Supporting information

Dunja Novakovic[†], Leena Peltonen[†], Antti Isomäki[‡], Sara J. Fraser-Miller[⊥], Line Hagner Nielsen[§], Timo Laaksonen[//], Clare J. Strachan[†]

[†] Drug Research Program, Division of Pharmaceutical Chemistry and Technology, Faculty of Pharmacy, University of Helsinki, Viikinkaari 5 E, 00014 University of Helsinki, Finland

[‡] Biomedicum Imaging Unit, Faculty of Medicine, University of Helsinki, Haartmaninkatu 8, 00014 University of Helsinki, Finland

[⊥] Dodd-Walls Center for Photonic and Quantum Technologies, Department of Chemistry, University of Otago, Dunedin 9016, New Zealand

[§] Department of Health Technology, Technical University of Denmark, Ørsteds Plads 345C, 2800 Kgs Lyngby, Denmark

[//] Laboratory of Chemistry and Bioengineering, Tampere University of Technology, Korkeakoulunkatu 8, 33720 Tampere, Finland

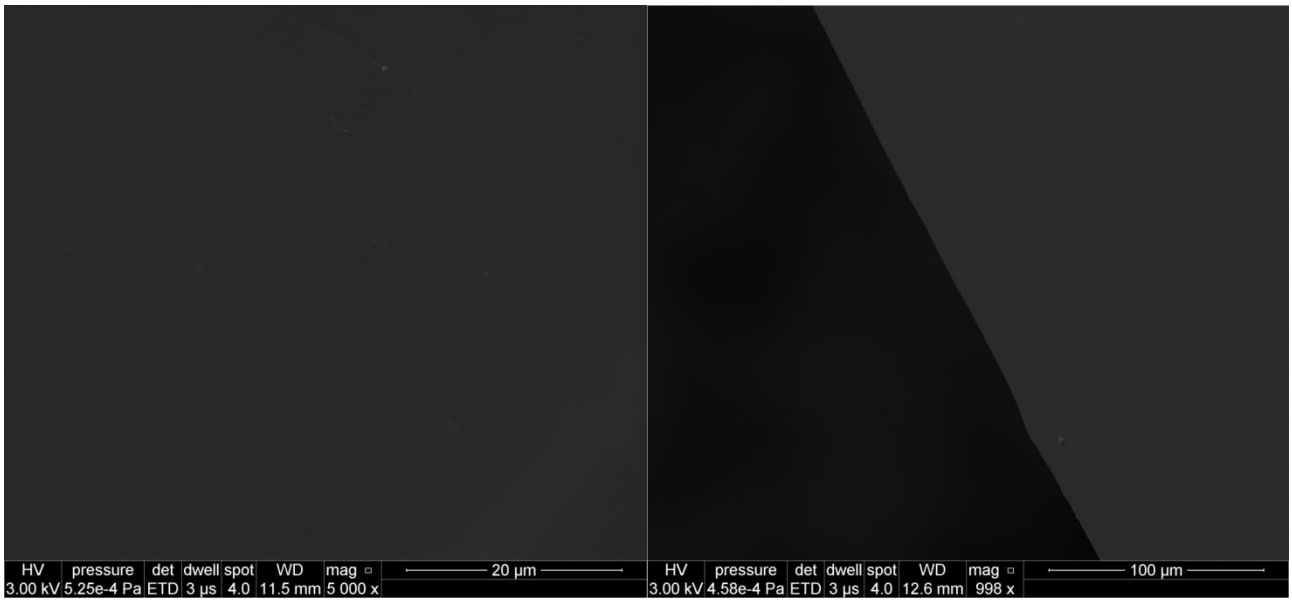

Figure S1. Surface (left) and cross-section (right) SEM micrographs of day 0 uncoated amorphous indomethacin compact

