

Examining the systemic bioavailability of cannabidiol and tetrahydrocannabinol from a novel transdermal delivery system in healthy adults: a single-arm, open-label, exploratory study

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SUPPLEMENTARY MATERIALS

Table S1 Summary of the pharmacokinetic parameters of CBD in the ITT population (n = 18)

Parameters	Mean $\pm$ SD Median (Min to Max)
AUC _T (pg/mL*h)	3891.36 $\pm$ 4055.1 2791.4 (364.1 to 15227.5)
C _{max} (pg/mL)	2337.08 $\pm$ 9559.8 584.5 (54.8 to 41333.3)
T _{max} (h)	0.17 $\pm$ 3.9 12 (0.17 to 12)
AUC _i (pg/mL*h)	6811.84 $\pm$ 6423.8 6124.7 (789.0 to 24124.7)
λ (h ⁻¹)	0.14 $\pm$ 0.054 0.13 (0.09 to 0.33)
t _{1/2} (h)	4.84 $\pm$ 1.5 5.32 (2.11 to 8.02)
k _a (h ⁻¹)	31988.6 $\pm$ 134517.8 105.49 (8.68 to 570971.6)

SD, standard deviation; Min, minimum; Max, maximum. AUC_T, area under the curve to the last measured timepoint; C_{max}, maximum concentration; T_{max}, time to maximum concentration; AUC_i, area under the curve to infinity; λ , terminal elimination rate constant; t_{1/2}, terminal half-life, k_a, absorption rate constant

Table S2 Summary of the pharmacokinetic parameters of THC in the ITT population (n = 18)

Parameters	Mean $\pm$ SD Median (Min to Max)
AUC _T (pg/mL*h)	2773.42 $\pm$ 3225.6 1729.475 (350.2 to 11830.84)
C _{max} (pg/mL)	2019.03 $\pm$ 8197.85 345.6 (50.1 to 35315.7)
T _{max} (h)	0.17 $\pm$ 4.47 12 (0.17 to 12)
AUC _i (pg/mL*h)	4307.52 $\pm$ 3882.7 3548.1 (693.89 to 11988)
λ (h ⁻¹)	0.15 $\pm$ 0.057 0.135 (0.09 to 0.35)
t _{1/2} (h)	4.44 $\pm$ 1.33 5.08 (1.96 to 7.68)
k _a (h ⁻¹)	27285.3 $\pm$ 114843.6 60.9 (3.3 to 487647.6)

SD, standard deviation; Min, minimum; Max, maximum. AUC_T, area under the curve to the last measured timepoint; C_{max}, maximum concentration; T_{max}, time to maximum concentration; AUC_i, area under the curve to infinity; λ , terminal elimination rate constant; t_{1/2}, terminal half-life, k_a, absorption rate constant

