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(54) Title: GENE EDITING SYSTEMS COMPRISING AN RNA GUIDE TARGETING STATHMIN 2 (STMN2) AND USES THEREOF

(57) Abstract: A system for genetic editing of a stathmin 2 (STMN2) gene, comprising (i) a Cas12i2 polypeptide or a first nucleic acid encoding the Cas12i2 polypeptide, and (ii) an RNA guide or second nucleic acid encoding the RNA guide, wherein the RNA guide comprises a spacer sequence specific to a target sequence within an STMN2 gene. Also provided herein are methods for editing a STMN2 gene using the gene editing system disclosed herein and/or for treating diseases associated with the STMN2 gene.