. Opioid neurotoxicity — check renal function for M6G accumulation and consider fentanyl rotation if GFR has declined
- B. Prostate cancer commonly metastasizes to the brain, making new brain metastases most likely
- C. Vasovagal event from dehydration mimicking seizure activity
- D. Epilepsy unrelated to his treatment requiring lifelong anticonvulsant therapy

115. A 59-year-old woman with advanced cervical cancer on hospice has severe perineal pain from sacral nerve root invasion. Which interventional procedure targets the specific neural structure mediating her perineal pain?

- A. Celiac plexus block at T12-L1 for upper abdominal visceral pain
- B. Ganglion impar block — the ganglion impar at the sacrococcygeal junction transmits visceral pain from the perineum, rectum, anus, and vulva
- C. Superior hypogastric plexus block for pelvic organ pain above the perineum
- D. Lumbar epidural steroid injection for radicular lower extremity pain

116. A hospice physician counsels a family about planned ventilator withdrawal. The patient is on FiO<sub>2</sub> 100%, PEEP 14, vasopressors, with minimal spontaneous breathing effort. The family asks, "How long will it take?" Which response is most appropriate?

- A. "He will die within exactly 5 minutes."
- B. "He will survive several days because the body has significant reserves."
- C. "It is completely impossible to provide any estimation."
- D. "Given his high support requirements and minimal independent breathing, death is likely within minutes to hours. I cannot predict the exact time, but we will keep him comfortable and be here with you."

117. A 64-year-old man with advanced colon cancer on hospice has a successful celiac plexus block — pain drops from 8/10 to 1/10. He then becomes increasingly sedated with RR 10. This illustrates which principle?

- A. Celiac plexus blocks always cause respiratory depression as a procedural complication
- B. The neurolytic agent used during the block caused direct CNS toxicity
- C. Pain is a potent respiratory stimulant — when the block eliminated pain, the stimulant effect was removed, unmasking the respiratory-depressant effect of his current opioid dose, which is now relatively excessive
- D. The block inadvertently damaged the phrenic nerve causing diaphragm paralysis

118. A palliative care physician has cared for a 63-year-old woman with lung cancer for six months. She dies peacefully. At the next team meeting, the physician feels tearful. A colleague notices and asks if she is alright. The most supportive response is which of the following?

- A. "It sounds like you're having a normal grief response to losing a patient you cared about. That's a sign you were truly present — not a weakness. Would it help to talk?"
- B. "You need a leave of absence — emotional responses indicate unfitness for clinical duties."
- C. "Leave your feelings at the door — boundaries require detachment."
- D. "I'll refer you for mandatory psychiatric evaluation."

119. A 54-year-old woman with advanced melanoma on pembrolizumab develops acute fatigue, hypotension (BP 70/38), nausea, and hypoglycemia. Morning cortisol is undetectable. Which urgent intervention is required?

- A. Aggressive IV fluids alone without hormone replacement
- B. IV hydrocortisone 100 mg for adrenal insufficiency from immune-related hypophysitis or adrenalitis — undetectable cortisol, hypotension, and hypoglycemia require urgent corticosteroid replacement
- C. High-dose prednisone for immune-related hepatitis
- D. Thyroid hormone replacement for presumed hypothyroidism

120. A 70-year-old man with advanced COPD on hospice has been on morphine and gabapentin 600 mg TID. His confusion and ataxia worsen over a week. Creatinine rose from 1.0 to 3.0 mg/dL. Which medication requires the MOST urgent adjustment?

- A. Morphine is the sole priority because opioid toxicity always supersedes all else
- B. Both require identical urgency with no distinction
- C. Neither is affected by renal function
- D. Gabapentin — entirely renally excreted, it accumulates most rapidly with declining GFR, causing dose-dependent sedation, confusion, and ataxia; while morphine also warrants attention, gabapentin's exclusively renal clearance makes adjustment most urgent

121. A 69-year-old man with advanced renal cell carcinoma on hospice has been on oxycodone for pain. His GFR declines from 48 to 11 mL/min over three weeks. He develops confusion and myoclonic jerks. Which opioid rotation is safest for his severe renal impairment?

- A. Morphine, the most studied opioid and therefore safest in all clinical scenarios
- B. Codeine, which requires only hepatic activation with no renal concerns
- C. Fentanyl — metabolized by CYP3A4 to inactive norfentanyl, with no active metabolites that accumulate in renal failure
- D. Meperidine, historically recommended for renal-impaired patients

122. A 71-year-old woman with end-stage heart failure on hospice has been on furosemide 80 mg daily. Her dyspnea improved but she develops new confusion, lethargy, and muscle cramps. Na 122 mEq/L, K 2.4 mEq/L. These abnormalities are most likely caused by which of the following?

- A. Diuretic-induced electrolyte derangements — furosemide causes renal sodium and potassium wasting, producing hyponatremia and hypokalemia manifesting as confusion, lethargy, and muscle cramps
- B. Morphine toxicity causing SIADH with secondary electrolyte disturbances
- C. Heart failure progression causing neurohormonal-mediated dilutional hyponatremia
- D. Hepatic encephalopathy from undiagnosed concurrent liver disease

123. A hospice physician counsels the family about planned ventilator withdrawal. The patient is on FiO<sub>2</sub> 100%, PEEP 16, vasopressors, minimal spontaneous respiratory effort. The family asks, "How long after you turn off the machine?" Which response is most appropriate?

- A. "He will die within exactly 3 minutes in all ventilator withdrawal cases."
- B. "Given his high ventilatory requirements, minimal independent breathing, and hemodynamic instability, death is likely within minutes to hours. I cannot predict the exact time, but we will keep him comfortable and be here with you."
- C. "He will survive several days because the body has significant respiratory reserves."
- D. "It is completely impossible to provide any estimation about time course."

124. A 57-year-old woman with advanced ovarian cancer on hospice asks, "Can I travel to visit my daughter in another state?" Which response best reflects hospice philosophy?

- A. "Hospice patients cannot leave their registered residence under any circumstances."
- B. "You would need to revoke hospice before traveling across state lines."
- C. "Travel is medically inadvisable for all terminal patients regardless of clinical status."
- D. "Yes — we can coordinate care, ensure adequate medications, arrange hospice services at your destination, and plan for contingencies. Let's make this happen."

125. A 65-year-old man with advanced colon cancer on hospice develops MBO. He is not surgical. The standard medical management combination for inoperable MBO is which of the following?

- A. Metoclopramide plus high-dose oral laxatives for prokinetic bowel stimulation
- B. TPN as primary intervention to maintain nutritional status during obstruction

C. Octreotide (reducing GI secretions) plus glycopyrrolate (reducing secretions and colic) plus dexamethasone (reducing peritumoral edema) plus parenteral opioids for pain

D. High-fiber diet with aggressive hydration for natural resolution

126. A palliative care team cares for a 70-year-old man with advanced gastric cancer. His 15-year-old daughter has been withdrawn, refusing visits, expressing hopelessness to her counselor. Grades have dropped. Which hospice response is most appropriate?

A. Arrange for the hospice social worker or bereavement coordinator to meet the daughter, assess her emotional state and safety (hopelessness warrants screening), and facilitate referral for adolescent counseling

B. Defer entirely to the school counselor without hospice involvement

C. Inform the mother that her daughter needs help and leave the referral to the family

D. Report to child protective services for suspected neglect

127. A 62-year-old woman with advanced breast cancer develops back pain worsening when supine, bilateral leg weakness (3/5), and urinary retention over 48 hours. Dexamethasone given. MRI: single-level epidural mass at T7. Pre-event ECOG 1, expected survival 8 months. The most critical factor determining neurologic outcome is which of the following?

A. The radiation fractionation schedule selected by radiation oncology

B. Her neurologic status at treatment initiation — ambulatory patients have >80% chance of remaining ambulatory; paraplegic patients have <10% chance of regaining function

C. The histologic type and expected radiosensitivity of her breast cancer

D. Her age as the sole determinant of neurologic recovery

128. A hospice program is audited. GIP was billed for a patient admitted for "caregiver respite needs." This billing error exists because of which of the following?

A. GIP can only be provided in acute care hospitals, not hospice inpatient units

B. GIP requires a minimum 14-day stay not met in this case

C. GIP requires 30-day CMS pre-authorization not obtained

D. GIP is for acute symptom management — caregiver respite is the indication for IRC, not GIP; billing the higher-reimbursement GIP for a respite need constitutes incorrect billing

129. A 73-year-old man with metastatic prostate cancer on hospice has painful bone metastases. His physician recommends a bone-targeted agent acting through RANKL inhibition. Which agent uses this mechanism?

A. Zoledronic acid, a bisphosphonate inhibiting osteoclasts via the mevalonate pathway

B. Calcitonin, directly inhibiting osteoclasts through calcitonin receptor activation

C. Denosumab — a monoclonal antibody blocking RANKL to prevent osteoclast differentiation and activation

D. Pamidronate, a first-generation IV bisphosphonate

130. A 59-year-old man with advanced pancreatic cancer on hospice develops hypercalcemia (corrected calcium 15.3 mg/dL) with confusion, constipation, nausea, and polyuria. After IV saline, which provides the most sustained calcium reduction?

A. Zoledronic acid 4 mg IV — inhibiting osteoclast-mediated bone resorption with onset 24–48 hours, nadir 4–7 days, and duration 2–4 weeks

B. Calcitonin for rapid and sustained calcium lowering over weeks

C. Furosemide for forced calciuresis as the primary strategy

D. Oral phosphate to bind calcium in the GI tract

131. A hospice nurse visits a 78-year-old woman with end-stage COPD. Her husband, the sole caregiver, has lost weight with dark circles under his eyes and says, "I'm fine — just focus on her." The most appropriate initial response is which of the following?

A. Focus exclusively on the patient because the husband is not the hospice patient

B. Gently express concern, normalize caregiving difficulty, explore respite or additional support, and communicate to the IDT — caregiver collapse directly threatens the patient's care plan

C. Arrange mandatory hospitalization of the husband for evaluation

D. Document without action and reassess at next visit in two weeks

132. A 66-year-old woman with advanced ovarian cancer on hospice has refractory ascites from peritoneal carcinomatosis (NOT portal hypertension). During home drainage, her husband drains 3 liters in 20 minutes. She becomes dizzy and hypotensive (BP 80/46). The most likely cause and preventive counseling are which of the following?

- A. Peritonitis from catheter contamination requiring emergency antibiotics
- B. Intra-abdominal hemorrhage from catheter erosion requiring surgical consultation
- C. Tension pneumoperitoneum from air entering the abdomen through the catheter
- D. Rapid large-volume drainage caused hemodynamic instability — future drainages should be performed more slowly (60–90 minutes) with the patient reclined

133. A 54-year-old man with advanced melanoma on hospice develops a painful fungating chest wall lesion with severe malodor from anaerobic colonization. Which topical agent is most effective?

- A. Silver sulfadiazine cream for broad-spectrum coverage
- B. Hydrogen peroxide 3% for wound irrigation twice daily
- C. Topical metronidazole 0.75% gel — specifically targeting anaerobic bacteria producing the malodor, with dramatic improvement often within 24–48 hours
- D. Povidone-iodine applied to the wound periphery for antisepsis

134. A 71-year-old man with end-stage liver disease on hospice is on lactulose for encephalopathy and morphine for pain. The pharmacy questions compatibility. Which statement is most accurate?

- A. Lactulose serves a dual purpose — treating encephalopathy (reducing ammonia) AND functioning as an osmotic laxative counteracting opioid-induced constipation, making the medications complementary
- B. Lactulose is contraindicated with opioids due to severe electrolyte disturbance risk
- C. Morphine must be stopped before lactulose can be started
- D. Lactulose chemically inactivates morphine through GI binding

135. A 63-year-old woman with advanced lung cancer tells her chaplain, "I feel like God abandoned me. Why is this happening?" The most appropriate chaplain response is which of the following?

- A. Provide theological reassurance that God does not punish with illness
- B. Explore her feelings of abandonment without trying to "fix" them, validate her spiritual struggle, facilitate engagement with her faith tradition, and offer pastoral presence
- C. Prescribe an anxiolytic to reduce her distress
- D. Refer to psychiatry because this intensity of spiritual distress indicates depression

136. A 69-year-old man with advanced COPD on hospice has persistent hiccups for six days. Medications include dexamethasone 4 mg daily (started three weeks ago), morphine, ondansetron, senna-docusate. The temporal relationship to dexamethasone is clear. The most appropriate management is which of the following?

- A. Increase dexamethasone because higher doses paradoxically suppress hiccups
- B. Add chlorpromazine 50 mg TID without addressing the dexamethasone
- C. Discontinue dexamethasone entirely without considering impact on other symptoms
- D. Reduce dexamethasone dose or switch corticosteroids, and initiate baclofen 5 mg TID for hiccup-specific treatment

137. A 57-year-old woman with advanced sarcoma on hospice is on morphine SR 120 mg every 12 hours and duloxetine 60 mg daily. Tramadol is added for new pain. Within 48 hours: agitation, hyperthermia, clonus, diaphoresis. After discontinuing serotonergic agents, which specific antidote should be given?