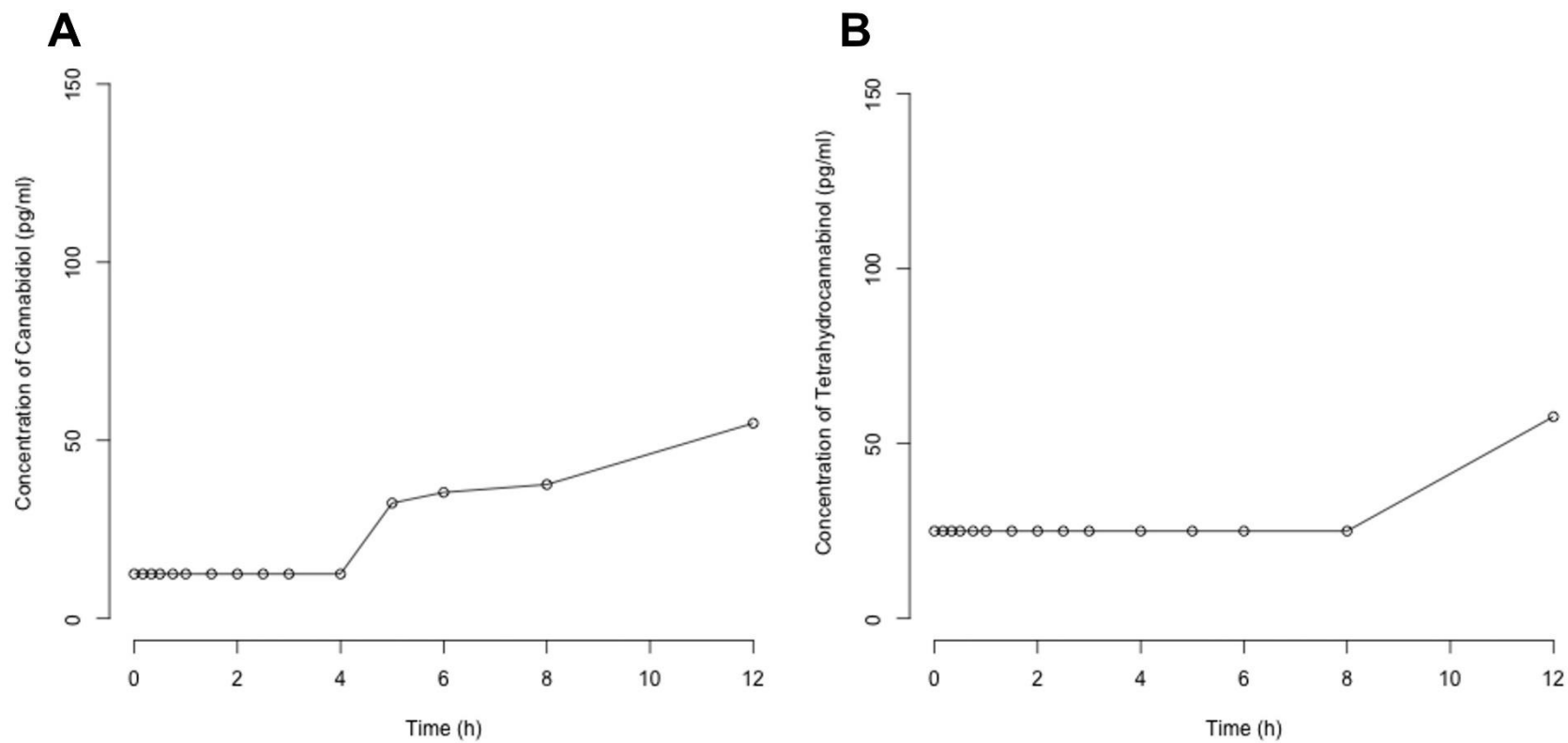


Fig. S1 Participant 002 time-concentration curves for A) CBD and B) THC

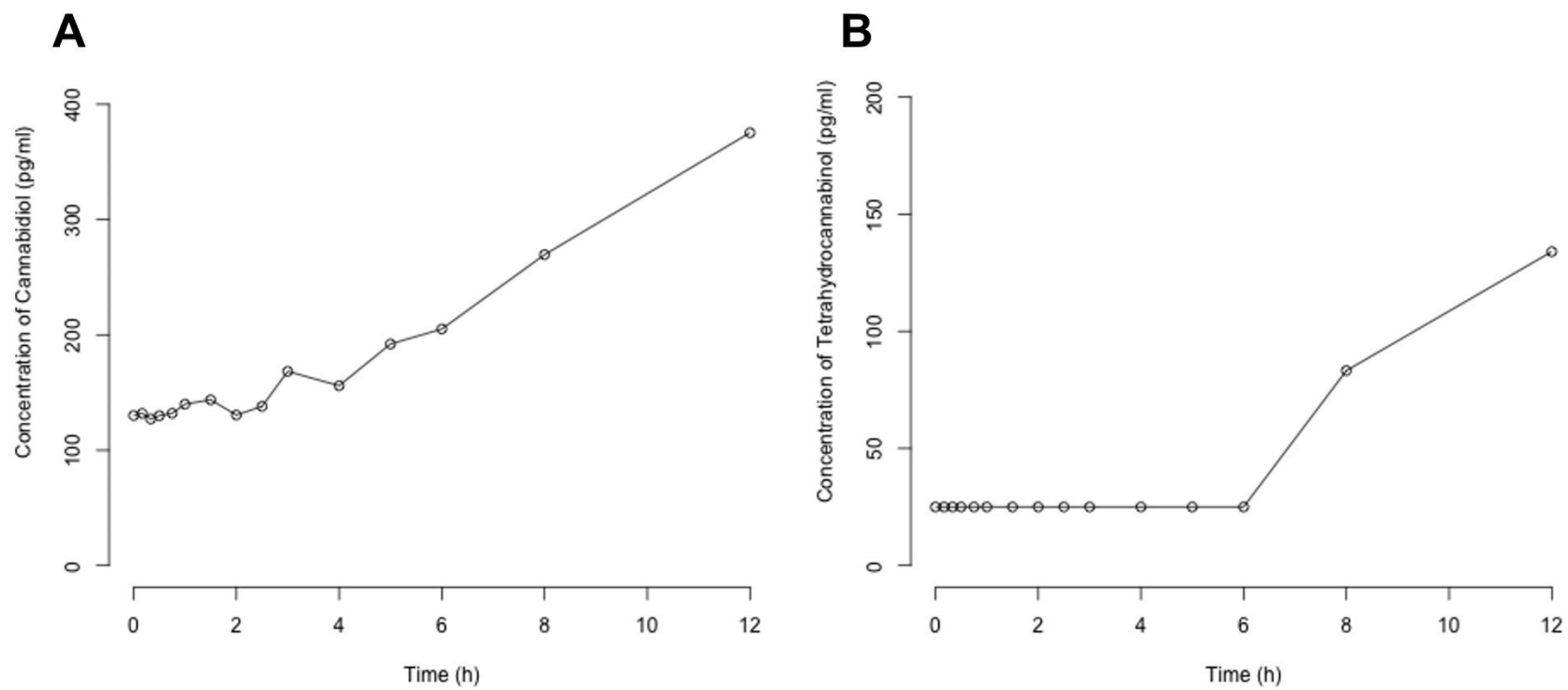


Fig. S2 Participant 003 time-concentration curves for A) CBD and B) THC

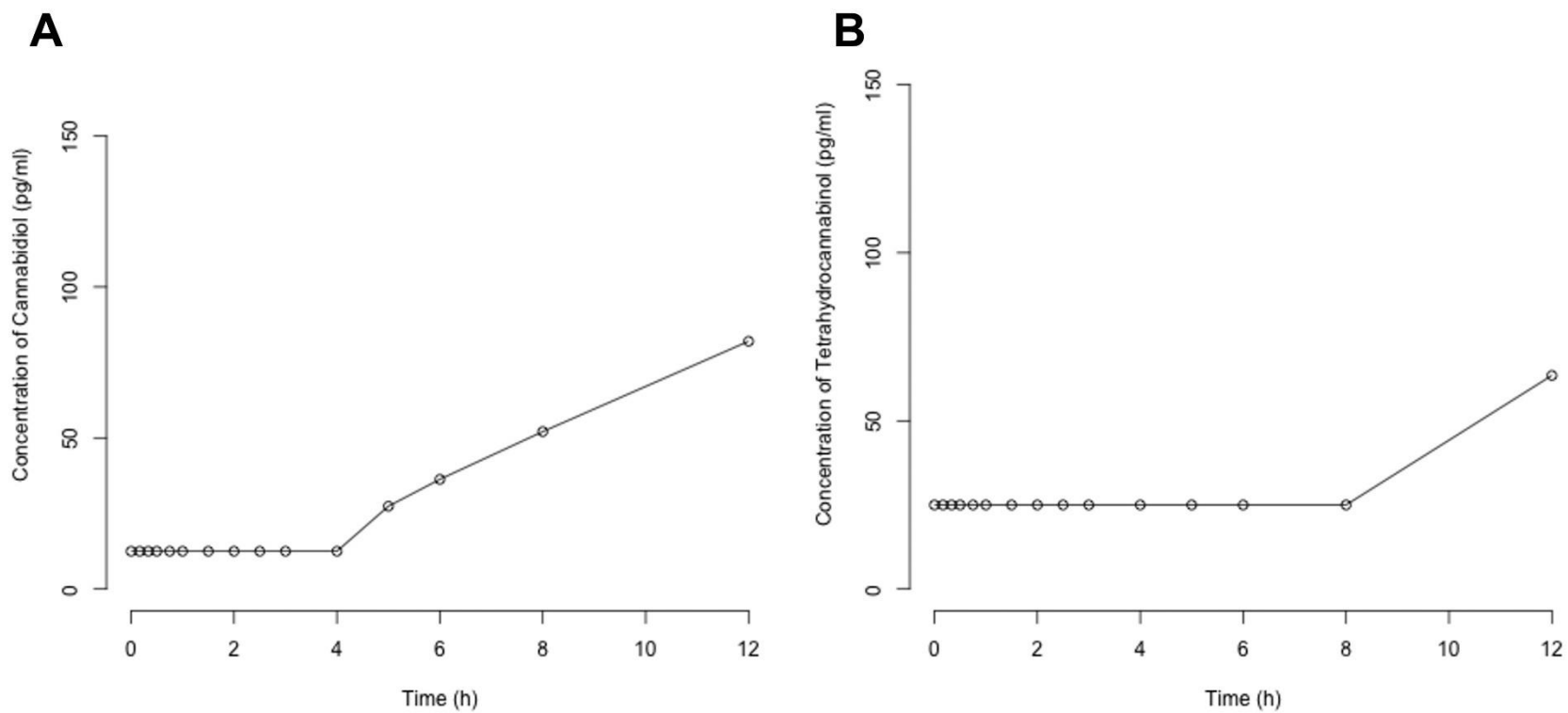


Fig. S3 Participant 004 time-concentration curves for A) CBD and B) THC

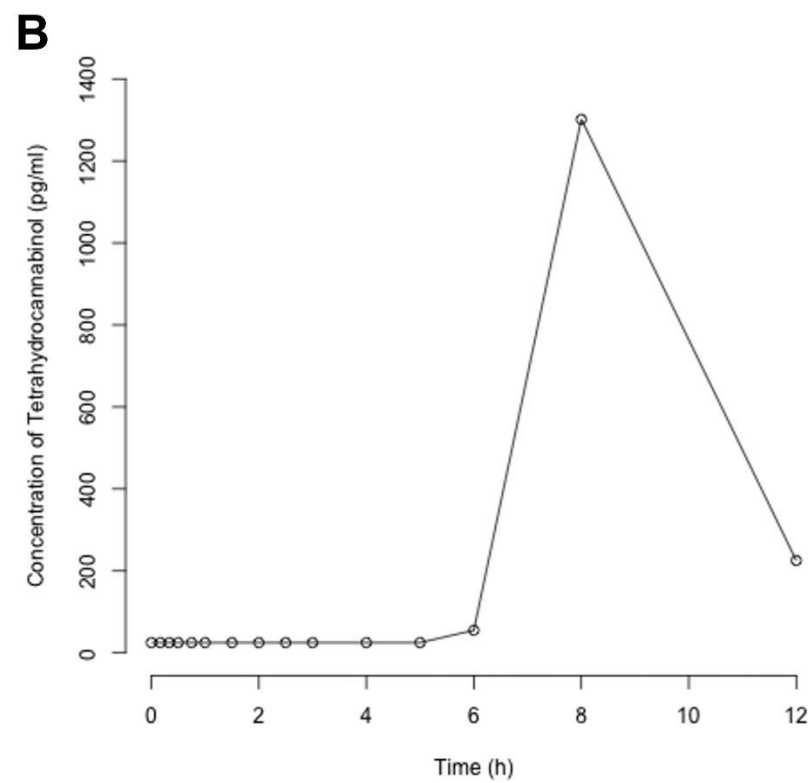
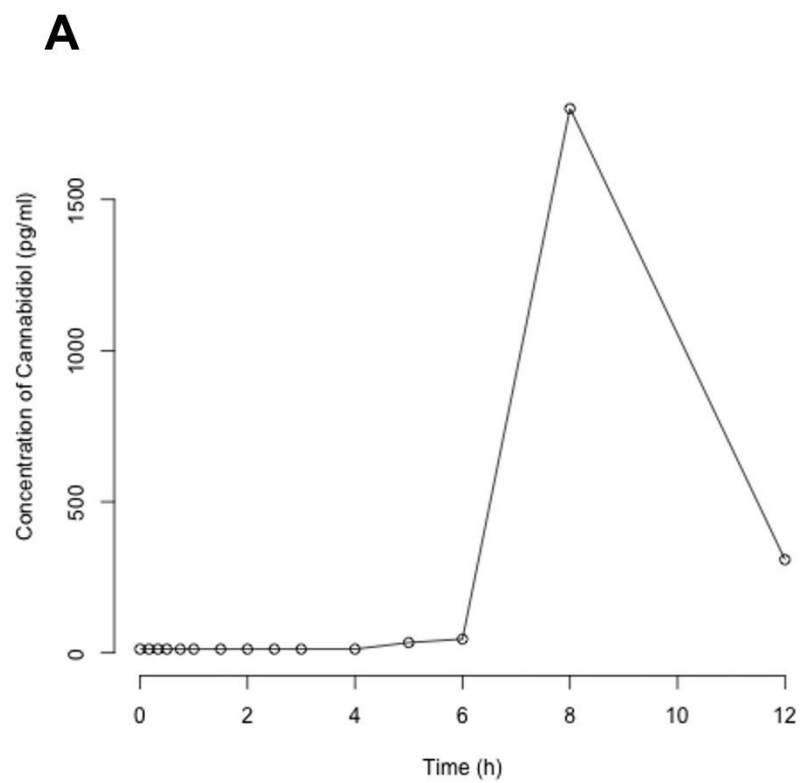


