

Canadian HPP Clinical Expert Committee

APPLICATION & CLINICAL SUMMARY FORMS  
for Hypophosphatasia (HPP) Enzyme Replacement Therapy

Please FAX all requests to AMY @ 204-789 3907 or scan and fax to [ayakimoski@chrim.ca](mailto:ayakimoski@chrim.ca)

Please ensure to include ALL RELEVANT REPORTS

REFERRING DOCTOR \_\_\_\_\_ Institution \_\_\_\_\_

City \_\_\_\_\_ Province/Territory \_\_\_\_\_

Email \_\_\_\_\_

Telephone \_\_\_\_\_

PATIENT INFORMATION

Initials/Case #: \_\_\_\_\_ Date of Birth \_\_\_\_\_

Day/Month/Year

Province/Territory of Residence \_\_\_\_\_ Sex:  Male  Female

TYPE OF REQUEST  Antenatal  Newborn  Infantile  Juvenile (Childhood)

CRITERIA TO QUALIFY PATIENT FOR ERT (check all that apply)

Patient must have confirmed diagnosis of HPP #1 and fulfill criteria in 2 other areas as listed below in #2 - #6 (known to respond to ERT)

#1.  Confirmed diagnosis of Pediatric-Onset HPP

#2.  Clinical manifestations (check all that apply):

- Failure to Thrive/Poor Growth (crossing percentiles)
- Clinical signs of rickets: thickened wrists; rachitic rosary
- Fractures, recurrent and poorly healing
- Orthopedic Surgical Procedures
- Abnormal Gait
- Delayed Motor Development
- Use of Assistive Devices

#3.  Radiologic findings (check all that apply):

- Radiologic signs of rickets
- Severe hypomineralization/Osteopenia
- Limb Bowing/Deformation
- Other eg radiolucent tongues \_\_\_\_\_

#4.  **Severe Pain plus #1 and #2 or #3**

Pain that is not related to a fixable problem (eg, pain that is not self-limited due to a surgical procedure or fracture) AND

Pain severe enough to repeatedly miss school days

Pain requiring opioid or non-opioid analgesics on a daily basis

#5.  **Respiratory Findings (check all that apply):**

Lung hypoplasia

Respiratory Failure

Supplemental Oxygen

Assisted Ventilation

#6.  For **neonatal requests for perinatal HPP**, requesting centre must have management team & decision making structure in place and follow guideline for initiation & monitoring of treatment of neonate with perinatal HPP (Attachment 1).

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**For HPP CEC Notes:**

1. Application received \_\_\_\_\_

2. Application disseminated to committee members \_\_\_\_\_

3. Recommendations received from committee members and collated  
\_\_\_\_\_

4. Conference call, if necessary \_\_\_\_\_

5. Committee recommendation \_\_\_\_\_ submitted \_\_\_\_\_

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**HPP CLINICAL SUMMARY FORM –Please Fax with application form & all relevant reports**

<b>SYSTEM</b>	<b>FEATURE/CRITERIA</b>
	<p><b>BOLD</b> items are those criteria that can qualify patient for ERT (respond to ERT) Items not in bold are features of HPP <i>not known</i> to respond to ERT</p>
<b>Growth</b>	<p>Current height _____ cm feet/inches (circle one) (____%)            Current weight _____ kg pounds (circle one) (____%)            Current Head circumference _____ cm (____%)  <input type="checkbox"/> <b>Poor growth (crossing percentiles)/FTT</b> <input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<b>Genetic studies</b>	<p><input type="checkbox"/> <b>Confirmed diagnosis of Pediatric-Onset HPP</b>  <input type="checkbox"/> Low ALP, specify: _____  <input type="checkbox"/> ALPL mutation, specify: _____</p>
<b>Clinical Manifestations</b>	<p><input type="checkbox"/> <b>Fractures</b>      <b>Number</b> _____                                              <b>Location</b> _____</p> <p><input type="checkbox"/> <b>Non-healing</b>    <input type="checkbox"/> <b>Healed</b>  <input type="checkbox"/> <b>Thickened wrists</b> <input type="checkbox"/> yes <input type="checkbox"/> no; rachitic rosary <input type="checkbox"/> yes <input type="checkbox"/> no  <input type="checkbox"/> <b>Orthopedic surgical procedures</b>  <b>Specify type of surgery, age at procedure:</b> _____</p> <hr/> <p><input type="checkbox"/> <b>Gait</b>            <input type="checkbox"/> Normal                                              <input type="checkbox"/> <b>Abnormal, specify</b> _____</p> <p><input type="checkbox"/> <b>Motor development:</b>  <input type="checkbox"/> Meeting age-appropriate milestones  <input type="checkbox"/> <b>Delayed</b>  <input type="checkbox"/> <b>Weakness, specify</b> _____</p> <p><b>Details:</b> _____</p> <hr/> <p><input type="checkbox"/> <b>6 Minute Walk Test</b> <input type="checkbox"/> Yes (attach result)      <input type="checkbox"/> No  <input type="checkbox"/> <b>Use of assistive devices:</b>  <input type="checkbox"/> Yes, specify _____  <input type="checkbox"/> No</p> <p><input type="checkbox"/> Scoliosis  <input type="checkbox"/> Skeletal deformities, specify _____</p> <p><b>Details:</b> _____</p> <hr/> <p><input type="checkbox"/> Craniosynostosis  <input type="checkbox"/> Early loss of primary teeth.                                              Age at first tooth loss: _____ Months/Years (Circle One)  <input type="checkbox"/> Poor dentition  <input type="checkbox"/> Other teeth problems: _____  <input type="checkbox"/> Joint swelling, specify _____</p> <p><input type="checkbox"/> Participates in sports: <input type="checkbox"/> Yes    <input type="checkbox"/> No    <input type="checkbox"/> Not applicable  <input type="checkbox"/> Misses school:                    <input type="checkbox"/> Yes    <input type="checkbox"/> No    <input type="checkbox"/> Not applicable  <input type="checkbox"/> Other eg Childhood Health Assessment Questionnaire (CHAQ) Disability Index  <b>Details:</b> _____</p>

