

# The patient's own bone marrow-derived stromal cells

## Citation for published version (APA):

de Munter, H. J. P. J. M. . (2021). *The patient's own bone marrow-derived stromal cells: disease modifiers in (neuro)degenerative disorders*. ProefschriftMaken. <https://doi.org/10.26481/dis.20210409jm>

## Document status and date:

Published: 01/01/2021

## DOI:

[10.26481/dis.20210409jm](https://doi.org/10.26481/dis.20210409jm)

## Document Version:

Publisher's PDF, also known as Version of record

## Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

[Link to publication](#)

## General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

[www.umlib.nl/taverne-license](http://www.umlib.nl/taverne-license)

## Take down policy

If you believe that this document breaches copyright please contact us at:

[repository@maastrichtuniversity.nl](mailto:repository@maastrichtuniversity.nl)

providing details and we will investigate your claim.

## Postulations Thesis

“The patient’s own bone marrow-derived stromal cells: disease modifiers in (neuro)degenerative disorders” of Johannes de Munter

-I-

A stem cell is able to move, adapt, orchestrate responses in a micro-environment, which makes dose finding/dose response curves obsolete. The problem stem cells give in research is at the same time the opportunity of stem cells in treatment. (This thesis)

-II-

What a coordinator can do in the World as demonstrated in the Guinness World Records with the Jerusalema dance can stem cells do in the body with macrophages, astrocytes and/or oligodrocytes. Coordination can reduce numbers, but up today it is not possible to measure coordination by/of stem cells (Fischbach 2013).

-III-

When Mesenchymal stem cells are used in research, the investigator has to demonstrate that these cells are able to adhere to plastic, express a certain range of CD-markers, can multiply and finally are able to differentiate into different lineages. All research in which these criteria are met is research not performed with naïve mesenchymal stem cells. We need criteria to describe naïve cells but at the moment they are not defined. (this thesis)

-IV-

Industry is more science driven than universities as they have to be 100% sure that the results of experiments can be verified in clinical trial and practice.

-V-

During the extensive reviewing in-vitro and in-vivo literature in which stem cells were involved, it became clear that processing outside the body, phase of the disease, route of administration and exact timing were more related to a possible outcome than numbers of cells. (this thesis)

-VI-

Not the absolute number of administrated stem cells but the condition of the individual stem cells at the moment of administration counts and determine the effects of stem cells in patients.

-VII-

A phase I clinical trial to test the safety of autologous naïve stem cells is obsolete as every healthy individual is already the proof of this safety.

-VIII-

The real power of innovation lies in the experiment which were not successful and failed. Studying their methods and materials and reading carefully their conclusions provided essential information for defining a successful strategy. It is disappointing that there are not more opportunities to read published research which failed.

-IX-

What steroids are in today's medicine, naïve stem cells will become in the nearby future.

-X-

As stem cells can make decisions of their own, non-homologous use without the presence of illness can provide a complete different picture.