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(54) **Title**: MANUFACTURE OF ACTIVE HIGHLY PHOSPHORYLATED HUMAN N-ACETYLGALACTOSAMINE-6-SULFATASE AND USES THEREOF

(57) **Abstract**: This invention provides compositions of active highly phosphorylated human N- acetylgalactosamine-6-sulfatase (GALNS), and pharmaceutical compositions and formulations thereof, methods of producing and purifying GALNS, and its use in the diagnosis, prophylaxis, or treatment of diseases and conditions, including particularly lysosomal storage diseases that are caused by, or associated with, a deficiency in the GALNS enzyme, *e.g.*, Mucopolysaccharidosis IVa (MPS IVa or Morquio A syndrome).