Experiment Number: S0305_2
Route: Gavage, IV
Species/Strain: Mouse/CD-1

Toxicokinetics Data Summary
Test Compound: Methadone hydrochloride
CAS Number: 1095-90-5

Date Report Requested: 01/11/2017
Time Report Requested: 12:23:40
Lab: Research Triangle Institute

Female

	Treatment Groups (mg/kg)		
	15 [a]	**2.5 IV** [a]	**2.5 IV** [b]
	Plasma		
C_{max} (ug/mL)	0.171		
k_{10} (minute^-1)	0.0065	0.01184	0.0017
$t_{1/2(k10)}$ (minute)	106.4	58.5	400.9
V_1 (mL/g)	16.0	8.923	58.6
AUC_{inf} (percent of dose*g*min/mL)	134.8	987.0	987.0
F (percent of iv value)	13.7	100	100

LEGEND

Data are displayed as mean values

MODELING METHOD & BEST FIT MODEL

[a] ADAPT II, a pharmacokinetic modeling package; 1-compartment, mono-exponential model

[b] ADAPT II, a pharmacokinetic modeling package; 2-compartment, bio exponential model

ANALYTE

Methadone hydrochloride

TK PARAMETERS

C_{max} = Observed or Predicted Maximum plasma (or tissue) concentration

k_{10} = Elimination rate constant from the central compartment also k_e or k_{elim}

$t_{1/2(k10)}$ = Half-life for the elimination process from the central compartment

V_1 = Volume of distribution of the central compartment, includes V_d and V_{volume} of distribution, V_z apparent volume of distribution NCA, V_{app} apparent volume of distribution for intravenous studies

AUC_{inf} = Area under the plasma concentration versus time curve, AUC, extrapolated to time equals infinity

F = Bioavailability, absolute bioavailability

** END OF REPORT **