

**Table 1.** Steady-state pharmacokinetic parameters for ciprofloxacin in patients with several physiopathology conditions after intravenous or oral administration (values expressed as mean (standard deviation)).

Study characteristic with Ciprofloxacin	Vd (l)	Cl (l/h)	T <sub>½</sub> (h)	Reference
Heathy, <b>Non obese</b>	199.1 (34.2)	26.8 (5.7)	4.2 (0.8)	Plaisance et al, 1987 <sup>35</sup>
Infusion 200 mg IV	219.0 (35.8)	44.6 (7.2)	4.0 (0.3)	Allard et al, 1993 <sup>57</sup>
21-30 years	146.0 (27.4)	25.2 (5.8)	4.4 (0.9)	Drusano et al, 1986 <sup>74</sup>
Oral 750 mg				
21-29 years	256.0 (80.0) <sup>1</sup>	29.5 (5.9) <sup>1</sup>	5.2 (0.7)	Plaisance et al, 1987 <sup>35</sup>
46-68 years	217.0 (45.0) <sup>1</sup>	50.4 (14.4) <sup>1</sup>	3.7 (0.4)	Drusano et al, 1986 <sup>74</sup>
Healthy, <b>obese</b>				
Infusion 400 mg IV	269.1 (51.6)	53.8 (9.5)	4.3 (0.6)	Allard et al, 1993 <sup>57</sup>
29 ± 7 years				
BMI = 36 ± 4 Kg/m <sup>2</sup>				
<b>Patients with cirrhosis</b>				
750 mg oral	218.1 (45.4) <sup>1</sup>	45.9 (14.1) <sup>1</sup>	3.7 (0.4)	Frost et al, 1989 <sup>62</sup>
52 ± 6 years				
<b>Patients with renal disease</b>				
Infusion 200 mg IV				
22-62 years				
CL <sub>CR</sub> ≥ 100 ml/min	191.7 (35.4)	26.8 (5.7)	4.3 (0.8)	Drusano et al., 1987 <sup>63</sup>
CL <sub>CR</sub> = 86-60 ml/min	243.0 (97.1)	26.3 (10.3)	6.1 (1.6)	
CL <sub>CR</sub> = 11-57 ml/min	183.2 (47.7)	15.0 (3.8)	7.7 (1.2)	
CL <sub>CR</sub> = 0 ml/min	210.2 (70.8)	15.4 (4.3)	8.5 (3.3)	
500 mg oral				
48-90 years				
CL <sub>CR</sub> ≥ 50 ml/min	123.4 (46.5) <sup>1</sup>	60.1 (46.2) <sup>1</sup>	4.3 (2.5)	Gaser et al., 1987 <sup>64</sup>
CL <sub>CR</sub> < 50 ml/min	136.6 (11.7) <sup>1</sup>	29.4 (6.4) <sup>1</sup>	7.1 (2.9)	
<b>Elderly patients</b>				
200 mg Infusion IV	100.8 (37.8)	16.6 (6.8)	5.8 (2.4)	Hirata et al., 1989 <sup>60</sup>
78 ± 11 years				
CL <sub>CR</sub> = 45 ± 16 ml/min				
<b>Acutely ill patient</b>				
200-400 mg Infusion IV	111.0 (33.0)	17.0 (6.6)	ND	Forrest et al., 1993 <sup>59</sup>
24-91 years				
Cl <sub>cr</sub> = 63 ± 30 ml/min				

400-1200 mg Infusion IV 56–71 years GFR= 32-101 ml/min	255.0 (51.0)	25.4 (67.8)	ND	Abdulla et al.,2020 <sup>65</sup>
400 mg Infusion IV 23-79 years Cl <sub>Cr</sub> =13–204 ml/min	107.5 ( 21)	18.6 (18.7)	ND	Li et al.,2019 <sup>78</sup>
400-600 mg Infusion IV 24–89 years Cl <sub>Cr</sub> = 7–204 ml/min	ND	15.2 (42.9)	ND	Roberts et al.,2019 <sup>61</sup>
400 mg Infusion IV 55–77 years	160 (51.2)	10.7 (46.9)	ND	Roger et al., 2016 <sup>77</sup>
200-400 mg Infusion IV 30-87 years GFR= 23-208 ml/min	ND	20.3 (51.2)	ND	Gielsing et al., 2020 <sup>66</sup>

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Vd: volume of distribution in steady state, Cl: systemic clearance, expressed as mean, BMI: body weight [in kilograms]/ height<sup>2</sup> [in meters], GFR: Glomerular filtration rate (ml/min) by MDRD, Cl<sub>Cr</sub>: creatinine clearance; ND: unpublished data.

<sup>1</sup>value of apparent volume of distribution in steady state (Vd/F) and apparent clearance (Cl/F) respectively