- A. Naloxone 0.4 mg IV for opioid-mediated serotonergic excess
- B. Dantrolene IV for the muscular component
- C. Cyproheptadine (serotonin antagonist) 12 mg orally initially, then 4–8 mg every 6 hours — the specific pharmacologic antidote for serotonin syndrome
- D. Bromocriptine as a dopamine agonist to counterbalance serotonin

138. A 72-year-old man with end-stage heart failure on hospice has an ICD permanently reprogrammed to disable shocks. The family asks whether the magnet placed earlier is still needed. Which is most accurate?

- A. The magnet can be removed — permanent reprogramming disabled shocks definitively; the magnet provided only temporary suspension before reprogramming and is no longer needed
- B. The magnet must remain permanently because reprogramming only partially disables shocks
- C. The magnet should remain as backup in case reprogramming reverses
- D. The magnet cannot be removed until the device is surgically explanted

139. A 61-year-old woman with advanced breast cancer on hospice has CIPN neuropathic pain. She is on tamoxifen. Which adjuvant analgesic should be AVOIDED?

- A. Gabapentin, which has no CYP interactions and is safe with tamoxifen
- B. Duloxetine — it inhibits CYP2D6, the enzyme converting tamoxifen to endoxifen, potentially reducing tamoxifen's anticancer efficacy
- C. Pregabalin, which is renally excreted without hepatic metabolism
- D. Nortriptyline at low doses for combined pain and sleep benefit

140. A hospice bereavement coordinator contacts the 69-year-old husband of a patient who died nine months ago. He reports resuming activities but still cries daily and sometimes hears his wife's voice. He asks, "Am I going crazy?" Which interpretation is most accurate?

- A. Daily crying at nine months indicates prolonged grief disorder requiring CGT
- B. The auditory experiences are pathognomonic for psychosis requiring antipsychotics
- C. His grief has become stuck and he needs directive counseling to move forward
- D. His symptoms are within normal grief — hearing a deceased spouse is reported by 30–60% of bereaved people, is NOT a hallucination or psychosis, and normalizing this experience reduces his fear

141. A 64-year-old man with advanced colon cancer on hospice develops seizures from brain metastases. Given his polypharmacy (opioids, antiemetics, corticosteroids), which anticonvulsant is most appropriate for maintenance?

- A. Phenytoin for established efficacy and long clinical track record
- B. Carbamazepine for additional neuropathic pain benefit

C. Levetiracetam — minimal hepatic metabolism, few drug interactions, IV and liquid formulations, ideal for palliative polypharmacy and patients who may lose swallowing ability

D. Valproic acid for broad-spectrum activity

142. A 73-year-old woman with advanced dementia (FAST 7E) on hospice has been non-verbal for ten months. During care, the CNA observes grimacing, moaning, and guarding with hip movement. PAINAD score 7/10. No analgesic medications. The most appropriate initial intervention is which of the following?

A. Scheduled acetaminophen trial (650 mg every 6 hours via rectal or crushed route) with PAINAD reassessment after 48–72 hours — the safest first-line approach for suspected pain in non-verbal dementia

B. Morphine 10 mg SC every 4 hours given the high PAINAD score

C. Comprehensive imaging before initiating any treatment

D. Psychiatry referral for behavioral evaluation rather than pain management

143. A 59-year-old man with advanced gastric cancer on hospice has constipation refractory to senna 4 BID and PEG daily. No BM in 11 days. No impaction, no obstruction. The most appropriate next step is which of the following?

A. High-fiber diet with increased fluids as definitive treatment

B. Methylnaltrexone 12 mg SC — a PAMORA blocking GI mu receptors without crossing the blood-brain barrier, indicated for OIC refractory to maximal conventional therapy

C. Discontinue opioids to eliminate constipation

D. Add docusate as the missing component

144. A 66-year-old woman with advanced pancreatic cancer on hospice develops nausea worst after meals with early satiety and bloating. Not positional. No obstruction. The most direct antiemetic is which of the following?

A. Scopolamine for vestibular nausea

B. Ondansetron for serotonin-mediated GI nausea

C. Dexamethasone for centrally mediated ICP-related nausea

D. Metoclopramide 10 mg before meals — combining antiemetic D2 antagonism with prokinetic 5-HT4 agonism to improve opioid-related gastroparesis

145. A 70-year-old man with advanced lung cancer on hospice has been on morphine for five months with good pain control. He takes senna-docusate daily with regular BMs. He asks about stopping the laxative. Which advice is most accurate?

A. He can safely stop after five months of regular bowel function

B. Switch to fiber for a more natural approach

C. Continue the laxative — tolerance to opioid-induced constipation does NOT develop, and constipation will return if stopped

D. Stop senna but keep docusate alone

146. A hospice nurse visits a 77-year-old man with end-stage heart failure who is actively dying. Mottling to mid-thighs, absent radial pulses, anuria 14 hours, mandibular breathing, unresponsive. The nurse should communicate which of the following?

A. Death is likely within hours to days — these converging signs represent progressive organ failure of active dying; the family should be supported in being together during this time

B. The patient needs hospital transfer for acute kidney injury evaluation

C. The signs are inconclusive — reassess in 24 hours

D. The mottling will resolve with warming blankets

147. A 62-year-old woman with advanced ovarian cancer on hospice has malignant ascites from peritoneal carcinomatosis (NOT portal hypertension). After draining 5 liters, she asks about albumin. Which is most accurate?

A. Albumin is always required after draining more than 3 liters

B. Albumin is NOT routinely required for malignant ascites from peritoneal carcinomatosis — it is standard for cirrhotic portal hypertensive ascites where post-paracentesis circulatory dysfunction is a specific concern

- C. Albumin must be given before drainage to improve oncotic gradient
- D. Albumin is mandatory for all home-based drainage procedures

148. A 67-year-old man with advanced colon cancer on hospice develops nausea worsened by head movement and position changes. Not meal-related. Which antiemetic class is most appropriate?

- A. Dopamine antagonist (haloperidol) for CTZ nausea
- B. Prokinetic (metoclopramide) for gastroparesis
- C. Serotonin antagonist (ondansetron) for peripheral GI nausea
- D. Antihistamine or anticholinergic (meclizine or scopolamine) for vestibular-mediated nausea — movement and position-change pattern is the diagnostic hallmark

149. A 54-year-old man with advanced melanoma on ipilimumab develops acute fatigue, hypotension (BP 66/36), nausea, and hypoglycemia. Morning cortisol undetectable. Which urgent intervention is required?

- A. Aggressive IV fluids alone without hormone replacement
- B. High-dose prednisone for presumed immune-related hepatitis
- C. IV hydrocortisone 100 mg for adrenal insufficiency from immune-related hypophysitis or adrenalitis — undetectable cortisol with hypotension and hypoglycemia requires urgent corticosteroid replacement
- D. Thyroid hormone replacement for presumed hypothyroidism

150. A 71-year-old man with advanced COPD on hospice has been on morphine. SpO<sub>2</sub> is 83% on 2 L/min. Despite morphine and fan, dyspnea remains severe. The family asks about increasing oxygen. Which recommendation is most evidence-based?

- A. This patient IS hypoxemic (SpO<sub>2</sub> 83%, below 90%) — documented hypoxemia may benefit from increased supplemental oxygen for dyspnea relief, unlike non-hypoxemic patients where oxygen adds no benefit
- B. Discontinue oxygen because it never benefits dyspnea
- C. Replace with heliox for all COPD patients
- D. Increase only if the patient specifically requests more

151. A hospice physician reviews a death certificate listing "Cardiac arrest" as cause of death. This is problematic because of which of the following?

- A. It is only appropriate when witnessed by a cardiologist
- B. "Cardiac arrest" is the mechanism common to all deaths — provides no disease-specific information; the certificate should specify the actual disease process
- C. It must include the specific terminal ECG rhythm
- D. It is acceptable for all deaths and requires no correction

152. A 59-year-old man with advanced melanoma on nivolumab develops fatigue, constipation, cold intolerance, weight gain. TSH 54 mIU/L, free T4 undetectable. This irAE is managed by which of the following?

- A. High-dose corticosteroids and permanent immunotherapy discontinuation
- B. Urgent surgical thyroidectomy
- C. Radioactive iodine ablation
- D. Levothyroxine replacement — immune-related hypothyroidism is managed with hormone replacement and typically does NOT require immunotherapy discontinuation

153. A palliative care physician meets a 67-year-old man with advanced gastric cancer. He asks, "How much time do I have?" Which response is most appropriate?

- A. "Based on statistics, you have exactly 4.2 months."
- B. "Medicine cannot tell you anything about prognosis."
- C. "I wish I could give an exact number, but single-point estimates are almost always inaccurate. We're likely looking at weeks to a few months. I want to help you plan for what matters most."
- D. "You have plenty of time — don't worry."

154. A 63-year-old woman with advanced breast cancer on hospice develops a new vertebral compression fracture at T12 with severe pain (9/10). ECOG 2, expected survival 5 months. In addition to opioids, which procedure provides the most rapid targeted relief?

- A. Vertebroplasty or kyphoplasty — providing relief in 70–90% of patients within 24–72 hours through mechanical stabilization
- B. Palliative radiation (single 8 Gy) with expected onset in 2–4 weeks
- C. Epidural corticosteroid injection at T12
- D. External thoracolumbar brace as primary analgesic intervention

155. A hospice social worker conducts bereavement follow-up with the 49-year-old daughter of a patient who died four months ago. She has resumed activities but experiences sudden grief waves. She asks, "Why does this keep happening?" Which explanation is most accurate?

- A. Continuing waves at four months indicate prolonged grief disorder
- B. Grief waves — sudden intense surges triggered by sensory reminders — are completely normal and can persist for months to years; functioning well between waves indicates healthy adaptation
- C. The episodes suggest a developing anxiety disorder
- D. She should avoid all triggering stimuli to prevent the waves

156. A 58-year-old woman with advanced cervical cancer on hospice has refractory pelvic pain. Her specialist recommends a superior hypogastric plexus block. This targets which structures?

- A. Upper abdominal visceral organs via T12-L1 ganglia (celiac plexus territory)
- B. Perineum and rectum via the sacrococcygeal ganglion impar
- C. Lower extremities via the lumbar sympathetic chain
- D. Pelvic visceral organs (uterus, cervix, bladder, rectum) — the superior hypogastric plexus transmits visceral afferent pain from these structures

157. A 72-year-old man with end-stage liver disease on hospice has worsening encephalopathy despite lactulose. His physician considers adding rifaximin. The pharmacy questions coverage. Which principle guides this decision?

- A. Rifaximin is an antibiotic and all antibiotics are excluded from the hospice benefit
- B. Rifaximin cannot be prescribed by a hospice physician

C. If rifaximin reduces confusion and agitation (symptom relief), it is consistent with comfort goals and may be covered under the per diem as a medication related to the terminal diagnosis

D. Rifaximin requires 30-day Medicare prior authorization

158. A 70-year-old woman with advanced breast cancer on hospice develops a new DVT causing significant right leg pain and swelling. Prognosis 3 months. Comfort measures. Which anticoagulation is most appropriate?

A. Treat with SC LMWH if symptoms are causing distress — the decision serves comfort goals, not a blanket policy

B. Anticoagulation is prohibited for all hospice DVT patients

C. Transfer to hospital for IV heparin and vascular surgery

D. Compression stockings as sole intervention

159. A 64-year-old man with advanced lung cancer on hospice tells his nurse, "I've been thinking about taking all my morphine at once. I haven't done anything — just the thought." Pain 4/10. No active plan. Which is the most appropriate initial response?

A. Report to law enforcement for suicidal ideation

B. Take the statement seriously — explore driving factors (fear, depression, undertreated pain), assess for depression, optimize symptoms, secure medications, involve the IDT

C. Remove all opioids immediately without replacement

D. Dismiss as a normal expression requiring no attention

160. A palliative care physician meets a family before delivering a medical update about a 74-year-old man in the ICU. The physician asks, "What is your understanding of what's been happening?" This serves which purpose?

A. Shifting responsibility for the update to the family

B. Testing the family's medical knowledge level

C. Determining whether they can participate in decisions

D. Assessing current understanding — the "Perception" step of SPIKES — revealing gaps, misconceptions, and a starting point for the update

161. A 66-year-old woman with advanced pancreatic cancer on hospice has been on dexamethasone 8 mg daily for six weeks. She develops proximal muscle weakness. This is most consistent with which of the following?

A. Spinal cord compression requiring emergent MRI

B. Brain metastasis progression causing motor deficits

C. Steroid-induced proximal myopathy — dose-dependent, duration-dependent, affecting hip and shoulder girdle muscles, distinguished from cord compression by proximal pattern without sensory level

D. Deconditioning requiring physical therapy only

162. A 61-year-old woman with advanced ovarian cancer on hospice has MBO managed medically. Despite octreotide, glycopyrrolate, and dexamethasone, she vomits 500 mL daily. A venting gastrostomy is placed. She asks if she can eat. Which is most accurate?

A. She may eat and drink small amounts for pleasure — food enters the stomach, is experienced (taste, texture), then drains through the gastrostomy rather than entering the obstructed bowel

B. She must remain NPO because any intake worsens the obstruction

C. She may eat full meals because the gastrostomy bypasses the obstruction

D. Clear liquids only because solid food blocks the gastrostomy tube

163. A hospice aide notices handgrip-pattern bruising on a 79-year-old patient with dementia. The caregiver son has a substance use history. The aide reports to the nurse. Which action is most appropriate?

