

Table 2. Pharmacokinetics of study drugs in healthy participants and participants with severe COPD.

	Healthy participants (N = 12), mean (95% CI)	Participants with COPD (N = 7), mean (95% CI)	P value	COPD pharmacokinetics vs. health pharmacokinetics, ratio (95% CI)
Midazolam (CYP3A4)				
AUC ($\mu\text{g} \cdot \text{h L}^{-1}$)	16 (13, 19)	32 (24, 39)	0.006	1.99 (1.83, 2.16)
C_{max} ($\mu\text{g L}^{-1}$)	7 (6, 8)	11 (9, 14)	0.02	1.64 (1.52, 1.77)
$t_{1/2}$ (h)	2.9 (2.7, 3.2)	5.0 (3.9, 6.2)	0.01	1.70 (1.61, 1.79)
CL/F ($\text{L h}^{-1} \text{kg}^{-0.67}$)	3.5 (2.9, 4.0)	2.2 (1.4, 3.0)	0.03	0.63 (0.60, 0.67)
Dextromethorphan (CYP2D6)				
AUC ($\mu\text{g} \cdot \text{h L}^{-1}$)	84 (-10, 179)	188 (-97, 473)	0.5	2.22 (-6.76, 11.2)
C_{max} ($\mu\text{g L}^{-1}$)	9 (1, 17)	8 (-1, 18)	0.9	0.93 (0.04, 1.83)
$t_{1/2}$ (h)	4.5 (3.2, 5.8)	9.8 (4.3, 15.3)	0.1	2.19 (1.21, 3.18)
CL/F ($\text{L h}^{-1} \text{kg}^{-0.67}$)	213 (100, 326)	153 (6, 299)	0.5	0.72 (0.40, 1.03)
Losartan (CYP2C9)				
AUC ($\mu\text{g} \cdot \text{h L}^{-1}$)	237 (184, 290)	546 (336, 755)	0.03	2.30 (1.77, 2.84)
C_{max} ($\mu\text{g L}^{-1}$)	71 (57, 84)	214 (94, 334)	0.06	3.03 (1.38, 4.68)
$t_{1/2}$ (h)	1.6 (1.4, 1.8)	1.5 (1.2, 1.7)	0.4	0.90 (0.87, 0.92)
CL/F ($\text{L h}^{-1} \text{kg}^{-0.67}$)	6.1 (5.0, 7.2)	3.2 (2.5, 4.0)	0.0009	0.53 (0.52, 0.55)
Omeprazole (CYP2C19)				
AUC ($\mu\text{g} \cdot \text{h L}^{-1}$)	1204 (746, 1663)	7051 (1805, 12297)	0.07	5.85 (-6.36, 18.07)
C_{max} ($\mu\text{g L}^{-1}$)	825 (554, 1097)	1876 (1077, 2675)	0.04	2.27 (1.51, 3.04)
$t_{1/2}$ (h)	0.9 (0.7, 1.1)	2.0 (0.9, 3.1)	0.09	2.35 (1.37, 3.34)
CL/F ($\text{L h}^{-1} \text{kg}^{-0.67}$)	1.3 (0.8, 1.8)	0.4 (0.1, 0.8)	0.01	0.35 (0.31, 0.39)
Caffeine (CYP1A2)				
AUC ($\text{mg} \cdot \text{h L}^{-1}$)	21 (18, 23)	52 (37, 67)	0.007	2.53 (2.20, 2.85)
C_{max} (mg L^{-1})	3 (3, 3)	6 (5, 7)	0.0002	2.22 (2.14, 2.30)
$t_{1/2}$ (h)	5.5 (4.6, 6.3)	7.7 (4.7, 10.7)	0.2	1.40 (1.22, 1.58)
CL/F ($\text{L h}^{-1} \text{kg}^{-0.67}$)	0.3 (0.3, 0.4)	0.2 (0.1, 0.2)	0.0009	0.52 (0.50, 0.53)
Paracetamol (UGT1A6, UGT1A9)				
AUC ($\text{mg} \cdot \text{h L}^{-1}$)	45 (39, 51)	75 (61, 90)	0.005	1.66 (1.59, 1.74)
C_{max} (mg L^{-1})	14 (10, 17)	2 (-3, 8)	0.008	0.17 (0.09, 0.26)
$t_{1/2}$ (h)	2.7 (2.5, 2.9)	2.4 (2.0, 2.8)	0.2	0.89 (0.88, 0.90)
CL/F ($\text{L h}^{-1} \text{kg}^{-0.67}$)	1.2 (1.0, 1.3)	0.9 (0.7, 1.0)	0.01	0.73 (0.72, 0.74)

N = number of participants; CI = confidence interval.