Exploring Co-crystallisation as a Technique for Taste Masking of Nevirapine

Yichun Shen^a, Marique Aucamp^b, Hend E. Abdelhakim^c, Xiunan Li^d, Yusuf Ghazali^b, Katharina Edkins^{a,e*}

^a School of Health Sciences, University of Manchester, Stopford Building, Oxford Road, Manchester M13 9PT, UK

^b School of Pharmacy, Faculty of Natural Sciences, University of the Western Cape, Bellville 7535, South Africa

^c Global Business School for Health, University College London (UCL), 7 Sidings Street, London, E20 2AE, UK

^d Department of Pharmaceutics, UCL School of Pharmacy, 29-39 Brunswick Square, London WC1N 1AX, UK

^e Institute of Pharmacy and Biomedical Sciences, Strathclyde University, 161 Cathedral Street, Glasgow G4 ORE, UK

Supporting Information

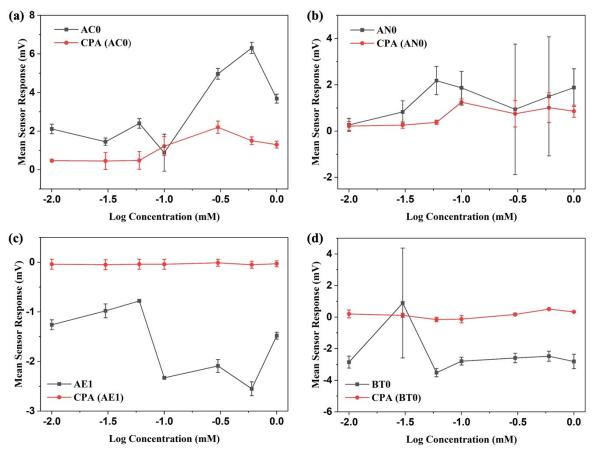


Figure S1 Dose-response curve representing initial taste and aftertaste (CPA) for NVP as detected by (a) ACO, (b) ANO, (c) AE1 and (d) BTO sensor.

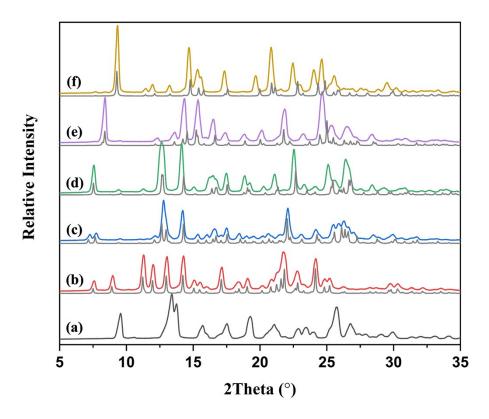


Figure S2 PXRD patterns of (a) NVP and co-crystal (b) NVP-BA, (c) NVP-SAC, (d) NVP-SA, (e) NVP-GTA and (f) NVP-MA with the coloured lines from ball mill experiment and the grey lines from simulation. (Refcode: RUTRAC, LATQOO, LATQUU, LATQEE and LATQII,

respectively)

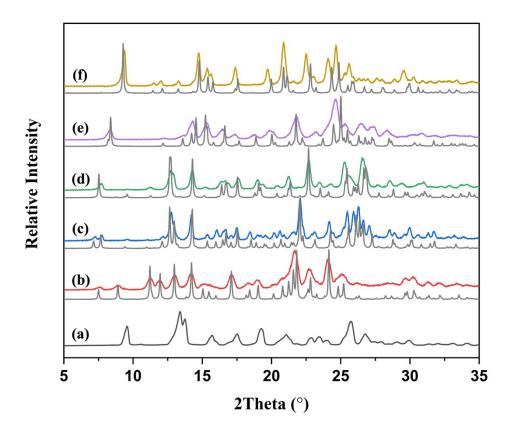


Figure S3 PXRD patterns of (a) NVP and co-crystal (b) NVP-BA, (c) NVP-SAC, (d) NVP-SA, (e) NVP-GTA and (f) NVP-MA with the coloured lines from slurry crystallisation experiment in acetone and the grey lines from simulation. (Refcode: RUTRAC, LATQOO, LATQUU, LATQEE and LATQII, respectively)

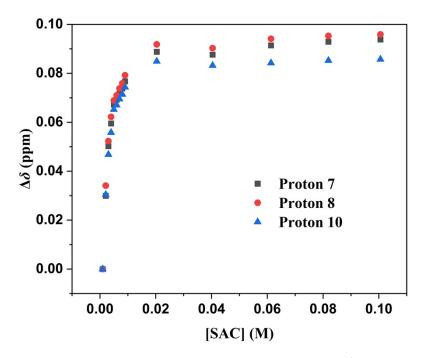


Figure S4 Chemical shifts of SAC protons in acetone-d6 in ¹H NMR dilution.

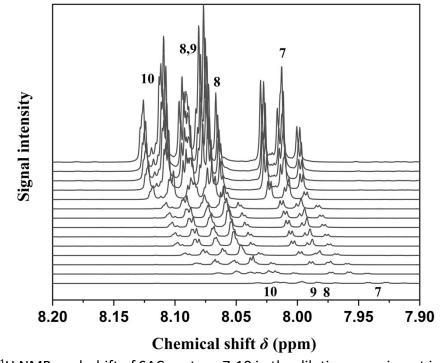


Figure S5 ¹H NMR peak shift of SAC protons 7-10 in the dilution experiment in acetone-d6 (there is an overlap between proton 8 and 9).