

Title (en)

APTAMER-BASED CAR T-CELL SWITCH

Title (de)

AUF APTAMER BASIERENDER CAR-T-ZELL-WECHSEL

Title (fr)

COMMUTATEUR DE CELLULE CAR T À BASE D'APTAMÈRES

Publication

EP 3827083 A2 20210602 (EN)

Application

EP 19798704 A 20190726

Priority

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- IB 2019000890 W 20190726

Abstract (en)

[origin: CN112955554A] An aptamer-based switch technology is provided that enhances control of the use of chimeric antigen receptor (CAR)-related immunotherapies. The aptamer-based switch utilizes a synthetic bridge molecule containing a target-binding aptamer bound through a linker to a CAR-binding aptamer. A system containing a CAR and a corresponding aptameric bridge provides an immunotherapy platform that: (i) can be targeted to any desired antigen by choosing the target-binding aptamer of the bridge, (ii) can be redirected from one target to another by changing the target-binding aptamer; (iii) can be dosed according to the changing needs of an individual patient overtime by altering the administration protocol for the bridge; (iv) can be switched on or off quickly or gradually; (v) can be used as a companion diagnostic for a specific CAR therapy; (vi) can be integrated with either in vivo or ex vivo CAR expression; (vii) is non-immunogenic; and (viii) has low production costs.

IPC 8 full level

C12N 15/115 (2010.01); **A61K 31/7088** (2006.01); **A61K 35/17** (2015.01); **A61P 35/00** (2006.01)

CPC (source: EP)

A61K 39/4611 (2023.05); **A61K 39/4631** (2023.05); **A61K 39/464406** (2023.05); **A61K 39/464412** (2023.05); **A61K 39/464413** (2023.05); **A61K 39/464424** (2023.05); **A61K 39/464429** (2023.05); **A61K 39/464495** (2023.05); **C07K 14/4748** (2013.01); **C07K 14/7051** (2013.01); **C12N 9/6424** (2013.01); **C12N 15/115** (2013.01); **A61K 2239/58** (2023.05); **C07K 2319/03** (2013.01); **C12N 2310/16** (2013.01); **C12N 2310/318** (2013.01); **C12N 2310/3519** (2013.01); **C12N 2310/51** (2013.01); **C12N 2320/13** (2013.01)

C-Set (source: EP)

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