

# How does ischemic stroke affect Oligodendrocytes (OLG) and Oligodendrocyte Progenitor Cells (OPC): an analysis

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# **BACKGROUND**

• Stroke is the second cause of death and disability in the world

 84% of Stroke is Ischemic and important weight for health systems

Most studies focused on the effect of stroke on nerve cells

• The aim is to collect and review studies that were aimed at elucidating the effect of ischemic stroke on OLG and OPC

# HOW

"Oligodendrocyte Precursor Cells" OR Oligodendroglia OR

"Extracellular Vesicles" OR (NG2 AND (neuroglia OR glia)) OR

exovesicles OR exosomes

• AND "Brain Ischemia" OR Stroke OR "ischemic stroke" OR

"cerebrovascular accident"

# HOW

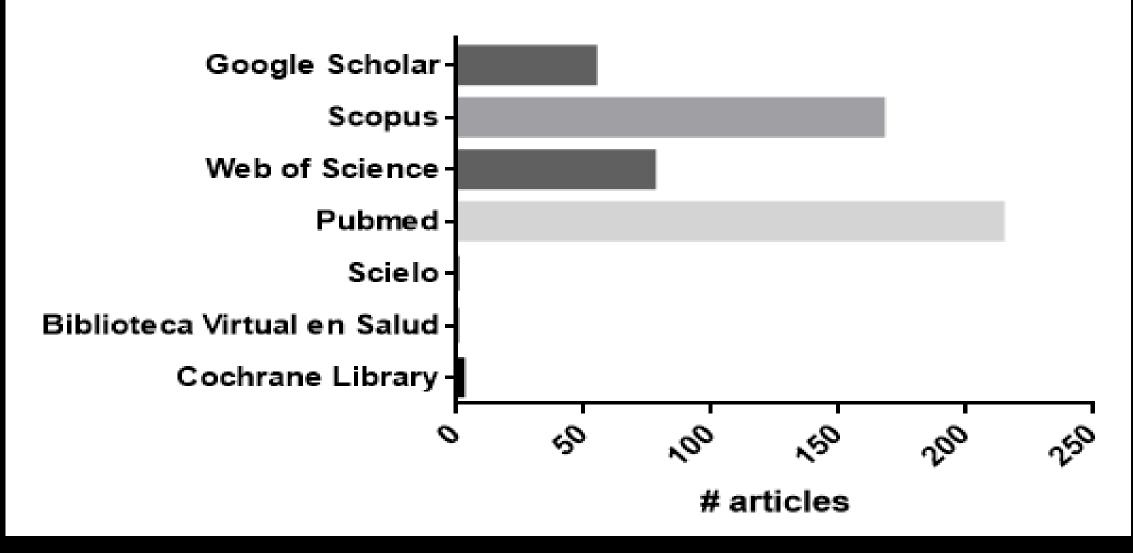
NOT retina OR prenatal OR perinatal OR "spinal cord" OR diabetes OR

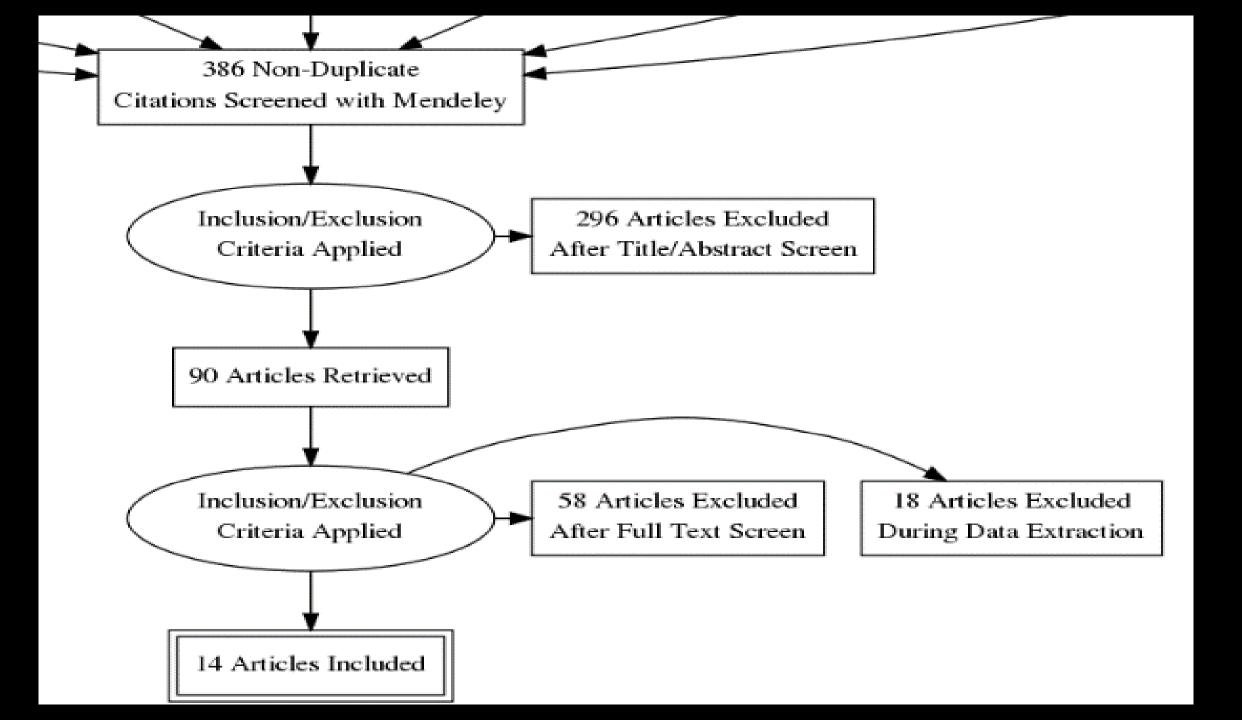
"myocardial infarction" OR hypertension OR fetal OR neonatal OR

