Supplementary Material

Thermo- and pH-responsive gelatin/polyphenolic tannin/graphene oxide hydrogels for efficient methylene blue delivery

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Figure S1 shows that GE/TN/GO-MB hydrogels present no significant porosity difference ($p > 0.05$). However, the hydrogels loaded with MB present high porosity - between 64.54 and 77.26%. The porosity facilitates water diffusion toward the polymer matrix, favoring the solute release [1]. Indeed, porous and three-dimensional matrices can be used as drug delivery systems (DDSs) [2].

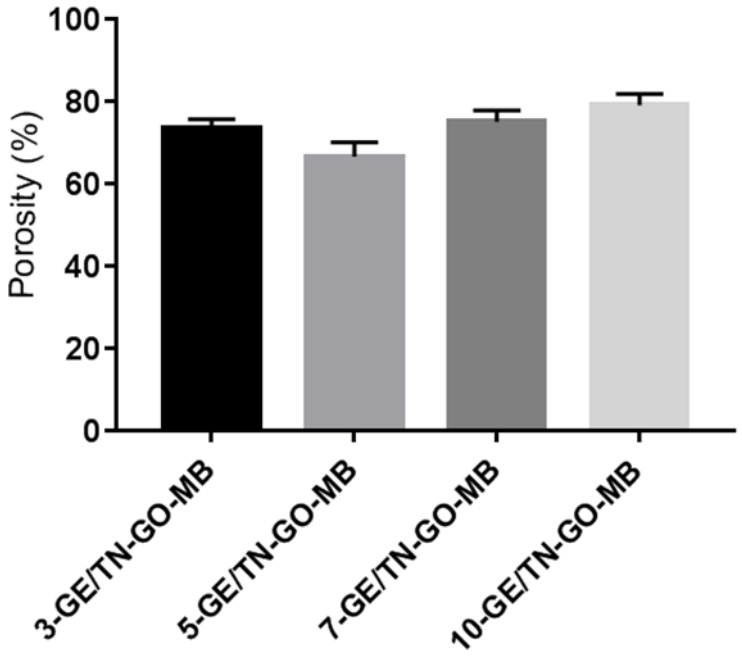

Figure S1. Porosity (%) of the [GE/TN/GO-MB hydrogels with different GO content (Table 1) measured at 37 ºC.

Figure S2. Digital images of a 10-GE/TN/GO-MB hydrogel after disintegration/dissolution (48 h) em SGF.

References

1. Berg, M.C., Zhai, L., Cohen, R.E., Rubner, M.F., 2006. Controlled Drug Release from Porous Polyelectrolyte Multilayers. Biomacromolecules 7, 357–364. https://doi.org/10.1021/bm050174e
2. Spizzirri, U.G., Cirillo, G. (Eds.), 2017. Functional Hydrogels in Drug Delivery: Key Features and Future Perspectives, 1st ed. CRC Press, Boca Raton, FL : CRC Press/ Taylor & Francis Group, 2017. https://doi.org/10.4324/9781315152271