Fig. S4 Participant 006 time-concentration curves for A) CBD and B) THC

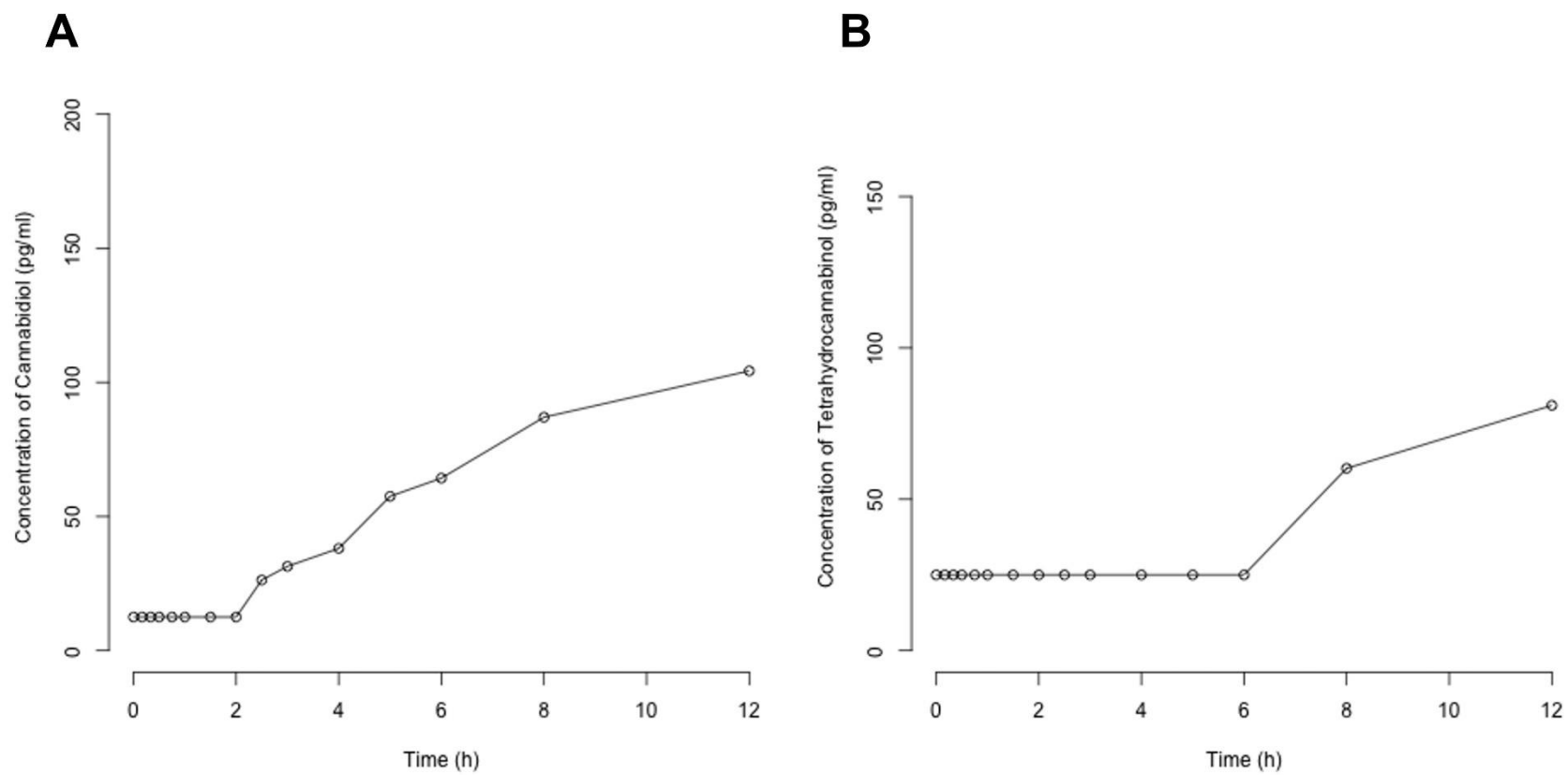


Fig. S5 Participant 007 time-concentration curves for A) CBD and B) THC

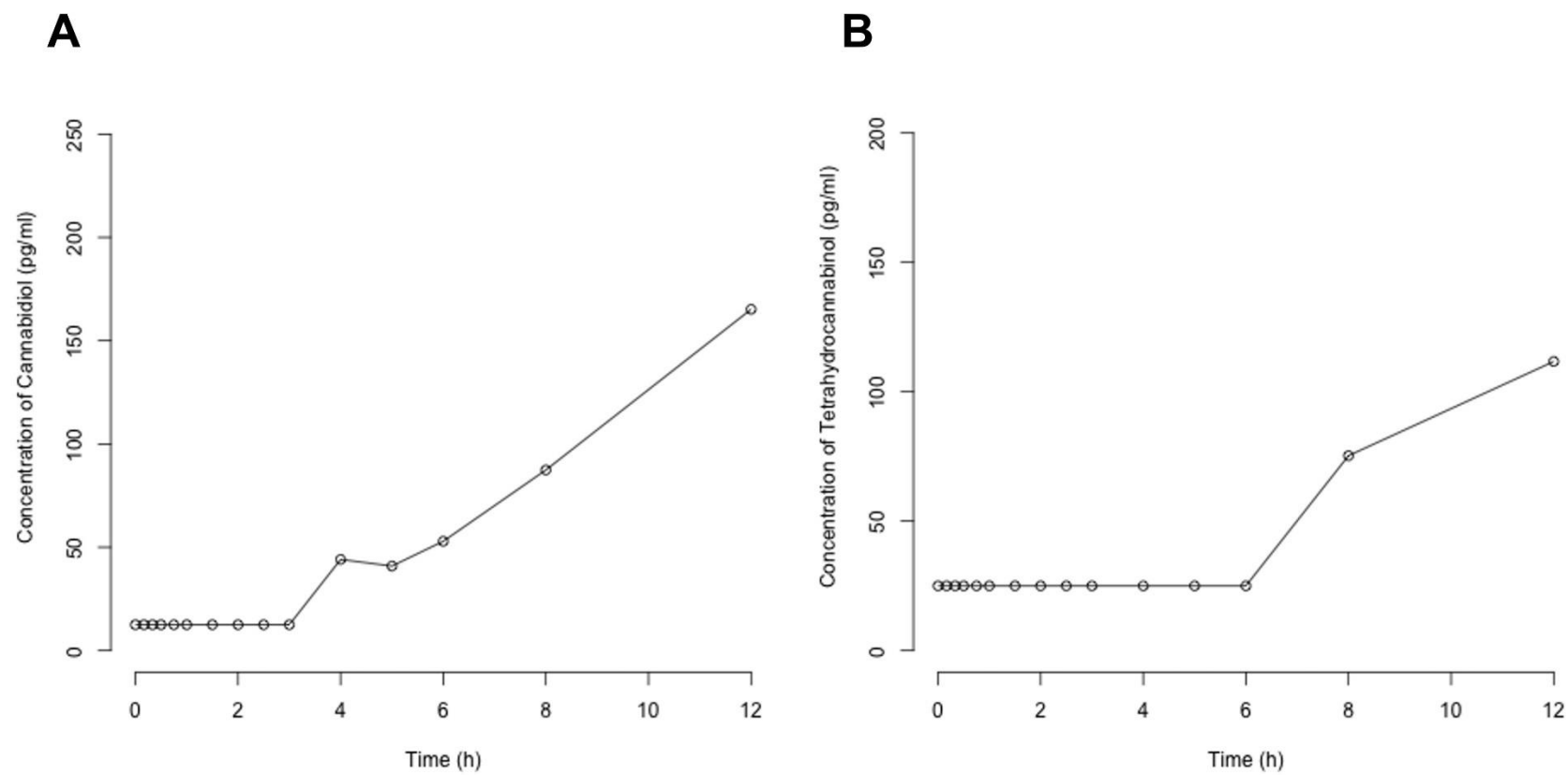


