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Analysis of iPSC-Derived Dopaminergic Neuron Susceptibility to Influenza and Excitotoxicity in Non-Affective Psychosis

Authors : Jamileh Ahmed, Helena Hernandez, Gabriel De Erausquin

Abstract : H1N1 virus susceptibility of iPSC-derived DA neurons from schizophrenia patients and controls will compared. C57/BL-6 fibroblasts were reprogrammed into iPSCs using a lenti-viral vector containing SOKM genes. Pluripotency verification with the AP assay and immunocytochemistry ensured iPSC presence. The experimental outcome of ISPCs from DA neuron differentiation will be discussed in the Results section. Fibroblasts from patients and controls will be reprogrammed into iPSCs using a sendai-virus vector containing SOKM. IPSCs will be characterized using the AP assay, immunocytochemistry and RT-PCR. IPSCs will then be differentiated into DA neurons. Gene methylation will be compared for both groups with custom-designed microarrays.

Keywords : schizophrenia, iPSCs, stem cells, neuroscience
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