pharmaceutics

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Supplementary Materials: Population Pharmacokinetic Analysis of Cefaclor in Healthy Korean Subjects

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Supplementary tables

Table S1. Previously reported pharmacokinetic parameter values of cefaclor in Koreans obtained by non-compartmental analysis.

References	Subjects	Pharmacokinetic parameters				
		$T_{1/2}$ (h)	T_{max} (h)	C_{max} (μg/mL)	$AUC_{0-\infty}$ (h·μg/mL)	CL/F (L/h)
Yun et al. (2002) [15]	Human (*n* = 20, 250 mg dose, male)	1.29–1.32	0.83–0.90	5.00–5.11	6.88–7.14	35.31–36.00
Chun et al. (2002) [16]	Human (*n* = 16, 500 mg dose, male)	-[a]	0.83–0.89	12.17–13.03	15.76–17.65[b]	-[a]
Cho et al. (2005) [12]	Human (*n* = 24, 250 mg dose, male)	-[a]	0.76–0.82	6.72–6.90	7.73–7.88[b]	-[a]
Kim et al. (2005) [17]	Human (*n* = 24, 250 mg dose, male)	-[a]	0.72–0.79	5.36–5.43	6.60–6.67[b]	-[a]
In this study	Human (*n* = 48, 250 mg dose, male)	0.68 ± 0.15	0.80 ± 0.28	7.87 ± 2.20	9.83 ± 2.41	27.19 ± 7.77

[a], information not provided in those reports. [b], AUC_{0-t} provided in those reports.

Table S2. Previously reported pharmacokinetic parameter values of cefaclor in non-Koreans.

References	Subjects (healthy humans)	Dose	Pharmacokinetic parameters				
			$T_{1/2}$ (h)	T_{max} (h)	C_{max} (μg/mL)	$AUC_{0-\infty}$ (h·μg/mL)	CL/F (L/h)
Bloch et al. (1977) [5]	*n* = 25, Male in USA	250 mg	0.7–1	-[a]	-[a]	-[a]	-[a]
Spyker et al. (1978) [4]	*n* = 24, Male in USA	500 mg	-[a]	0.88 ± 0.33	23.1 ± 7.7	-[a]	-[a]
Lode et al. (1979) [18]	*n* = 12, Male = 6, Female = 6 in Germany	1,000 mg	-[a]	-[a]	34.6 ± 7.8	74.5 ± 9.9	-[a]
Welling et al. (1979) [19]	-[a]	500 mg	-[a]	1–1.5	-[a]	-[a]	-[a]
Barbhaiya et al. (1990) [20]	*n* = 12, Male in USA	250 mg	0.5 ± 0.2	0.5 ± 0.0	10.6 ± 2.4	8.7 ± 1.4	10.92 ± 6.54[b]
Barbhaiya et al. (1990) [21]	*n* = 12, Male in USA	250 mg	0.83 ± 0.21	0.4–1.0	8.70 ± 2.72	8.60 ± 1.43	-[a]
Barbhaiya et al. (1990) [22]	*n* = 12, Male in USA	500 mg	0.54 ± 0.10	-[a]	16.7 ± 3.67	16.9 ± 2.5	22.62 ± 3.68[b]

Oguma et al. (1991) [26]	*n* = 8, Male in Japan	500 mg	0.59	-[a]	-[a]	18.6[c]	-[a]
Nix et al. (1997) [23]	*n* = 12, Male = 7, Female = 5 in USA	500 mg	0.69 ± 0.17	0.92 ± 0.43	15.9 ± 5.72	20.6 ± 3.38	24.9 ± 4.38
Sourgens et al. (1997) [25]	-[a]	-[a]	0.5–0.7	0.5–1	-[a]	-[a]	-[a]
Granados-Soto et al. (2003) [24]	*n* = 6, Male in Mexico	500 mg	-[a]	0.87 ± 0.06	11.45 ± 1.6	14.93 ± 1.64	-[a]
Li et al. (2009) [7]	*n* = 18, Female in USA	500 mg	0.59 ± 0.09	0.5–2	13.4 ± 3.5	21.2 ± 4.2	23.82 ± 4.96

[a], information not provided in those reports. [b], information provided as renal clearance (CL_R). [c], AUC_{0-t} provided in those reports.

