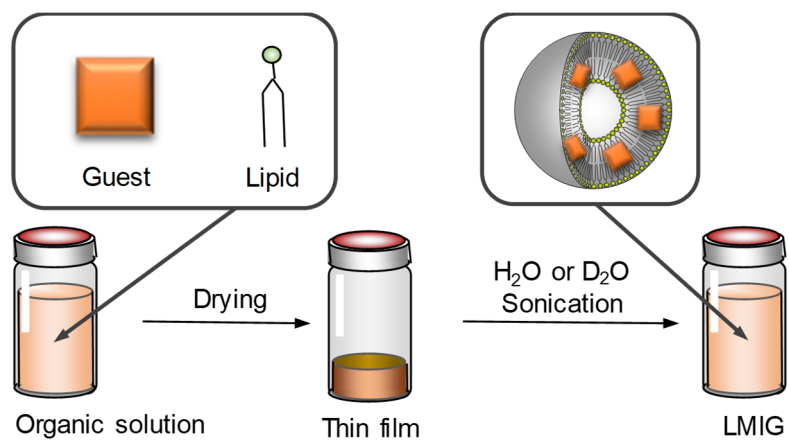


Electronic Supplementary Information

Light-triggered hydrophilic drug release from liposomes by removal of photolabile protecting group

Yuya Goto, Masafumi Ueda, Kouta Sugikawa, Kazuma Yasuhara and
Atsushi Ikeda



Scheme S1. The premixing method for the preparation of LMIGs.

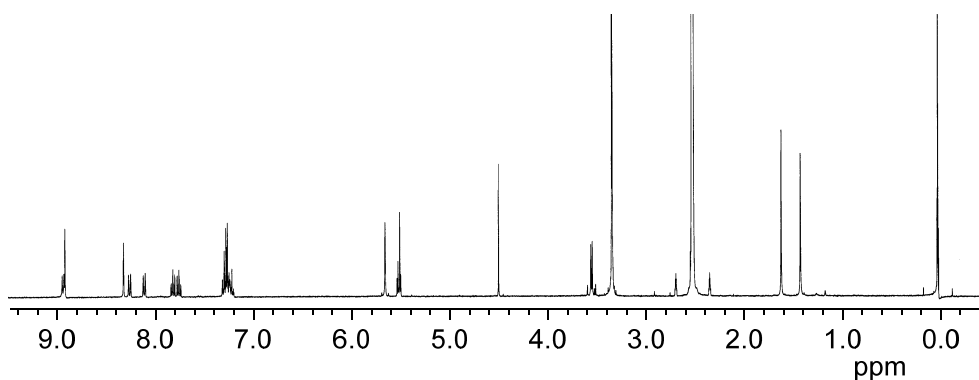


Fig. S1 Complete ^1H NMR spectrum of NNM-1 in CDCl_3 .

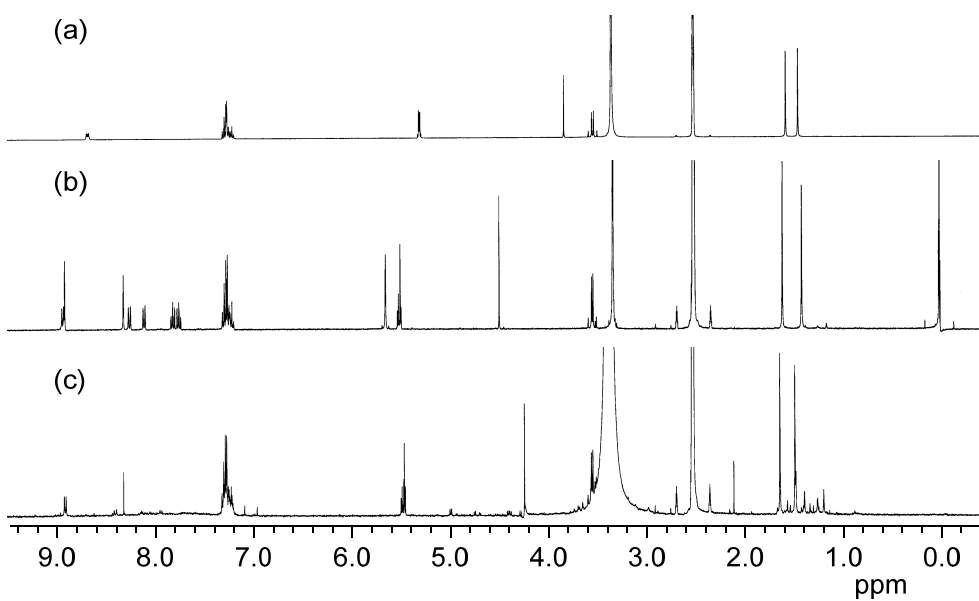


Fig. S2 Complete ^1H NMR spectra (400 MHz, $\text{DMSO}-d_6$, $25\text{ }^\circ\text{C}$) of (a) **1** and (b and c) NNM-1 (b) before and (c) after photoirradiation at 354 nm for 24 h.

