|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Tissue weight fraction (% of BW) | Regional flow fractions (% of total cardiac output) | Capillary fractions (fraction of tissue volume) | Macrophage fractions (fraction of tissue volume)(4) |
| Soft Tissue | 84 | 47.7 | 0.04 | 0.02 |
| Heart | 0.33 | 4.9 | 0.26 | 0.02 |
| Kidneys | 0.73 | 14.1 | 0.16 | 0.02 |
| Brain | 0.57 | 2 | 0.03 | 0.04 |
| Spleen | 0.2 | 1.22(3) | 0.22 | 0.3 |
| Lungs | 0.5 | 100 | 0.36 | 0.04 |
| Liver | 3.66 | 17.4 | 0.21 | 0.1 |
| Uterus | 0.011(1) | 1.11(4) | 0.077(4) | 0.02 |
| Skeleton | 10(2) | 12.2 | 0.04 | 0.04 |

* All values were provided by Brown *et al.,* 1997, except the following.
* (1) The value for the mass coefficient for the uterus was provided by PK-Sim software.
* (2) This value was taken from Kreyling *et al.*, 2017.
* (3) This value was taken from Malik, Kaplan and Saba, 1976.
* (4) The values for the blood flow coefficient, the volume coefficient for the uterus and values of the fractions for the calculation of macrophage volumes of all compartments were provided by Aborig *et al.,* 2019.

Brown, R.P., Delp, M.D., Lindstedt, S.L., Rhomberg, L.R. and Beliles, R.P. (1997). Physiological Parameter Values for Physiologically Based Pharmacokinetic Models. Toxicology and Industrial Health, 13(4), pp.407–484.

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Densities

|  |  |
| --- | --- |
| Density | Values (g/ml) |
| dskeleton (1) | 1.92 |
| dsoft tissue (2) | 0.940 |
| drest (1) | 1 |

(1) Brown, R.P., Delp, M.D., Lindstedt, S.L., Rhomberg, L.R. and Beliles, R.P. (1997). Physiological Parameter Values for Physiologically Based Pharmacokinetic Models. Toxicology and Industrial Health, 13(4), pp.407–484.

(2) Rotondo, F., Romero, M. del M., Ho-Palma, A.C., Remesar, X., Fernández-López, J.A.and Alemany, M. (2016). Quantitative analysis of rat adipose tissue cell recovery, and non-fat cell volume, in primary cell cultures. PeerJ, 4, p.e2725.

General parameters

Total cardiac output (BW given in g):

A picture containing text

Description automatically generated

Provided by:

Brown, R.P., Delp, M.D., Lindstedt, S.L., Rhomberg, L.R. and Beliles, R.P. (1997). Physiological Parameter Values for Physiologically Based Pharmacokinetic Models. Toxicology and Industrial Health, 13(4), pp.407–484.

Blood volume:

Graphical user interface

Description automatically generated with low confidence

Provided by:

Lee, H. and Blaufox, M. (1985). Blood Volume in the Rat. . Journal of Nuclear Medicine.

Venous blood volume (Vven) is the 64% of total blood volume, while the arterial blood volume is the 15% of total blood volume based on Brown et al.1997