A. Document and reassess at the next scheduled visit

B. Assess for elder abuse — private evaluation, look for additional signs, document, report to APS if suspected; all providers are mandatory reporters

C. Confront the son directly about the bruising

D. Attribute bruising to anticoagulant therapy without investigation

164. A 69-year-old man with advanced prostate cancer on hospice has diffuse bone metastases. His physician recommends adding a non-opioid specifically targeting bone pain. Which is most appropriate?

- A. Acetaminophen 1000 mg every 6 hours for general augmentation
- B. Gabapentin for neuropathic modulation at the bone-nerve interface
- C. Duloxetine for dual analgesic and antidepressant benefit
- D. An NSAID (celecoxib or ibuprofen) — specifically effective through prostaglandin synthesis inhibition at the metastatic site, where tumor-produced prostaglandins sensitize nociceptors

165. A 73-year-old man with end-stage heart failure on hospice has a mechanical mitral valve on warfarin for 20 years. Prognosis 3 weeks. Unlike AF alone, why does his warfarin warrant continuation?

- A. Warfarin provides symptom relief for heart failure dyspnea
- B. Medicare mandates continuation for mechanical valve patients
- C. Mechanical valves without anticoagulation carry significant, immediate risk of valve thrombosis and embolization — short-term risk is much higher than with AF alone
- D. Stopping warfarin causes immediate valve calcification

166. A hospice program reviews data: 44% die within 7 days, median LOS 9 days. This most strongly indicates which quality concern?

- A. Late referrals deny patients the full benefit of hospice — symptom management, psychosocial support, spiritual care, and caregiver preparation require time
- B. The program enrolls patients too early
- C. Death rate indicates overly aggressive symptom management
- D. Referral patterns meet benchmarks

167. A palliative care physician has cared for a 62-year-old woman with lung cancer for six months. She dies peacefully. The physician feels tearful reviewing the chart. A colleague notices. The most supportive response is which of the following?

- A. "You need a leave of absence — emotional responses indicate unfitness."

- B. "It sounds like a normal grief response to losing a patient you cared about. That's a sign of meaningful engagement, not weakness. Would it help to talk?"
- C. "Leave your feelings at the door — boundaries require detachment."
- D. "I'll refer you for mandatory psychiatric evaluation."

168. A 55-year-old man with advanced gastric cancer on hospice has pain with somatic (deep, aching) and neuropathic (burning, shooting) components from tumor compressing the femoral nerve. His opioid partially relieves aching but not burning. Which strategy best addresses both?

- A. Increase opioid alone because higher doses treat all pain equally
- B. Discontinue opioids and use gabapentin monotherapy
- C. Replace all medications with topical lidocaine
- D. Combine adequate opioid for somatic component with an adjuvant (gabapentin or duloxetine) for neuropathic component — neither alone optimally addresses both mechanisms

169. A 72-year-old man with advanced COPD on hospice has persistent dyspnea despite morphine 15 mg every 4 hours. SpO<sub>2</sub> 92%. Prominent anxiety with accessory muscle use. Morphine given 30 minutes ago with minimal improvement. Which next step is most appropriate?

- A. Increase O<sub>2</sub> to 5 L/min to achieve saturation above 95%
- B. Switch to hydromorphone for superior dyspnea efficacy
- C. Add lorazepam 0.5–1 mg SL for the anxiety-breathlessness cycle — when opioid alone fails and anxiety is prominent, benzodiazepine addresses the component opioid cannot control
- D. Nebulized albuterol as sole additional intervention

170. A 67-year-old woman with advanced breast cancer on hospice has severe right upper quadrant pain from hepatic capsule distension. Her opioid provides partial relief. Which non-opioid most directly targets the mechanism?

- A. Dexamethasone 8 mg daily — reducing hepatic inflammation and peritumoral edema directly decreases capsular stretch
- B. Gabapentin for neuropathic modulation

- C. An NSAID for prostaglandin-mediated inflammation
- D. Acetaminophen for general augmentation

171. A 65-year-old man with advanced hepatocellular carcinoma (Child-Pugh C) requires opioid therapy. GFR 72 (normal). He starts morphine at a reduced oral dose. Why must the dose be reduced?

- A. Morphine is entirely renally excreted and bilirubin interferes with clearance
- B. Reduced hepatic first-pass metabolism increases oral morphine bioavailability — more drug reaches systemic circulation at any given dose, effectively increasing exposure
- C. Morphine binds to bilirubin creating toxic conjugates
- D. Ascites dilutes morphine requiring lower initial loading doses

172. A hospice bereavement coordinator contacts the 67-year-old wife of a patient who died six months ago. She has returned to activities but cries daily and reaches for her husband in bed. She asks, "Shouldn't I be over this?" Which response is most appropriate?

- A. "Six months is long — I recommend grief counseling for the daily crying."
- B. "Daily crying suggests developing prolonged grief disorder."
- C. "Stay busy and avoid thinking about him."
- D. "What you describe is completely normal. There is no timeline for grief. Crying daily at six months is expected. Your return to activities shows healthy adaptation."

173. A 59-year-old man with advanced colon cancer on hospice has new confusion, nausea, constipation, polyuria. Corrected calcium 14.9 mg/dL. Family attributed symptoms to disease progression. The most important clinical implication is which of the following?

- A. The hypercalcemia is incidental and unrelated to symptoms
- B. The calcium is mildly elevated and will self-correct
- C. Hypercalcemia explains multiple symptoms simultaneously — a potentially reversible cause of suffering; treating it (if consistent with goals) could improve confusion, nausea, constipation, and polyuria at once

D. Treatment is categorically prohibited in hospice

174. A 56-year-old woman with advanced cervical cancer on hospice has severe perineal pain from sacral nerve invasion. Her specialist recommends a ganglion impar block. The target and indication are which of the following?

A. The ganglion impar is at the sacrococcygeal junction, transmitting visceral pain from perineum, rectum, anus, and vulva — the targeted block for her perineal cancer pain

B. It is at T12-L1 for upper abdominal pain

C. It is a cervical ganglion for upper extremity pain

D. It is in the lumbar plexus for leg pain

175. A hospice program's volunteer utilization is 4.1%. Under Medicare COP, which is the significance?

A. Compliant — the minimum is 3%

B. Below the 5% Medicare minimum — must increase volunteer services to achieve compliance

C. Exceeds requirements — no minimum exists

D. Volunteer utilization is recommended but not mandatory

176. A 70-year-old man with advanced prostate cancer on hospice develops acute back pain, bilateral weakness, urinary retention. MRI: single-level cord compression at T10. Pre-event ECOG 1, expected survival 6 months. Based on Patchell trial, the best treatment is which of the following?

A. Radiation alone as universal standard for all MSCC

B. Corticosteroids alone as definitive management

C. Comfort measures only because recovery is impossible once deficits appear

D. Surgical decompression followed by radiation — superior to radiation alone for single-level compression in patients with good ECOG and survival >3 months

177. A 64-year-old woman with advanced ovarian cancer on hospice has severe epigastric pain from pancreatic invasion radiating to the back. High-dose opioids with persistent pain. Her specialist recommends celiac plexus neurolysis. Which is most accurate?

- A. Should be last resort only after all other options fail
- B. Relief lasts only 48 hours requiring weekly repetition
- C. Achieves significant relief in 70–90% of pancreatic cancer patients, substantially reduces opioid needs, and evidence supports early consideration
- D. Contraindicated in patients already on opioids

178. A 73-year-old man with end-stage COPD is dying at home. His breathing has become agonal — gasping every 30–40 seconds. His wife asks, "Is he suffering?" Which response is most accurate?

- A. "The gasping is a brainstem reflex — not conscious effort. Your husband is not aware of these movements and is not suffering. This is normal and expected in the final stage of dying."
- B. "He is struggling to breathe and needs increased medications."
- C. "These are seizures requiring anticonvulsant medication."
- D. "Call 911 — agonal breathing indicates a cardiac emergency."

179. A 59-year-old woman with advanced ovarian cancer on hospice asks about MAID. She is in a legal state, pain controlled, not depressed, wants "control over timing." The most appropriate initial response is which of the following?

- A. Provide prescription immediately since she meets criteria
- B. Explore driving factors deeply, assess depression thoroughly, ensure she understands legal requirements, and either participate or refer if the physician has conscientious objection
- C. Refuse discussion because it conflicts with the physician's beliefs
- D. Inform her MAID is unavailable to hospice patients

180. A 72-year-old man with advanced lung cancer on hospice has been on morphine and gabapentin 600 mg TID. Confusion and ataxia worsened over a week. Creatinine rose from 1.1 to 3.1 mg/dL. Which medication requires MOST urgent adjustment?

- A. Morphine is the sole priority
- B. Both require identical urgency
- C. Neither is affected by renal function
- D. Gabapentin — entirely renally excreted, it accumulates most rapidly with declining GFR; while morphine also warrants attention, gabapentin's exclusively renal clearance makes adjustment most urgent

181. A 71-year-old man with advanced heart failure on hospice has been declining. Yesterday he was suddenly alert, ate a meal, talked to family. Today he is unresponsive. This is best described as which of the following?

- A. Evidence of recovery requiring hospital transfer
- B. Medication interaction causing temporary alertness
- C. A terminal rally — transient improvement hours to days before death, not indicating recovery, typically followed by rapid decline
- D. Resolution of concurrent infection

182. A 61-year-old woman with advanced ovarian cancer on hospice develops a pathologic humerus fracture. ECOG 2, expected survival 4 months. The most appropriate management is which of the following?

- A. Surgical fixation followed by palliative radiation — restoring function and preventing non-healing in a patient with adequate performance status
- B. Conservative management with sling and opioids
- C. Radiation alone without surgery
- D. Amputation to eliminate pain

183. A hospice IDT reviews a newly enrolled 77-year-old man with advanced heart failure. Medicare COP require the IDT to include, at minimum, which core members?

- A. Physician, RN, physical therapist, pharmacist

- B. Physician, NP, occupational therapist, dietitian
- C. Physician, RN, and chaplain only
- D. Correction needed. Let me match to key B=183.

183. A hospice IDT reviews a newly enrolled 77-year-old man with advanced heart failure. Medicare COP require the IDT to include which minimum core members?

- A. Physician, RN, physical therapist, and pharmacist
- B. Physician, RN, social worker, and pastoral or other counselor — the four mandatory core members under Medicare regulations
- C. Physician, NP, occupational therapist, and dietitian
- D. Physician, RN, and chaplain only — social work is optional

184. A 57-year-old man with advanced esophageal cancer has complete dysphagia. He is on morphine SR 90 mg every 12 hours (180 mg oral/day). Converting to SC hydromorphone:  $180 \div 3 = 60$  mg parenteral morphine;  $60/10 \times 1.5 = 9$  mg parenteral hydromorphone; 25% reduction:  $9 \times 0.75 = 6.75$  mg/day. The correct hourly rate is which of the following?

- A. 0.56 mg/hour (no reduction applied)
- B. 0.17 mg/hour (double reduction)
- C. 1.12 mg/hour (incorrect conversion)
- D. Approximately 0.28 mg/hour ( $6.75 \div 24$  — the correct calculation)

185. A 69-year-old man with advanced lung cancer on hospice transitions from IV hydromorphone 0.5 mg/hour (12 mg/24h IV) to oral hydromorphone at home. Using the 5:1 parenteral-to-oral ratio, the correct daily oral dose is which of the following?

- A. 12 mg oral/day (incorrect 1:1)
- B. 36 mg oral/day (incorrect 3:1)
- C. 60 mg oral/day ( $12 \times 5 = 60$  mg — the correct 5:1 ratio for hydromorphone)
- D. 24 mg oral/day (incorrect 2:1)

186. A palliative care team cares for a Hindu patient nearing death. His wife mentions cultural preferences for post-death care. Which practice is most consistent with Hindu tradition?

- A. Hindu tradition generally favors cremation, with family members potentially washing and preparing the body with specific prayers and rituals
- B. Immediate embalming with multi-day visitation
- C. Body should not be left alone with burial within 24 hours (Jewish shemira)
- D. Plain pine casket without cosmetic preparation

187. A 63-year-old man with advanced colon cancer on hospice has been on warfarin for AF. Prognosis 2 weeks. No stroke history. The most appropriate anticoagulation management is which of the following?

- A. Continue warfarin because AF requires lifelong therapy
- B. Discontinue warfarin — absolute risk reduction over 2 weeks is negligible while bleeding risk continues and monitoring burden is unjustified
- C. Switch to a direct oral anticoagulant
- D. Increase warfarin for enhanced protection

188. A 56-year-old woman with advanced sarcoma on hospice is on OME 600 mg/day. Her specialist recommends methadone rotation. Which unique property requires specific monitoring?

- A. Direct hepatotoxicity requiring weekly LFT monitoring
- B. Complete absence of respiratory depression
- C. Severe thrombocytopenia requiring CBC monitoring
- D. QTc prolongation with torsades risk — requiring ECG at baseline, after stabilization, and periodically; the only common opioid with this cardiac risk

189. A 70-year-old woman with advanced pancreatic cancer on hospice has refractory pelvic pain. Her specialist recommends an intrathecal pump. Current OME 600 mg. Using the 300:1 ratio, the daily intrathecal dose is approximately which of the following?

