While the true prevalence of HPP remains unknown, estimates suggest it occurs in ~1 in 5,685 people* –

MANY OF WHOM REMAIN UNDIAGNOSED[1–4]

Rethink HPP diagnosis by earlier recognition of hypophosphatasia signs and symptoms and the impact of persistently low ALP adjusted for age and sex[5]

*Prevalence data has been calculated based on information presented in Tornero C, et al. 2020.[1]
ALP, alkaline phosphatase; HPP, hypophosphatasia.

1. Tornero C, et al. *Orphanet J Rare Dis*. 2020;15(1):51. **2.** Rockman-Greenberg C. *Pediatr Endocrinol Rev*. 2013;10(Suppl 2):380–388. **3.** NORD. Hypophosphatasia. Available at: https://rarediseases.org/rare-diseases/hypophosphatasia/#complete-report (Accessed February 2025). **4.** Tournis S, et al. *J Clin Med*. 2021;10(23):5676. **5.** Khan AA, et al. *Osteoporos Int*. 2024;35(3):431–438.

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The estimated median

DIAGNOSTIC DELAY IS ~10 YEARS

in adults with HPP*[1]

Rethink HPP diagnosis by earlier recognition of hypophosphatasia signs and symptoms and the impact of persistently low ALP adjusted for age and sex [2]

*In adults (n=52) median age of earliest reported manifestations of HPP was 37.6 years (min: 0.2, max: 75.2), which preceded median age at diagnosis (47.5 years; min: 0.2, max: 75.2).[1] Data from the Global HPP Registry, sponsored by Alexion Pharmaceuticals, an observational, longitudinal, multinational, long-term study collecting data on HPP diagnosis, history, clinical course, symptoms (including multisystemic aspects of disease) and burden of illness from patients who have a diagnosis of HPP.[1,3]

ALP, alkaline phosphatase; HPP, hypophosphatasia.

1. Högler W, et al. *BMC Musculoskelet Disord*. 2019;20(1):80. **2.** Khan AA, et al. *Osteoporos Int*. 2024;35(3):431–438. **3.** Seefried L, et al. *J Bone Miner Res*. 2020;35(11):2171–2178.

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75% **of adult patients with HPP*** suffer from **pain**, making it one of the most common symptoms[1]

Neuropathic pain[2,3]

Musculoskeletal pain[1,4]

Rethink HPP disease burden especially the impact on daily function and QoL, and the potential for progression in children and adults[5–7]

*(N=160/213) Data from the Global HPP Registry, sponsored by Alexion Pharmaceuticals, an observational, longitudinal, multinational, long-term study collecting data on HPP diagnosis, history, clinical course, symptoms (including multisystemic aspects of disease) and burden of illness from patients who have a diagnosis of HPP.[1,6]
HPP, hypophosphatasia; QoL, quality of life.

1. Dahir KM, et al. *Orphanet J Rare Dis*. 2022;17(1):277. **2.** Lehane F, et al. *J Clin Med*. 2024;13(8):2263.
3. Colazo JM, et al. *Osteoporos Int*. 2019;30(2):469–480. **4.** Khan AA, et al. *Osteoporos Int*. 2024;35(3):431–438.
5. Rush ET, et al. *Orphanet J Rare Dis*. 2019;14(1):201. **6.** Seefried L, et al. *J Bone Miner Res*. 2020;35(11):2171–2178.
7. Szabo SM, et al. *Orphanet J Rare Dis*. 2019;14(1):85.

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MORE THAN HALF OF PATIENTS

with HPP may not have overt bone manifestations*[1]

Neurological,† Pain, Fatigue,[1,2] Muscle weakness[1]

+ bone manifestations‡[1]

Rethink HPP disease burden especially the impact on daily function and QoL, and the potential for progression in children and adults[3–5]

*Skeletal manifestations were present in 44.2% (N=53/120) of paediatric (<18 years) and 48.2% (N=66/137) of adult (≥18 years) patients with HPP.[1] Data from the Global HPP Registry, sponsored by Alexion Pharmaceuticals, an observational, longitudinal, multinational, long-term study collecting data on HPP diagnosis, history, clinical course, symptoms (including multisystemic aspects of disease) and burden of illness from patients who have a diagnosis of HPP.[1,5] †Includes craniosynostosis, developmental delay, increased intracranial pressure and seizures.[1] ‡Includes bone deformity, pseudofractures, recurrent and poorly healing fractures, rickets-like changes (by radiograph).[1]
HPP, hypophosphatasia; QoL, quality of life.

1. Högler W, et al. *BMC Musculoskelet Disord*. 2019;20(1):80. **2.** Dahir KM, et al. *Orphanet J Rare Dis*. 2022;17(1):277. **3.** Rush ET, et al. *Orphanet J Rare Dis*. 2019;14(1):201. **4.** Seefried L, et al. *J Bone Miner Res*. 2020;35(11):2171–2178. **5.** Szabo SM, et al. *Orphanet J Rare Dis*. 2019;14(1):85.

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Patients with and without skeletal manifestations* have similar impairments in:[1]

Disability scores†

QoL‡

Rethink HPP disease burden especially the impact on daily function and QoL, and the potential for progression in children and adults[2–4]

*Of 468 adults (skeletal group, n=300; muscular/pain group, n=73) from the Global HPP Registry, sponsored by Alexion Pharmaceuticals, an observational, longitudinal, multinational, long-term study collecting data on HPP diagnosis, history, clinical course, symptoms (including multisystemic aspects of disease) and burden of illness from patients who have a diagnosis of HPP.[1,3] †HAQ-DI disability assessment scores at baseline; N=191/239 (skeletal group) and N=47/239 (muscular/pain group).[1] ‡SF-36v2 domain scores at baseline. The individual SF-36v2 domain scores, except the physical functioning score, did not differ between the skeletal (N=191/238) and muscular/pain (N=47/238) groups.[1]
HAQ-DI, health assessment questionnaire–disability index; HPP, hypophosphatasia; QoL, quality of life; SF-36v2, Short Form Health Survey version 2.

1. Dahir KM, et al. *Front Endocrinol (Lausanne)*. 2023;14:1138599. **2.** Rush ET, et al. *Orphanet J Rare Dis*. 2019;14(1):201. **3.** Seefried L, et al. *J Bone Miner Res*. 2020;35(11):2171–2178. **4.** Szabo SM, et al. *Orphanet J Rare Dis*. 2019;14(1):85.

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