Experiment Number: S0593
Route: Gavage, IV
Species/Strain: Mouse/B6C3F1

Toxicokinetics Data Summary
Test Compound: 2-Hydroxy-4-methoxybenzophenone
CAS Number: 131-57-7

Date Report Requested: 11/09/2016
Time Report Requested: 13:59:57
Lab: Research Triangle Institute

Male

Treatment Groups (mg/kg)

	100 [a, #]	100 [c, #]	100 [b, *]	250 [a, #]	250 [b, *]	500 [a, #]	500 [b, *]	50 IV [a, #]	50 IV [b, *]
Plasma									
C_{max} (mg/L)	0.0799		0.372	0.346	1.43	0.614	3.24	31.7	4.47
T_{max} (minute)	15		30	15	30	60	30	5	5
Alpha (min^-1)		0.161 ± 0.018							
Beta (min^-1)	0.0028	0.00874 ± 0.0026		0.0045		0.0044		0.0042	
$t_{1/2(Beta)}$ (minute)	248			154		158		166	
k_{01} (min^-1)		0.0809 ± 0.038							
k_{10} (min^-1)		0.112 ± 0.013							
k_{12} (min^-1)		0.0454 ± 0.0095							
k_{21} (min^-1)		0.0126 ± 0.0038							
Cl (L/min/kg)								0.0736	
$Cl_{1(F)}$ (L/min/kg)	6.13			8.96		6.72			
V_1 (L/kg)		0.72 ± 0.096						17.6	
$V_{1(F)}$ (L/kg)	2189			1996		1532			
MRT (minute)	352			183		182		38.2	
AUC_{0-t} (mg*min/L)			60.8		151		349		200
AUC_{inf} (mg*min/L)	15.3			30.1		76.5		647	
F (fraction)	0.0120			0.00822		0.0110			

Experiment Number: S0593
Route: Gavage, IV
Species/Strain: Mouse/B6C3F1

Toxicokinetics Data Summary
Test Compound: 2-Hydroxy-4-methoxybenzophenone
CAS Number: 131-57-7

Date Report Requested: 11/09/2016
Time Report Requested: 13:59:57
Lab: Research Triangle Institute

	Female								
	Treatment Groups (mg/kg)								
	100 [a,#]	**100 [d,#]**	**100 [b,*]**	**250 [a,#]**	**250 [b,*]**	**500 [a,#]**	**500 [b,*]**	**50 IV [a,#]**	**50 IV [b,*]**
	Plasma								
C_{max} (mg/L)	0.112		0.433	0.757	2.04	5.30	3.82	19.0	3.07
T_{max} (minute)	15		15	30	10	120	15	5	5
Alpha (min^-1)		0.135 ± 0.016							
Beta (min^-1)	0.0051	0.00740 ± 0.0017		0.0088		0.0055		0.0042	
$t_{1/2(Beta)}$ (minute)	137			78.5		126		164	
k_{01} (min^-1)		0.0315 ± 0.016							
k_{10} (min^-1)		0.0756 ± 0.0089							
k_{12} (min^-1)		0.0533 ± 0.0093							
k_{21} (min^-1)		0.0132 ± 0.0030							
Cl (L/min/kg)								0.108	
$Cl_{1(F)}$ (L/min/kg)	7.59			4.97		0.774			
V_1 (L/kg)		1.38 ± 0.17						25.4	
$V_{1(F)}$ (L/kg)	1502			563		140			
MRT (minute)	296			123		142		59.8	
AUC_{0-t} (mg*min/L)			24.1		91.7		275		84.3
AUC_{inf} (mg*min/L)	12.4			54.7		650		434	
F (fraction)	0.0142			0.0216		0.139			

Experiment Number: S0593
Route: Gavage, IV
Species/Strain: Mouse/B6C3F1

Toxicokinetics Data Summary
Test Compound: 2-Hydroxy-4-methoxybenzophenone
CAS Number: 131-57-7

Date Report Requested: 11/09/2016
Time Report Requested: 13:59:57
Lab: Research Triangle Institute

LEGEND

Data are displayed as mean ± SEM

MODELING METHOD & BEST FIT MODEL

[a] WinNonlin (Models 200 and 201), Version 1.0 (Scientific Consulting Inc., 1995); Noncompartmental modeling

[b] WinNonlin Version 1.0 (Scientific Consulting Inc., 1995); Noncompartmental modeling

[c] WinNonlin Version 1.0 (Scientific Consulting Inc., 1995); Best fit is two compartmental which simultaneously solves iv and oral data sets. Analyzed using compartmental modeling techniques with established models or models written to simultaneously solve iv (Study AC) and oral data sets (Study AE) using 1/YHAT weighting where YHAT is the predicted plasma HMBP concentration at a given time.

[d] WinNonlin Version 1.0 (Scientific Consulting Inc., 1995); Best fit is two compartmental which simultaneously solves iv and oral data sets. Analyzed using compartmental modeling techniques with established models or models written to simultaneously solve iv (Study AD) and oral data sets (Study AF) using 1/YHAT weighting where YHAT is the predicted plasma HMBP concentration at a given time.

ANALYTE

[#] 2-Hydroxy-4-methoxybenzophenone

[*] 2,4-Dihydroxybenzophenone

TK PARAMETERS

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

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

Alpha = Hybrid rate constant of the alpha phase

Beta = Hybrid rate constant of the beta phase

$t_{\frac{1}{2}(beta)}$ = 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 including 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

$V_{1(F)}$ = 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_{0-t} = Area under the plasma concentration versus time curve, AUC, from time t_i (initial) to t_f (final), AUC_{last}

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

F = Bioavailability, absolute bioavailability

** END OF REPORT **