- A. 60 mg (incorrect 10:1)
- B. 20 mg (incorrect 30:1)
- C. Approximately 2 mg intrathecal morphine per day ( $600 \div 300 = 2$  mg — correct calculation)
- D. 6 mg (incorrect 100:1)

190. A hospice program reviews Medicare bereavement requirements. How long must bereavement support be provided?

- A. At least 13 months — including periodic contacts, memorial events, support groups, and counseling referrals
- B. Services end on the day of death
- C. Single contact at 30 days only
- D. Bereavement is recommended but not required

191. A 61-year-old man with advanced gastric cancer on hospice develops acute pulmonary edema. On morphine and furosemide 40 mg daily. Crackles, JVD, SpO<sub>2</sub> 79%. Comfort measures, DNR. The most appropriate management is which of the following?

- A. Continue medications unchanged
- B. Morphine bolus AND furosemide increase to 80 mg IV — addressing both symptom and treatable cause consistent with comfort goals
- C. Morphine alone without diuretic adjustment
- D. Hospital transfer for BiPAP

192. A 64-year-old woman with advanced breast cancer on hospice develops opioid-induced pruritus after morphine dose increase. Bilirubin and renal function normal. After failing antihistamines, the best rotation is which of the following?

- A. Codeine for lower histamine release
- B. Hydromorphone with identical histamine properties
- C. Meperidine, historically recommended

D. Fentanyl — minimal histamine-releasing properties make it the preferred rotation when pruritus is the indication

193. A 73-year-old man with end-stage heart failure on hospice has an ICD. He agrees to deactivate shocks but maintain pacing. Which is most accurate?

A. Shocks and pacing cannot be independently controlled

B. Deactivating shocks automatically disables pacing

C. Shock and pacing functions can be independently programmed — deactivating shocks while maintaining pacing is standard, preventing painful shocks while preserving beneficial pacing

D. Maintaining pacing is incompatible with hospice

194. A 59-year-old man with advanced lung cancer on hospice has cancer-related fatigue. Hemoglobin 10.8, thyroid normal, depression negative. Non-pharmacologic measures implemented. Which medication has strongest evidence?

A. Methylphenidate 5 mg morning and noon — CNS stimulant with rapid onset and strongest evidence for cancer-related fatigue

B. Modafinil for sustained wakefulness

C. Dexamethasone for long-term energy

D. ESA to correct mild anemia

195. A 66-year-old woman with advanced ovarian cancer on hospice asks, "Can I go to my granddaughter's recital?" The nurse's response should reflect which principle?

A. "Travel is too risky for your condition."

B. "Absolutely — we'll plan medications, arrange equipment, ensure comfort. Living fully on hospice is what we support."

C. "You need medical clearance first."

D. "Events interfere with nursing schedules."

196. A hospice nurse educates a family about the death rattle. Glycopyrrolate given 2 hours ago, rattle persists. Which explanation is most accurate?

- A. Glycopyrrolate failed — perform deep suctioning
- B. A different anticholinergic must be substituted
- C. The rattle indicates pneumonia requiring antibiotics
- D. Anticholinergics prevent NEW secretions but cannot dry EXISTING pooled secretions — noise persists until reabsorbed or repositioned; the patient is likely unaware

197. A 62-year-old woman with advanced lung cancer tells her chaplain, "I don't believe in God. I don't need spiritual care." The most appropriate response is which of the following?

- A. "I'll note your decline and won't visit again."
- B. "Everyone needs spiritual care — let me explain why."
- C. "Spiritual care addresses meaning, purpose, legacy — not just religion. I'm here for whatever matters to you without imposing beliefs."
- D. "Perhaps reconsider given your situation."

198. A palliative care physician meets a family about a 69-year-old man with end-stage heart failure in the ICU. The son angrily says, "You're giving up on him!" The most effective response is which of the following?

- A. "I can hear how frightened you are — you love your father. Can you tell me what worries you most?"
- B. "Let me show you the data so you understand why treatment is futile."
- C. "You're welcome to get a second opinion."
- D. "The facts are clear — we need to accept reality."

199. A 55-year-old woman with advanced cervical cancer on hospice has severe neuropathic pain — burning, shooting — from sacral nerve invasion. Opioid provides partial relief. Which adjuvant should be added?

- A. NSAID for inflammatory pain at the tumor-nerve interface
- B. Gabapentinoid (gabapentin or pregabalin) or SNRI (duloxetine) — first-line adjuvant classes for neuropathic pain
- C. Benzodiazepine for anxiety amplifying pain perception
- D. Acetaminophen-codeine combination for enhanced analgesia

200. A 71-year-old man with advanced COPD on hospice develops acute dyspnea. SpO<sub>2</sub> 76%, RR 34, severe anxiety. POLST: comfort measures only. The most appropriate immediate intervention is which of the following?

- A. Call 911 for emergency intubation
- B. Withhold opioids due to respiratory depression concern
- C. Oxygen only and observe for 60 minutes
- D. Morphine bolus, midazolam for anxiety, increase O<sub>2</sub> (he IS hypoxemic), position upright, fan to face — comprehensive symptom management consistent with comfort goals

201. A 67-year-old man with advanced prostate cancer on hospice develops confusion, hallucinations, myoclonus. Creatinine rose from 1.0 to 3.8 mg/dL. He is on morphine. The most likely cause and management are which of the following?

- A. Brain metastases requiring radiation
- B. Serotonin syndrome requiring cyproheptadine
- C. M6G accumulation from renal decline — rotate to fentanyl, which has no active metabolites
- D. New psychiatric disorder requiring haloperidol

202. A hospice program reviews compliance data. Volunteer utilization is 3.6%. Under Medicare COP, which is the significance?

- A. The program is below the 5% Medicare minimum and must increase volunteer services
- B. The program is compliant — no minimum exists
- C. The program exceeds the 2% minimum

D. Volunteer requirements apply only to non-profit programs

203. A 73-year-old woman with advanced dementia (FAST 7D) on hospice develops fever and tachypnea — her fifth aspiration pneumonia in 14 months. The antibiotic decision should be influenced most by which of the following?

A. The specific organism on culture

B. Whether the recurrent pattern reflects disease trajectory — each course treats infection but doesn't change aspiration risk — and whether continued treatment serves comfort or prolongs dying

C. Whether temperature exceeds 39.5°C mandating treatment

D. Antibiotic cost relative to per diem

204. A 59-year-old man with advanced melanoma on pembrolizumab develops severe diarrhea (12 stools/day), bloody stool, cramping. Stool studies negative. 10 days post-infusion. The most appropriate treatment is which of the following?

A. Loperamide alone

B. Empiric metronidazole for undetected *C. difficile*

C. Octreotide for secretory diarrhea

D. Systemic corticosteroids (prednisone 1–2 mg/kg) for immune-related colitis, immunotherapy held, infliximab if steroid-refractory

205. A 64-year-old woman with advanced lung cancer on hospice develops nausea worsened by position changes and head movement. Not meal-related. The most likely pathway is which of the following?

A. CTZ via D2 receptors

B. GI tract via 5-HT3 from gastroparesis

C. Vestibular system via H1 and muscarinic receptors — movement-worsened nausea is the hallmark of vestibular-mediated emesis

D. Higher cortical centers via GABA receptors

206. A 72-year-old man with advanced heart failure on hospice has been on furosemide 80 mg daily. Dyspnea worsened with crackles, JVD, edema. The physician considers metolazone. The pharmacologic rationale is which of the following?

- A. Sequential nephron blockade — metolazone blocks distal tubular sodium reabsorption, overcoming compensatory reabsorption that limits furosemide alone
- B. Metolazone replaces furosemide as a more potent agent
- C. Metolazone has bronchodilating properties
- D. Metolazone provides positive inotropic support

207. A 57-year-old woman with advanced sarcoma on hospice has complete dysphagia. Total oral morphine 240 mg/day. Converting to SC morphine using 3:1 ratio, the correct infusion rate is which of the following?

- A. 10 mg/hour (no conversion)
- B. Approximately 3.3 mg/hour ( $240 \div 3 = 80$  mg SC/day  $\div 24 = 3.3$  mg/hour)
- C. 1.7 mg/hour (incorrect 6:1)
- D. 5 mg/hour (incorrect 2:1)

208. A 65-year-old man with end-stage liver disease on hospice is on lactulose for encephalopathy. The pharmacy questions coverage. The physician's most accurate response is which of the following?

- A. Lactulose must be discontinued as disease-directed
- B. Patient must pay out of pocket
- C. Requires medical director approval for each refill
- D. Lactulose relieves distressing symptoms (confusion, agitation) related to terminal diagnosis — clinical purpose determines coverage, not drug classification

209. A 61-year-old woman with advanced breast cancer on hospice says, "I feel like a burden. They'd be better off without me." PHQ-9 is 19. No suicidal ideation. The most important implication is which of the following?

- A. Normal grief expression requiring no intervention
- B. Her statement accurately reflects her family dynamics
- C. Perceived burdensomeness is strongly associated with desire for hastened death and is a red flag for depression — PHQ-9 of 19 confirms moderately severe depression requiring treatment
- D. Social work referral for caregiver support without depression treatment

210. A hospice physician completes a death certificate listing "Cardiac arrest" as cause of death. This is problematic because of which of the following?

- A. "Cardiac arrest" is the mechanism common to all deaths — provides no disease-specific information; the certificate should specify the actual disease process
- B. Only appropriate when a cardiologist witnesses the death
- C. Must include the terminal ECG rhythm
- D. Acceptable for all deaths and requires no correction

211. A hospice nurse cares for a 74-year-old woman with end-stage heart failure who is actively dying. Her daughter asks, "Can she still hear us?" The most accurate response is which of the following?

- A. "Once unresponsive, all sensory function has ceased."
- B. "We believe hearing may be the last sense preserved. While we can't know with certainty, I encourage you to keep talking, holding her hand, and saying what you need to say."
- C. "She can hear everything — be very careful what you discuss."
- D. "Her hearing has been replaced by hallucinations."

212. A 63-year-old man with advanced gastric cancer on hospice develops nausea — constant, non-positional, non-meal-related, gradually improving over 3 days since starting morphine. This is most consistent with which of the following?

- A. Gastroparesis requiring indefinite prokinetic therapy
- B. Allergic reaction requiring immediate discontinuation

C. Bowel obstruction requiring octreotide

D. CTZ stimulation — tolerance develops within 3–7 days (explaining improvement), managed with short haloperidol course as bridge

213. A 69-year-old man with advanced COPD on hospice has "good days and bad days." His wife asks if good days mean recovery. The most accurate explanation is which of the following?

A. Good days indicate medications are working — consider hospice discharge

B. Fluctuating pattern requires hospital evaluation

C. Fluctuating function within overall decline is the characteristic organ failure pattern — good days do not indicate recovery but rather natural variability

D. Good days represent terminal rally suggesting imminent death

214. A 72-year-old woman with advanced breast cancer on hospice has a large lytic lesion in her femoral neck (55% cortical destruction). Ambulatory with walker, ECOG 2, expected survival 5 months. In addition to pain management and radiation, which intervention is indicated?

A. Prophylactic surgical fixation — >50% cortical destruction in a weight-bearing bone carries high fracture risk; fixation prevents catastrophic complication in a patient with adequate performance status

B. Strict bed rest

C. Hip brace for external support

D. Bisphosphonate therapy alone

215. A 58-year-old woman with advanced ovarian cancer on hospice asks about MAID in a legal state. Pain controlled, not depressed, wants control. The most appropriate initial response is which of the following?

A. Provide prescription immediately

B. Explore driving factors, assess depression thoroughly, ensure understanding of legal requirements, participate or refer

C. Refuse discussion

D. MAID unavailable to hospice patients

216. A 65-year-old man with advanced colon cancer on hospice has refractory constipation despite senna 4 BID, PEG daily. No BM in 11 days. No impaction, no obstruction. The next step is which of the following?

- A. High-fiber diet as definitive treatment
- B. Discontinue opioids entirely
- C. Add docusate as the missing component
- D. Methylnaltrexone 12 mg SC — PAMORA blocking GI mu receptors without crossing blood-brain barrier, indicated for OIC refractory to maximal conventional laxatives

217. A 70-year-old woman with end-stage heart failure on hospice has been declining. Yesterday: suddenly alert, eating, talking. Today: unresponsive. This is best described as which of the following?

- A. Recovery requiring hospital evaluation
- B. Medication interaction
- C. Terminal rally — transient improvement before death, not indicating recovery
- D. Infection resolution

218. A 61-year-old man with advanced lung cancer on hospice develops seizures from brain metastases. Complex polypharmacy. Which anticonvulsant is most appropriate?

- A. Levetiracetam — minimal hepatic metabolism, few interactions, IV and liquid formulations, ideal for palliative polypharmacy
- B. Phenytoin for established efficacy
- C. Carbamazepine for neuropathic pain benefit
- D. Valproic acid for broad-spectrum activity

219. A 67-year-old man with advanced gastric cancer on hospice tells his nurse, "I want to go to my grandson's wedding. Can I?" The most appropriate response is which of the following?

