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- (71) **Applicant:** **EBERHARD KARLS UNIVERSITÄT TÜBINGEN** [DE/DE]; Geschwister-Scholl-Platz, 72074 Tübingen (DE).
- (72) **Inventors:** **STAFFORST, Thorsten**; Engelfriedshalde 3, 72076 Tübingen (DE). **PFEIFFER, Laura Sophia**; Wanger Weg 22, 73760 Ostfildern (DE). **LATIFI, Ngadhn-jim**; Charlottenstraße 21, 72070 Tübingen (DE).
- (74) **Agent:** **GILL JENNINGS & EVERY LLP**; The Broadgate Tower 20 Primrose Street, London EC2A 2ES (GB).
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(54) **Title:** CHEMICALLY MODIFIED ANTISENSE OLIGONUCLEOTIDES (ASOS) AND COMPOSITIONS COMPRISING THE SAME FOR RNA EDITING

(5'-N₋₁^aN₀^fN₊₁^g-3') (I)

5'-N₋₅^aN₋₄^bN₋₃^cN₋₂^dN₋₁^eN₀^fN₊₁^gN₊₂^hN₊₃ⁱN₊₄^j-3' (II)

(57) **Abstract:** The invention relates to chemically modified oligonucleotides comprising a sequence with a length of 23 to 80 nucleotides, capable of binding to a target sequence in a target RNA, comprising a central base triplet (CBT) of 3 nucleotides (I) with the central nucleotide (N₀) directly opposite to the target adenosine in the target RNA, wherein the core oligonucleotide comprises the following sequence: (II) comprising different 2' sugar and linkage modifications. The present disclosure also provides oligonucleotides and compositions thereof for use in use in the treatment or prevention of a genetic disorder, condition, or disease. Also provided are methods for editing a target adenosine or deaminating at least one specific adenosine in a target nucleic acid.



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