Fig. S6 Participant 008 time-concentration curves for A) CBD and B) THC

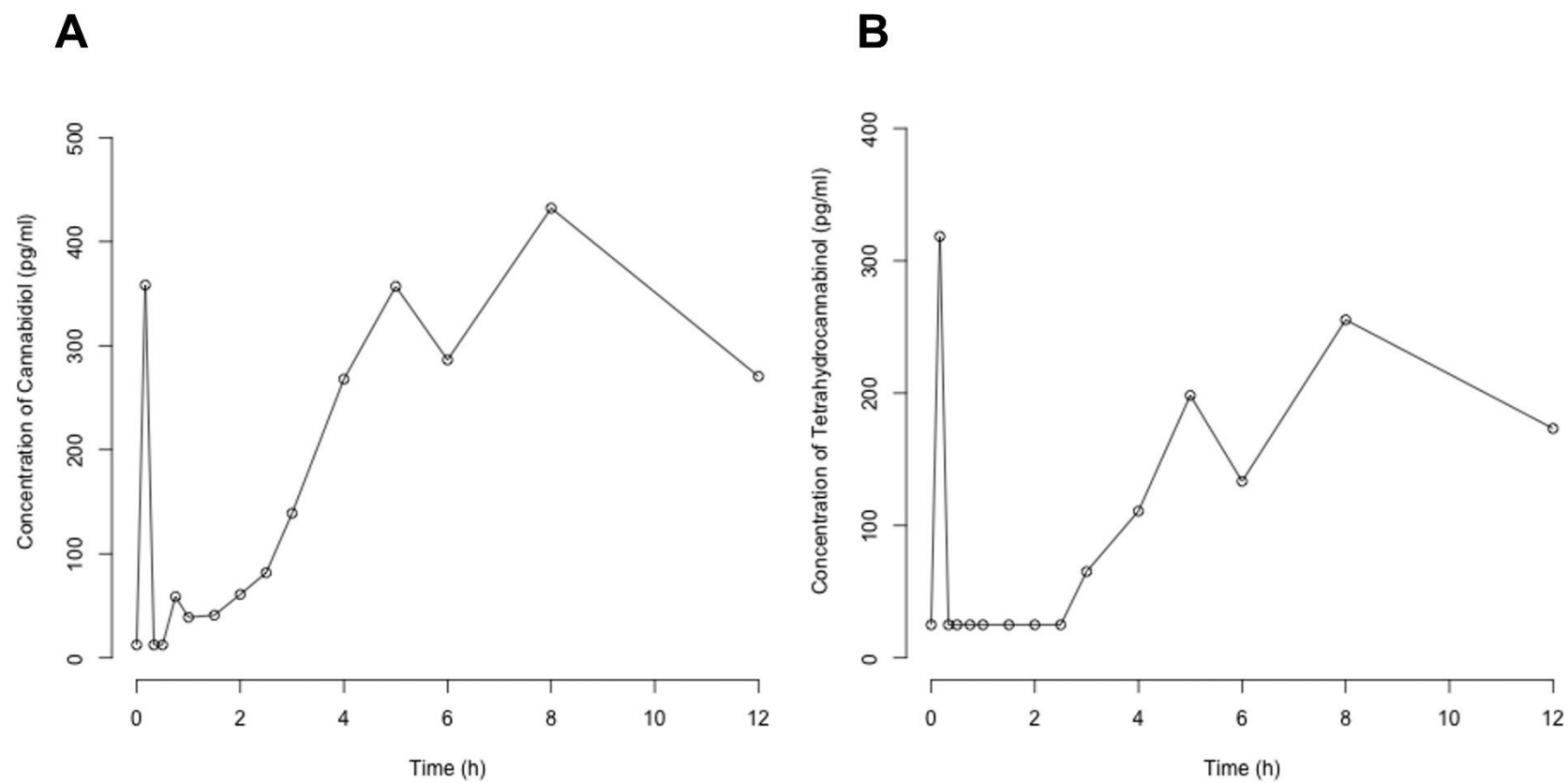


Fig. S7 Participant 009 time-concentration curves for A) CBD and B) THC

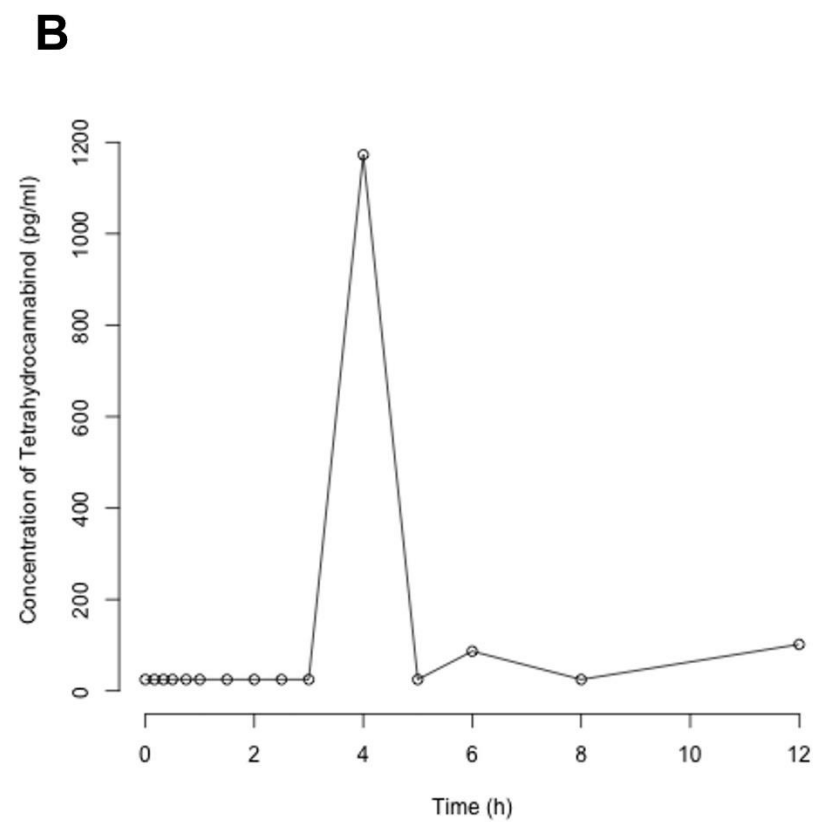
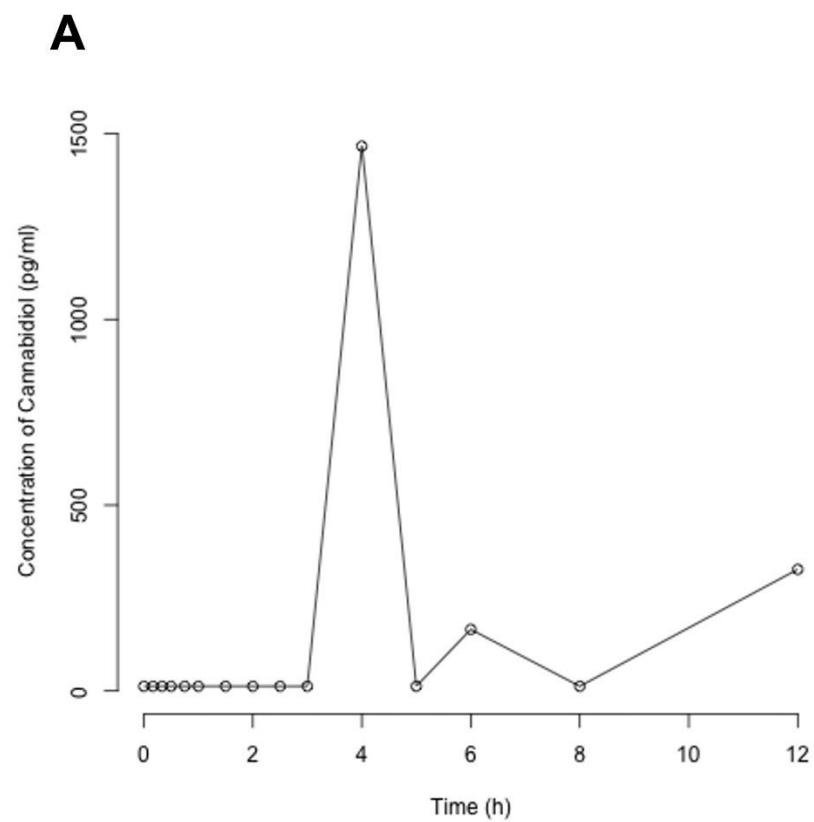


