

Male																		
	Treatment Groups (mg/kg)																	
	200 a, 2		500 c, 3		500 d, 4		500 b, 2		500 a, 4		500 a, 2		500 a, 3		1000 a, 2		50 IV a, 1	
	Plasma																	
Beta (min^-1)	0.0105								0.0091		0.0076		0.0304		0.0062		0.0337	
t <sub>1/2(Beta)</sub> (minute)	66.0								75.8		91.5		22.8		112		20.5	
k <sub>01</sub> (min^-1)			0.0571 ± 0.037		0.0120 ± 0.0066		0.0100 ± 0.0045											
k <sub>10</sub> (min^-1)			0.0664 ± 0.0066		0.0610 ± 0.0050		0.0593 ± 0.0044											
Cl (L/min/kg)																	0.121	
Cl <sub>1(F)</sub> (L/min/kg)	15.1								22.2		17.7		23.7		15.6			
V <sub>1</sub> (L/kg)	1438		1.89 ± 0.21		1.99 ± 0.18		2.02 ± 0.16		2434		2333		780		2522		3.59	
MRT (minute)	104								115		140		38.7		188		16.6	
AUC <sub>inf</sub> (ug*min/L)	11457								18878		23924		16944		59483		391079	
F (fraction)	0.00803								0.00545		0.00686		0.00511		0.00777			

	Female				
	Treatment Groups (mg/kg)				
	200 a, 2	500 e, 2	500 a, 2	1000 a, 2	50 IV a, 1
	Plasma				
Beta (min^-1)	0.0053		0.0062	0.0067	0.0335
t <sub>1/2(Beta)</sub> (minute)	131		112	104	20.7
k <sub>01</sub> (min^-1)		0.100 ± 0.0046			
k <sub>10</sub> (min^-1)		0.0571 ± 0.0043			
Cl (L/min/kg)					0.152
Cl <sub>1(F)</sub> (L/min/kg)	16.6		24.2	22.5	
V <sub>1</sub> (L/kg)	3129	2.59 ± 0.21	3933	3368	4.52
MRT (minute)	226		190	142	17.4
AUC <sub>inf</sub> (ug*min/L)	10782		17863	42010	309567
F (fraction)	0.00913		0.00625	0.00674	

**Experiment Number:** S0555  
**Route:** Dermal, IV  
**Species/Strain:** Mouse/B6C3F1

**Toxicokinetics Data Summary**  
**Test Compound:** DL-Camphor  
**CAS Number:** 21368-68-3

**Date Report Requested:** 11/09/2016  
**Time Report Requested:** 14:02:35  
**Lab:** Research Triangle Institute

## LEGEND

---

Data are displayed as mean  $\pm$  SEM

### MODELING METHOD & BEST FIT MODEL

<sup>a</sup> WinNonlin, Version 1 .0 (Scientific Consulting Inc ., 1995); non-compartmental analysis (WinNonlin Models 200 or 201).

<sup>b</sup> WinNonlin, Version 1 .0 (Scientific Consulting Inc ., 1995); Compartmental models were written to simultaneously solve iv and dermal data sets (WinNonlin) with 1/YHAT weighting, where YHAT is the predicted plasma d,l-camphor concentration at a given time. M and S simultaneously solved iv and single administration mid dose dermal protected, male mice.

<sup>c</sup> WinNonlin, Version 1 .0 (Scientific Consulting Inc ., 1995); Compartmental models were written to simultaneously solve iv and dermal data sets (WinNonlin) with 1/YHAT weighting, where YHAT is the predicted plasma d,l-camphor concentration at a given time. M and AC simultaneously solved iv and single administration mid dose dermal unprotected, male mice.

<sup>d</sup> WinNonlin, Version 1 .0 (Scientific Consulting Inc ., 1995); Compartmental models were written to simultaneously solve iv and dermal data sets (WinNonlin) with 1/YHAT weighting, where YHAT is the predicted plasma d,l-camphor concentration at a given time. M and AF simultaneously solved iv and repeated administration mid dose dermal unprotected, male mice.

<sup>e</sup> WinNonlin, Version 1 .0 (Scientific Consulting Inc ., 1995); Compartmental models were written to simultaneously solve iv and dermal data sets (WinNonlin) with 1/YHAT weighting, where YHAT is the predicted plasma d,l-camphor concentration at a given time. N and T simultaneously solved iv and single administration mid dose dermal protected, female mice.

### ANALYTE

DL-Camphor

### ROUTE & DOSE FREQUENCY

<sup>1</sup> Intravenous, 1 per study

<sup>2</sup> Dermal Protected, 1 per study

<sup>3</sup> Dermal Unprotected, 1 per study

<sup>4</sup> Dermal Unprotected, Repeated dose, 7 per study

### TK PARAMETERS

Beta = Hybrid rate constant of the beta phase

$t_{1/2(\text{beta})}$  = 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  $k_{elim}$

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 \*\***