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(54) Title: TUNING OF RELEASE KINETICS IN HYDROGELS

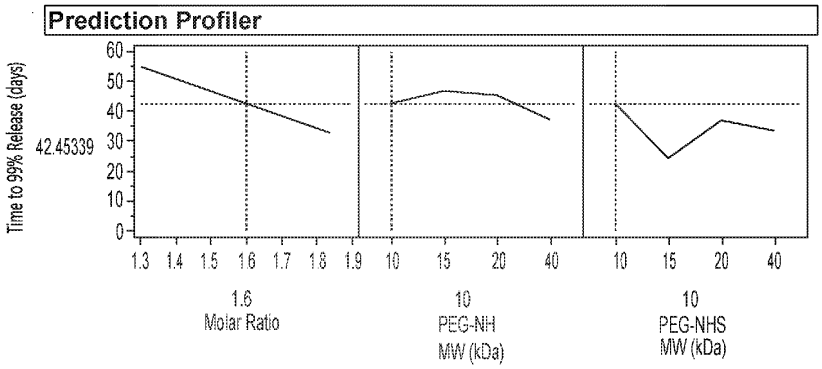


FIG. 14

(57) Abstract: The present disclosure is directed to methods for tuning the release profile of a biologic disposed in a hydrogel. Parameters that can be used for the tuning include a molar ratio of a nucleophilic group to an electrophilic group, the number of the nucleophilic groups in the first precursor, the number of the electrophilic groups in the second precursor, the molecular weight of the first precursor, the molecular weight of the second precursor, a weight ratio of the biologic and excipient to the hydrogel, a weight percentage of the biologic in a solid state formulation, and a ratio of surface area to volume of the hydrogel. The methods described herein allow the formation of hydrogel with different release profiles suitable for different therapeutic applications.

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