Physician's Orders
ZOLEDRONIC ACID (ZOMETA) - PEDIATRIC, OUTPATIENT, INFUSION CENTER
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Defaults for orders not otherwise specified below:
- Interval: Every 28 days

Duration:
- Until date: __________
- 1 year
- _____ # of Treatments

Anticipated Infusion Date ___________ ICD 10 Code with Description __________

Height __________ (cm) Weight __________ (kg) Allergies __________

Provider Specialty
- ☐ Allergy/Immunology
- ☐ Infectious Disease
- ☐ OB/GYN
- ☐ Rheumatology
- ☐ Cardiology
- ☐ Internal Med/Family Practice
- ☐ Other
- ☐ Surgery
- ☐ Gastroenterology
- ☐ Nephrology
- ☐ Otolaryngology
- ☐ Urology
- ☐ Genetics
- ☐ Neurology
- ☐ Pulmonary
- ☐ Wound Care
- ☐ Cardiology
- ☐ Internal Med/Family Practice
- ☐ Other
- ☐ Surgery
- ☐ Gastroenterology
- ☐ Nephrology
- ☐ Otolaryngology
- ☐ Urology
- ☐ Genetics
- ☐ Neurology
- ☐ Pulmonary
- ☐ Wound Care

Site of Service
- ☐ SH Gerber
- ☐ SH Lemmen Holton (GR)
- ☐ SH Pennock
- ☐ SH United Memorial
- ☐ SH Helen DeVos (GR)
- ☐ SH Ludington
- ☐ SH Reed City
- ☐ SH Zeeland

Appointment Requests

☑ Infusion Appointment Request
Status: Future, Expected: S, Expires: S+366, Sched. Tolerance: Schedule appointment at most 3 days before or at most 3 days after, Labs and infusion

Provider Reminder

☑ ONC PROVIDER REMINDER
For symptoms of allergic reaction or anaphalaxis, order “Peds Hypersensitivity Reactions” Therapy Plan.

☑ ONC PROVIDER REMINDER 2
Zoledronic acid is not recommended for patients with severe renal impairment. Longer infusions may reduce risk of nephrotoxicity.

Safety Parameters and Special Instructions

☑ ONC SAFETY PARAMETERS AND SPECIAL INSTRUCTIONS 1
Verify home medication list. Patient should receive Calcium Carbonate 15 mg/kg/dose of elemental Ca++ three times daily starting one week prior to zoledronic acid infusion.

Treatment Parameters

☑ ONC MONITORING AND HOLD PARAMETERS 1
Do NOT initiate infusion until provider has reviewed lab results:
- Endocrine Patients: Perfect Serve Pediatric Endocrinologist on call
- All other patients: Notify patient's physician, NP, or PA-C

☑ ONC MONITORING AND HOLD PARAMETERS 2
Do not give Zoledronic Acid if ionized calcium is less than 1.12 mmol/L or total calcium is less than 8.5 mg/dL.

☑ ONC MONITORING AND HOLD PARAMETERS 3
May proceed with treatment if patient does not report any symptoms of jaw or dental pain.
ZOLEDRONIC ACID (ZOMETA) - PEDIATRIC, OUTPATIENT, INFUSION CENTER (CONTINUED)

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Communications of this medical record shall be maintained except when use or disclosure is required or permitted by law, regulation, or written authorization by the patient.

Additional Lab Orders

☐ Calcium Ionized, Blood Level
   STAT, Starting S, For 1 Occurrences, Blood, Venous

☐ Renal Function Panel
   STAT, Starting S, For 1 Occurrences, Blood, Venous

☐ Magnesium, Blood Level
   STAT, Starting S, For 1 Occurrences, Blood, Venous

☐ Phosphorus, Blood Level
   STAT, Starting S, For 1 Occurrences, Blood, Venous

☐ Vitamin D 25 Hydroxy
   STAT, Starting S, For 1 Occurrences, Blood, Venous

☐ Complete Blood Count w/Differential
   STAT, Starting S, For 1 Occurrences, Blood, Venous

☐ Comprehensive Metabolic Panel (CMP)
   STAT, Starting S, For 1 Occurrences, Blood, Venous

Pre-Medications – SELECT DOSE FORM

Acetaminophen Premed - select suspension, tablet OR chewable

☐ acetaminophen (TYLENOL) 32 MG/ML suspension 15 mg/kg
   (Treatment Plan)
   15 mg/kg, Oral, Once, For 1 Doses
   Give 30 to 60 minutes prior to infusion.
   Recommended maximum single dose is 1000mg
   No more than 5 doses from all sources in 24 hour period, not to exceed 4000mg/day

