Experiment Number: S0541
Route: Gavage, IV
Species/Strain: Rat/Sprague-Dawley

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

Date Report Requested: 11/09/2016
Time Report Requested: 14:03:05
Lab: Research Triangle Institute

Male

	Treatment Groups (mg/kg)				
	4.29 [a]	**4.29 [b]**	**50 [b]**	**100 [b]**	**4.29 IV [b]**
	Plasma				
C_{max} (ug/mL)		1.17	64.6	73.5	30.9
T_{max} (minute)		10	10	10	
$t_{1/2(Beta)}$ (minute)		532	354	331	597
k_{01} (min^-1)	0.00468 ± 0.0012				
k_{12} (min^-1)	0.112 ± 0.012				
Cl (mL/min/kg)					7.1
$Cl_{1(F)}$ (mL/min/kg)		9.1	8.9	7.8	
V_1 (L/kg)	0.529 ± 0.060				
MRT (minute)		855	528	463	607
AUC_{inf} (ug/mL*min)		470	5621	12776	603
F (percent)	1.09 ± 0.17	0.78	0.80	0.91	

LEGEND

Data are displayed as mean ± SEM

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 employing a delay term in order to simulate the effect of enterohepatic recirculation

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

ANALYTE

Gemfibrozil

TK PARAMETERS

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

$T_{max(obs)}$ = 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_{12} = Distribution rate constant from first to second 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 **