

## **Human Gene Therapy**

- Published Online: 5 November 2019

<https://doi.org/10.1089/hum.2018.003.correx>

**Impact Factor:\* 3.855**

**\*2018 Journal Impact Factor, Journal Citation Reports (Web of Science Group, 2019)**

## **Human Gene Therapy**

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ISSN: 1043-0342 Online ISSN: 1557-7422 Published 22 issues annually Current Volume: 30

# **ESGCT**

## **27th Annual Congress**

**In collaboration with SETGyc**

**Barcelona, Spain**

**October 22–25, 2019**

**Abstracts**

P512

**Introduction of mesenchymal stem cells reduced the effect of ischemia on nitric oxide content in the hippocampus and restored the approximate motor activity of rats after modeling of cerebral stroke**

M Baltin<sup>1</sup> S Pashkevich<sup>2</sup> M Dosina<sup>2</sup> A Zamaro<sup>2</sup> A Denisov<sup>2</sup>  
D Loiko<sup>2</sup> V Andrianov<sup>1 3</sup> G Yafarova<sup>1 3</sup> T Baltina<sup>1</sup>  
K Gainutdinov<sup>1 3</sup> K Kulchitsky<sup>2</sup>

*1: Institute of Fundamental Medicine and Biology, Kazan Federal University, Kazan, Russia 2: Institute of Physiology of National Academy of Sciences of Belarus, Minsk, Belarus 3: Zavoisky Physical-Technical Institute, FRC Kazan Scientific Center of RAS, Kazan, Russia*

We studied the effects of intranasal mesenchymal introduction of stem cell (MSC) on the approximate motor activity and the level of NO in hippocampus of the rats after modeling of ischemic stroke caused by ligation of common carotid arteries. Experiments were partly supported by subsidy to Kazan Federal University for the state assignment in the sphere of scientific activities (No 17.9783.2017/8.9). It was implemented the analysis by EPR spectroscopy the dynamics of the NO content in the dentate gyrus (CA4 region of the rats hippocampus before and after modeling of cerebral ischemia. A significant decrease in NO production 1 day after modeling of ischemia was found. It was shown that intranasal introduction of MSC partially increased the level of NO in hippocampus, reduced after brain stroke. It is shown that intranasal administration of MSC in the acute period after occlusion of the common carotid arteries is accompanied by a more rapid restoration of the approximate motor activity in experimental animals.