<b>X-ray findings and other Imaging Results</b>	<input type="checkbox"/> <b>Rickets</b> <input type="checkbox"/> <b>Severe hypomineralization/osteopenia</b> <input type="checkbox"/> <b>Limb Bowing/Deformation</b> <input type="checkbox"/> <b>Other, please specify: eg radiolucent tongues</b> _____ <input type="checkbox"/> <b>Skeletal survey</b> <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, age at x-rays _____ Months/Years (Circle One) X-ray findings _____ Most recent X-ray results _____ <input type="checkbox"/> <b>DEXA Scan</b> <input type="checkbox"/> Yes <input type="checkbox"/> No If yes age(s) at DEXA _____ Months/Years (Circle One) Results _____ <input type="checkbox"/> <b>Peripheral quantitative computed tomography (pQCT) (research tool)</b>
<b>Pain</b>	<input type="checkbox"/> <b>Pain that is not related to a fixable problem</b> (ie: pain that is not self-limited d/t a surgical procedure or fracture) <input type="checkbox"/> <b>Pain severe enough to repeatedly miss school days</b> <input type="checkbox"/> <b>Daily use of opioid or non-opioid analgesics</b> <input type="checkbox"/> Analgesics (overall use) <input type="checkbox"/> Yes <input type="checkbox"/> No List analgesics used, dosage, frequency: _____ <hr/> <input type="checkbox"/> <b>Muscle pain</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> <b>Bone pain</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> <b>Joint pain</b> <input type="checkbox"/> Yes <input type="checkbox"/> No Specify type of pain, location, pain at rest or with activity, daytime or at night, and clinical response to intervention <hr/> <input type="checkbox"/> Heating Pad <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Massage <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Other interventions, specify: _____ <input type="checkbox"/> Validated pain tools _____ eg. Visual analog for pain eg. Childhood Health Assessment Questionnaire (CHAQ) Pain Index eg. "PROMIS" <a href="http://www.healthmeasures.net/explore-measurement-systems/promis">http://www.healthmeasures.net/explore-measurement-systems/promis</a> <input type="checkbox"/> Patient's/parent's assessment of pain and QOL
<b>Respiratory</b>	<input type="checkbox"/> <b>Lung hypoplasia</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> <b>Respiratory failure</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> <b>Supplemental O2</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> <b>Assisted ventilation</b> <input type="checkbox"/> Yes, specify _____ <input type="checkbox"/> No
<b>Renal Manifestation</b>	<input type="checkbox"/> Nephrocalcinosis <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Renal failure/reduced renal function <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Other studies</b>	<input type="checkbox"/> Hearing Loss <input type="checkbox"/> Yes if Yes, specify _____ <input type="checkbox"/> No <input type="checkbox"/> Not tested <input type="checkbox"/> Seizures <input type="checkbox"/> Yes If Yes, B6 responsive <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> Cognitive development <input type="checkbox"/> Normal for age <input type="checkbox"/> Delayed, if delayed, specify: _____ _____
<b>Biochemical parameters</b>	<input type="checkbox"/> Calcium, phosphate, magnesium, <b>alkaline phosphatase</b> , PTH, 25 OH vitamin D, <b>pyridoxal-5-phosphate (PLP)</b> , urine phosphoethanolamine (PEA)