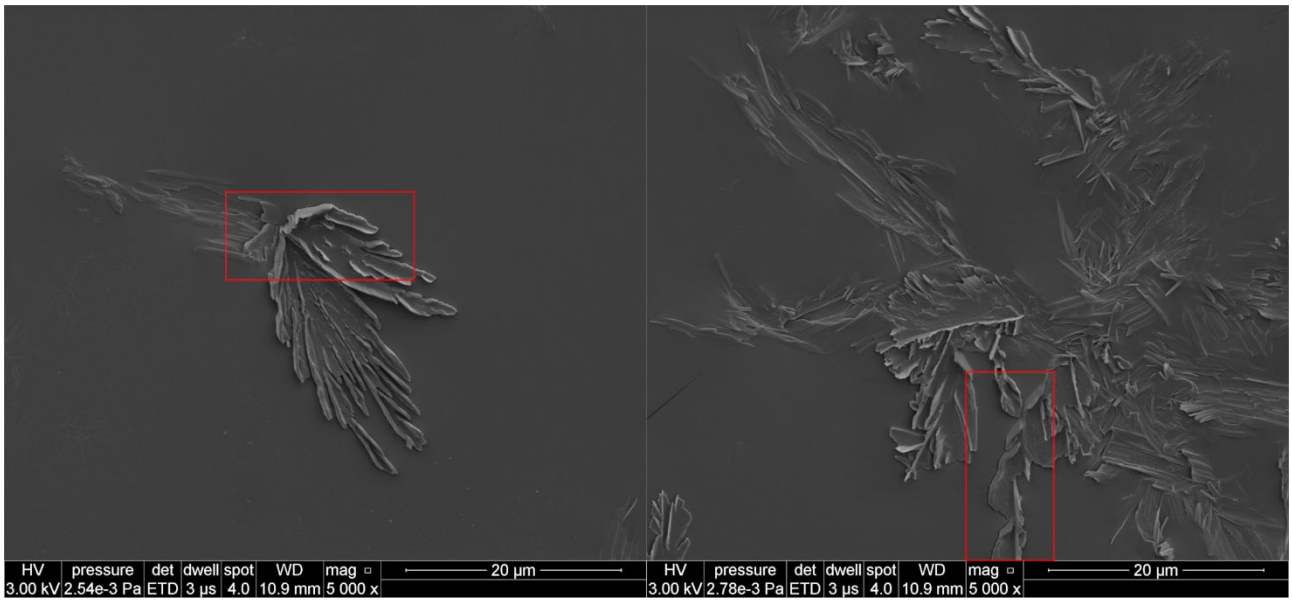

Figure S2. SEM micrographs of top surface of uncoated amorphous indomethacin compacts stored for 3 days at 30°C/75%RH; red rectangles indicate areas in which depletion zones are visible

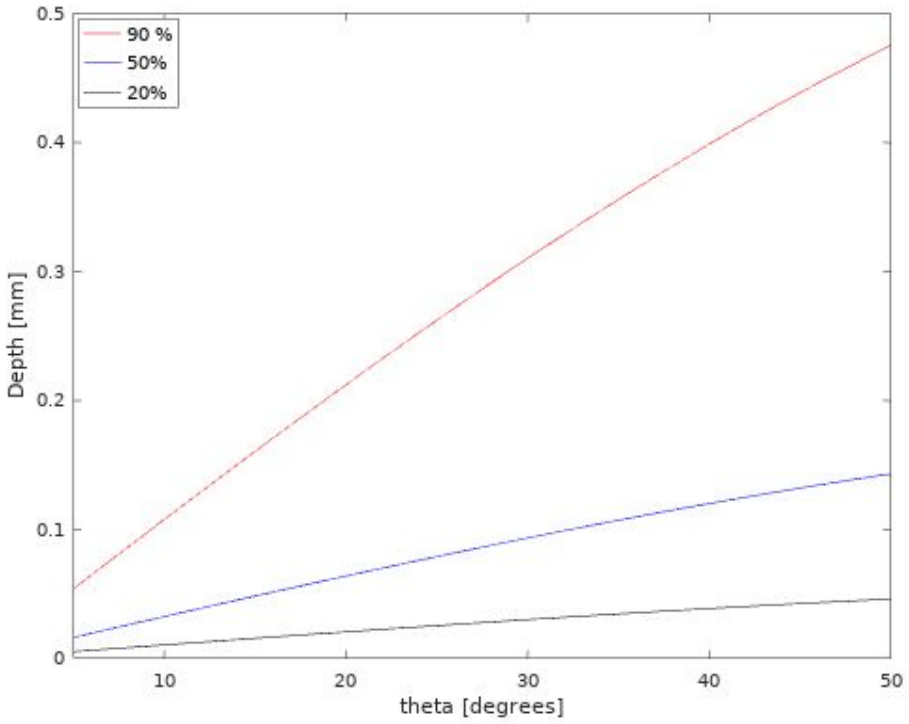

Figure S3. The relationship between the incidence angle (theta) and probed penetration depth of the sample during XRD measurements. Profiles showing the origin of 90%, 50% and 20% of the diffraction signals are depicted in red, blue and black, respectively. This estimation is based on the θ/2θ geometry of the XRD instrument (incident angle is always half of the detection angle). Thus, measurements with θ equal to or less than 17.5 degrees in this figure correspond to a 2θ angle of 35 degrees in Figures 2 and 7 and are representative for the observed diffraction peaks.