- A. "Too risky to travel."

- B. "Absolutely — we'll plan medications, arrange equipment, ensure comfort. Living fully is what hospice supports."
- C. "You need physician clearance first."
- D. "Events interfere with nursing schedules."

220. A 59-year-old woman with advanced cervical cancer on hospice has bilateral ureteral obstruction. Creatinine 5.7 mg/dL. Confused and nauseated. Oncologist proposes nephrostomy. The decision should be guided by which of the following?

- A. Technical feasibility of the procedure
- B. The patient's values, goals, and understanding that nephrostomy extends life but does not treat cancer — she must weigh this against living with tubes
- C. Insurance coverage under hospice benefit
- D. Creatinine level mandating intervention regardless of goals

221. A hospice program reviews data: 41% die within 7 days, median LOS 11 days. This indicates which quality concern?

- A. Program enrolls too early
- B. Symptom management hastens death
- C. Late referrals deny patients full hospice benefit — services require time to provide effectively
- D. Referral patterns meet benchmarks

222. A 72-year-old man with advanced prostate cancer develops hypercalcemia (calcium 15.0 mg/dL) with confusion, constipation, polyuria. The treatment decision should be guided by which of the following?

- A. The patient's goals — treating may improve symptoms if he wants relief; if comfort-only and treatment prolongs dying, supportive management alone may be appropriate
- B. Calcium level mandates treatment regardless of goals
- C. Medicare reimbursement determines treatment availability

D. Oncologist must approve before hospice physician can proceed

223. A 64-year-old woman with advanced lung cancer on hospice has been on dexamethasone 8 mg daily for five weeks. She develops proximal weakness. This is most consistent with which of the following?

A. Steroid-induced proximal myopathy — dose and duration dependent, hip/shoulder girdle, distinguished from cord compression by absent sensory level

B. Spinal cord compression

C. Brain metastasis progression

D. Deconditioning only

224. A 73-year-old man with end-stage COPD on hospice develops death rattle. Glycopyrrolate given 3 hours ago. Rattle persists. The most appropriate explanation is which of the following?

A. Glycopyrrolate failed — try suctioning

B. The rattle indicates pneumonia

C. A different anticholinergic must be substituted

D. Anticholinergics prevent NEW secretions but cannot dry EXISTING pooled secretions — noise persists until reabsorbed or drained by repositioning; patient is likely unaware

225. A hospice physician reviews a death certificate: "Cardiac arrest." This is problematic because of which of the following?

A. Only appropriate when witnessed by a cardiologist

B. Must include terminal ECG rhythm

C. "Cardiac arrest" is the universal death mechanism — no disease information; specify the actual disease process

D. Acceptable for all deaths

226. A 58-year-old man with advanced gastric cancer on hospice has diabetes from dexamethasone. Glucose >350. Polyuria, thirst, blurred vision. Treatment is justified by which of the following?

- A. Treatment for symptom relief — polyuria, thirst, and blurred vision directly impair comfort
- B. Strict HbA1c <7% for microvascular prevention
- C. Insulin excluded from hospice benefit
- D. All glucose >300 requires insulin per regulation

227. A 61-year-old woman with advanced breast cancer on hospice develops complete dysphagia. Oral morphine 120 mg/day. Converting to SC using 3:1 ratio, the correct rate is which of the following?

- A. 5 mg/hour (no conversion)
- B. Approximately 1.7 mg/hour ( $120 \div 3 = 40$  SC/day  $\div 24 \approx 1.7$ )
- C. 0.83 mg/hour (incorrect 6:1)
- D. 2.5 mg/hour (incorrect 2:1)

228. A hospice social worker meets the 44-year-old wife of a patient who died one week ago. She reports functioning normally, hasn't cried, feels "numb." This is most consistent with which of the following?

- A. Pathologic absent grief requiring psychiatric referral
- B. Evidence of poor relationship with the deceased
- C. Dissociative disorder from the traumatic death
- D. Normal initial bereavement — numbness, functional autopilot, and disbelief are common in the first days to weeks and do not indicate pathology

229. A 69-year-old man with advanced COPD on hospice has worsening dyspnea. Morphine given 30 minutes ago, minimal improvement. SpO2 91%. Prominent anxiety. The most appropriate next step is which of the following?

- A. Increase O2 to achieve 95% saturation
- B. Switch to hydromorphone

- C. Add lorazepam 0.5–1 mg SL for the anxiety-breathlessness cycle
- D. Nebulized albuterol as sole intervention

230. A 71-year-old man with advanced heart failure on hospice has worsening dyspnea. On morphine and furosemide 40 mg daily. Crackles, JVD, 4 kg weight gain, SpO<sub>2</sub> 82%. Comfort measures, DNR. The most appropriate management is which of the following?

- A. Morphine bolus AND furosemide increase — addressing both symptom and treatable cause consistent with comfort goals
- B. Continue medications unchanged
- C. Morphine alone without diuretic adjustment
- D. Hospital transfer for BiPAP

231. A 63-year-old woman with advanced ovarian cancer on hospice has severe pelvic pain from tumor invasion. Her specialist recommends a ganglion impar block. The target is which of the following?

- A. T12-L1 ganglia for upper abdominal pain
- B. Sacrococcygeal junction — the ganglion impar transmits visceral pain from perineum, rectum, anus, vulva
- C. Cervical ganglion for upper extremity pain
- D. Lumbar plexus for leg pain

232. A hospice program's volunteer utilization is 4.3%. Under Medicare COP, which is the significance?

- A. Compliant — minimum is 3%
- B. Exceeds requirements — no minimum exists
- C. Volunteer utilization is recommended but not mandatory
- D. Below the 5% Medicare minimum — must increase volunteer services

233. A 72-year-old man with advanced lung cancer on hospice has a seizure-like episode. On morphine SR 90 mg every 12 hours. Creatinine was normal one week ago. The most important initial consideration is which of the following?

- A. New brain metastases since lung cancer commonly metastasizes to brain
- B. Vasovagal event from dehydration
- C. Opioid neurotoxicity — check renal function for M6G accumulation; if GFR declined, rotate to fentanyl
- D. Epilepsy unrelated to cancer requiring lifelong anticonvulsant

234. A 64-year-old man with advanced pancreatic cancer on hospice has refractory epigastric pain. Celiac plexus neurolysis is recommended. Which statement is most accurate?

- A. Achieves relief in 70–90% of pancreatic cancer patients, reduces opioid needs, and evidence supports early consideration
- B. Should be last resort after all other options fail
- C. Relief lasts only 48 hours
- D. Contraindicated in patients on opioids

235. A 57-year-old woman with advanced breast cancer on hospice develops opioid-induced pruritus after morphine dose increase. Normal bilirubin, normal renal function. After failing antihistamines, the best rotation is which of the following?

- A. Codeine for lower histamine release
- B. Fentanyl — minimal histamine-releasing properties make it preferred when pruritus is the rotation indication
- C. Hydromorphone with identical histamine release
- D. Meperidine, historically recommended

236. A 59-year-old man with advanced melanoma on nivolumab develops fatigue, constipation, cold intolerance, weight gain. TSH 56, free T4 undetectable. This irAE is managed by which of the following?

- A. High-dose corticosteroids and permanent immunotherapy discontinuation
- B. Surgical thyroidectomy

C. Radioactive iodine ablation

D. Levothyroxine replacement — hypothyroidism from immune-related thyroiditis is managed with hormone replacement and typically does NOT require stopping immunotherapy

237. A 72-year-old man with advanced prostate cancer on hospice has intrathecal pump recommended. OME 900 mg/day. Using 300:1 ratio, the daily intrathecal dose is approximately which of the following?

A. 90 mg (incorrect 10:1)

B. 30 mg (incorrect 30:1)

C. 3 mg intrathecal morphine per day ( $900 \div 300 = 3$  — correct calculation)

D. 9 mg (incorrect 100:1)

238. A hospice bereavement coordinator contacts the 51-year-old widow of a patient who died 15 months ago. She has persistent yearning, avoidance, functional impairment, and cannot accept the death. Meets DSM-5-TR PGD criteria. Which psychotherapy has strongest evidence?

A. Complicated Grief Treatment (CGT) — 16-session manualized therapy with 50–70% response rates

B. Standard CBT for depression

C. Group supportive therapy alone

D. Psychoanalytic therapy

239. A 66-year-old woman with advanced ovarian cancer on hospice says, "What was the point of my life? Did any of it matter?" She is not depressed. This existential questioning is best addressed through which of the following?

A. Anxiolytic for existential anxiety

B. Spiritual care — dignity therapy, narrative life review, meaning exploration; evidence-based interventions for existential suffering at end of life

C. Psychiatry for existential depression

D. Dismissing as philosophical rumination

240. A 71-year-old man with advanced COPD on hospice has been on morphine and gabapentin 600 mg TID. Confusion and ataxia worsen. Creatinine 1.0→3.0. Which requires MOST urgent adjustment?

- A. Morphine is sole priority
- B. Both require identical urgency
- C. Neither affected by renal function
- D. Gabapentin — entirely renally excreted, accumulates most rapidly with declining GFR; while morphine also warrants attention, gabapentin's exclusively renal clearance makes adjustment most urgent.

## Practice Exam 5: Answer Key and Full Answer Explanations

1. B — Zoledronic acid inhibits osteoclast-mediated bone resorption, providing the most sustained calcium reduction: onset 24–48 hours, nadir 4–7 days, duration 2–4 weeks. Calcitonin bridges the gap with rapid but transient effect (tachyphylaxis within 48 hours). Furosemide-forced calciuresis is no longer recommended as primary therapy.

2. D — The calculation yields 8.25 mg SC hydromorphone per day. Dividing by 24:  $8.25 \div 24 = 0.34$  mg/hour. This multi-step conversion — oral morphine → parenteral morphine → parenteral hydromorphone → cross-tolerance reduction → hourly rate — is the most complex equianalgesic calculation on the exam.

3. A — Medicare requires individualized certification narratives with specific clinical findings: functional status, disease-specific prognostic markers, laboratory values, comorbid conditions, and clinical trajectory. A generic statement provides none of this and is the leading cause of claim denials and audit findings.

4. C — This patient has months of remaining quality life and a symptomatic infection causing distress. Oral antibiotics relieve dysuria, pain, and fever — consistent with comfort goals. The decision is based on whether treatment serves the patient's comfort, not on a blanket hospice antibiotic policy.

5. B — The communication priority is responding to emotion before clinical information. She is experiencing acute grief and fear about her children. Medical information cannot be heard in this moment. Acknowledge her pain, validate her concern, allow silence, then transition to next steps.

6. A — A strong magnet over the ICD generator suspends shock delivery for as long as it remains in position. Taping it securely provides continuous suspension until the device representative arrives. The magnet does not reprogram the device — it provides temporary suspension only.
7. D — Projectile vomiting with headache and papilledema indicates elevated ICP directly stimulating the vomiting center. Dexamethasone 16 mg IV reduces vasogenic edema and ICP, addressing the mechanism. Ondansetron and metoclopramide do not target ICP-mediated emesis.
8. C — Anticholinergics prevent NEW secretion production but cannot dry EXISTING pooled secretions. The noise persists until previously accumulated secretions are reabsorbed or drain with repositioning. The patient is almost certainly unaware of the sound. Deep suctioning is avoided — uncomfortable, stimulates more secretions, temporary relief only.
9. A — The nephrostomy decision must be guided by the patient's values and understanding: tubes relieve obstruction and extend life but do not treat cancer. She must weigh extension against living with tubes for remaining time. This is a goals-of-care conversation, not a technical decision.
10. B — Beginning with the third benefit period (first 60-day), Medicare requires a face-to-face encounter with a hospice physician or NP within 30 days before the period starts. This ensures personal reassessment of patients beyond six months. Not required during the first two 90-day periods.
11. D — Non-pitting edema with thickened skin, woody texture, and positive Stemmer's sign are pathognomonic for lymphedema. It does NOT respond to diuretics because the mechanism is lymphatic obstruction, not fluid overload. Furosemide removes intravascular fluid but cannot address protein-rich interstitial fluid from impaired drainage.
12. A — Topical metronidazole 0.75% gel specifically targets anaerobic bacteria producing the malodor. Improvement is dramatic — typically within 24–48 hours — transforming the patient's social experience and enabling family presence.
13. C — A terminal rally is a transient, poorly understood period of improvement hours to days before death. Vital signs remain abnormal, trajectory unchanged. Families should be gently prepared that it typically precedes rapid decline but may be a precious final connection opportunity.

14. B — This patient has failed maximal conventional laxative therapy. Methylnaltrexone blocks GI mu receptors without crossing the blood-brain barrier — reversing peripheral opioid-induced constipation without affecting analgesia. PAMORAs are specifically indicated for OIC refractory to conventional laxatives.

15. D — Tolerance to opioid-induced constipation does NOT develop — the only major opioid side effect for which tolerance never occurs. If the laxative is stopped, constipation returns regardless of how long the patient has been regular. The most important and most tested laxative fact on the HPM exam.

16. C — The convergence of mottling to mid-thighs, absent radial pulses, anuria, mandibular breathing, and unresponsiveness indicates active dying with death likely within hours to days. Clear communication, comfort optimization, and family support are the priorities.