alzheimer OR dementia OR "multiple sclerosis" OR premature OR cancer

OR tumour OR astrocytes OR microglia







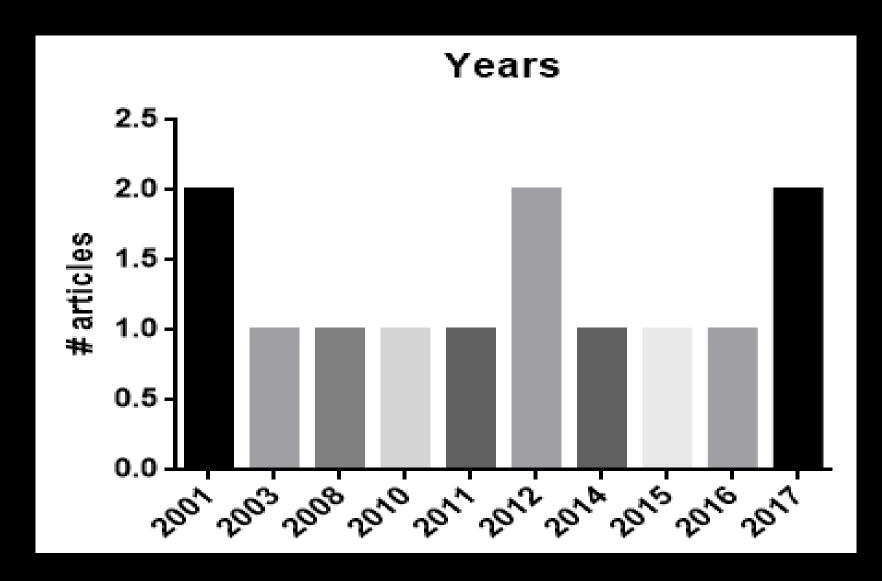
### **FINDINGS**

 Unilateral MCAO middle cerebral artery