Nanoparticle-based delivery of carbamazepine: a promising approach for the treatment of refractory epilepsy

Anna Zybina, Anastasiya Anshakova, Julia Malinovskaya, Pavel Melnikov, Vladimir Baklaushev, Vladimir Chekhonin, Olga Maksimenko, Sergey Titov, Vadim Balabanyan, Jörg Kreuter, Svetlana Gelperina, Kenul Abbasova

PII: S0378-5173(18)30321-1
DOI: https://doi.org/10.1016/j.ijpharm.2018.05.023
Reference: IJP 17494

To appear in: *International Journal of Pharmaceutics*

Received Date: 16 January 2018
Revised Date: 19 April 2018
Accepted Date: 7 May 2018

Please cite this article as: A. Zybina, A. Anshakova, J. Malinovskaya, P. Melnikov, V. Baklaushev, V. Chekhonin, O. Maksimenko, S. Titov, V. Balabanyan, J. Kreuter, S. Gelperina, K. Abbasova, Nanoparticle-based delivery of carbamazepine: a promising approach for the treatment of refractory epilepsy, *International Journal of Pharmaceutics* (2018), doi: https://doi.org/10.1016/j.ijpharm.2018.05.023

NANOPARTICLE-BASED DELIVERY OF CARBAMAZEPINE: A PROMISING APPROACH FOR THE TREATMENT OF REFRACTORY EPILEPSY

Anna Zybina[a], Anastasiya Anshakova[b], Julia Malinovskaya[c,d], Pavel Melnikov[e], Vladimir Baklaushev[f], Vladimir Chekhonin[e], Olga Maksimenko[c], Sergey Titov[g], Vadim Balabanyan[h], Jörg Kreuter[d,i], Svetlana Gelperina[c], Kenul Abbasova[a*]

[a] *M.V. Lomonosov Moscow State University, Faculty of Biology, Leninskie Gory 1/12, 119991, Moscow, Russian Federation;*

[b] *Mendeleev University of Chemical Technology, Miusskaya pl., 9, 125047 Moscow, Russian Federation;*

[c] *Drugs Technology LLC, Rabochaya st. 2A, 141400 Khimki, Moscow Region, Russian Federation;*

[d] *I.M. Sechenov First Moscow State Medical University, Trubetskaya st. 8-2, Moscow 119991, Russia;*

[e] *Research and Education Center for Medical Nanobiotechnology, Pirogov Russian National Research Medical University, Ostrovityanova st, 117997 Moscow, Russian Federation;*

[f] *Federal Research and Clinical Center of Specialized Medical Care and Medical Technologies, Federal Biomedical Agency of the Russian Federation, Orekhoviy blvd 2, 115682 Moscow, Russian Federation;*

[g] *Russian State University for the Humanities, Miusskaya sq. 6, Moscow, GSP-3, 125993, Moscow, Russian Federation;*

[h] *M.V. Lomonosov Moscow State University, Faculty of Fundamental Medicine, Leninskie Gory 1/12, 119991, Moscow, Russian Federation;*

[i] *Institute of Pharmaceutical Technology, Biocenter Niederursel, Goethe University, Max-von-Laue-Str. 9, 60438 Frankfurt/Main, Germany*

* Author to whom correspondence should be addressed:

Kenul Abbasova

Address: M.V. Lomonosov Moscow State University, Faculty of Biology, Leninskie Gory 1/12, 119991, Moscow, Russian Federation

Tel: +7 916 8200345

E-mail: akenul@gmail.com