17. A — Albumin is NOT routinely required for malignant ascites from peritoneal carcinomatosis. It is standard for cirrhotic portal hypertensive ascites, where post-paracentesis circulatory dysfunction is a specific concern. Different pathophysiology, different clinical need.

18. B — In severe hepatic impairment, reduced first-pass metabolism increases oral morphine bioavailability. Normally ~70% is metabolized on first pass. When liver function fails, more drug reaches systemic circulation at the same dose, requiring reduction to prevent toxicity.

19. D — DVT treatment in hospice is individualized based on symptom burden. If pain and swelling cause distress, LMWH can relieve symptoms at home. The decision serves comfort goals — not a categorical prohibition on anticoagulation.

20. C — Clinician grief is a normal, healthy response to losing a patient with whom the physician had a meaningful relationship. It reflects emotional engagement, not burnout, compassion fatigue, or a boundary violation.

21. A — This patient meets all Patchell trial criteria: single-level compression (T9), good ECOG (1), expected survival >3 months (7 months). Surgery plus radiation is superior to radiation alone for this population.

22. B — Multiple randomized trials demonstrate that a single 8 Gy fraction provides equivalent pain relief to multi-fraction regimens for uncomplicated bone metastases, with 60–80% response rates. Single-fraction minimizes treatment burden — one visit instead of 10–25.
23. D — CGT is the most evidence-supported therapy for prolonged grief disorder: 16 sessions, 50–70% response rates in RCTs. Significantly exceeds standard IPT or antidepressant medication alone.
24. C — Existential questioning is a spiritual concern addressed through dignity therapy, life review, and meaning exploration — evidence-based interventions for end-of-life existential suffering. Anxiolytics medicalize a fundamentally human experience.
25. A — Dexamethasone is a well-recognized cause of persistent hiccups with clear temporal relationship. Management: dose reduction or corticosteroid switch, plus baclofen 5 mg TID for hiccup-specific treatment through GABA-B agonism.
26. B — Uremic myoclonus is managed with benzodiazepines (lorazepam or clonazepam) — not anticonvulsant loading. Myoclonus is distinct from seizures. Lorazepam 0.5–1 mg SL every 6–8 hours provides effective symptomatic relief.
27. D — Morphine neurotoxicity from M6G accumulation (creatinine 0.9→3.5). Fentanyl is preferred in renal failure — metabolized to inactive norfentanyl, no active metabolites accumulate. Meperidine is never appropriate due to neurotoxic normeperidine.
28. A — 43% dying within 7 days, median LOS 10 days indicate late referrals. Patients miss weeks to months of hospice services that require time to provide effectively — symptom management, psychosocial support, spiritual care, caregiver preparation.
29. C — Severe bloody diarrhea on ipilimumab with negative infectious workup is immune-related colitis. Prompt corticosteroids (prednisone 1–2 mg/kg), immunotherapy hold, infliximab consideration for steroid-refractory cases. Loperamide alone is insufficient.
30. B — This patient IS hypoxemic (SpO<sub>2</sub> 84%, below 90%). The evidence against oxygen applies to non-hypoxemic patients. In documented hypoxemia, increased oxygen may provide genuine dyspnea relief. Titrate to comfort.

31. D — Sequential nephron blockade: metolazone blocks distal tubular sodium reabsorption, overcoming compensatory reabsorption that limits furosemide alone. The synergistic combination is standard for diuretic resistance.

32. A — Lactulose directly relieves distressing encephalopathy symptoms. Clinical purpose determines hospice coverage, not drug classification. A medication providing comfort related to the terminal diagnosis is a comfort medication.

33. C — Comprehensive response: explore motivations, assess depression thoroughly, ensure understanding of legal process, and participate or refer. Even in legal states, thorough evaluation before facilitation is essential.

34. B — Nausea worsened by movement and position changes is the hallmark of vestibular-mediated emesis, transmitted through H1 and muscarinic receptors. Meclizine and scopolamine target these. The positional pattern is the diagnostic key.

35. A — This combines Support ("our team will be with you"), Knowledge ("effective medications — morphine for air hunger"), and Exploration ("what frightens you most?"). It addresses fear without false guarantees and opens dialogue.

36. D — Hepatic capsule pain from capsular distension by expanding metastases. Dexamethasone reduces hepatic inflammation and peritumoral edema, directly decreasing the stretch mechanism. The most targeted non-opioid for this pain syndrome.

37. C — Zoledronic acid inhibits osteoclast-mediated bone resorption with onset 24–48 hours, nadir 4–7 days, duration 2–4 weeks. Calcitonin bridges with rapid but transient effect. Furosemide calciuresis is no longer primary therapy.

38. B — Living fully — attending meaningful events — is core hospice philosophy. The nurse facilitates by planning medications, arranging equipment, and ensuring comfort. Patients are not confined to their homes.

39. A — Postprandial nausea with early satiety and bloating without obstruction is classic opioid-related gastroparesis. Metoclopramide combines antiemetic D2 antagonism with prokinetic 5-HT4 agonism — treating both nausea and its cause.

40. D — Caregiver health directly impacts patient care. Express concern, normalize difficulty, explore support options, and ensure the IDT addresses caregiver health. Caregiver collapse threatens the entire care plan.

41. C — M6G accumulation from renal decline (creatinine 1.0→3.8). Stable dose for six weeks then acute toxicity coinciding with rising creatinine confirms metabolite accumulation. Fentanyl rotation eliminates the problem.

42. B — Pathologic fracture with ECOG 2 and 5-month survival warrants surgical fixation followed by radiation. Without surgery, tumor-weakened bone won't heal. Fixation restores function; radiation prevents regrowth.

43. A — Uses a range ("weeks to a few months"), acknowledges uncertainty, connects prognosis to planning ("what matters most"), and avoids both false precision and unhelpful vagueness.

44. D — Tramadol (serotonin reuptake inhibitor) plus duloxetine (SNRI) causes serotonin syndrome. Clonus distinguishes it from NMS — present in serotonin syndrome, absent in NMS. Both share hyperthermia and autonomic instability.

45. C — Mechanical valves without anticoagulation carry significant, immediate risk of valve thrombosis and embolization — much higher than AF stroke risk alone. Even over 4 weeks, discontinuation risk is substantial.

46. A — Using 300:1 ratio:  $450 \div 300 = 1.5$  mg intrathecal per day. The 300-fold reduction provides equivalent analgesia with dramatically fewer systemic side effects.

47. B —  $6.75 \text{ mg} \div 24 \text{ hours} = 0.28 \text{ mg/hour}$ . The multi-step conversion is the most complex calculation tested on the exam.

48. D — Correct death certificate traces the causal chain: aspiration pneumonia (Line a), dysphagia (Line b), Parkinson's disease (Line c). "Cardiac arrest" is a mechanism. "Natural causes" and "old age" are unacceptable.
49. C — Fluctuating function is the characteristic organ failure trajectory. Good days within overall decline do not indicate recovery — they reflect the natural variability of COPD.
50. A — Immune-related thyroiditis progressing to hypothyroidism is managed with levothyroxine replacement and typically does NOT require immunotherapy discontinuation. Straightforward hormone replacement.
51. B — Levetiracetam: no hepatic metabolism, minimal drug interactions, IV and liquid formulations. Ideal for palliative polypharmacy and patients losing swallowing ability.
52. D — Handgrip-pattern bruising on a vulnerable patient with a caregiver with substance use history raises abuse concern. All providers are mandatory reporters. Assess, document, report to APS if suspected.
53. C — Permanent reprogramming disabled shocks definitively. The magnet provided only temporary suspension before reprogramming and is no longer needed. The reprogramming persists regardless of magnet presence.
54. A — Lytic lesion >50% cortical destruction in a weight-bearing bone carries high fracture risk. Prophylactic fixation in a patient with ECOG 2 and 4-month survival prevents catastrophic fracture.
55. B — Hypercalcemia explains confusion, nausea, constipation, and polyuria simultaneously. Treating it (if consistent with goals) could improve multiple symptoms at once — a reversible cause of multi-symptom suffering.
56. D — Celiac plexus neurolysis achieves 70–90% relief in pancreatic cancer, reduces opioid requirements, and evidence supports early consideration. Deep, boring epigastric pain radiating to the back is the classic indication.

57. C — Agonal breathing is a brainstem reflex — not conscious effort. The patient is unaware and not suffering. Clear explanation reduces the profound anxiety families experience witnessing these reflexive gasps.

58. A — Everything described is within normal grief at six months. No timeline for grief. Return to activities indicates healthy adaptation. Normalizing the experience counters social pressure to "get over it."

59. B — Mixed pain requires multimodal therapy. Opioid for somatic component; adjuvant (gabapentin or duloxetine) for neuropathic component. Neither alone optimally addresses both mechanisms.

60. D — Gabapentin is entirely renally excreted, accumulating most rapidly with declining GFR. While morphine also warrants attention (M6G), gabapentin's exclusively renal clearance makes it most urgently dose-dependent. Reduce 50–75%.

61. C — NSAIDs target bone pain through prostaglandin synthesis inhibition at the metastatic site. Bone metastases produce abundant prostaglandins sensitizing nociceptors. NSAID addition provides opioid-sparing benefit specific to bone pain.

62. A — Venting gastrostomy allows eating small amounts for pleasure. Food enters the stomach and is experienced, then drains through the tube rather than entering the obstructed bowel. A major quality-of-life benefit.

63. B — Medicare requires 5% minimum volunteer utilization. At 3.8%, the program is below threshold and must increase services. A compliance issue triggering deficiency findings during surveys.

64. D — Leading with empathy ("how frightened you are"), validating emotion ("you love your father"), and opening exploration ("what worries you most?") is the most effective de-escalation strategy.

65. C — Burning, shooting, electric-shock-like pain from nerve invasion is classic neuropathic pain. Gabapentinoids and SNRIs are first-line adjuvants targeting voltage-gated calcium channels or descending inhibitory pathways.

66. A — Fifth aspiration pneumonia in 14 months reflects progressive dementia with dysphagia. Each antibiotic treats the infection but cannot change aspiration risk. Key question: comfort or prolonging dying?

67. B — Lactulose serves dual purpose: treating encephalopathy (reducing ammonia) AND functioning as osmotic laxative counteracting opioid-induced constipation. The medications are complementary.

68. D — Grief waves triggered by reminders are completely normal and can persist for months to years. Functioning well between waves indicates healthy adaptation. No timeline for grief.

69. C — Spiritual care addresses meaning, purpose, legacy — not just religion. The chaplain redefines spiritual care, offers support on the patient's terms, and keeps the door open without imposing beliefs.

70. A — Fentanyl has minimal histamine-releasing properties, making it the best rotation when pruritus is the indication. Morphine and codeine are the strongest histamine releasers.

71. B — Moral distress: knowing the ethically right action but unable to carry it out due to hierarchical barriers. Causes anguish and powerlessness. Distinct from compassion fatigue, burnout, and normal dissatisfaction.

72. D — Vertebroplasty/kyphoplasty provides relief in 70–90% of patients within 24–72 hours through mechanical stabilization. For acute compression fracture pain, this offers the fastest targeted relief.

73. C — With 2-week prognosis and no stroke history, risk reduction from warfarin is negligible while bleeding risk continues. Monitoring burden is unjustified. Contrasts with mechanical valves where short-term risk is substantial.

74. A — Acute pulmonary edema requires addressing BOTH symptom (morphine) AND cause (furosemide for volume overload). Morphine alone without diuresis provides suboptimal relief. Treating the treatable cause is a comfort intervention.

75. B — GIP is for acute symptom management. Caregiver respite is IRC — different level, lower reimbursement, 5-day max. Billing GIP for respite constitutes incorrect billing with fraud implications.

76. D — Duloxetine inhibits CYP2D6, converting tamoxifen to endoxifen. Concurrent use reduces endoxifen, potentially decreasing tamoxifen's anticancer efficacy. Gabapentin and pregabalin are safe alternatives.

77. C — Methadone uniquely prolongs QTc among opioids, creating torsades de pointes risk. ECG monitoring at baseline, after stabilization, and periodically. No other common opioid has this cardiac risk.

78. A — Parenteral-to-oral ratio for hydromorphone is 1:5. Converting:  $14.4 \text{ mg IV} \times 5 = 72 \text{ mg oral per day}$ . The 5:1 ratio for hydromorphone is distinct from morphine's 3:1 — confusing them is dangerous.

79. B — Severe hypoxemia (SpO<sub>2</sub> 78%) on comfort measures: morphine for air hunger, midazolam for anxiety/terror, increased oxygen (he IS hypoxemic), upright positioning, fan to face. Comprehensive management consistent with POLST.

80. D — "Cardiac arrest" is the universal death mechanism — no disease-specific information. The certificate must specify the actual disease process.

81. C — Treatment for symptom relief: polyuria, thirst, and blurred vision directly impair comfort. Hospice glucose management targets symptoms, not long-term HbA1c.

82. A — The DPAHC is effective only if the surrogate understands the patient's values. Without that conversation, the surrogate makes decisions based on their own values — substituting their judgment, not the patient's.

83. B — When opioid alone fails and anxiety is prominent, lorazepam addresses the anxiety-breathlessness cycle. SpO<sub>2</sub> 91% is above hypoxemia threshold, so oxygen provides less benefit than addressing the anxiety.