occlusion with filament or suture

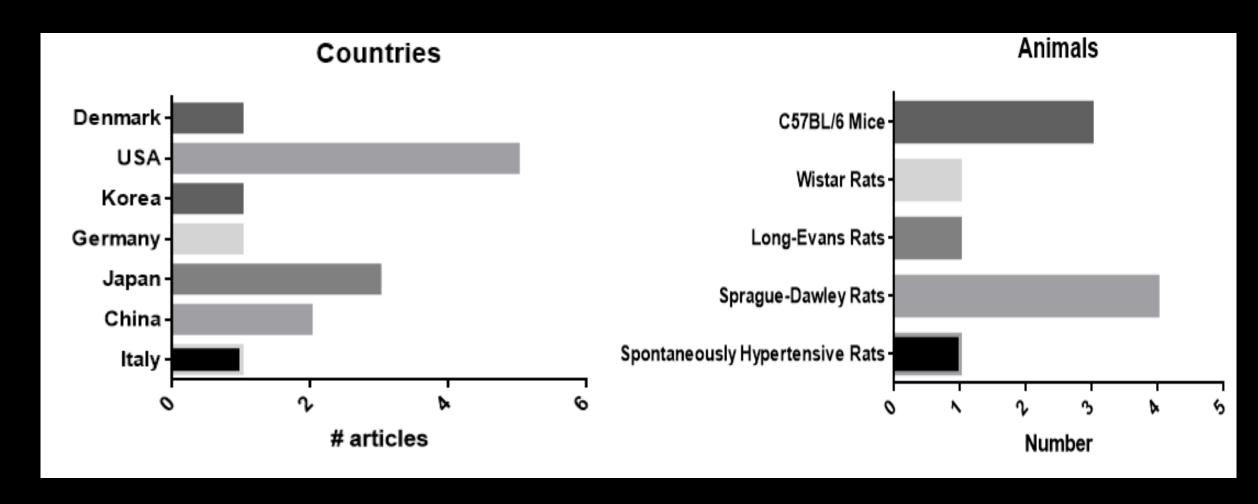
Mean of time 60-90 minutes

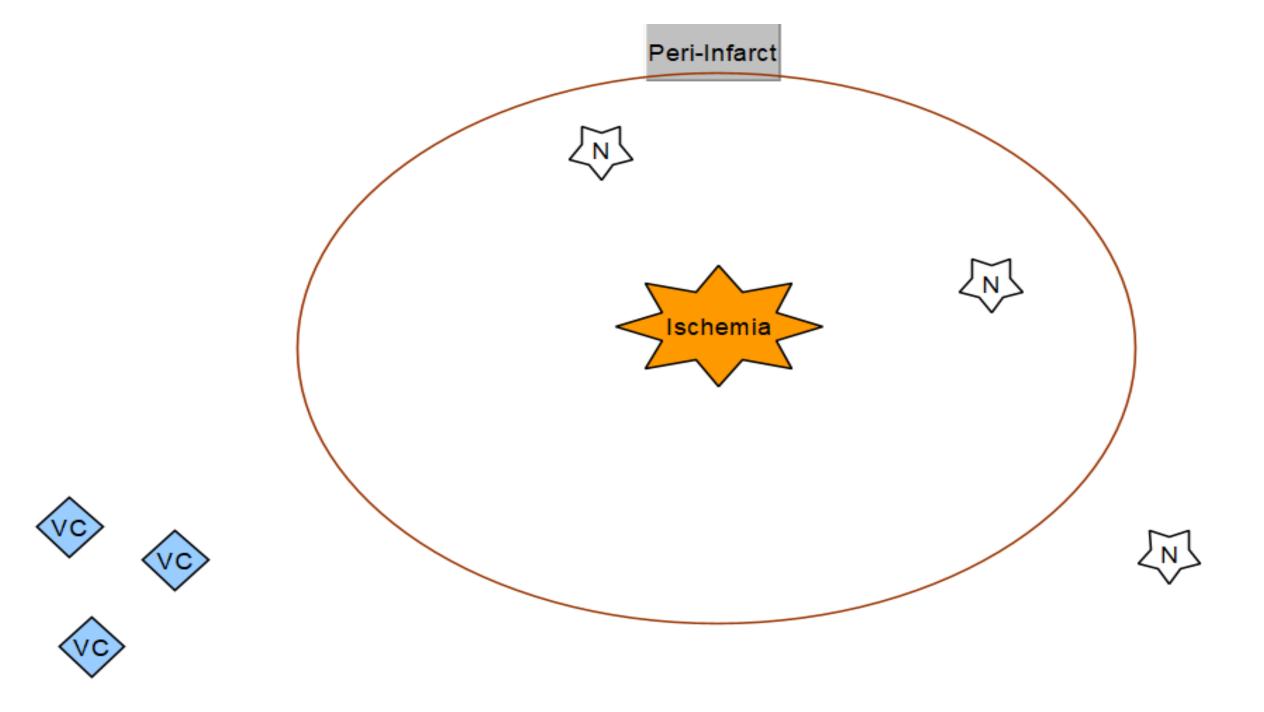
• Included zones: cortex, striatum, corpus callosum, external capsule

