



# Review of Clinical Trials Using Neural Stem Cells

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Mots-clés Brain disorders [4], Brain tumours [5], Clinical trials [6], Neural stem cells [7], neurodegenerative diseases [8], Stem Cells [9]

The use of stem cells in clinical trials started several years ago for regenerativebased therapies or for the treatment of tumours. After brain injuries or neurodegenerative diseases, neural stem cells represent a promising strategy to repair the affected tissue and to replace degenerative cells. Neural stem cells can migrate and differentiate into neurons, astrocytes and oligodendrocytes, and thus could serve as promising therapeutic solutions. However, these cells can represent a potential source of cancer stem cells in tumour brain where they are responsible of recurrence, invasiveness and resistance to current treatments. Thus, few clinical trials involving endogenous, genetically modifiedor derived-neural stem cells have been conducted in the world to treat brain disorders. According to the website [www.clinicaltrials.gov](http://www.clinicaltrials.gov) [10] only 37 clinical trials involving neural stem cells are listed. Most of them use derived-neural stem cells to treat brain disorders (neurodegenerative diseases, injuries or tumours). For the future, a better approach would be to target directly endogenous stem cells.

URL de la notice <http://okina.univ-angers.fr/publications/ua15255> [11]

Lien vers le document <https://www.jscimedcentral.com/Biotechnology/biotechnology-3-1057.pdf> [12]

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## Liens

[1] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=25607>

[2] <http://okina.univ-angers.fr/c.lepinoux/publications>

[3] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=25608>

[4] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=21898>

[5] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=21899>

[6] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=21900>

[7] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=19124>

[8] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=15418>

- [9] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=16879>
- [10] <http://www.clinicaltrials.gov>
- [11] <http://okina.univ-angers.fr/publications/ua15255>
- [12] <https://www.jscimedcentral.com/Biotechnology/biotechnology-3-1057.pdf>

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