

Presseinformation

For a long and healthy life – chance through stem cells – stem cell research revolutionizes medical prophylaxis – adult stem cells help in the case of multiple sclerosis and Morbus Crohn – no ethical reservations

Heidelberg (afk).The possibilities of modern medicine are consistently increasing in versatility. Stem cells play a particularly important role. As Dr. Christoph Ganss M.D., managing director of the first tissue bank for stem cells of the skin, TICEBA GmbH, points out, the latest research findings from the U.S. show that some stem cells of the skin offer manifold possibilities for use in the case of diseases and are of increasing importance with regard to possibilities of treatment.

Up until now, the best-known use of stem cells is their use in the treatment of leukaemia. But in the meantime, even cartilage damage, skin lesions and heart attacks are being treated successfully with stem cells. The latest published results report their successful uses in cases of multiple sclerosis and Morbus Crohn. Researchers are feverishly working on a treatment of diabetes mellitus with stem cells, one of the most widespread diseases with very serious consequences in some cases.

As it is a very big effort to obtain stem cells from the blood or bone marrow, according to Dr. Ganss, researchers are increasingly turning to the research of stem cells of the skin, as the skin contains a big amount of precious adult multipotent primordial cells, it is our biggest organ and can be reached easily, the removal of a small amount of skin tissue (size of about a 1-cent-piece)

can be done easily and without risk and, the most important reason, stem cells of the skin are of no ethical concern.

In order to draw the maximal benefit from these medical possibilities in the future, it is ideal to set up a stock of one's own healthy, pluripotent adult stem cells, as only stem cells with unchanged genetic information, which means with an unchanged blueprint of the organism, may be used optimally in the case of need, as all genes (genetic information) are continuously exposed to influences from the environment such as viral infections, energetic radiation by the planet and the sun or environmental poisons.

This is where, according to Dr. Ganss, the service of TICEBA (Tissue & Cell Banking) comes in. This young company based in Heidelberg is the first company to specialize in the removal, preparation and assessment of their quality with a patented technology and to then conserve this sample with the help of cryogenic storage. The isolation technique has been developed by a former colleague from Heidelberg, Dr. Markus Frank, who in the meantime has become a well-known stem cell researcher at Harvard University. With this method, the most promising stem cells can be extracted from the sample and be frozen at minus 190 degrees C° for decades. Experiments carried out by Dr. Frank have proved that 95 percent of stem cells frozen this way are still alive and kicking after about 20 years.

TICEBA GmbH is a life-science-company conducting research in the area of stem cell research and regenerative medicine. The company based in the technology park in Heidelberg, Germany is the first private tissue bank worldwide for the personal and individual storage of skin tissue and the pluripotent adult stem cells contained therein. It is managed by the physician and entrepreneur Dr. Christoph Ganss M.D. Dr. Frank supports the company as scientific counsellor with his expertise in stem cell