

A carrier-free long-acting ropivacaine formulation using methylprednisolone sodium succinate as a dual-functional adjuvant

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Supplementary Figures

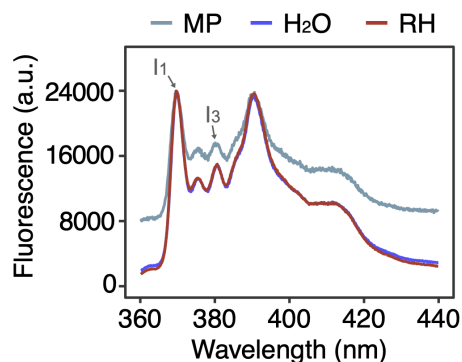


Figure S1. Comparison of pyrene fluorescence spectra in 4 mg/mL MP, 40 mg/mL RH and H₂O. With the I₁ peak normalized, increased I₃ peak in MP indicated strong hydrophobic interaction and suggested the self-assembly behavior. On the contrary, I₃ peak in RH and H₂O completely overlapped, suggesting the absence of hydrophobic interaction in RH solution, which means RH could not undergo self-assembly.

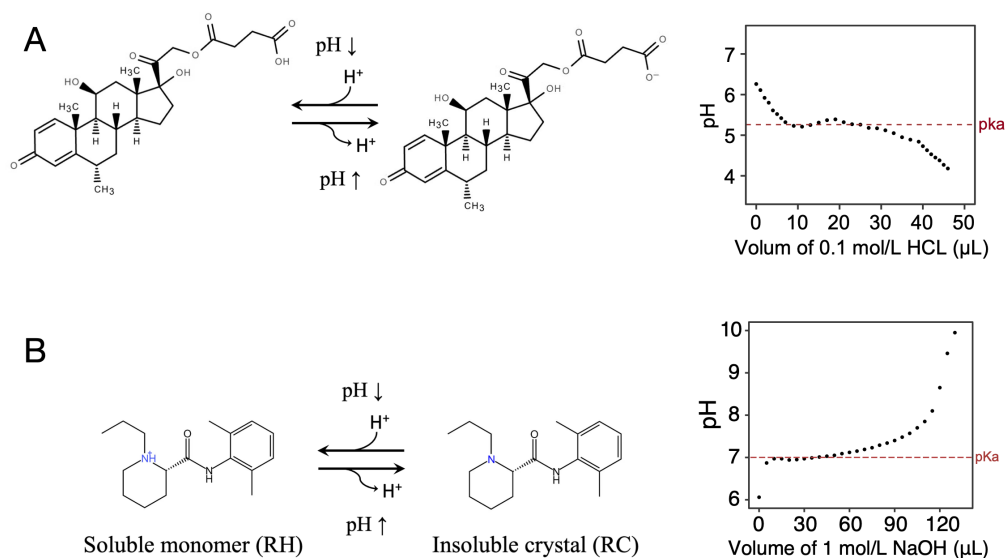


Figure S2. (A) The dissociation equilibrium of MP and the pK_a determined by HCl titration; (B) The dissociation equilibrium of RH and the pK_a determined by NaOH titration.

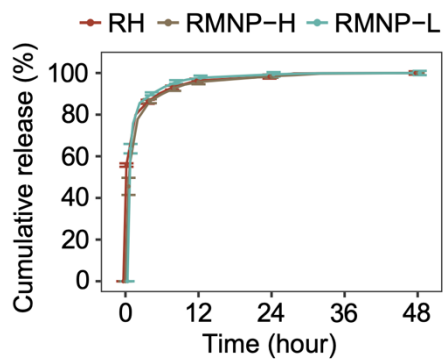


Figure S3. The *in vitro* release curves of RH, RMNP-L and RMNP-H (n=3). All formulations exhibited a similar burst-release profile.