



Supplementary Figure1: The REMODEL-CD Clinical Trial Overview. The trial includes two arms, the precision care (interventional) and conventional care (control). The conventional care arm will receive starting doses of 5-7.5 mg/kg (based on pre-treatment serum albumin) and one proactive therapeutic drug monitoring (TDM) at dose4. The starting dose in the precision care arm will vary between 5-12.5 mg/kg and is based on predicted (baseline) infliximab clearance and a target trough concentration (cTrough) of 18-24 µg/mL at dose3. Following induction, two additional Checkpoints will be assessed for Pharmacokinetic (PK) and Pharmacodynamic (PD) targets. Infliximab optimization during maintenance is dependent on whether the PK, PD or both PK/PD targets have been met. As noted, the PK target is the first priority before assessing the PD targets and escalating the target concentration to the next tier. ESR, erythrocyte sedimentation rate; nCD64, neutrophil CD64; PCDAI, pediatric Crohn's disease activity index; CAI, Crohn's disease activity index; CRP, c-reactive protein; fCal, fecal calprotectin; MIPD, model-informed precision dosing.