Fig. S8 Participant 011 time-concentration curves for A) CBD and B) THC

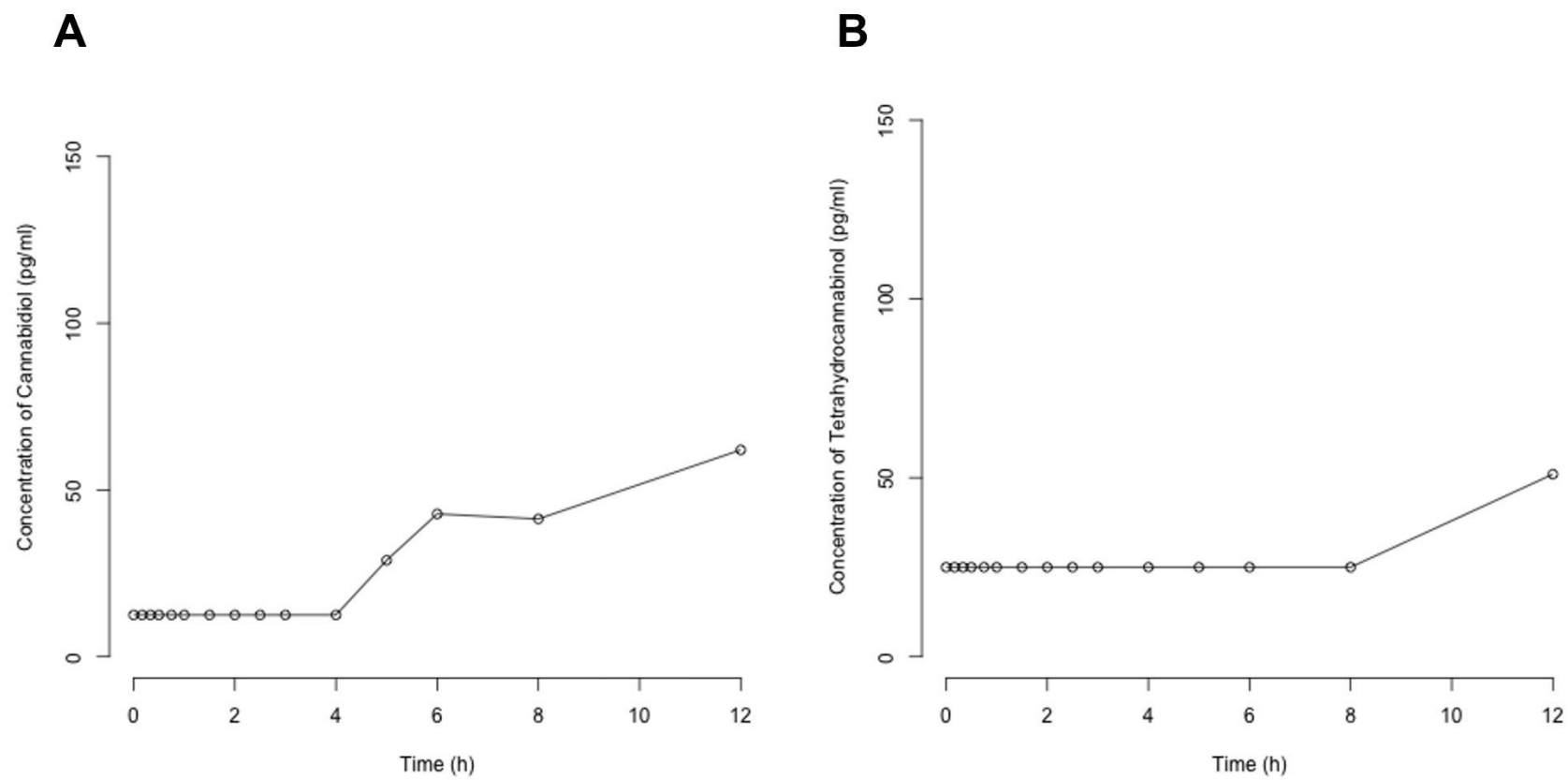


Fig. S9 Participant 012 time-concentration curves for A) CBD and B) THC

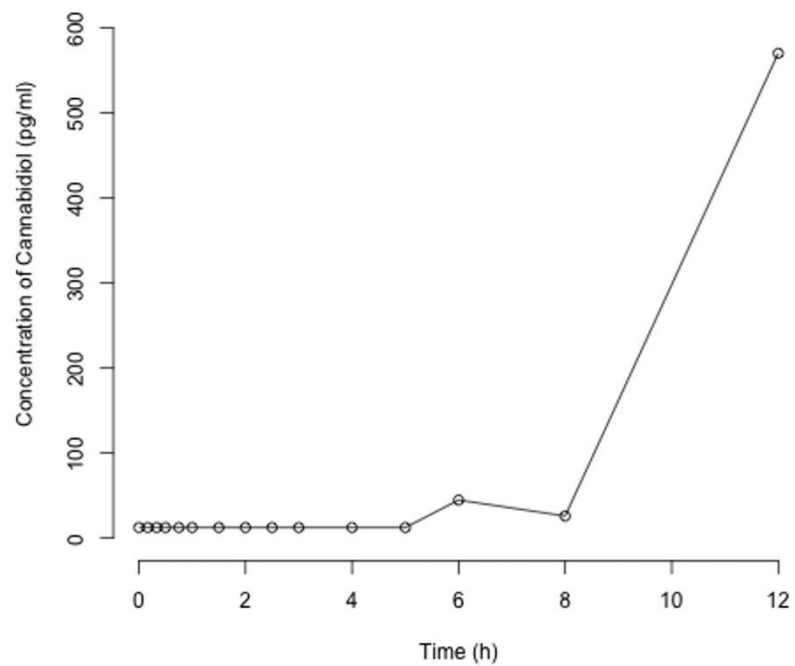
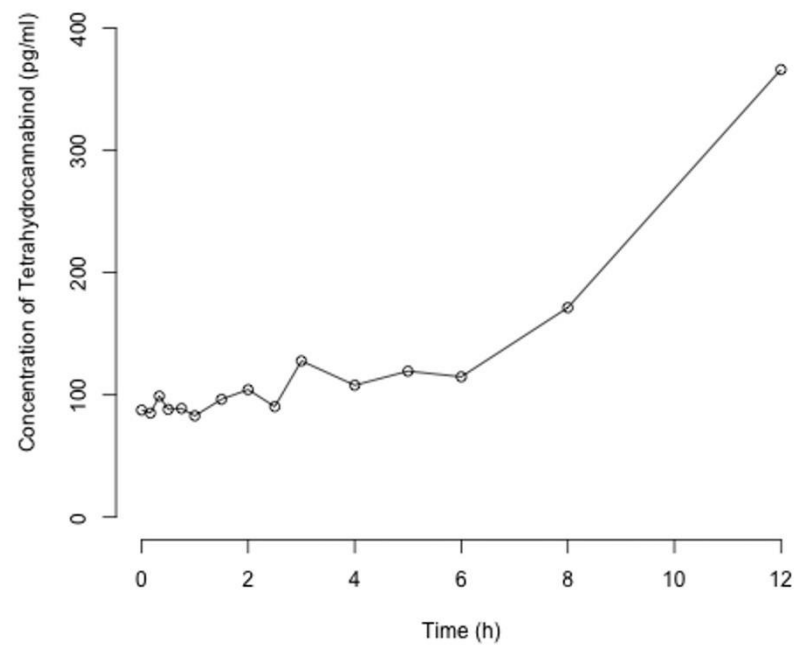
A**B**

Fig. S10 Participant 013 time-concentration curves for A) CBD and B) THC

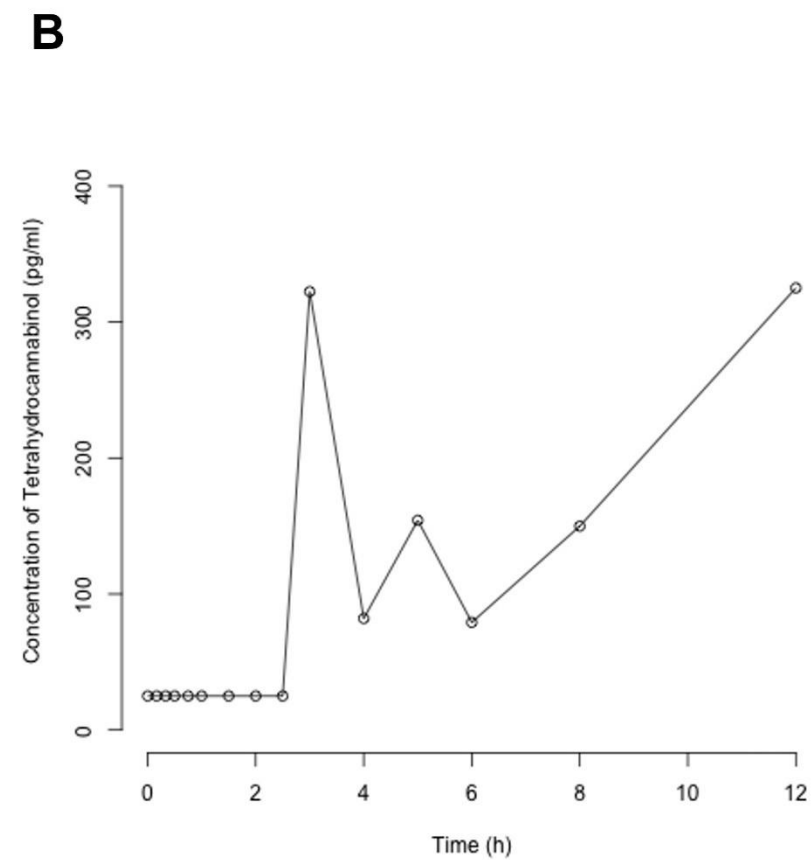
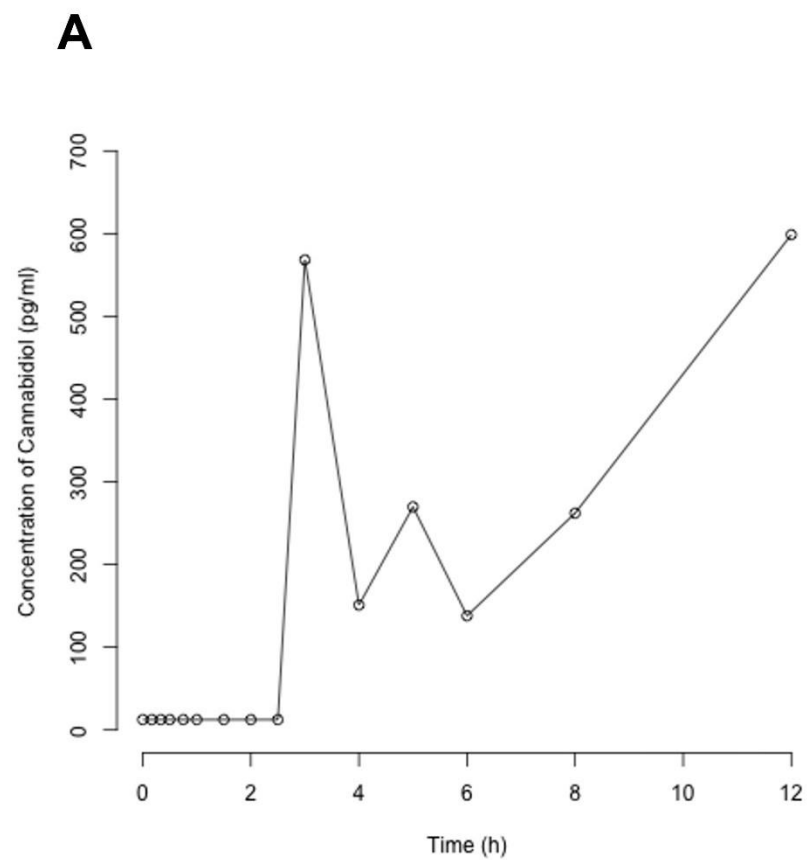


