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Human Gene Therapy

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Effect of intranasal administration of mesenchymal stem cells on the average speed of movement and time of activity and NO level in olfactory bulb of rats after simulation of brain stroke

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In physiological conditions, neuroblasts, which are generated by neural stem cells in olfactory bulbs, migrate to brain areas with intensive formation of new neural networks. After stroke, neuroblasts migrate to the area of neurodestruction. These findings are a compelling argument for further research to develop new treatments by enhancing endogenous neurogenesis in brain injury. We found that intranasal administration of mesenchymal stem cells (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. This process was accompanied by an increase in the number of MSC in olfactory bulb of rats. MSC also partially increased the level of NO in olfactory bulb, reduced after brain stroke

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Evaluation of the cationic solid lipid nanoparticles carrying siRNA against EphA2 receptor as non-viral delivery systems

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For gene delivery purposes; cost-efficient, easily producible & scalable non-viral delivery systems are considered as an