Experiment Number: S0541
Route: Gavage, IV
Species/Strain: Hamster/Syrian Golden

Toxicokinetics Data Summary
Test Compound: Gemfibrozil
CAS Number: 25812-30-0

Date Report Requested: 11/09/2016
Time Report Requested: 14:02:52
Lab: Research Triangle Institute

Male

	Treatment Groups (mg/kg)				
	8 [a]	**8 [b]**	**15 [b]**	**30 [b]**	**15 IV [b]**
	Plasma				
C_{max} (ug/mL)		0.874	2.16	6.95	238
T_{max} (minute)		15	10	10	
$t_{1/2(Beta)}$ (minute)		41.3	61.4	46.0	56.9
k_{01} (min^-1)	0.0145 ± 0.0013				
k_{10} (min^-1) *	0.161 ± 0.011				
k_{12} (min^-1)	0.0261 ± 0.0051				
k_{21} (min^-1)	0.0164 ± 0.0031				
Cl (mL/min/kg)					17.4
$Cl_{1(F)}$ (mL/min/kg)		143.0	123.0	103.0	
V_1 (L/kg)	0.241 ± 0.012				
MRT (minute)		73.4	88.3	74.9	10.5
AUC_{inf} (ug/mL*min)		56	122	292	862
F (percent)	0.252 ± 0.022	0.12	0.14	0.17	

LEGEND

Data are displayed as mean ± SEM

* Data are displayed as mean ± SD

MODELING METHOD & BEST FIT MODEL

[a] Compartmental modeling techniques with established models or models written to simultaneously solve iv and oral data sets (SimuSolv, Version 3.0, The Dow Chemical Company, Midland, MI); 2-compartment model without the delay term

[b] Models 200 and 201, PCNONLIN software, SCI Software, Lexington, KY; Non-compartmental analysis

ANALYTE

Gemfibrozil

TK PARAMETERS

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

T_{max} = Time at which C_{max} predicted or observed occurs

$t_{½(beta)}$ = Half-life for the beta phase

k_{01} = Absorption rate constant, k_a

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

k_{12} = Distribution rate constant from first to second compartment etc.

k_{21} = Distribution rate constant from second to first compartment etc.

Cl = Clearance, includes total clearance

$Cl_{1(F)}$ = Apparent clearance of the central compartment, also $Cl_{(F)}$ for gavage groups in non-compartmental model

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

MRT = Mean residence time

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

F = Bioavailability, absolute bioavailability

** END OF REPORT **