

1 **Calcitonin for Hypercalcemic Crisis**

- 1 A How-To Guide for Drug Approval
- 2 Kelly Sawyer, PharmD
- 3 PGY1 Pharmacy Resident
Acute Care Pharmacy
Baystate Medical Center

2 **Objectives**

- Identify the role in therapy of calcitonin for treatment of hypercalcemic crisis
- Explain the rationale behind BMC restriction criteria for calcitonin approval
- Apply restriction criteria to patient cases in order to identify appropriate candidates for calcitonin

3 **Non-Formulary Request**

- CG is a 56-year old male with a history of small-cell lung cancer presenting to Baystate ED for significant fatigue, abdominal pain, and nausea.
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- His initial labs are as follows:
 - Calcium: 12.6 mg/dL
 - Ionized calcium: 2.2 mmol/L
 - Albumin: 4.2 g/dL
 - SCr: 1.1 mg/dL (baseline 1.0-1.2)
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4 **Non-Formulary Request**

- You are staffing in the central pharmacy when you get a call from CG's prescriber, Dr. Electro Lyte.
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- Dr. Lyte would like to order IM calcitonin 4 units/kg Q12H x 3 days for CG.
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- What do you do next?
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5 **Calcitonin Approval Process (Former)**

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8 **Calcitonin Approval Process (Now)**

9 **Approval Steps (Restriction Criteria)**

10 **Change to Formulary Status**

11 **Change to Formulary Status**

12 **Change to Formulary Status**

- 13 **Change to Formulary Status**
- Cost per vial: \$2521.90 (200 units/mL, 2 mL vial)
 - Cost per regimen for a 70 kg patient: \$7565.70 (approximately 3 vials)
 - Anticipated use per year: 5 patients
 - Anticipated cost per year: \$37,828.50
- 14 **Approval Steps (Restriction Criteria)**
- 15 **Calcitonin 5-Step Process**
- 16 **STEP 1: Fluid Administration**
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- 19 **STEP 2: Zoledronic Acid**
- 20 **STEP 2: Zoledronic Acid**
- 21 **STEP 3: Evaluation of Acuity**
- 22 **STEP 3: Evaluation of Acuity**
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- 24 **STEP 4: Initial One-Time Dose**
- 25 **STEP 5: Reassessment of Need**
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- Questions to consider:
 1. Does the patient still meet our restriction criteria for critical hypercalcemia?
 2. Is the patient still having symptoms of hypercalcemic crisis?
 3. Were formulary alternatives contraindicated in this patient?
- 27 **STEP 5: Reassessment of Need**
- 28 **Calcitonin 5-Step Process**
- 29 **Calcitonin 5-Step Process**
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- 33 **Calcitonin 5-Step Process**
- 34 **Attendance Code**
- Please text attendance code to:
413-200-2444
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