

Table II. Volumes of Various Body Fluids and Organs in the Mouse, Rat, Rabbit, Monkey, Dog, and Human

	Mouse (0.02 kg) <sup>a,b</sup>	Rat (0.25 kg) <sup>a,c,d</sup>	Rabbit (2.5 kg) <sup>a,e</sup>	Monkey (5 kg) <sup>a,b</sup>	Dog (10 kg) <sup>a,f</sup>	Human (70 kg) <sup>d,g</sup>
Organ volumes (mL)						
Brain	—	1.2	—	—	72	1,450
Liver	1.3	19.6	100	135	480	1,690
Kidneys	0.34	3.7	15	30	60	280
Heart	0.095	1.2	6	17	120	310
Spleen	0.1	1.3	1	—	36	192
Lungs	0.1	2.1	17	—	120	1,170
Gut	1.5	11.3	120	230	480	1,650
Muscle	10.0	245	1,350	2,500	5,530	35,000
Adipose	—	10.0	120	—	—	10,000
Skin	2.9	40.0	110	500	—	7,800
Blood	1.7	13.5 <sup>h</sup>	165 <sup>h</sup>	367	900 <sup>h</sup>	5,200
Total body water (mL) <sup>h</sup>	14.5	167	1,790	3,465	6,036	42,000
Intracellular fluid (mL) <sup>h</sup>	—	92.8	1,165	2,425	3,276	23,800
Extracellular fluid (mL) <sup>h</sup>	—	74.2	625	1,040	2,760	18,200
Plasma volume (mL) <sup>h</sup>	1.0	7.8	110	224	515	3,000

<sup>a</sup> In P. Welling and F. Tse (eds.), *Pharmacokinetics: Regulatory, Industrial, Academic Perspectives*, Marcel Dekker, New York, 1988.

<sup>b</sup> F. G. King. *Toxicol. Appl. Pharmacol.* 67:390–400 (1983).

<sup>c</sup> H. Harashima. *J. Pharmacokin. Biopharm.* 13:425–440 (1985).

<sup>d</sup> A. Bernareggi and M. Rowland. *J. Pharmacokin. Biopharm.* 19:21–50 (1991).

<sup>e</sup> P. A. Harris and J. F. Gross. *Cancer Chemother. Rep.* 59:819–825 (1975).

<sup>f</sup> In A. Andersen (ed.), *The Beagle as an Experimental Dog*. Iowa State University Press, Ames, 1970.

<sup>g</sup> In *International Commission on Radiological Protection—Report of the Task Group on Reference Man*, ICRP No. 23, Pergamon Press, London, 1975.

<sup>h</sup> In D. Dittmer (ed.), *Blood and Other Body Fluids*, Federation of American Societies for Experimental Biology, Washington, DC, 1961.