



## MAGBBRIS

### NEW MAGNETIC BIOMATERIALS FOR BRAIN REPAIR AND IMAGING AFTER STROKE

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*"By engineering novel magnetic nano-biomaterials, we will achieve tissue repair in the event of an ischemic attack."*

According to the World Health Organization data, 15 million people worldwide experience a stroke each year. Neuro-repair treatments offer the opportunity to treat stroke patients by extending the therapeutic time window. By engineering novel magnetic nano-biomaterials, we will achieve tissue repair in the event of an ischemic attack. We will take advantage of nanotechnology to deliver therapeutic growth factors secreted by progenitor cells into the injured brain. MAGBBRIS will demonstrate that growth factors secreted by endothelial progenitor cells, having proven potential to induce tissue repair, can be encapsulated in magnetic biomaterials and successfully and safely transplanted into mice brains, with the guidance of magnetic fields, to induce tissue repair.

MAGBBRIS consortium is made up of a highly multidisciplinary, materials-science, biomedical and clinical research and industrial partnership. The project will provide a new medicinal product, ready to be tested in a preclinical multicenter study.

