

**Table 1.** The fraction of a bolus injection of SIV going into an organ after two hours, and the clearance rate in that organ estimated by Eqs. 3–4.

| Organ                    | % RNA  | measured |                          | normalized  |                                | half life      |
|--------------------------|--------|----------|--------------------------|-------------|--------------------------------|----------------|
|                          |        | $R_O$    | $c_O$ (d <sup>-1</sup> ) | $\hat{R}_O$ | $\hat{c}_O$ (d <sup>-1</sup> ) |                |
| Liver                    | 0.053  | 0.295    | 79.75                    | 0.728       | 91.28                          | 10.9–12.5 min  |
| Lung                     | 0.154  | 0.054    | 44.71                    | 0.133       | 56.10                          | 17.8–22.3 min  |
| Spleen                   | 0.077  | 0.004    | 20.66                    | 0.010       | 32.19                          | 31.0–48.3 min  |
| Lymph nodes <sup>a</sup> | 1.380  | 0.030    | 9.73                     | 0.074       | 21.06                          | 47.4–102.6 min |
| Others <sup>b</sup>      | 0      | < 0.022  | –                        | 0.054       | –                              | –              |
| Total                    | 1.664% | 0.405    | –                        | 1.0         | –                              | –              |

Data from Zhang *et al.* [16,17]: for the indicated organs the fraction,  $R_O$ , of injected radioactivity was measured in an uninfected rhesus macaque (animal AR97), and the percentage of injected SIV RNA was measured in another uninfected macaque (animal 1336). The % RNA column corresponds to the  $100V_O/V_P(0)$  of Eq. (3). From this data we compute the clearance rate in the organ,  $c_O$ , and the corresponding half-life. Because in total only 40.5% of the radioactivity was recovered, we also re-normalize the radioactivity data (assuming that part of the radioactivity has disappeared by degradation of the labeled molecules). The ranges in the half life column are obtained from the corrected and the uncorrected radioactivity data, respectively.

<sup>a</sup>Lymph nodes were assumed to be 1% of the total body weight.

<sup>b</sup>measured in heart, kidney, muscle, pancreas, brain and tonsil.

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