

QUESTION

1. A 100-kg patient is receiving a continuous intravenous infusion of a drug at a rate of 10 mg/h. The drug has a half-life of 12 hours. The patient is in steady state. The plasma concentration of the drug is 2 mg/L. What is the volume of distribution of the drug?

A. 10 L
B. 20 L
C. 30 L
D. 40 L
E. 50 L

ANSWER

ANSWER

100 kg

100 kg

10 mg/h

10 mg/h

2 mg/L

2 mg/L

100%