## Dąbrowska Z., Gabiec K. STEM CELLS ARE THE HOPE OF MODERN STOMATOLOGY

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**Rationale.** Stem cells are often hailed as the medicine of the 21st Century. They provide with us with potential tools to effectively counteract not only diseases, but even aging. For stomatology, stem cells are the technology of the future in the regeneration of periodontium and pulp, and dental replantation and transplantation.

**Objective:** The aim of study was to summary information from literature about mouth diseases therapy with using stem cells.

**Material and methods.** On the basis of a literature review, the previous achievements and potential capabilities of stem cell therapy were discussed, focusing on dental applications.

**Results and discussion.** The paper discusses the modulation of stem cells and their therapeutic potential and capabilities. The presence and properties of stem cells in the pulp of human deciduous and permanent teeth, the periodontal membrane and the dental sac are also discussed.

**Conclusions.** The results of the studies conducted by cited researchers are promising and give hope for the development of regenerative and restorative processes of the dental and periodontal tissues. In the future, stem cells obtained from primary and permanent teeth deposited in special dental banks will be able to prevent degradation of periodontal tissue, or even heal the teeth.