84. D — School-age children understand death's permanence but lack mature coping. Grief manifests as denial, academic decline, acting out. Supportive intervention, not discipline, is appropriate.

85. C — Prophylactic anticonvulsants are NOT recommended for non-seizing brain metastasis sites. Trials show no first-seizure reduction, and medications carry significant side effect risks.
86. A — DVT treatment is individualized based on symptom burden. If pain and swelling cause distress, LMWH relieves symptoms at home. Decision serves comfort goals.
87. B — Volume overload (crackles, JVD, weight gain, edema) is causing dyspnea. Increasing furosemide and/or adding metolazone directly addresses the cause — a comfort intervention.
88. D — Opioid-induced CTZ nausea: constant, non-positional, improving over 3–7 days as tolerance develops. The improving trajectory is the diagnostic key. Short haloperidol course bridges tolerance.
89. C — Superior hypogastric plexus transmits visceral afferent pain from pelvic organs — uterus, cervix, bladder, rectum. The specific target for pelvic cancer pain.
90. A — Medicare requires at least 13 months of bereavement support — contacts, events, groups, counseling referrals. The 13-month requirement covers all first-year anniversary milestones.
91. B — Hospice patients can travel. Coordinate care, ensure medications, arrange services at destination. Facilitating meaningful experiences embodies living fully during serious illness.
92. D — 3:1 ratio:  $240 \div 3 = 80 \text{ mg SC/day} \div 24 = 3.3 \text{ mg/hour}$ . Same drug, different route — no cross-tolerance reduction.
93. C — Terminal rally: transient improvement before death, not indicating recovery. Typically followed by rapid decline. A precious opportunity for connection.
94. A — Failed maximal conventional laxatives → PAMORA. Methylnaltrexone blocks GI mu receptors without crossing blood-brain barrier, reversing peripheral constipation without affecting analgesia.
95. B — Methylphenidate has the strongest evidence for cancer-related fatigue. Rapid onset (hours). Standard: 5 mg morning and noon. Hemoglobin 10.7 is unlikely the primary cause.

96. D — Medicare requires 13 months of bereavement support. The physician can also help prepare the family now through conversations and planning.

97. C — Fentanyl has minimal histamine release — best rotation for pruritus. Morphine and codeine are strongest releasers. Meperidine is never appropriate.

98. A — Modern ICDs have independently programmable shock and pacing. Deactivating shocks while maintaining pacing is standard — preventing painful shocks while preserving beneficial pacing.

99. B — Comprehensive response: explore factors (fear, depression, undertreated pain at 4/10), assess depression, optimize symptoms, secure medications, involve IDT. Neither dismissal nor punishment is appropriate.

100. D — "What is your understanding?" is the Perception step of SPIKES — revealing gaps, misconceptions, and a starting point for the medical update.

101. C — Steroid myopathy: dose-dependent, duration-dependent, proximal pattern. Six weeks of dexamethasone 8 mg is sufficient. Distinguished from cord compression by absent sensory level.

102. A — Standard MBO management: octreotide (reducing secretions) + glycopyrrolate (secretions and colic) + dexamethasone (edema) + parenteral opioids. Metoclopramide is contraindicated in complete obstruction.

103. B — Neurologic status at treatment initiation is THE critical factor. Ambulatory >80% chance of remaining so; paraplegic <10% recovery. MSCC is a true emergency.

104. D — Validates the question, explains why comparisons are unreliable, offers honest communication about his specific disease, invites collaborative planning. Avoids false hope and dismissal.

105. C — CTZ stimulation with tolerance developing within 3–7 days explains the improving trajectory. Short haloperidol course bridges the tolerance period.

106. A — Hearing may be the last sense preserved. Encouraging family to keep talking, holding hands, and saying what they need to say improves bereavement outcomes.

107. B — Perceived burdensomeness is strongly associated with desire for hastened death and is a depression red flag. PHQ-9 of 20 confirms severe depression requiring treatment.

108. D — Hindu tradition generally favors cremation with family preparation of the body and specific prayers/rituals. The team should accommodate these practices.

109. C — Face-to-face encounter required beginning with the third benefit period (first 60-day) and all subsequent periods. Must occur within 30 days before the period starts.

110. A — Medicare requires 13 months of bereavement support — contacts, events, groups, referrals. Preparation can also begin before the patient's death.

111. B — Denosumab blocks RANKL, preventing osteoclast differentiation. Distinct from bisphosphonates (mevalonate pathway). RANKL inhibition prevents formation rather than blocking active osteoclasts.

112. D — Worsening liver function reduces first-pass metabolism, increasing oral morphine bioavailability. More drug reaches circulation at the same dose. Dose reduction is critical.

113. C — Furosemide causes sodium and potassium wasting. Hyponatremia (125) → confusion. Hypokalemia (2.7) → muscle cramps. Common diuretic complication requiring monitoring and supplementation.

114. A — On high-dose morphine with seizure-like episode: check renal function for M6G accumulation. If GFR has declined, rotate to fentanyl. Prostate cancer rarely metastasizes to brain.

115. B — Ganglion impar at the sacrococcygeal junction transmits visceral pain from perineum, rectum, anus, vulva. The precise target for perineal cancer pain.

116. D — With high ventilatory requirements, minimal spontaneous effort, and hemodynamic instability, death likely within minutes to hours. Honest range with comfort commitment and presence.

117. C — Pain is a respiratory stimulant counteracting opioid depression. Block eliminated pain → stimulant removed → depressant effect unmasked at now-excessive dose. Requires immediate opioid reduction.

118. A — Normalizing clinician grief, validating it as meaningful engagement, and offering support. Emotional responses are expected and healthy in hospice work.

119. B — Acute adrenal insufficiency (undetectable cortisol, hypotension, hypoglycemia) on checkpoint inhibitor requires urgent IV hydrocortisone 100 mg. Life-threatening irAE.

120. D — Gabapentin is entirely renally excreted, accumulating most rapidly with declining GFR. While morphine also warrants attention, gabapentin's exclusively renal clearance makes adjustment most urgent. Reduce 50–75%.

121. C — Fentanyl is the preferred opioid in severe renal impairment because it is metabolized by CYP3A4 to inactive norfentanyl — no active metabolites accumulate. Morphine (M6G), oxycodone (oxymorphone), and codeine (produces morphine) all generate active metabolites that accumulate in renal failure. Meperidine is never appropriate due to neurotoxic normeperidine.

122. A — Furosemide causes renal sodium and potassium wasting, producing hyponatremia (122) and hypokalemia (2.4). These manifest as confusion, lethargy (hyponatremia), and muscle cramps (hypokalemia). This is a common, potentially dangerous diuretic complication requiring electrolyte monitoring, supplementation, and possible dose adjustment.

123. B — With high ventilatory requirements (FiO<sub>2</sub> 100%, PEEP 16), minimal spontaneous effort, and vasopressor dependence, death is likely within minutes to hours. The family needs an honest range, acknowledgment of uncertainty, commitment to comfort, and assurance of continued presence. Neither false precision nor complete refusal to estimate is appropriate.

124. D — Hospice patients can travel. The team coordinates care, ensures medications, arranges services at the destination, and plans contingencies. Facilitating meaningful experiences embodies the core hospice principle of living fully during serious illness.

125. C — Standard MBO medical management combines octreotide (reducing secretions), glycopyrrolate (reducing secretions and colic), dexamethasone (reducing edema), and parenteral opioids. Metoclopramide is contraindicated in complete obstruction due to its prokinetic effect against a fixed obstruction.

126. A — The daughter's withdrawal, academic decline, and hopelessness warrant active intervention. The hospice social worker should assess emotional state and safety (hopelessness requires screening), and facilitate counseling referral. The hospice team's responsibility extends to affected family members.

127. B — Neurologic status at treatment initiation is THE critical factor. Ambulatory patients have >80% chance of remaining ambulatory; paraplegic patients have <10% recovery chance. MSCC is a true emergency — every hour of delay risks irreversible damage.

128. D — GIP is for acute symptom management. Caregiver respite is IRC — different level, lower reimbursement, 5-day maximum. Billing GIP for respite constitutes incorrect billing with potential fraud implications.

129. C — Denosumab blocks RANKL, preventing osteoclast differentiation and activation. Distinct from bisphosphonates (mevalonate pathway). RANKL inhibition prevents osteoclast formation rather than blocking active cells.

130. A — Zoledronic acid inhibits osteoclast-mediated bone resorption: onset 24–48 hours, nadir 4–7 days, duration 2–4 weeks. Calcitonin bridges with rapid but transient effect (tachyphylaxis within 48 hours). Furosemide calciuresis is no longer primary therapy.

131. B — Caregiver health directly impacts patient care. Express concern, normalize difficulty, explore support options, communicate to IDT. Caregiver collapse threatens the entire home-based care arrangement.

132. D — Rapid large-volume drainage (3L in 20 minutes) causes hemodynamic instability from vasovagal response and fluid shift. Future drainages: slower (60–90 minutes), patient reclined, potentially smaller volumes more frequently.

133. C — Topical metronidazole 0.75% targets anaerobic bacteria producing the malodor. Dramatic improvement within 24–48 hours, transforming the patient's social experience and enabling family presence.

134. A — Lactulose serves dual purpose: treating encephalopathy (reducing ammonia) AND functioning as osmotic laxative counteracting opioid constipation. The medications are complementary, not conflicting.

135. B — The chaplain's role is pastoral presence and exploration — not theological correction, pharmacotherapy, or psychiatric referral. Spiritual distress requires compassionate exploration and engagement with the patient's faith on her terms.

136. D — Dexamethasone is a recognized cause of persistent hiccups with clear temporal relationship. Optimal approach: address cause (dose reduction or switch) AND symptom (baclofen for GABA-B-mediated hiccup suppression).

137. C — Cyproheptadine is the specific serotonin syndrome antidote, blocking 5-HT<sub>2A</sub> receptors. Standard: 12 mg orally initially, then 4–8 mg every 6 hours. Naloxone reverses opioids, not serotonin toxicity. Dantrolene treats NMS.

138. A — Permanent reprogramming disabled shocks definitively. The magnet provided only temporary suspension before reprogramming and is no longer needed. The reprogramming persists regardless of magnet presence.

139. B — Duloxetine inhibits CYP2D6, converting tamoxifen to endoxifen. Concurrent use reduces endoxifen, potentially decreasing tamoxifen's efficacy. Gabapentin and pregabalin are safe alternatives with no CYP interactions.

140. D — Daily crying at nine months and hearing a deceased spouse are within normal grief. Auditory experiences are reported by 30–60% of bereaved — NOT hallucinations or psychosis. Normalizing reduces the bereaved person's fear.

141. C — Levetiracetam: no hepatic metabolism, minimal interactions, IV and liquid formulations. Ideal for palliative polypharmacy and patients losing swallowing ability. Phenytoin and carbamazepine have extensive CYP interactions.

142. A — Scheduled acetaminophen trial is the evidence-based first step for suspected pain in non-verbal dementia. Safest first-line agent. PAINAD improvement after 48–72 hours supports pain as the cause of behavioral distress.

143. B — Failed maximal conventional laxatives → PAMORA. Methylnaltrexone blocks GI mu receptors without crossing blood-brain barrier, reversing peripheral constipation without affecting analgesia.

144. D — Postprandial nausea with early satiety and bloating without obstruction is classic gastroparesis. Metoclopramide combines antiemetic D2 antagonism with prokinetic 5-HT4 agonism — treating both nausea and its cause.

145. C — Tolerance to opioid-induced constipation does NOT develop — the only major side effect without tolerance. Stopping the laxative guarantees constipation recurrence regardless of prior regularity.

146. A — Convergence of mottling to mid-thighs, absent pulses, anuria, mandibular breathing, unresponsiveness indicates active dying. Death likely within hours to days. Clear communication, comfort optimization, and family support are priorities.

147. B — Albumin is NOT routinely required for malignant ascites from peritoneal carcinomatosis. It is standard for cirrhotic portal hypertensive ascites where post-paracentesis circulatory dysfunction is a specific concern.

148. D — Movement and position-change worsened nausea is the hallmark of vestibular-mediated emesis via H1 and muscarinic receptors. Meclizine and scopolamine target these. The positional pattern is diagnostic.

149. C — Acute adrenal insufficiency (undetectable cortisol, hypotension, hypoglycemia) on checkpoint inhibitor requires urgent IV hydrocortisone 100 mg. Life-threatening irAE from hypophysitis or adrenalitis.

150. A — This patient IS hypoxemic (SpO<sub>2</sub> 83%, below 90%). Evidence against oxygen applies to non-hypoxemic patients. Documented hypoxemia may benefit from increased oxygen for dyspnea relief.

151. B — "Cardiac arrest" is the universal death mechanism providing no disease information. The certificate must specify the actual disease process for public health statistics.

152. D — Immune-related hypothyroidism: levothyroxine replacement, typically does NOT require immunotherapy discontinuation. Straightforward hormone replacement.

153. C — Uses a range, acknowledges uncertainty, connects prognosis to planning, avoids false precision and unhelpful vagueness. Provides actionable information while respecting prognostic limitations.

