

Pouch-like structure with paracrine activity and method for its preparation**Abstract**

5 The present invention relates to a pouch-like structure useful for mechanically preventing distension and/or resisting dilation of the heart and for supporting the hearts function by controllable and paracrine support of a failing heart in a mammal. The pouch-like structure is composed at least partly of engineered tissue comprising genetically engineered cells, like, genetically engineered
10 cells other than cardiac myocytes whereby said genetically engineered cells, like genetically engineered cells other than cardiac myocytes, contain a gene encoding a paracrine factor said gene encoding the paracrine factor being under control of an inducible promoter system or an heterologous promoter system. Further, the present invention relates to a method for the preparation and
15 individual of the pouch-like structure for therapeutic, disease modelling, and drug development applications. In addition, the present invention relates to cells other than cardiac myocytes for use in the preparation of the pouch-like structure as described herein.

20 (no suitable Figure)