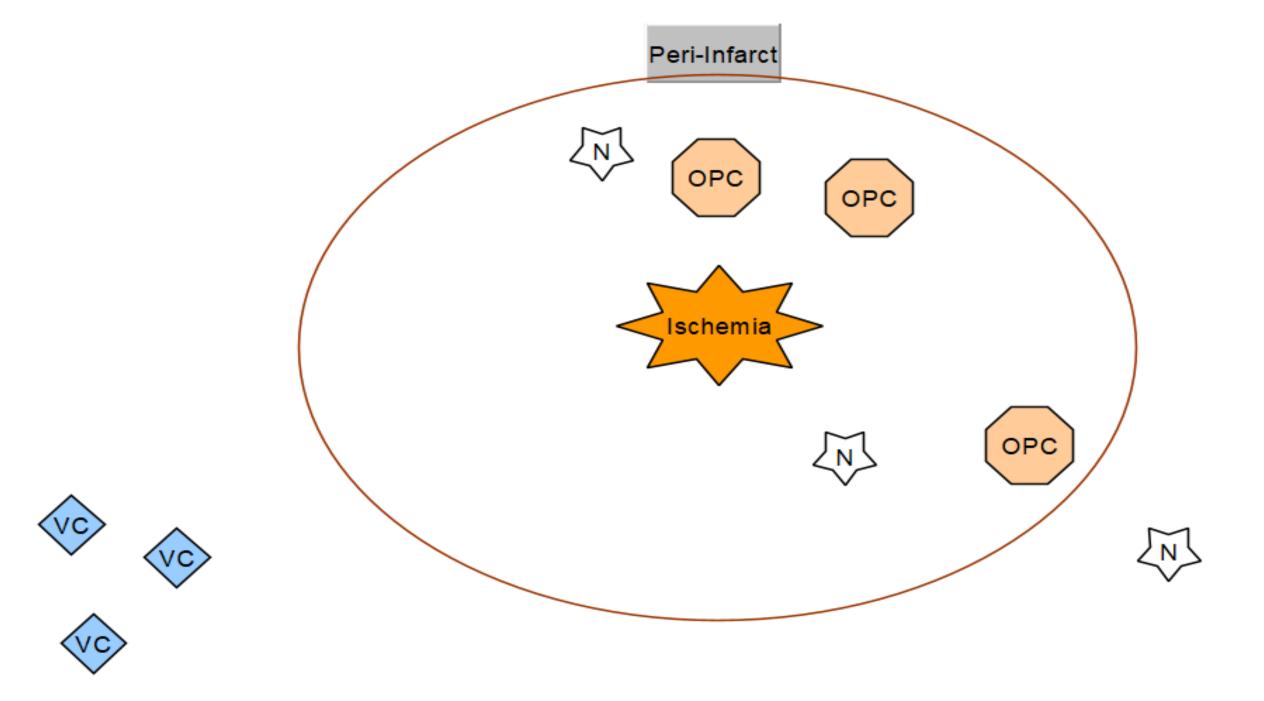
# **FINDINGS**

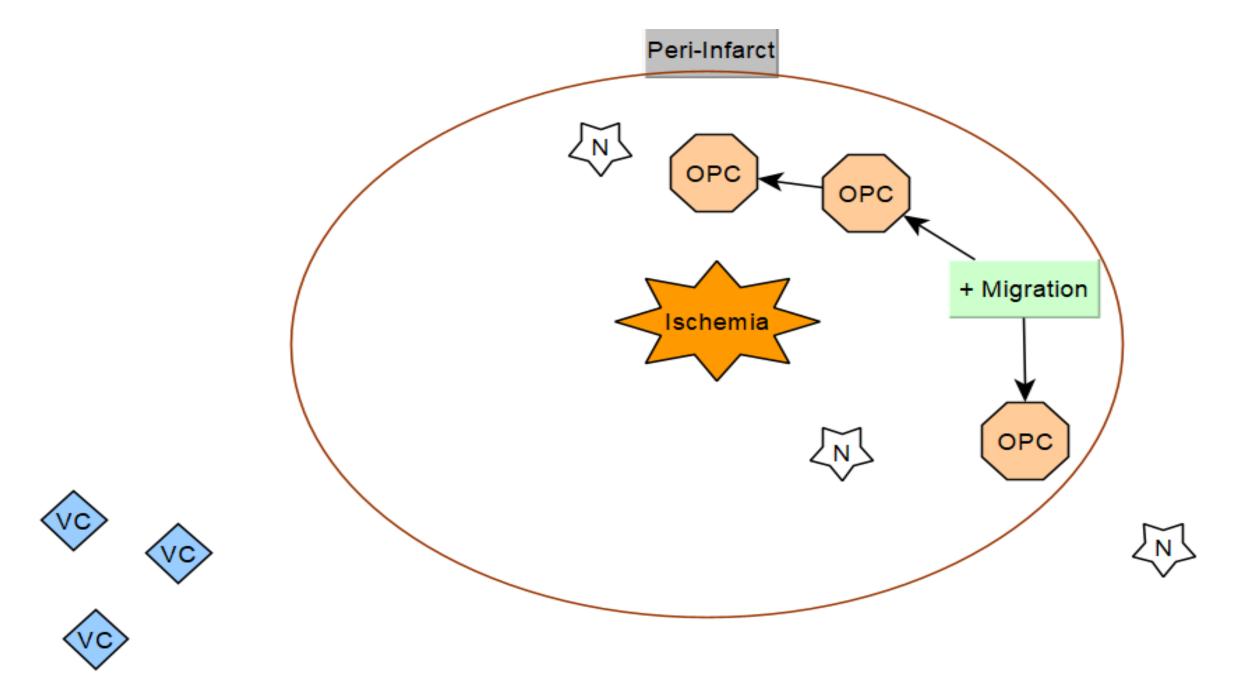


