3.4.3 Effect of GlcN on PRN effective intestinal permeability (P_{eff}) and clearance

Effective intestinal permeability (P_{eff}) values were estimated by the Nelder–Mead algorithm of the Parameter Estimation module using the SimCYP program. PRN plasma mean concentration profiles were used to estimate P_{eff}, V_d and clearance values as shown in **table 3.50**. Permeability of PRN with 200 mg/kg GlcN was reduced by 50% with GlcN, whereas clearance increased while V_d almost did not changed.

Table 3.50 P_{eff}, Clearance, and V_d results of propranolol 20 mg/kg, propranolol with 100 and 200 mg/kg GlcN estimated by the Nelder–Mead algorithm using the SimCYP program.

Treatment	effective intestinal permeability (P_{eff}) (10^{-4} cm/sec)	Clearance (CL) (L/hr)	Volume (V_d) (L/kg)
PRN (20 mg/kg)	25.28	23.88	0.49
PRN with GlcN (100 mg/kg)	23.99	25.11	0.43
PRN with GlcN (200 mg/kg)	12.65	35.75	0.55