Fig. S11 Participant 015 time-concentration curves for A) CBD and B) THC

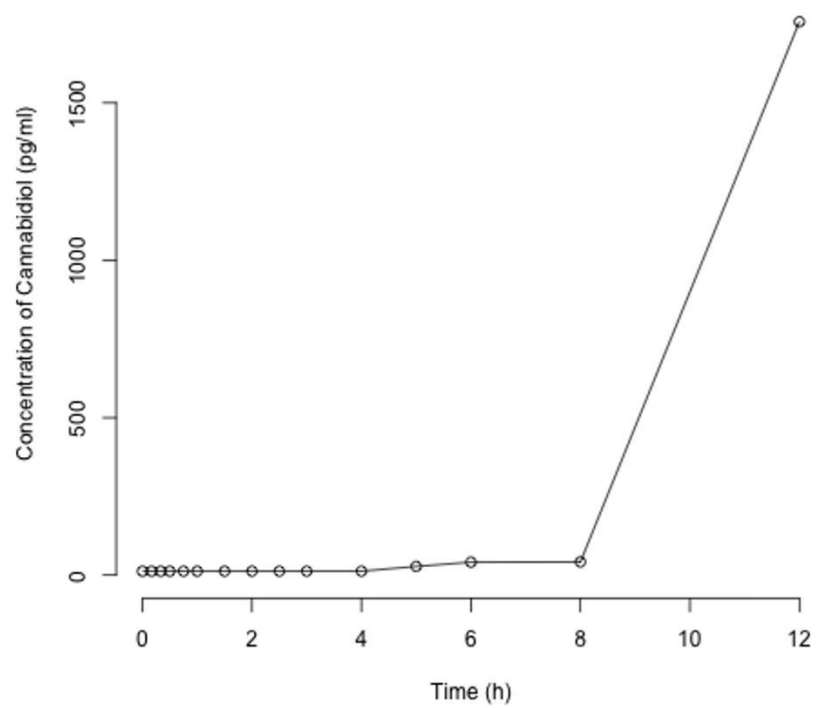
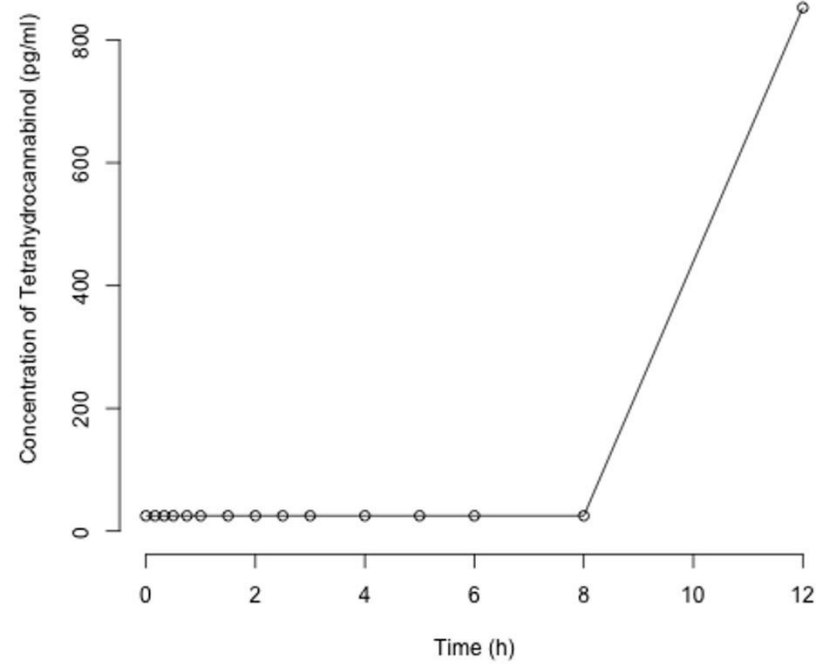
A**B**

Fig. S12 Participant 017 time-concentration curves for A) CBD and B) THC

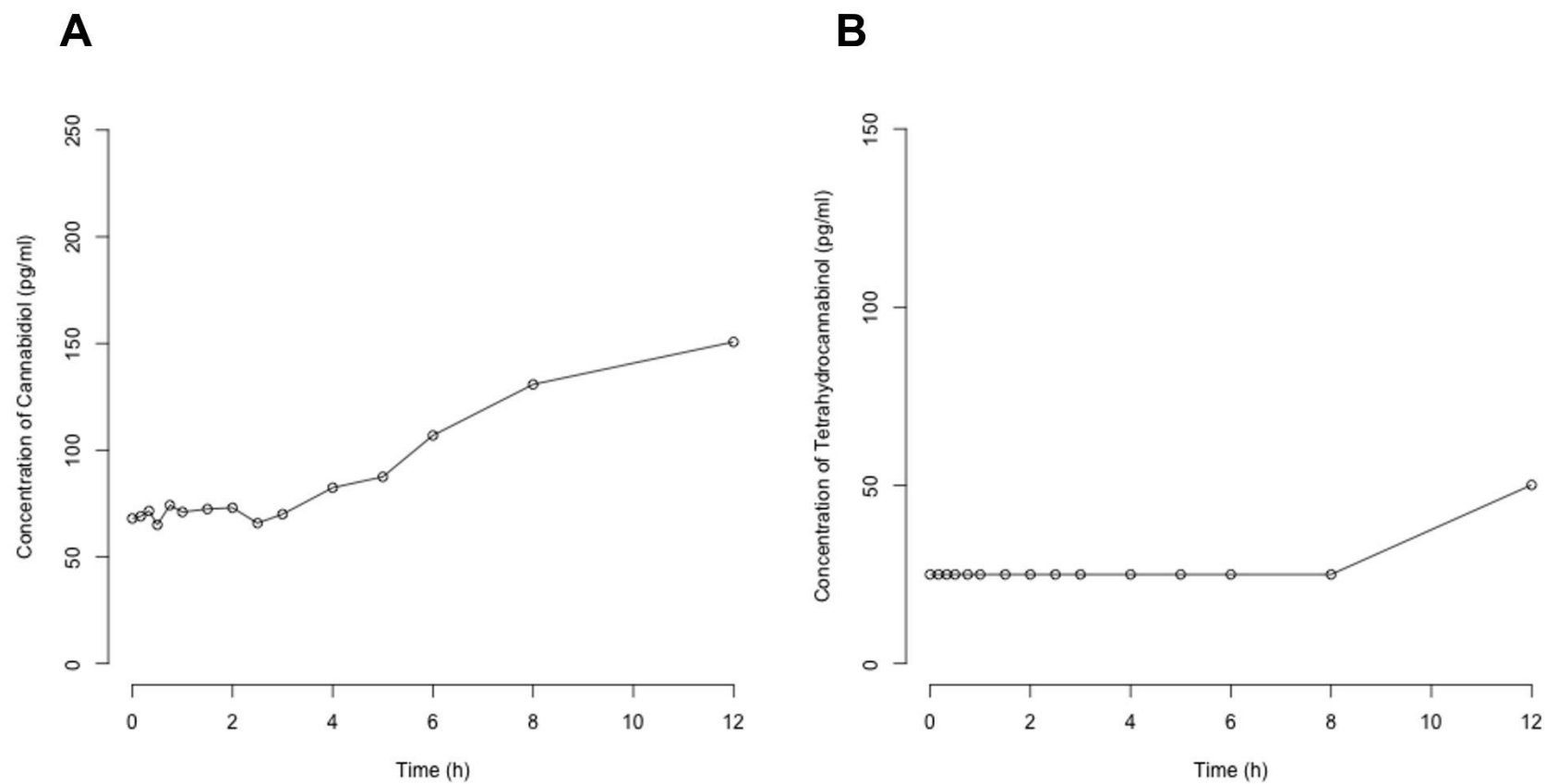


Fig. S13 Participant 018 time-concentration curves for A) CBD and B) THC

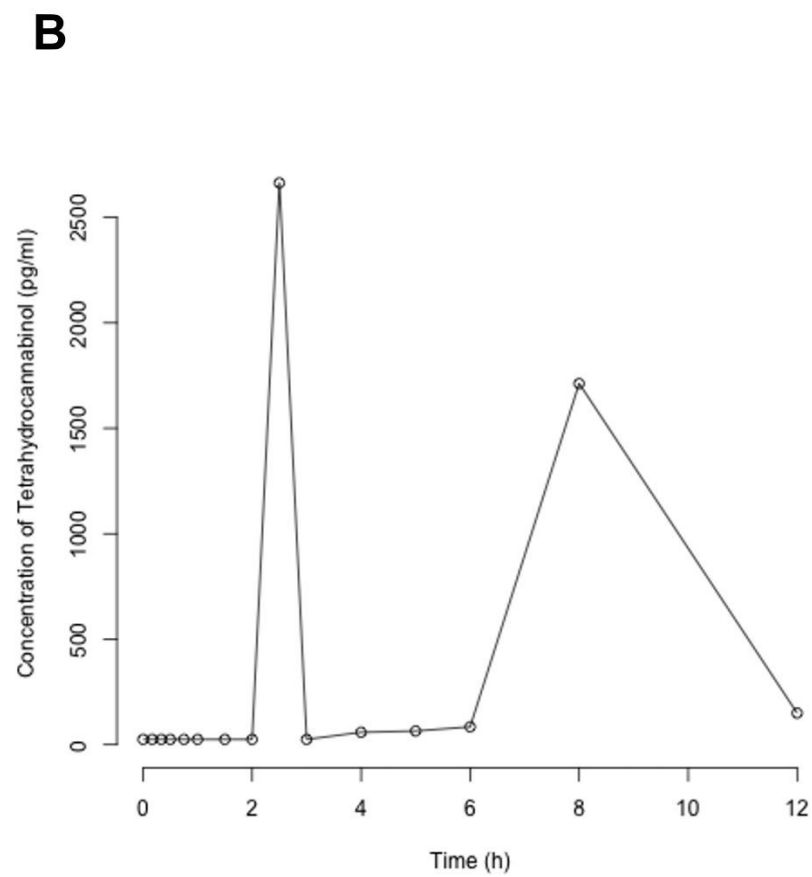
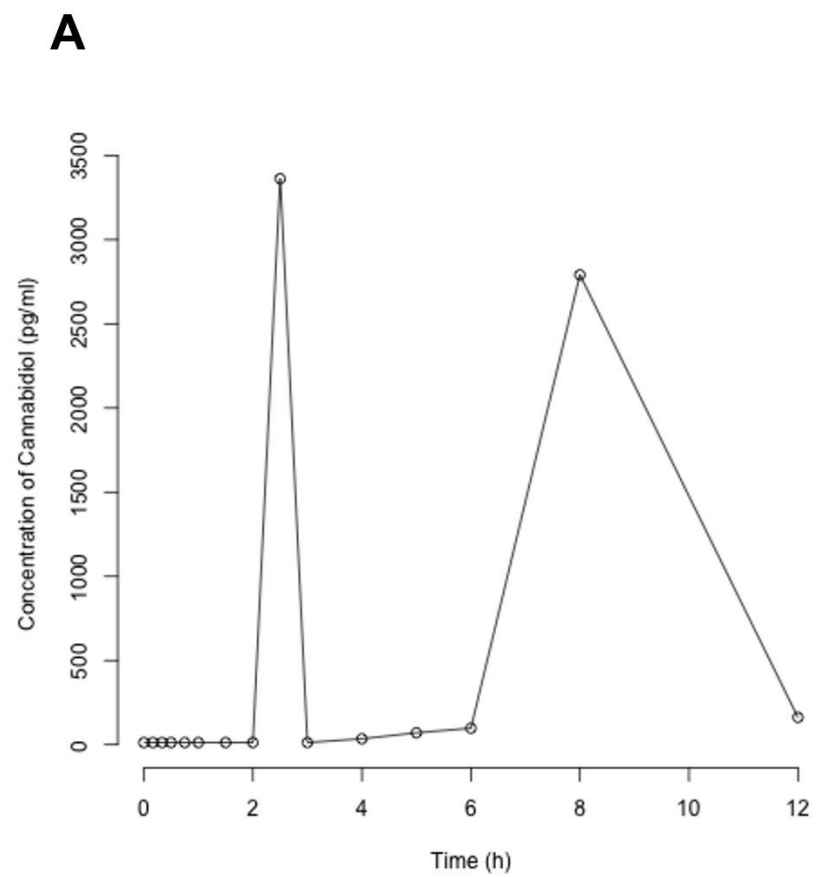