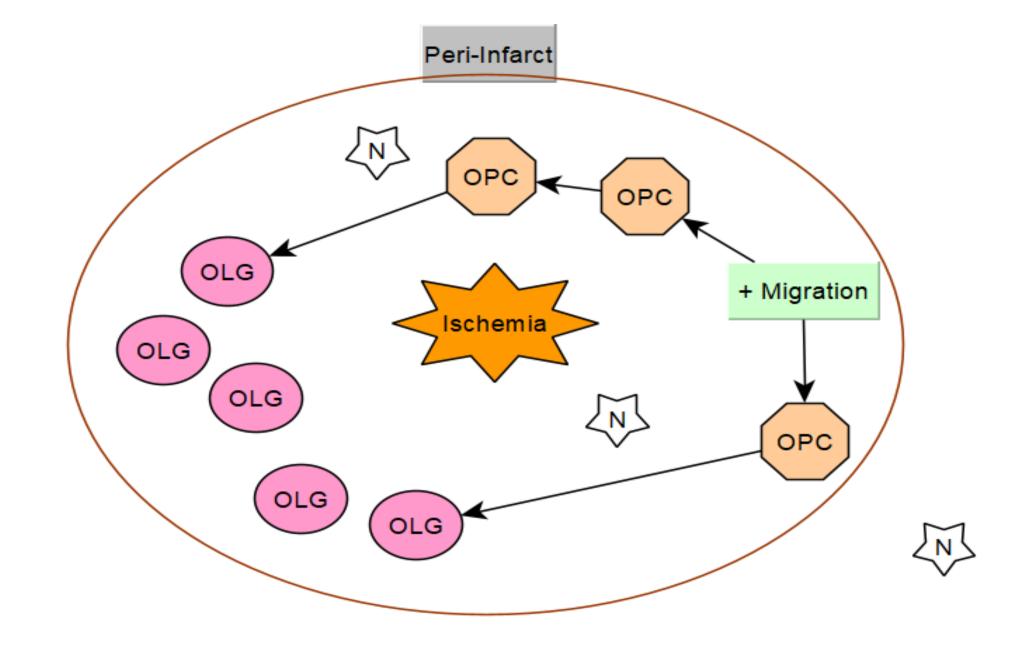
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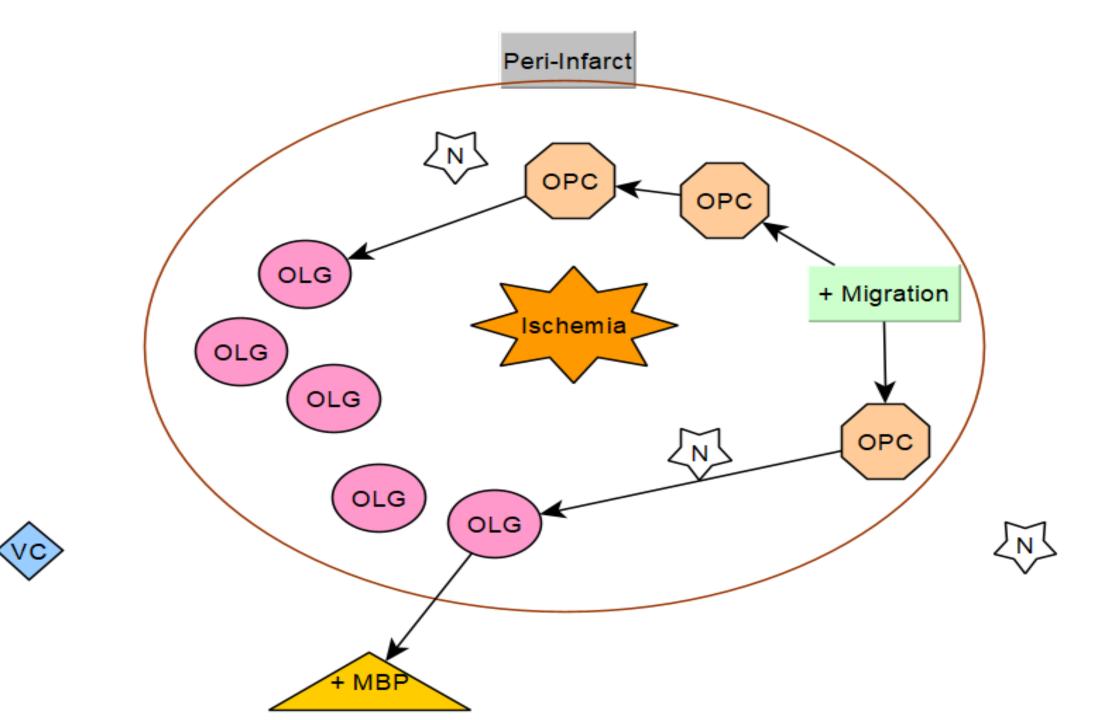


