

## ROUTES OF ADMINISTRATION, VOLUME, AND NEEDLE GAUGES FOR DRUG ADMINISTRATIONS<sup>1</sup>

University of South Florida provides the following as guidelines only for use by IACUC-certified faculty and staff.

Species	PO	SC <sup>2</sup>	IM <sup>3</sup>	IP	IV (bolus)	IV (slow) <sup>4</sup>
<b>Mouse</b>	10 µl/g 20-22 gauge gavage needle	10 µl/g scruff, dorsum ≤23 gauge	Insufficient muscle mass; Not recommended	20 µl/g ≤21 gauge	5 µl/g lateral tail v. 27-30 gauge	20 µl/g lateral tail v. 27-30 gauge
<b>Rat</b>	10 µl/g 18-20 gauge gavage needle	10 µl/g scruff, dorsum ≤20 gauge	300 µl/site quadriceps m. ≤21 gauge	20 µl/g ≤21 gauge	5 µl/g lateral tail or saphenous v. ≤23 gauge	20 µl/g lateral tail or saphenous v. ≤23 gauge
<b>Cat</b>	10 ml/kg	1 ml/kg scruff, dorsum ≤20 gauge	0.25 ml/kg quadriceps m. ≤20 gauge	5 ml/kg ≤20 gauge	2 ml/kg cephalic or saphenous v. ≤21 gauge	10 ml/kg cephalic or saphenous v. ≤21 gauge
<b>Rabbit</b>	10 ml/kg	1 ml/kg scruff, dorsum ≤20 gauge	0.25 ml/kg quadriceps m. ≤20 gauge	5 ml/kg ≤20 gauge	2 ml/kg marginal ear v. ≤21 gauge	10 ml/kg marginal ear v. ≤21 gauge
<b>Pig</b>	10 ml/kg	1 ml/kg scruff, dorsum ≤20 gauge	0.25 ml/kg quadriceps m. ≤20 gauge	1 ml/kg ≤20 gauge	2.5 ml/kg ear v. ≤21 gauge	5 ml/kg ear v. ≤21 gauge
<b>Bird</b>		1-3% bdy wt pectoral, interscapular, inguinal folds ≤21 gauge	0.2 ml/100 g pectoral m. ≤25 gauge	Not applicable		
<b>Dog</b>	5 ml/kg	1 ml/kg scruff, dorsum ≤20 gauge	0.25 ml/kg quadriceps m. ≤20 gauge	2 ml/kg ≤20 gauge	2.5 ml/kg cephalic v. ≤20 gauge	5 ml/kg cephalic v. ≤20 gauge

<sup>1</sup>Does not apply to polyclonal/monoclonal antibody production (refer to IACUC Principle & Procedure XVII & XVIII), or fluid replacement volumes.

<sup>2</sup>≤3 SC sites per day.

<sup>3</sup>≤2 IM sites per day.

<sup>4</sup>5-10 minutes duration.