Position statement of the biomedical steering committee of the Stem Cell Network NRW on the range of untested stem cell therapies

The biomedical steering committee of the Network is deeply concerned that some institutions are offering stem cell-based therapies which have not been proven to be effective. There is no scientifically based evidence for the effectiveness of a whole array of commercially available stem cell-based treatments, including those offered by the XCell Center Duesseldorf/Cologne.

Stem cells are characterized by two properties. Firstly, they have the ability to self-renew, i.e. they can divide and thus produce further stem cells of the same type. Secondly, they have the ability to become or “to differentiate into” specialized cells which can take over a particular function. These properties hold huge potential for the development of cell replacement therapies in which diseased or dead cells could be replaced by new, functioning ones.

At present, the spectrum of diseases for which there are clinically proven treatments based on stem cells is still extremely small. Disorders of the blood and immune systems and acquired loss of bone marrow function can, in some cases, be treated effectively with blood stem cell transplantation.

Doctors have been transferring blood stem cells by way of bone marrow transplantation for more than 40 years. In the meantime, umbilical cord blood, like bone marrow, often serves as a source of blood stem cells and is, increasingly, being used as an alternative to bone marrow in transplantation.
For tissues and organs such as skin, cornea as well as the retina, stem cells contained in, or applied to, these tissues can also contribute to long-term regeneration.

Currently, other stem cell treatments should be regarded as being experimental. This means that the safety and efficacy of these treatments have not yet been proven or have yet to be tested. If the stem cell based therapies on offer display the following characteristics, extreme caution should be exercised and seeking a second expert opinion is recommended:

- Multiple diseases are treated with the same cells.
- No clear documentation as to the source of the cells or how the treatment will be carried out.
- Claims that there is no risk at all.
- Claims which are based on patient testimonials.
- High treatment costs or hidden costs.

The wording of this position statement is consistent with the recommendations of the International Society for Stem Cell Research (ISSCR). The ISSCR Patient Handbook is available, free of charge, at www.stammzellen.nrw.de.

The biomedical steering committee is made up of the following stem cell research representatives from North Rhine-Westphalia, Germany:

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