Fig. S14 Participant 019 time-concentration curves for A) CBD and B) THC

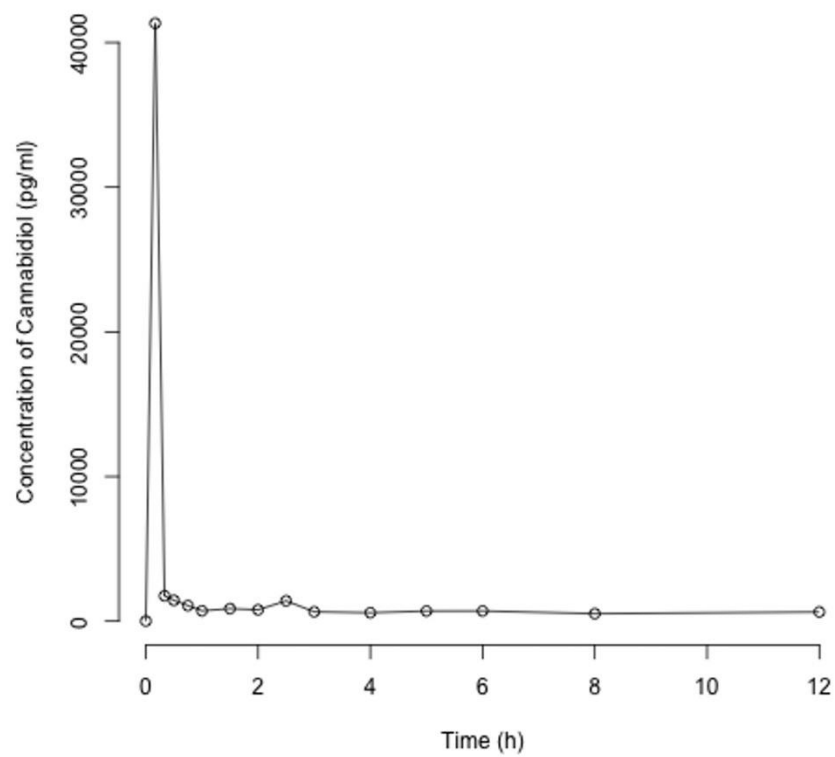
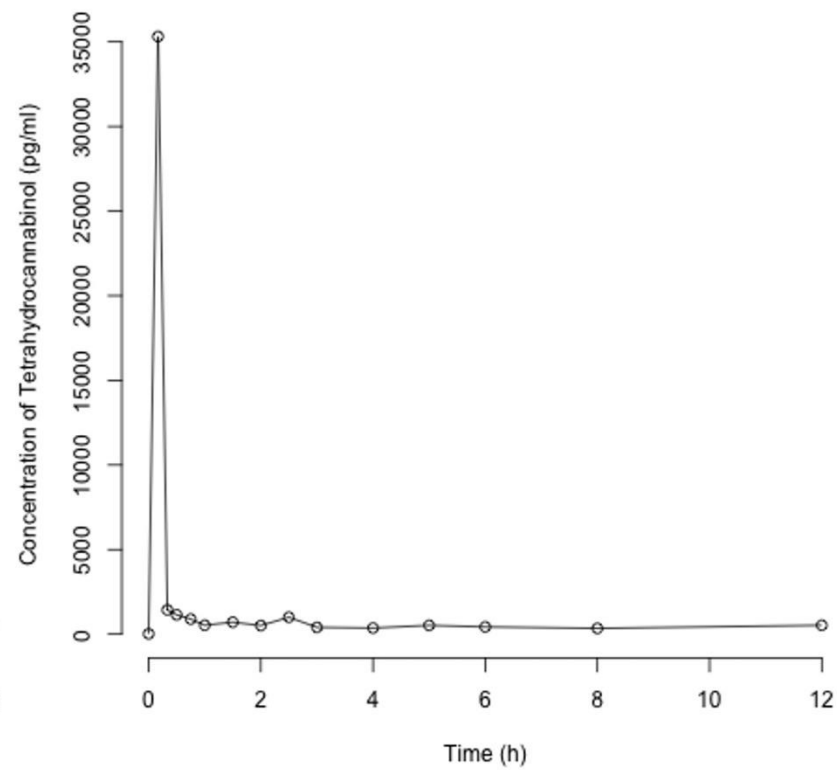
A**B**

Fig. S15 Participant 021 time-concentration curves for A) CBD and B) THC

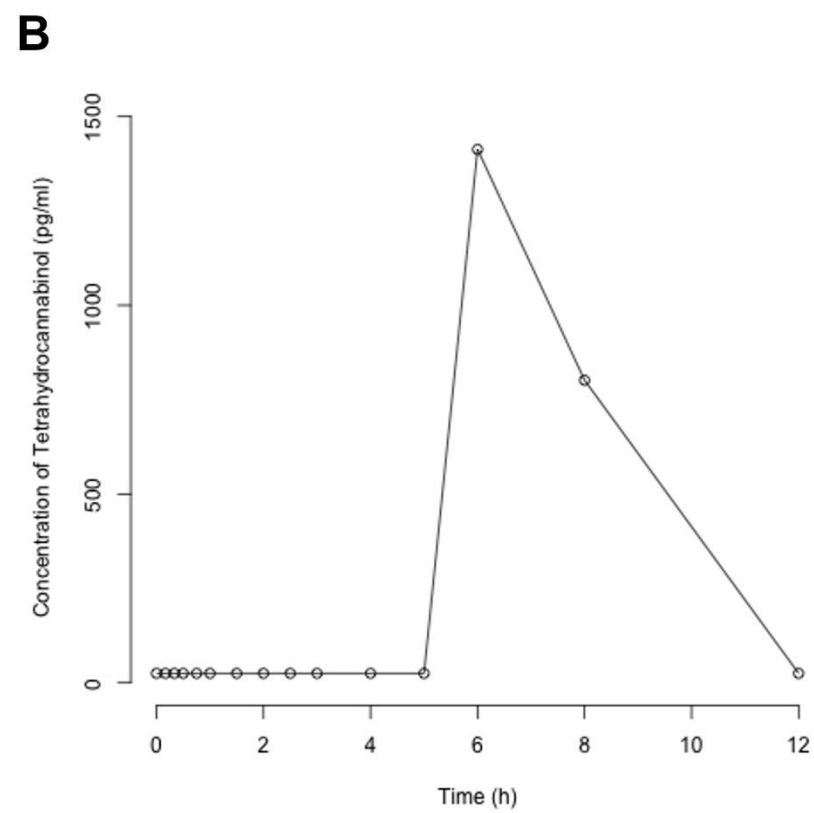
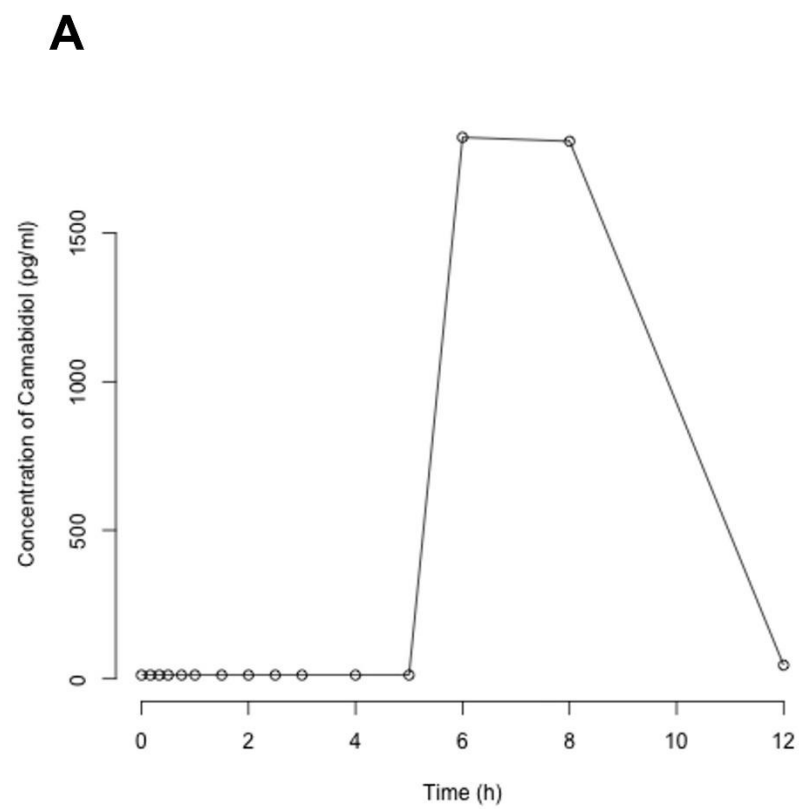


