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Systematic investigation of the adsorption potential of lignin- and cellulose-based nanomaterials towards pharmaceuticals

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SUPPORTING INFORMATION

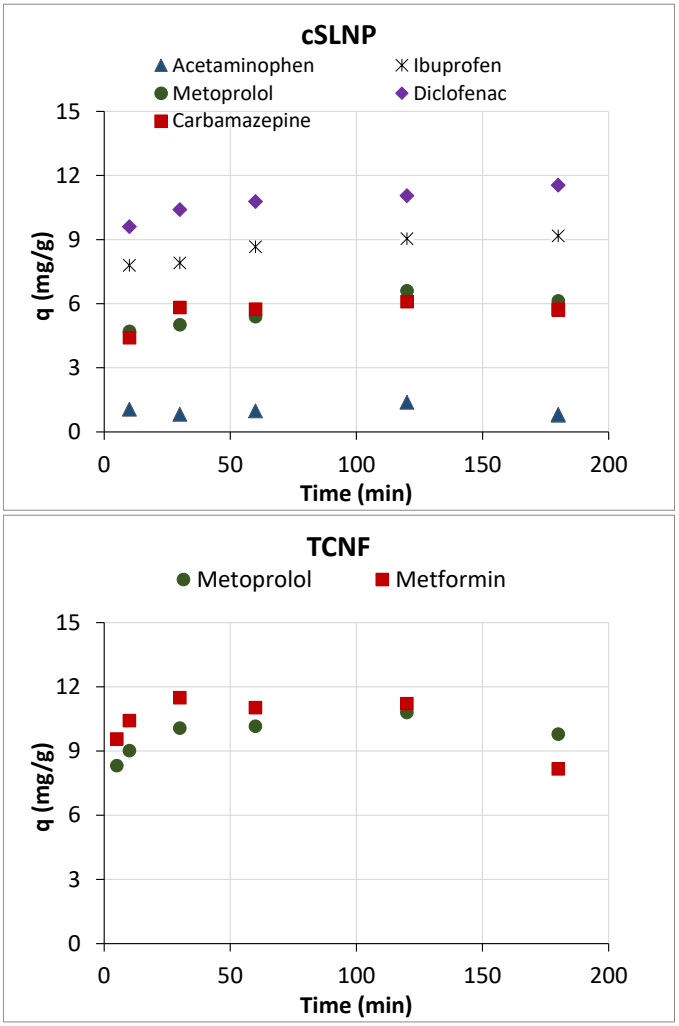

Figure S1. Changes in adsorption capacity (q, mg/g) of cationic SLNP and TCNF with time. Adsorption conditions: room temperature, 20µg/ml initial concentration for each pharmaceutical, 1 mg/mL mass to volume ratio of adsorbent to pharmaceutical solution, pH≈5. Only the APIs that exhibited significant adsorption for each nanomaterial was shown. The cSLNP did not show significant adsorption for metformin while the TCNF only showed significant adsorption for the cationic metoprolol and metformin.

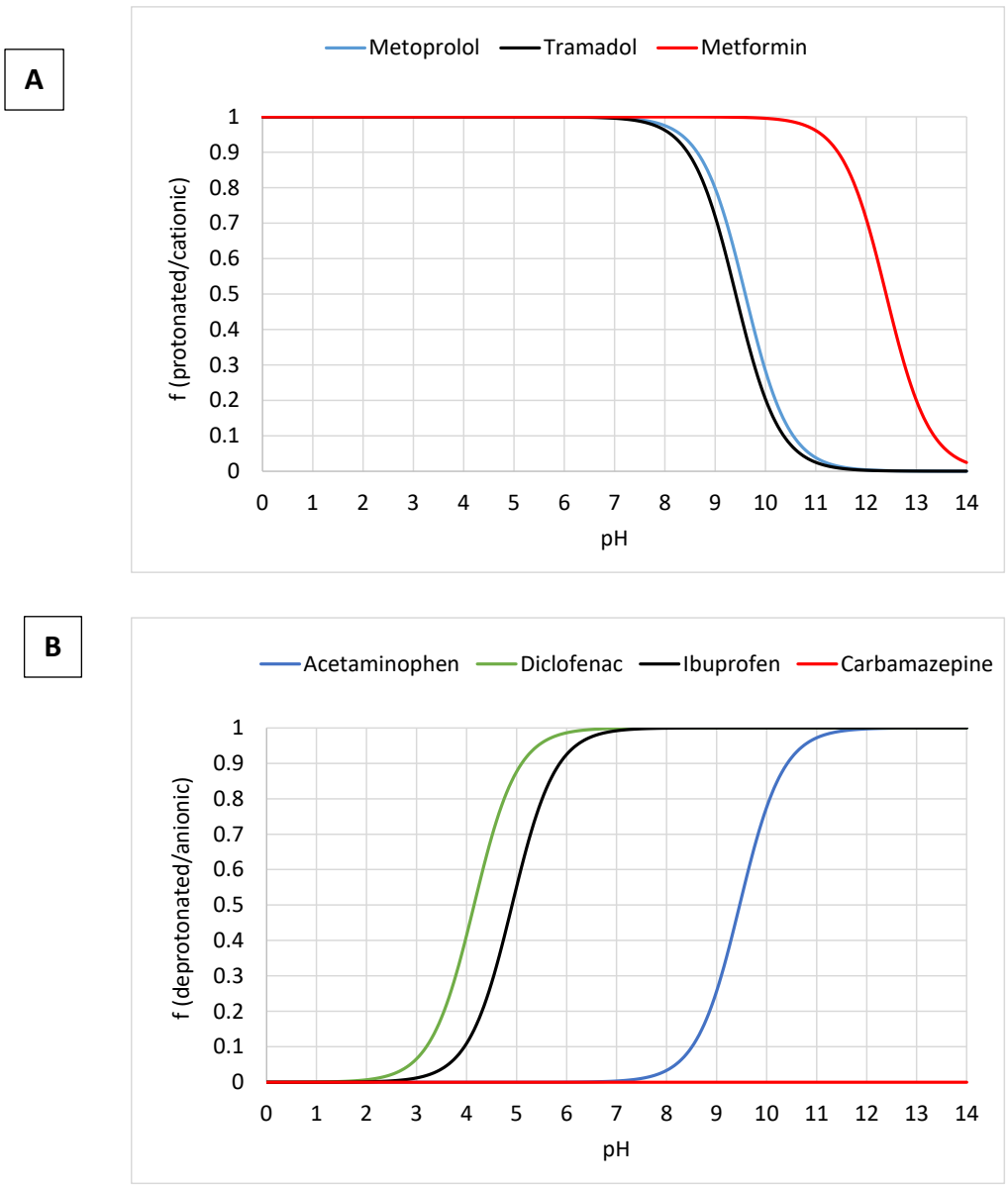

Figure S2. The fraction (f) distribution of cationic (A) and anionic (B) species of the seven pharmaceuticals as a function of pH calculated from their pKa values using the Hendersson-Hasselbach equation.