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(54) **Title:** SCAFFOLD-FREE SELF-ORGANIZED 3D SYNTHETIC TISSUE

(57) **Abstract:** The present invention can be used for actual implantation surgery without a scaffold. The present invention provides a synthetic tissue or complex which can be produced by culture and has a high level of differentiation ability. The present invention also provides a therapy and medicament for repairing and/or regenerating tissue using replacement and covering. By culturing cells under specific culture conditions such that medium contains an extracellular matrix synthesis promoting agent, the cells are organized and are easily detached from a culture dish. The present invention was achieved by finding such a phenomenon. In addition, the self contraction of the tissue can be regulated by culturing the tissue in a suspended manner. Therefore, it is possible to regulate the three-dimensional shape of the tissue. The present invention also provides a method for producing an implantable synthetic tissue which does not require a plurality of monolayer cell sheets assembled to form a three-dimensionally structured synthetic tissue. The present invention is characterized by richness in adhesion molecules, nonnecessity of additional fixation at an implantation site, and good biological integration.

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