154. A — Vertebroplasty/kyphoplasty: relief in 70–90% within 24–72 hours through mechanical stabilization. For acute compression fracture pain, this offers the fastest targeted relief. Radiation onset is 2–4 weeks.

155. B — Grief waves triggered by reminders are normal and can persist for months to years. Functioning well between waves indicates healthy adaptation. No timeline for grief.

156. D — Superior hypogastric plexus transmits visceral pain from pelvic organs: uterus, cervix, bladder, rectum. The specific target for pelvic cancer pain. Celiac plexus serves upper abdomen; ganglion impar serves perineum.

157. C — If rifaximin reduces confusion and agitation (symptom relief), it is consistent with comfort goals and may be covered under per diem. Clinical purpose determines coverage, not drug classification.

158. A — DVT treatment is individualized based on symptom burden. If pain and swelling cause distress, LMWH relieves symptoms at home. Decision serves comfort goals, not a blanket policy.

159. B — Comprehensive response: explore factors (fear, depression, undertreated pain at 4/10), assess depression, optimize symptoms, secure medications, involve IDT. Neither dismissal nor punishment is appropriate.

160. D — "What is your understanding?" is the Perception step of SPIKES. Reveals gaps, misconceptions, and provides a starting point for the update.

161. C — Steroid myopathy: dose-dependent, duration-dependent, proximal pattern affecting hip/shoulder girdle. Six weeks of dexamethasone 8 mg is sufficient. Distinguished from cord compression by absent sensory level.

162. A — Venting gastrostomy allows small amounts for pleasure. Food enters the stomach and is experienced, then drains through the tube. A major quality-of-life benefit.

163. B — Handgrip-pattern bruising on a vulnerable patient with a substance-using caregiver raises abuse concern. All providers are mandatory reporters. Assess, document, report to APS if suspected.

164. D — NSAIDs target bone pain through prostaglandin synthesis inhibition at the metastatic site. Bone metastases produce prostaglandins sensitizing nociceptors. NSAID addition provides specific opioid-sparing benefit.

165. C — Mechanical valves without anticoagulation carry significant, immediate valve thrombosis and embolization risk — much higher than AF stroke risk alone. Even over 3 weeks, discontinuation risk is substantial.

166. A — 44% dying within 7 days, median LOS 9 days indicate late referrals. Patients miss weeks to months of services requiring time to provide effectively.

167. B — Normalizing clinician grief, validating it as meaningful engagement, and offering support. Emotional responses are expected and healthy in hospice work.

168. D — Mixed pain requires multimodal therapy. Opioid for somatic; adjuvant (gabapentin or duloxetine) for neuropathic. Neither alone optimally addresses both.

169. C — When opioid alone fails and anxiety is prominent, lorazepam addresses the anxiety-breathlessness cycle. SpO<sub>2</sub> 92% is above hypoxemia threshold; oxygen provides less benefit than addressing anxiety.

170. A — Hepatic capsule distension from expanding metastases. Dexamethasone reduces inflammation and edema, directly decreasing capsular stretch. Most targeted non-opioid for this mechanism.

171. B — Severe hepatic impairment reduces first-pass metabolism, increasing oral morphine bioavailability. More drug reaches circulation at the same dose. Dose reduction prevents toxicity.

172. D — Everything described is normal grief at six months. No timeline. Daily crying and reaching for the deceased reflect deep love. Return to activities indicates healthy adaptation.

173. C — Hypercalcemia explains confusion, nausea, constipation, polyuria simultaneously. Treating (if consistent with goals) could improve multiple symptoms at once — a reversible cause of suffering.

174. A — Ganglion impar at sacrococcygeal junction transmits visceral pain from perineum, rectum, anus, vulva. The precise target for perineal cancer pain.

175. B — Medicare requires 5% minimum volunteer utilization. At 4.1%, the program is below threshold and must increase services.

176. D — Patchell trial criteria met: single-level, ECOG 1, survival >3 months. Surgery plus radiation superior to radiation alone for this population.

177. C — Celiac plexus neurolysis: 70–90% relief in pancreatic cancer, reduces opioid needs. Evidence supports early consideration, not last-resort status. Classic indication: deep epigastric pain radiating to back.

178. A — Agonal breathing is a brainstem reflex — not conscious effort. Patient is unaware and not suffering. Clear explanation reduces family anxiety.

179. B — Comprehensive response: explore motivations, assess depression, ensure legal understanding, participate or refer. Even in legal states, thorough evaluation before facilitation is essential.

180. D — Gabapentin is entirely renally excreted, accumulating most rapidly with declining GFR. While morphine also warrants attention, gabapentin's exclusively renal clearance makes adjustment most urgent.

181. C — Terminal rally: transient improvement before death, not recovery. Typically followed by rapid decline. A precious connection opportunity.

182. A — Pathologic fracture with ECOG 2 and 4-month survival warrants surgical fixation plus radiation. Without surgery, tumor-weakened bone won't heal. Fixation restores function.

183. B — Medicare COP require the IDT to include: physician, RN, social worker, and pastoral or other counselor. The four mandatory core members under federal regulation.

184. D —  $6.75 \text{ mg} \div 24 = 0.28 \text{ mg/hour}$ . The multi-step conversion is the exam's most complex equianalgesic calculation.

185. C — Parenteral-to-oral ratio for hydromorphone is 1:5. Converting:  $12 \text{ mg IV} \times 5 = 60 \text{ mg oral/day}$ . The 5:1 ratio is distinct from morphine's 3:1.

186. A — Hindu tradition generally favors cremation with family preparation of the body and specific prayers/rituals. The team should accommodate these practices.

187. B — With 2-week prognosis and no stroke history, warfarin risk reduction is negligible while bleeding risk continues. Monitoring burden is unjustified.

188. D — Methadone uniquely prolongs QTc among opioids, creating torsades risk. ECG monitoring at baseline, after stabilization, and periodically. No other common opioid has this cardiac risk.

189. C — 300:1 ratio:  $600 \div 300 = 2 \text{ mg intrathecal/day}$ . The 300-fold reduction provides equivalent analgesia with dramatically fewer side effects.

190. A — Medicare requires at least 13 months of bereavement support — contacts, events, groups, referrals. Covers all first-year anniversary milestones.

191. B — Acute pulmonary edema requires addressing BOTH symptom (morphine) AND cause (furosemide for volume overload). Morphine alone without diuresis provides suboptimal relief.

192. D — Fentanyl has minimal histamine release — best rotation for pruritus. Morphine and codeine are strongest releasers. Meperidine is never appropriate.

193. C — Modern ICDs have independently programmable shock and pacing. Deactivating shocks while maintaining pacing is standard — preventing painful shocks while preserving beneficial pacing.

194. A — Methylphenidate has strongest evidence for cancer-related fatigue. Rapid onset (hours). Standard: 5 mg morning and noon. Hemoglobin 10.8 unlikely the primary cause.

195. B — Living fully — attending meaningful events — is core hospice philosophy. The nurse facilitates by planning medications, equipment, and comfort.

196. D — Anticholinergics prevent NEW secretions but cannot dry EXISTING pooled ones. Noise persists until reabsorbed or repositioned. Patient is likely unaware.

197. C — Spiritual care addresses meaning, purpose, legacy — not just religion. Support whatever matters to the patient without imposing beliefs. Relevant to all worldviews including atheism.

198. A — Leading with empathy, validating emotion, opening exploration. Responding to underlying fear rather than surface demand enables productive dialogue.

199. B — Burning, shooting, electric-shock-like pain from nerve invasion is neuropathic. Gabapentinoids and SNRIs are first-line adjuvants targeting the specific mechanism.

200. D — Severe hypoxemia (SpO<sub>2</sub> 76%) on comfort measures: morphine for air hunger, midazolam for terror, increased oxygen (IS hypoxemic), upright, fan. Comprehensive management consistent with POLST.

201. C — M6G accumulation from renal decline (creatinine 1.0→3.8). Stable dose then acute toxicity with rising creatinine confirms metabolite accumulation. Fentanyl rotation resolves it.

202. A — Medicare requires 5% minimum. At 3.6%, below threshold. Must increase services. Compliance issue triggering deficiency findings.

203. B — Fifth aspiration pneumonia in 14 months reflects progressive dementia with dysphagia. Each course treats infection but cannot change aspiration risk. Key: comfort or prolonging dying?

204. D — Severe bloody diarrhea on pembrolizumab with negative infectious workup is immune-related colitis. Prompt corticosteroids, immunotherapy hold, infliximab if refractory.

205. C — Movement-worsened nausea is vestibular-mediated via H1 and muscarinic receptors. The positional pattern is the diagnostic hallmark.

206. A — Sequential nephron blockade: metolazone blocks distal tubular reabsorption, overcoming compensatory reabsorption limiting furosemide alone. Standard for diuretic resistance.

207. B — 3:1 ratio:  $240 \div 3 = 80$  mg SC/day  $\div 24 = 3.3$  mg/hour. Same drug, different route — no cross-tolerance reduction.

208. D — Lactulose relieves distressing encephalopathy symptoms. Clinical purpose determines coverage. Comfort medication regardless of classification.

209. C — Perceived burdensomeness strongly associated with hastened death desire and depression. PHQ-9 of 19 confirms moderately severe depression requiring treatment.

210. A — "Cardiac arrest" is the universal mechanism — no disease information. Specify the actual disease process for public health statistics.

211. B — Hearing may be last preserved. Encourage family to keep talking, holding hands, saying what they need to say. Improves bereavement outcomes.

212. D — CTZ stimulation: constant, non-positional, improving over 3–7 days as tolerance develops. The improving trajectory is diagnostic. Short haloperidol bridges tolerance.

213. C — Fluctuating function is the characteristic organ failure trajectory. Good days within decline are natural variability, not recovery.

214. A — Lytic lesion >50% cortical destruction in weight-bearing bone: high fracture risk. Prophylactic fixation in ECOG 2 with 5-month survival prevents catastrophic complication.

215. B — Comprehensive response: explore motivations, assess depression, ensure legal understanding, participate or refer. Thorough evaluation before facilitation.

216. D — Failed maximal conventional laxatives → PAMORA. Methylnaltrexone blocks GI mu receptors without crossing blood-brain barrier.

217. C — Terminal rally: transient improvement before death. Not recovery. Typically followed by rapid decline.

218. A — Levetiracetam: no hepatic metabolism, few interactions, IV/liquid formulations. Ideal for palliative polypharmacy.

219. B — Living fully is core hospice philosophy. Plan medications, equipment, comfort for the trip.

220. B — Nephrostomy decision guided by patient's values and understanding: extends life but doesn't treat cancer. Patient must weigh this tradeoff.

221. C — 41% dying within 7 days, median LOS 11 days: late referrals. Services require time to provide effectively.

222. A — Treatment guided by patient's goals. Treating may improve symptoms; if comfort-only and treatment prolongs dying, supportive management alone may be appropriate.

223. A — Steroid myopathy: dose/duration-dependent, proximal pattern. Five weeks of dexamethasone 8 mg is sufficient. Distinguished from cord compression by absent sensory level.

224. D — Anticholinergics prevent NEW secretions but cannot dry EXISTING. Noise persists until reabsorbed or drained. Patient likely unaware.

225. C — "Cardiac arrest" is universal mechanism — no diagnostic information. Specify actual disease.

226. A — Treatment for symptom relief: polyuria, thirst, blurred vision directly impair comfort. Hospice glucose management targets symptoms.

227. B — 3:1 ratio:  $120 \div 3 = 40$  SC/day  $\div 24 \approx 1.7$  mg/hour. Same drug, different route.

228. D — Numbness, functional autopilot, disbelief are normal in first days/weeks after death. Not pathology or absent grief.

229. C — When opioid alone fails and anxiety is prominent, lorazepam addresses the anxiety-breathlessness cycle. SpO<sub>2</sub> 91% above threshold; anxiety is the target.

230. A — Pulmonary edema: morphine AND furosemide. Treating both symptom and treatable cause is more effective than either alone. Comfort-directed.

231. B — Ganglion impar at sacrococcygeal junction: perineum, rectum, anus, vulva. Precise target for perineal cancer pain.

232. D — Medicare requires 5% minimum. At 4.3%, below threshold. Must increase volunteer services.

233. C — On high-dose morphine with seizure-like episode: check renal function for M6G accumulation. Rotate to fentanyl if GFR declined.

234. A — Celiac plexus neurolysis: 70–90% relief in pancreatic cancer. Reduces opioid needs. Evidence supports early consideration.

235. B — Fentanyl has minimal histamine release — preferred rotation for pruritus. Morphine and codeine are strongest releasers.

236. D — Immune-related hypothyroidism: levothyroxine replacement. Typically does NOT require immunotherapy discontinuation.

237. C — 300:1 ratio:  $900 \div 300 = 3$  mg intrathecal/day. The 300-fold reduction provides equivalent analgesia with dramatically fewer side effects.

238. A — CGT: 16-session manualized therapy, 50–70% response rates for prolonged grief disorder. Strongest evidence among psychotherapies.

239. B — Existential questioning addressed through spiritual care: dignity therapy, life review, meaning exploration. Evidence-based interventions for end-of-life existential suffering.

240. D — Gabapentin is entirely renally excreted, accumulating most rapidly with declining GFR. While morphine also warrants attention, gabapentin's exclusively renal clearance makes adjustment most urgent.