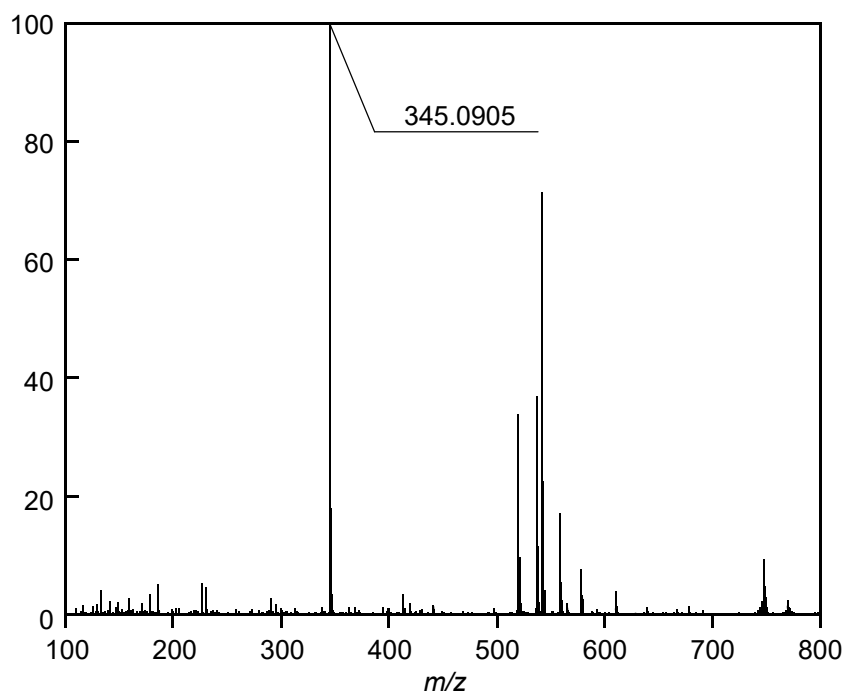


Fig. S3 Positive ion ESI-MS/MS spectrum of protonated NNM-1 (m/z 520) recorded with a 35% normalised collision energy.

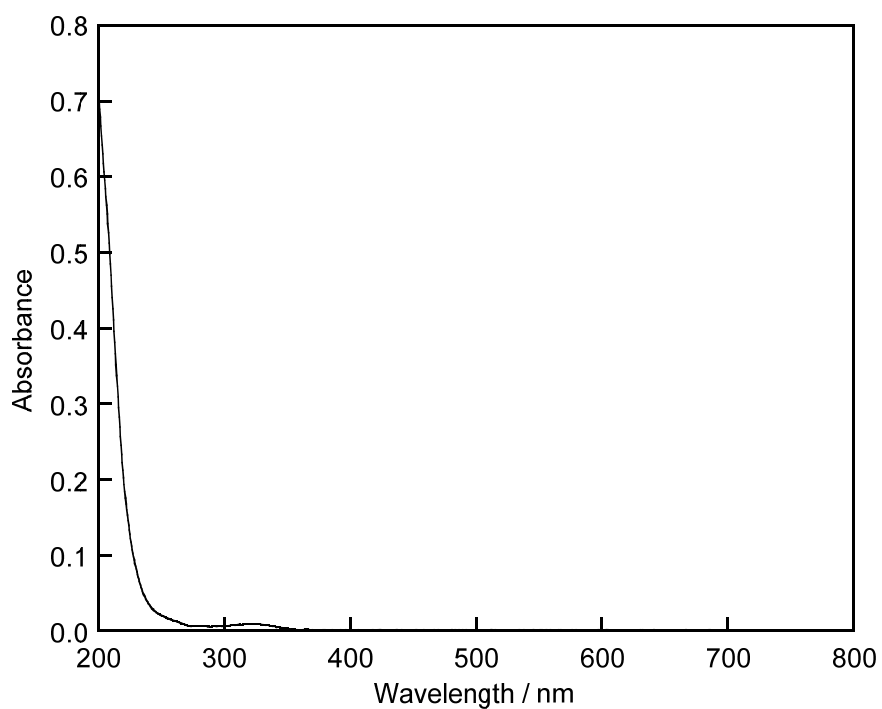


Fig. S4 UV-vis spectrum of the sodium salt of **1** in H_2O ($[1] = 0.40$ mM).

