In vitro cytocompatibility evaluation of poly(DL-lactic acid) scaffolds loaded with minocycline and voriconazole addressing osteomyelitis

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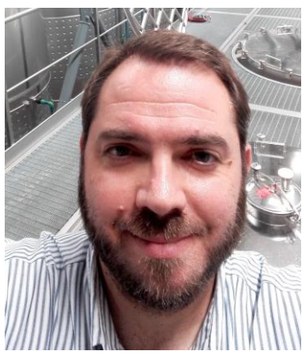
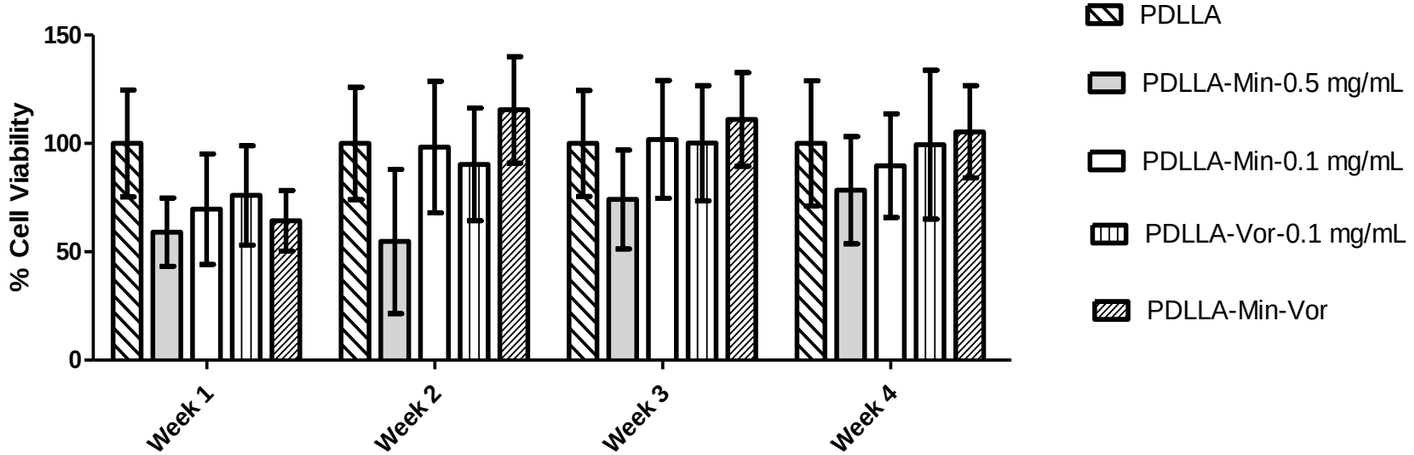
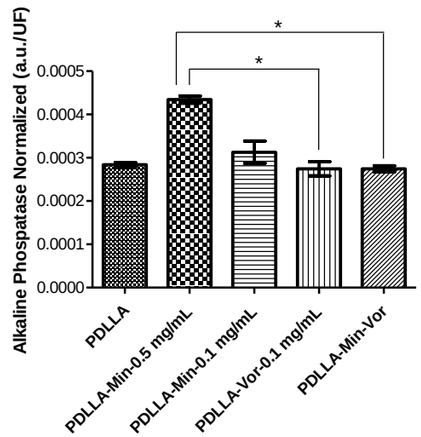
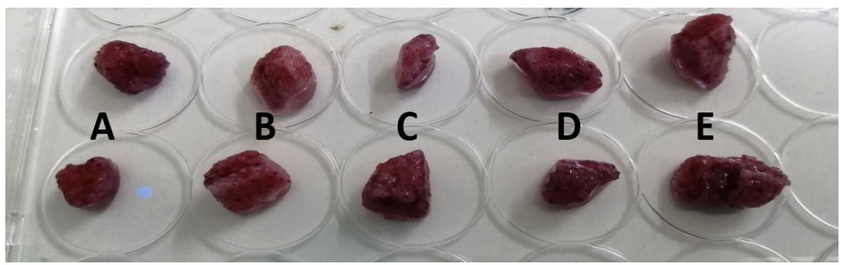


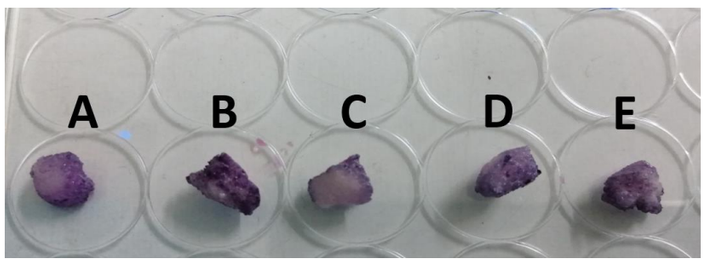
Objectives: In this work is proposed the cytocompatibility evaluation of an innovative system based in the dual delivery of minocycline (Min) and voriconazole (Vor), aiming bone infection therapeutics.



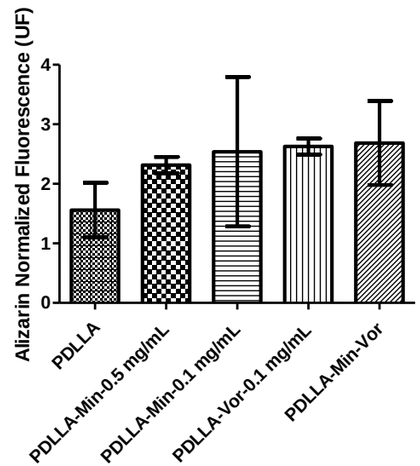


* $p < 0.05$





Qualitative evaluation of **osteoblast activity** through **Alizarin Red** (left) and **ALP** (right) assays **A** – PDLLA, **B** - PDLLA-MH 0.5 mg/mL, **C -** PDLLA-MH 0.1 mg/mL, **D -** PDLLA-VCZ 0.1 mg/mL and **E -** PDLLA-MH-VCZ



Conclusion: Once the described **scaffolds enhanced osteoblasts differentiation**, **matrix mineralization** and **evidenced no cytotoxic effects**, they come to light as an **auspicious alternative** for local antimicrobial therapy addressing **osteomyelitis** prevention and therapeutics.