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Electrospun silk fibroin fibers for storage and controlled release of human platelet lysate.

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Abstract

Human platelet lysate (hPL) is a pool of growth factors and cytokines able to induce regeneration of different tissues. Despite its good potentiality as therapeutic tool for regenerative medicine applications, hPL has been only moderately exploited in this field. A more widespread adoption has been limited because of its rapid degradation at room temperature that decreases its functionality. Another limiting factor for its extensive use is the difficulty of handling the hPL gels. In this work, silk fibroin-based patches were developed to address several points: improving the handling of hPL,

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