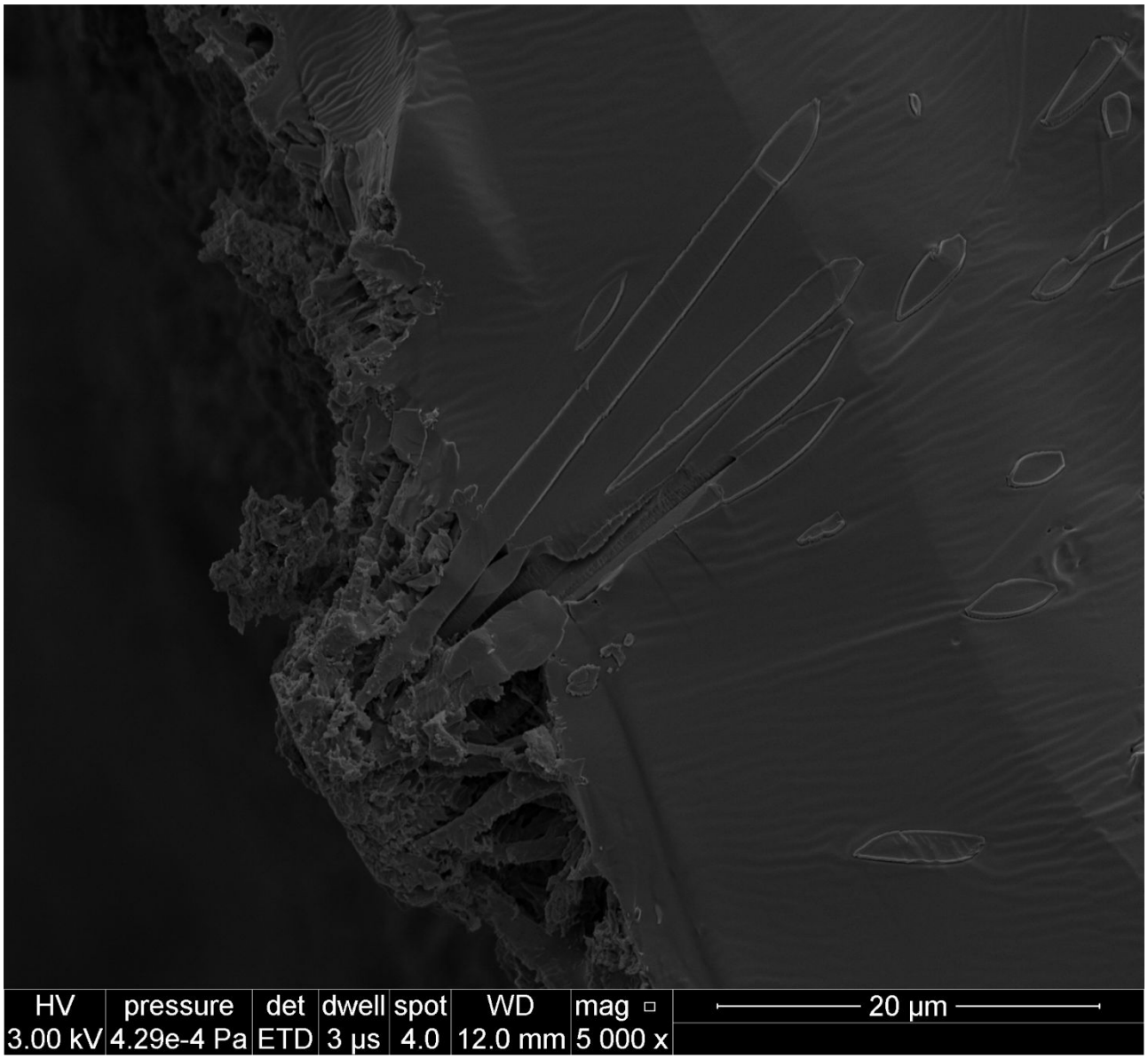

Figure S4. SEM micrograph of cross section of 2C coated amorphous indomethacin compact stored for 28 days at 30°C/75%RH that underwent dissolution testing for 45 minutes