

## ABSTRACT

According to the invention, thermoreversible hydrogels are provided, which are prepared from chain-extended poloxamers, having advantageous properties. In addition, the invention provides thermoreversible hydrogels, including biological materials, and a process for the preparation thereof, thermoreversible hydrogels including living cells, application systems for pharmaceutical applications, and an *in-vitro*-method for forming a composition on a surface.

[No suitable figure]