## Nanoparticles of Esterified Polymalic Acid for Controlled Anticancer Drug Release

Alberto Lanz-Landázuri,<sup>1</sup> José Portilla-Arias,<sup>2</sup> Antxon Martínez de Ilarduya,<sup>1</sup> Montserrat García-Alvarez,<sup>1</sup> Eggehard Holler,<sup>2</sup> Julia Ljubimova,<sup>2</sup> Sebastián Muñoz-Guerra<sup>1</sup>\*

<sup>1</sup>Departament d'Enginyeria Química, Universitat Politècnica de Catalunya, ETSEIB, Diagonal 647, 08028, Barcelona Spain. <sup>2</sup>Nanomedicine Research Center, Department of Neurosurgery, Cedars-Sinai Medical Center, 127 S. San Vicente Blvd. AHSP-A8220, Los Angeles, CA 90048, USA.



Figure S1. <sup>1</sup>H NMR spectrum of PMLA-Et<sub>100</sub>.



Figure S2. <sup>1</sup>H NMR spectrum of of PMLA-Bu<sub>100</sub>.



Figure S3.<sup>1</sup>H NMR spectrum of *co*PMLA-Et<sub>50</sub>H<sub>50</sub>. (\*) DMSO and water solvent peaks.



**Figure S4.** <sup>1</sup>H NMR spectrum of *co*PMLA-Bu<sub>50</sub>H<sub>50</sub>. (\*) DMSO and water solvent peaks.



**Figure S5.** Deconvoluted GPC chromatograms of coPMLA-Et<sub>50</sub>H<sub>50</sub> and coPMLA-Bu<sub>50</sub>H<sub>50</sub> after incubation in aqueous buffer at pH 7.4 and 5.0 for the indicated times.



**Figure S6.** <sup>1</sup>H NMR spectra of the degradation products of PMLA-Bu<sub>100</sub> incubated at pH 7.4 and 37 °C. (\*) impurity.



**Figure S7.** <sup>1</sup>H NMR spectra of the degradation products of coPMLA-Bu<sub>50</sub>H<sub>50</sub> incubated at pH 7.4 and 37 °C.



Figure S8. Particle size distributions profiles measured by light scattering.