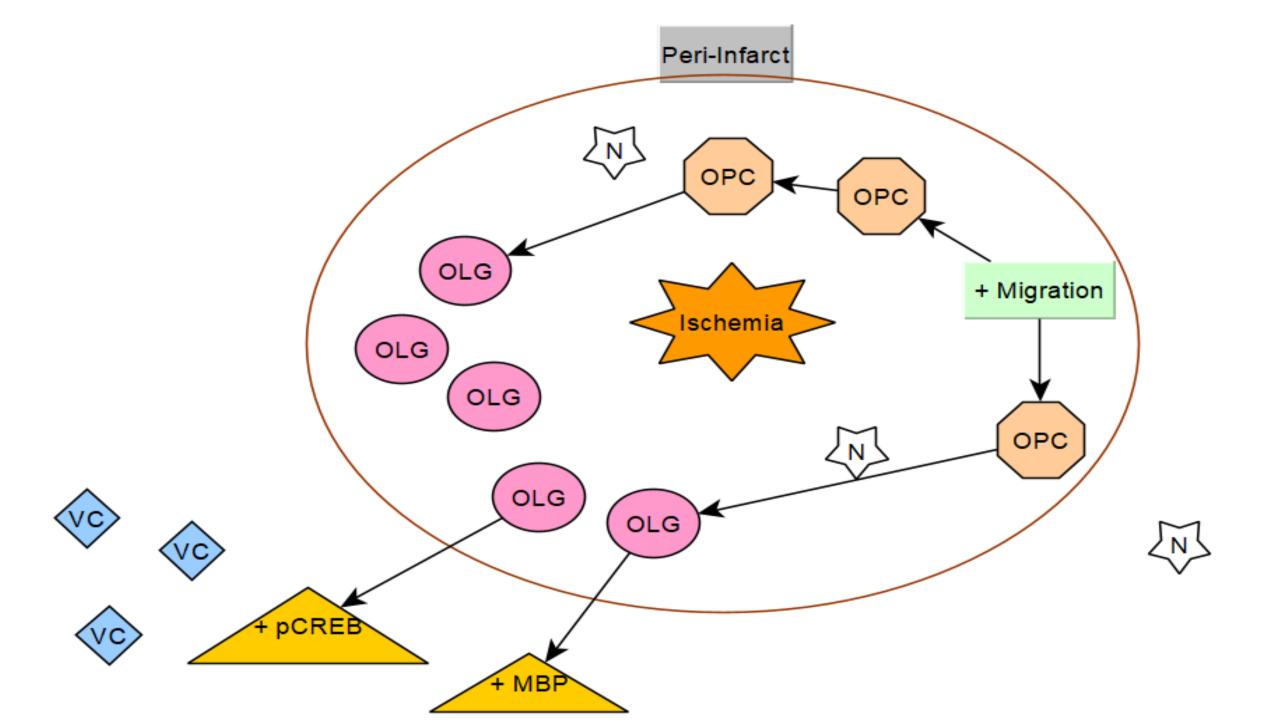


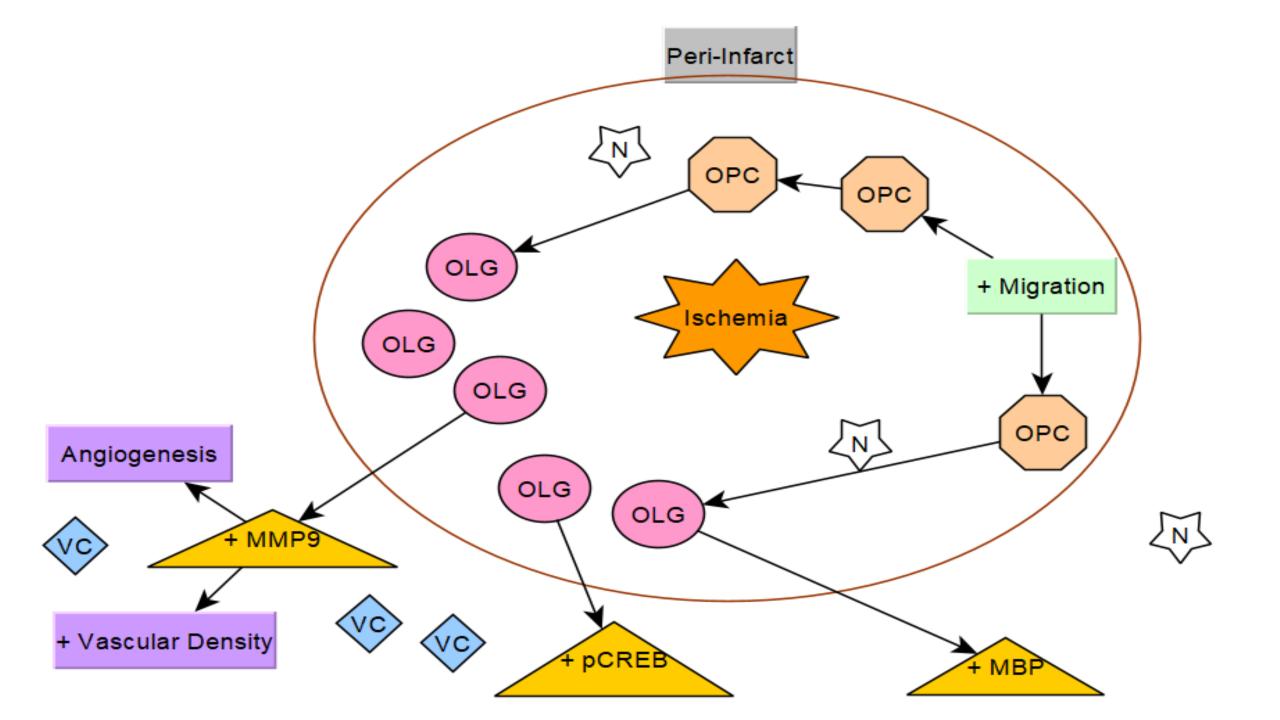


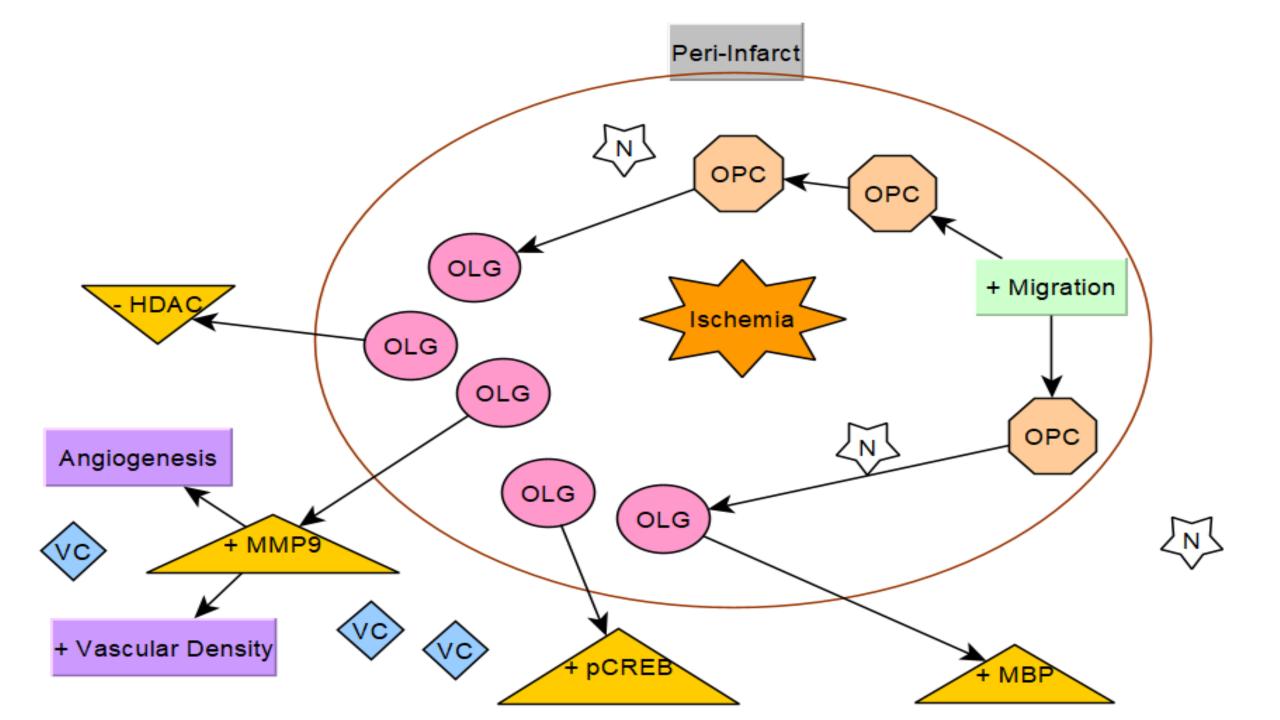


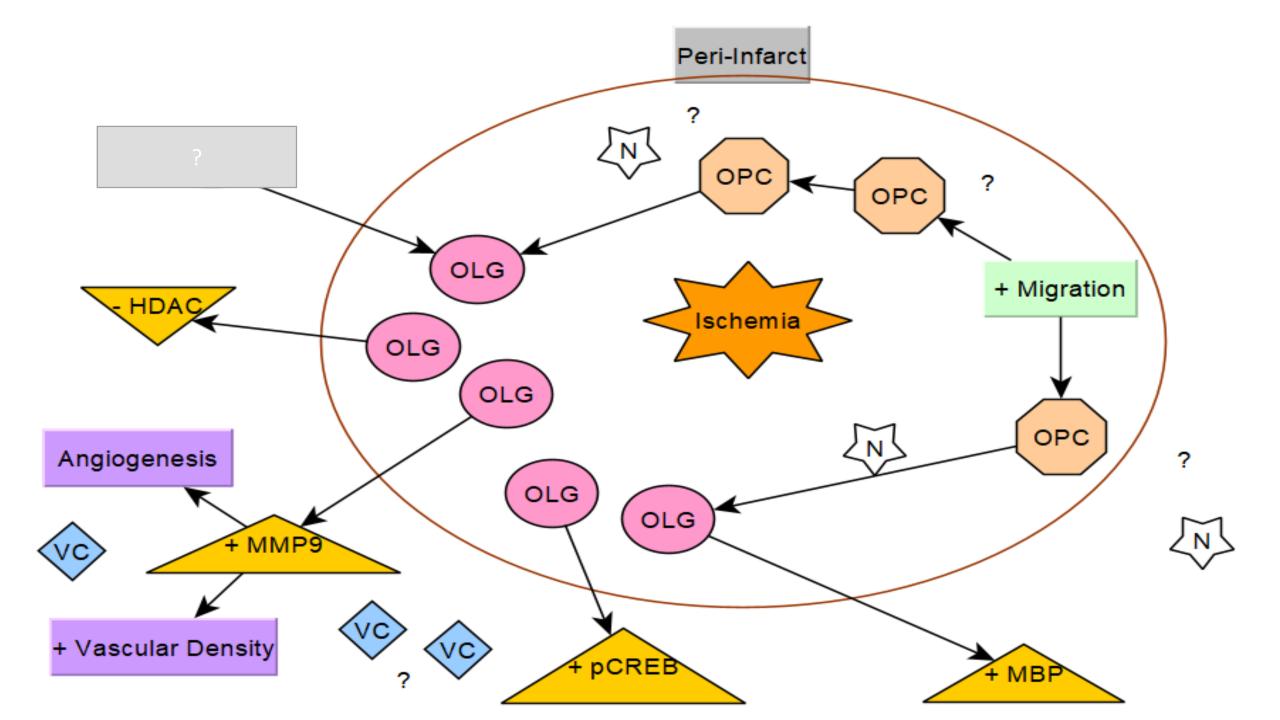










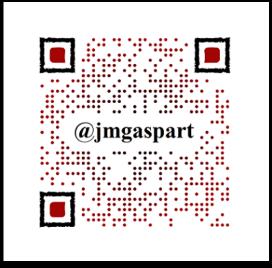


### CONCLUSIONS

- The OLG and OPC are an component of the triad neuron-glia-vascular cells in cerebral ischemia
- Is important to continue the research about the links between OLG-OPC and other cells in ischemic stroke
- Is necessary to continue the integration of evidence to give a comprehensive explanation

# **THANKS**

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For more information scan me!

# References

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