

Pharmacokinetics and Pharmacodynamics of Filgotinib

Table 3 Steady-state pharmacokinetic parameters of filgotinib and its metabolite after repeated oral doses to healthy volunteers ($n = 6$ per dose group)

Analyte	Filgotinib dose (mg)	Regimen	C_{max} (ng/mL)	t_{max} (h)	AUC_{0-t} (ng \times h/mL)	C_t (ng/mL)	$t_{1/2,\lambda_z}$ (h)	
Filgotinib	25	b.i.d.	144 (26.1)	0.5 (0.5–2)	346 (15.8)	3.75 (47.5)	3.82 (48.9)	
	50		211 (28.9)	1.5 (0.5–3)	758 (23.0)	9.52 (31.7)	5.75 (58.6)	
	100		556 (29.8)	3 (2–5)	2,380 (42.3)	27.8 (51.6)	5.87 (47.4), $n = 4$	
	ANOVA ^a (p value)			$p = 0.5287$	$p = 0.0037$	$p = 0.0372$	$p = 0.2192$	$p = 0.6323$
	Tukey's test					25 50		
						50 100		
Filgotinib	200	q.d.	1,200 (42.0)	2 (1–2)	4,450 (30.0)	6.04 (44.3)	5.17 (39.1), $n = 5$	
	300		1,380 (37.7)	1.5 (0.5–3)	4,400 (17.2)	9.93 (58.6)	10.9 (22.5), $n = 5$	
	450		2,580 (44.3)	2.5 (0.5–3)	10,200 (30.9)	17.6 (52.7)	7.09 (45.2)	
	ANOVA ^a (p value)			$p = 0.8174$	$p = 0.3232$	$p = 0.0226$	$p = 0.1753$	$p = 0.0150$
	Tukey's test					300 200	200 450	
						200 450	450 300	
200 mg q.d. vs 100 mg b.i.d								
ANOVA (p value)			$p = 0.9913$	$p = 0.0325$	$p = 0.8134$	ND	$p = 0.3822$	
Metabolite	25 ($n = 3$)	b.i.d.	835 (18.2)	1 (0–0.5)	8,660 (22.8)	612 (15.4)	22.0 (8.82)	
	50		1,460 (9.07)	3 (2–5)	15,200 (10.2)	1,050 (14.7)	23.8 (13.8)	
	100		4,010 (10.3)	5 (0–5)	41,100 (12.9)	3,000 (19.3)	22.5 (17.5)	
	ANOVA ^a (p value)			$p = 0.0630$	$p = 0.2336$	$p = 0.1347$	$p = 0.0199$	$p = 0.7175$
	Tukey's test					50 25		
						25 100		
Metabolite	200	q.d.	3,540 (21.2)	5 (3–5)	69,900 (25.6)	2,470 (28.0)	27.3 (7.81)	
	300		3,410 (11.0)	5 (3–8)	66,100 (15.8)	2,193 (22.0)	25.9 (17.8)	
	450		5,250 (20.8)	5 (3–8)	102,000 (24.5)	3,502 (29.6)	25.8 (24.1)	
	ANOVA ^a (p value)			$p = 0.0020$	$p = 0.7198$	$p = 0.0033$	$p = 0.0042$	$p = 0.6443$
	Tukey's test			300 450		300 450	300 450	
				200		200	450 200	