

Published on Science 2.0 (http://www.science20.com)

Home > Life Sciences > Genetics & Molecular Biology > News Articles > Not All Stem Cells Are Creating Equally

Not All Stem Cells Are Creating Equally

By News Account Created Jan 9 2013 - 12:30pm

Not all isolated stem cells are equally valid in regenerative medicine and tissue engineering - only a specific group of cord blood stem cells (CB-SC) maintained in culture are useful for therapeutic purposes, say researchers in a new paper.

At present, cord blood stem cells

- adult stem cells - are key to regenerative medicine and tissue engineering. From all types of

cord blood stem cells

those called "Wharton's jelly stem cells" (HWJSC) have piqued the interest of specialists in regenerative medicine at the University of Granada and Alcalá de Henares University, because of their accessibility and ability to develop into several types of tissue and modulate immune responses.

Through a combination of microscopy, microanalysis essays and the study of the genes involved in cell viability, the researchers discovered that cord blood stem cells are the most useful.

The relevance of this paper lies in the possibility to select the most suitable Wharton's jelly stem cells

for tissue engineering and regenerative medicine. According to these researchers, different studies with HWJSC have obtained contradictory results because researchers failed to previously select the most suitable cell group.

The results of this study also open the possibility to select stem cell subgroups from different tissues, in order to improve the therapeutic efficacy of different regenerative medicine protocols.

Published in Tissue Engineering

Genetics & Molecular Biology

ION Publications LLC

Source URL: http://www.science20.com/news_articles/not_all_stem_cells_are_creating_equally-100563