Fig. S16 Participant 022 time-concentration curves for A) CBD and B) THC

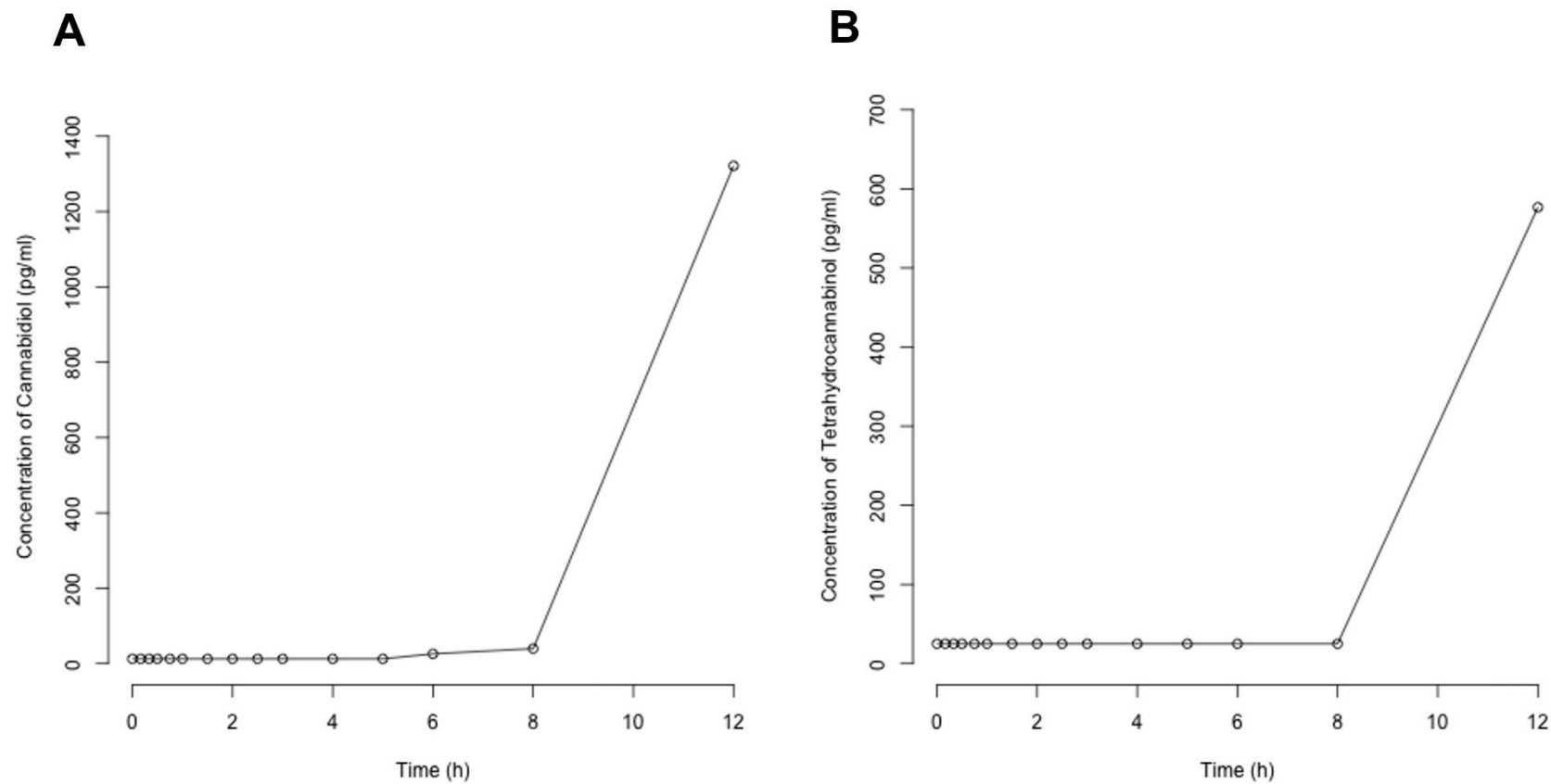


Fig. S17 Participant 023 time-concentration curves for A) CBD and B) THC

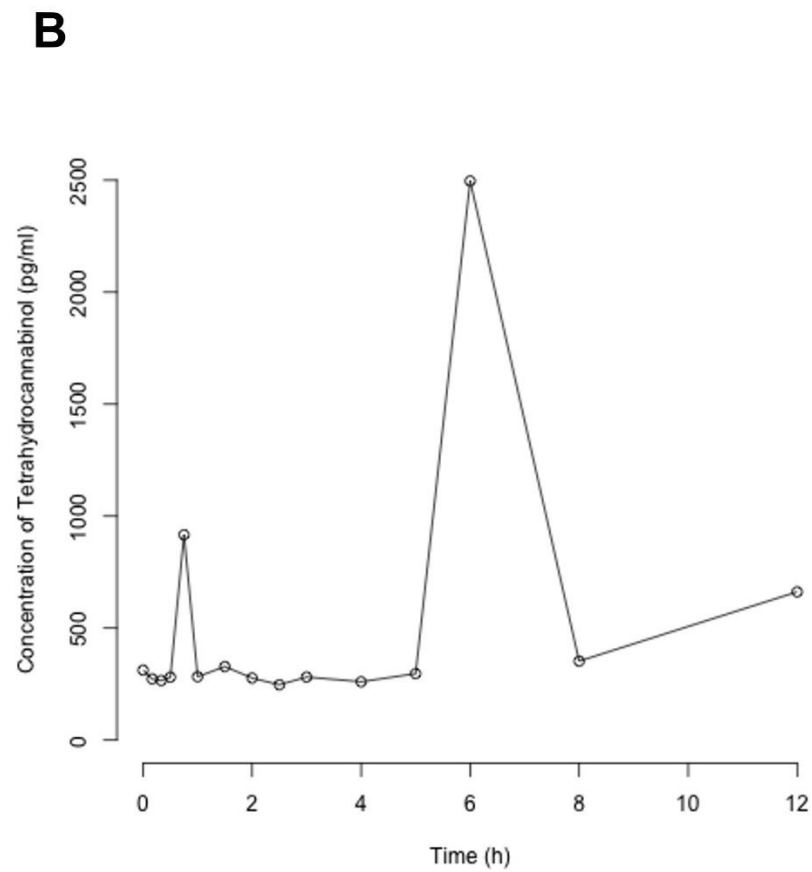
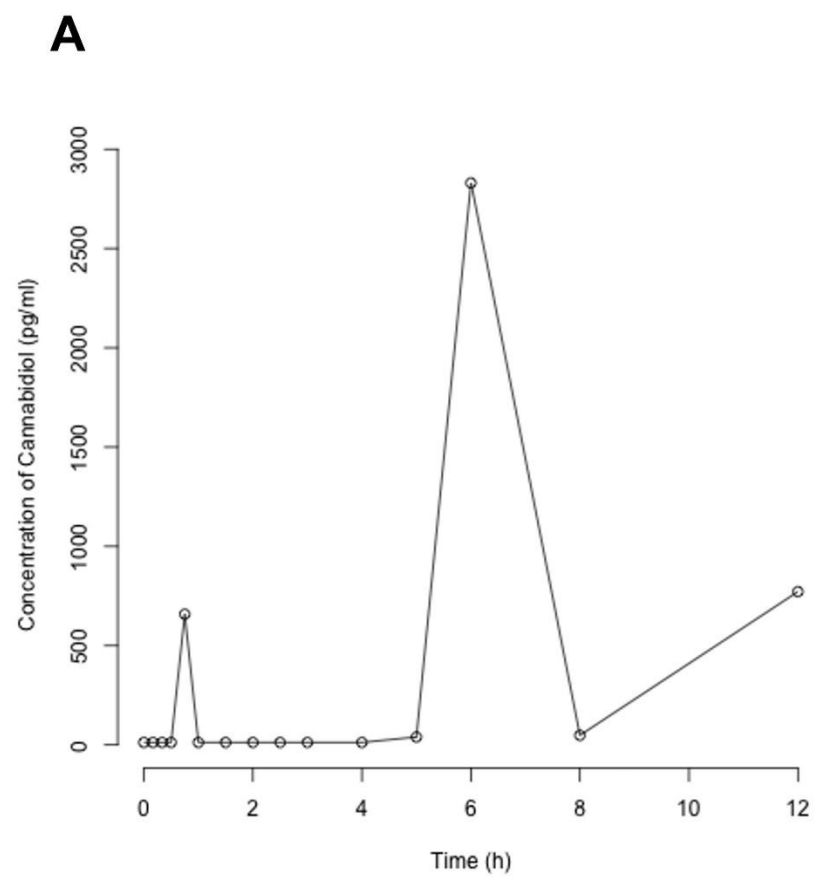


Fig. S18 Participant 024 time-concentration curves for A) CBD and B) THC