☐ acetaminophen (TYLENOL) tablet 15 mg/kg
   (Treatment Plan)
   15 mg/kg, Oral, Once, Starting S, For 1 Doses
   Give 30 to 60 minutes prior to infusion.
   Recommended maximum single dose is 1000mg
   No more than 5 doses from all sources in 24 hour period, not to exceed 4000mg/day

☐ acetaminophen (TYLENOL) dispersible / chewable tablet 15 mg/kg
   (Treatment Plan)
   15 mg/kg, Oral, Once, Starting S, For 1 Doses
   Give 30 to 60 minutes prior to infusion.
   Recommended maximum single dose is 1000mg
   No more than 5 doses from all sources in 24 hour period, not to exceed 4000mg/day

Ondansetron Premed - select injection OR ODT

☐ ondanetron (ZOFRAN) IV 0.15 mg/kg
   (Treatment Plan)
   0.15 mg/kg, Intravenous, for 5 Minutes, Once PRN, Nausea, Starting S, For 1 Doses
   Give 30 to 60 minutes prior to infusion.
   Recommended maximum single dose is 16mg

☐ ondanetron (ZOFRAN-ODT) disintegrating tab 0.15 mg/kg
   (Treatment Plan)
   0.15 mg/kg, Oral, Once PRN, Nausea, Starting S, For 1 Doses
   Give 30 to 60 minutes prior to infusion.
   Recommended maximum single dose is 16mg

Additional Pre-Medications

☐ Pre-medication with dose: __________________________________________

☐ Pre-medication with dose: _______________________________________________
**Medications**

<table>
<thead>
<tr>
<th>Medicine</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zoledronic acid (ZOMETA) in sodium chloride 0.9 % IVPB</td>
<td>0.0125 mg/kg</td>
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<tr>
<td></td>
<td>0.025 mg/kg</td>
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<tr>
<td></td>
<td>0.05 mg/kg</td>
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<tr>
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<td>4 mg</td>
</tr>
</tbody>
</table>

If infusion rate is less than 5 mL/hour, run additional 0.9% sodium chloride fluid at 5 mL/hour to keep line patent.

**Nursing Orders**

- **ONC NURSING COMMUNICATION 1**
  - Place Intermittent Infusion Device if needed.
  - Do NOT initiate infusion until provider has reviewed labs and gives permission to start.
  - Obtain heart rate, respiratory rate, pulse oximetry and temperature. Assess for symptoms of anaphylaxis every 15 minutes through 30 minutes after drug completion.
  - Notify pediatric physician, NP or PA-C and stop drug infusion immediately if patient has itching, hives, swelling, fever, rigoress, dyspnea, cough, bronchospasm or temperature > 101 F. Notify if greater than 20% decrease in systolic or diastolic blood pressure.
  - At the end of infusion, flush secondary line with 0.9% Sodium Chloride at a rate no faster than the Zoledronic Acid infusion rate.
  - Advise patient that flu-like symptoms may occur for at least 48 hours after infusion and to take acetaminophen as directed in discharge instructions.
  - Verify that patient has diphenhydramine / Epi-pen available (as appropriate) for immediate home use. Advise patient that severe hypersensitivity or anaphylactic reactions may occur during and after infusion. Inform patients of signs and symptoms of anaphylaxis and hypersensitivity reactions, and importance of seeking medical care.
  - Check temperature immediately prior to discharge. Call provider if febrile.

- **ONC NURSING COMMUNICATION 2**
  - Instruct patient to continue acetaminophen PO every 6 hours around the clock for next 4 days.
  - Instruct patient to continue calcium carbonate PO three times daily for the next 7 days.
  - Instruct patient to call Pediatric Endocrinology physician on call (866-940-7073) if patient develops fever after discharge.

**Post-Infusion Labs**

- **ONC NURSING COMMUNICATION 3**
  - Send stat Renal Panel with mag and ical. If Calcium, ionized calcium or phosphorus is low:
    - Endocrine Patients: Perfect Serve Pediatric Endocrinologist on call
    - All other patients: Notify pediatric physician, NP or PA-C

- **Renal Function Panel**
  - STAT, Starting S, For 1 Occurrences, Blood, Venous

- **Magnesium, Blood Level**
  - STAT, Starting S, For 1 Occurrences, Blood, Venous

- **Calcium Ionized, Blood Level**
  - Once, Starting S, For 1 Occurrences
  - Reason for Exam: Draw 60 minutes post zoledronic acid infusion.
  - Blood, Venous

**Post-Infusion Additional Lab Orders**

- Labs: ____________________________________________  Every ___days  Until date: _______
  - Every Once  Until date: _______
  - Every 1 year  Until date: _______
  - _____ # of Treatments

**Telephone order/Verbal order documented and read-back completed. Practitioner’s initials: ____________________________**

**NOTE:** Unless Order is written DAW (dispense as written), medication may be supplied which is a generic equivalent by nonproprietary name.