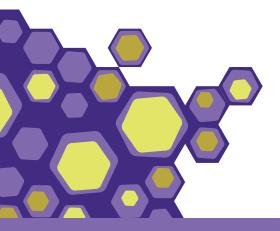
## Consider MPS VII in Perinatal NIHF

## ≈40% of MPS VII patients have a history of nonimmune hydrops fetalis (NIHF)<sup>1,2</sup>

- NIHF is defined as abnormal fluid collection, including ascites, pleural effusions, pericardial effusions, and skin edema, in at least 2 areas of the fetus<sup>3,4</sup>
- Lysosomal storage disorders (LSDs) were found in ≈5% of NIHF cases overall, and it is estimated that LSDs would be found in ≈30% of idiopathic NIHF cases if a comprehensive LSD workup was performed<sup>4</sup>
- NIHF is the most common presentation of MPS VII<sup>1,5</sup>
  - MPS VII is a rare, progressive, autosomal recessive disease characterized by  $\beta$ -glucuronidase enzyme deficiency caused by a mutation in the *GUSB* gene<sup>1,2,6</sup>
- Lysosomal enzyme testing is recommended in idiopathic NIHF<sup>4,7</sup>

Pre- and neonatal testing for MPS VII can lead to diagnosis and opportunity for early intervention<sup>4</sup>



## No-cost enzyme deficiency testing for MPS VII

## Enzyme deficiency testing for MPS VII is available at no cost



Email TestingforMPSVII@ultragenyx.com for more information about testing for MPS VII

Additionally, if your patient tests positive for MPS VII, his or her parents will be offered access, at no cost, to a genetic counselor to address any questions or concerns by phone



**References: 1.** Vervoort R, Islam MR, Sly WS, et al. Molecular analysis of patients with β-glucuronidase deficiency presenting as hydrops fetalis or as early mucopolysaccharidosis VII. *Am J Hum Genet*. 1996;58(3):457-471. **2. Montaño AM, Lock-Hock N, Steiner R, et al. Clinical course of sly syndrome (mucopolysaccharidosis type VII). J Med Genet. 2016;53(6):403-18.3.** Santolaya J, Alley D, Jaffe R, Warsof SL. Antenatal classification of hydrops fetalis. *Obstet Gynecol*.

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