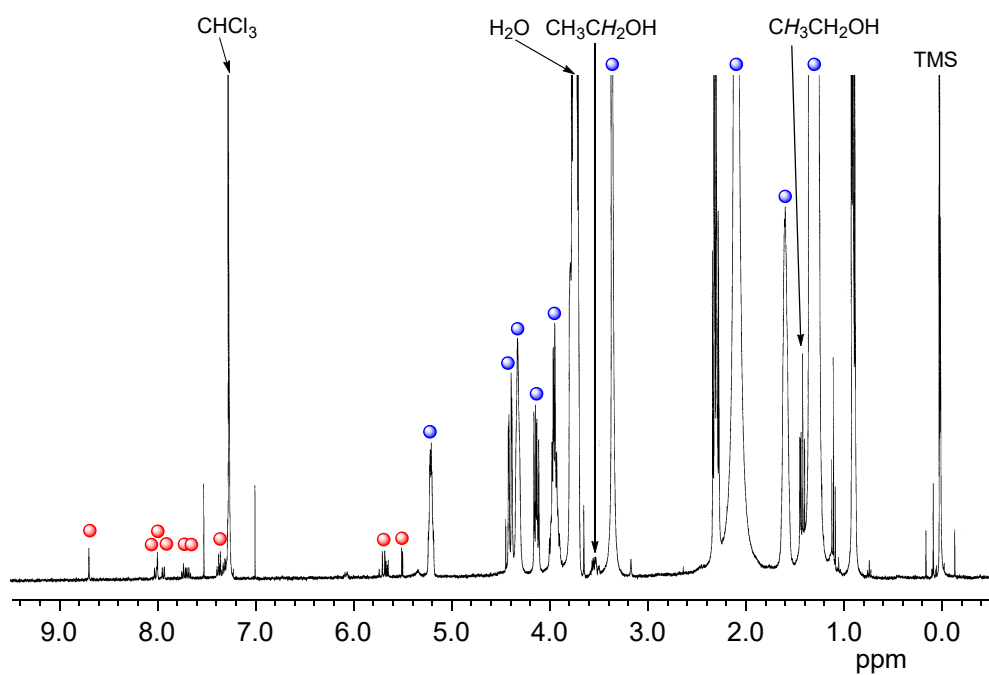


Fig. S5 Complete ^1H NMR spectrum of the residue of LMI-NNM-1 solution after photoirradiation at 365 nm for 12 h and lyophilisation (CDCl_3 , $[\text{EtOH}] = 0.4$ mM, red circles: NNM-1, blue circles: DMPC).

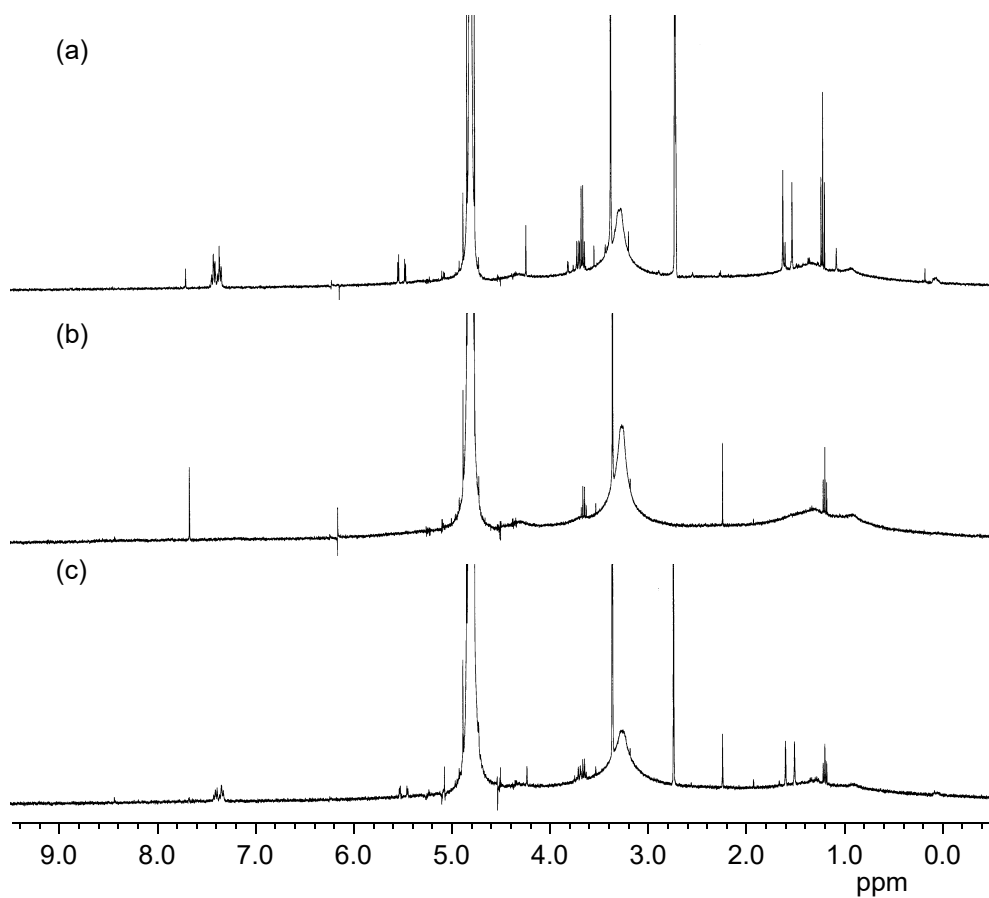


Fig. S6 Complete ^1H NMR spectra of (a) **1** and (b and c) NNM-1 (b) before and (c) after photoirradiation at 365 nm for 12 h in the presence of liposomes in D_2O ($[\text{DMPC}] = 4.0$ mM and $[\mathbf{1}] = [\text{NNM-1}] = 0.40$ mM).