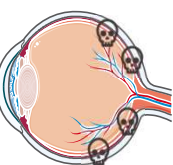


AN INJECTABLE THERMOSENSITIVE HYDROGEL LOADED WITH RETINAL TARGETED HYBRID NANOPARTICLES AGAINST INHERITED RETINAL DEGENERATION

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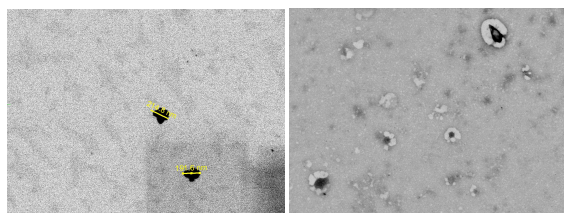
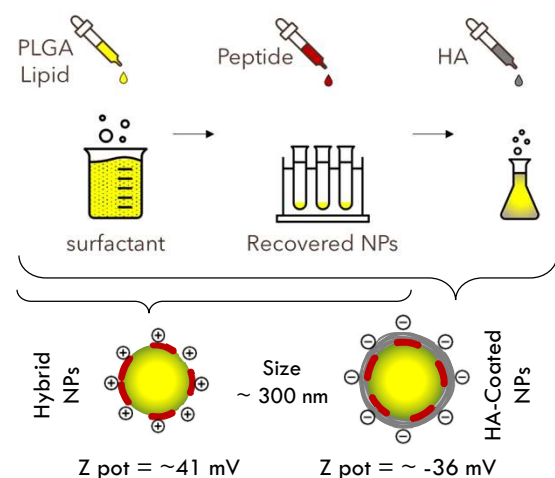
² Clinical and Experimental Medicine PhD program, University of Modena and Reggio Emilia, Italy
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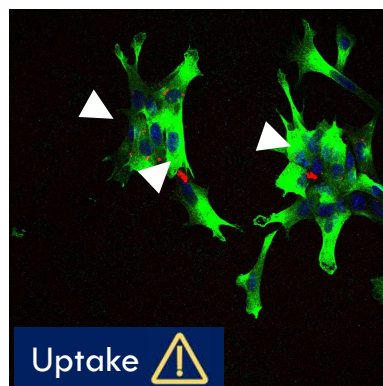
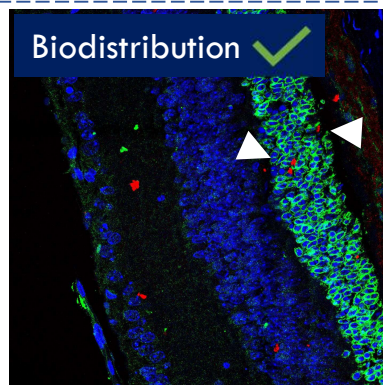
Inherited Retinal Degeneration: genetic condition
NEUROPROTECTIVE PEPTIDE
→ Reduce degradation + Prolong release



1) Formulation of the NPs



Biodistribution



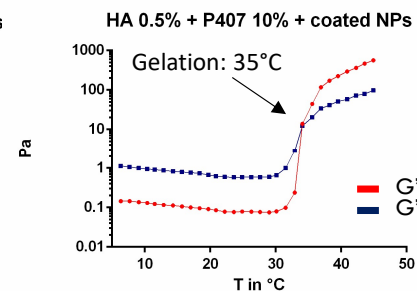
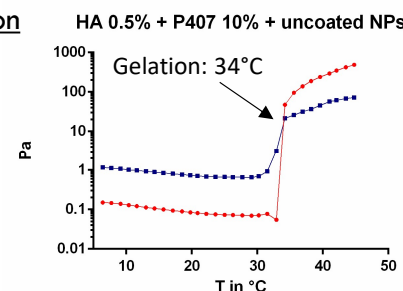
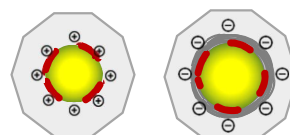
2) Formulation of the Thermosensitive Hydrogel



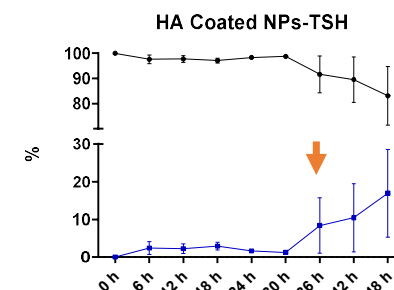
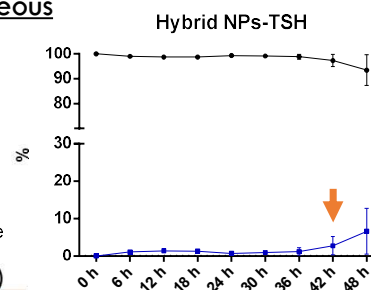
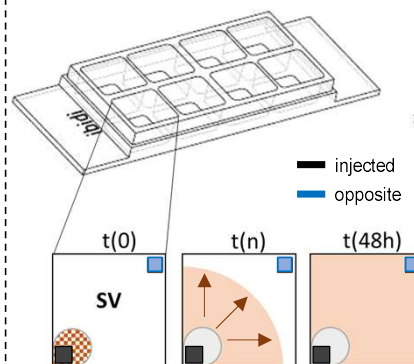
Poloxamer 407 + Hyaluronic Acid Medium MW

Liquid at 4°C = injectable
Solid at 35°C = *in vivo*

Rheological characterization



NP Mobility in Synthetic Vitreous



FUTURE WORK

Evaluation of the peptide release profile and mobility
In vitro and *ex vivo* efficacy of the formulations