Supplementary figure

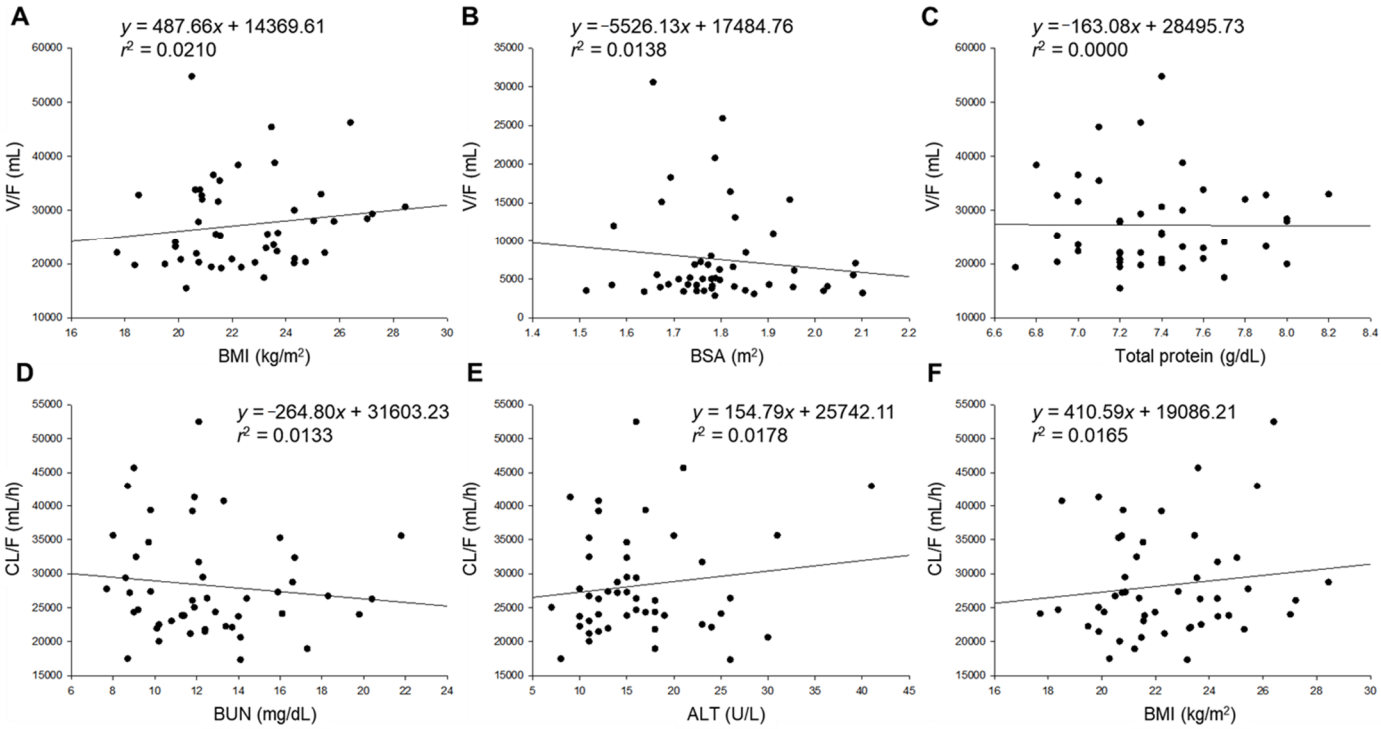

Figure S1. Relationship between subjects' characteristics and individual predicted pharmacokinetic parameters. V/F of cefaclor according to BMI (A), V/F of cefaclor according to BSA (B), V/F of cefaclor according to total protein (C), CL/F of cefaclor according to BUN (D), CL/F of cefaclor according to ALT (E), and CL/F of cefaclor according to BMI (F).