

Supplementary Methods

IFX PK model simulations

The final population PK model II was applied to illustrate effects of pregnancy and anti-IFX Abs on the PK of IFX during pregnancy by model simulations. First, PK profiles for typical patients were simulated. Then, PK profiles for 6,000 virtual patients differing in anti-IFX Ab status, pregnancy status, and (dis)continuation of IFX in the 3rd trimester were simulated, including interpatient variability in PK parameters. The virtual patients were assigned to be anti-IFX Ab negative (ADA-) or anti-IFX Ab positive (ADA+), IFX dosing was set to 325 mg (corresponding to a 5 mg/kg dosing of a standard patient of 65 kg), and the IFX regimen comprised standard induction (i.e., infusions at weeks (w) 0, 2, and 6) and maintenance therapy (infusions every (q) 8w). Date of conception was set to week 22 (corresponding to timing of 2nd maintenance IFX infusion). As the therapeutic threshold for IFX is not well defined, the percentage of patients reaching different pre-defined PK targets of >3, >4, and >5 µg/mL at week 62 of IFX therapy corresponding to end of pregnancy, was compared relative to anti-IFX Ab status, pregnancy status, and IFX administration in the 3rd trimester.