# **Toxicokinetics Data Summary**

**Experiment Number: S0609** 

Species/Strain: Mouse/B6C3F1

Route: Oral followed by IV

**Test Compound:** AZT + TMP/SMX (mixture) combination

CAS Number: AZTTMPSMX

Date Report Requested: 02/01/2017 Time Report Requested: 12:59:21

Lab: Research Triangle Institute International

## Male

	Treatment Groups (mg/kg)										
	100/250#	100/250°	100/250 *	100/250~	100/1000#	100/1000°	100/1000 *	100/1000~			
	Plasma										
C <sub>max</sub> (ug/mL)	179	1.08	2.04	0.442	184	0.846	1.45	0.590			
T <sub>max</sub> (hour)		0.250	6.00	0.500		0.250	0.750	0.750			
Lambdaz (hour^-1)	2.15				1.45						
t <sub>1/2</sub> (hour)	0.322				0.480						
CI (mL/min/kg)	20.7				18.9						
V <sub>1</sub> (L/kg)	0.577				0.784						
MRT (hour)	0.488				0.519						
AUC <sub>0-t</sub> (ug*hr/mL)		0.580	7.34	0.183		0.557	1.33	0.345			

# **Toxicokinetics Data Summary**

**Experiment Number: S0609** 

Species/Strain: Mouse/B6C3F1

Route: Oral followed by IV

**Test Compound:** AZT + TMP/SMX (mixture) combination

**CAS Number:** AZTTMPSMX

Date Report Requested: 02/01/2017 Time Report Requested: 12:59:21

Lab: Research Triangle Institute International

## Female

	Treatment Groups (mg/kg)										
	100/250°	100/250~	100/250 *	100/250#	100/1000°	100/1000#	100/1000~	100/1000 *			
	Plasma										
C <sub>max</sub> (ug/mL)	0.724	0.105	1.15	164	0.629	105	0.365	0.716			
T <sub>max</sub> (hour)	0.250	1.00	6.00		0.250		1.00	0.500			
Lambdaz (hour^-1)				1.87		1.78					
t <sub>1/2</sub> (hour)				0.370		0.391					
CI (mL/min/kg)				18.6		21.3					
V <sub>1</sub> (L/kg)				0.597		0.721					
MRT (hour)				1.07		0.548					
AUC <sub>0-t</sub> (ug*hr/mL)	0.340	0.0222	3.05		0.415		0.0834	0.535			

# **Toxicokinetics Data Summary**

**Test Compound:** AZT + TMP/SMX (mixture) combination

CAS Number: AZTTMPSMX Lab: Research Triangle Institute International

Date Report Requested: 02/01/2017

Time Report Requested: 12:59:21

Species/Strain: Mouse/B6C3F1

**Experiment Number: S0609** 

**LEGEND** 

Route: Oral followed by IV

Data are displayed as mean values

MODELING METHOD & BEST FIT MODEL

WinNonlin (Model 200 and 201, WinNonlin Ver. 1.5A, Scientific Consulting, Inc. now Pharsight Corporation, Apex, NC); Non compartmental analysis

## **ANALYTE**

- # 3'-Azido-3'-deoxythymidine
- \* 3'-Amino-3'-deoxythymidine
- <sup>2</sup> 3'-amino-3'-deoxythymidine glucuronide
- ° Beta-D-glucuronide

### **DOSING**

Mice were given a single oral dose of Trimethoprim-Sulfamethoxazole (TMP/SMX) followed one hour later by a single intravenous dose of 3'-Azido-3'-deoxythymidine (AZT) on Study Day 1.

#### TK PARAMETERS

C<sub>max</sub> = Observed or Predicted Maximum plasma (or tissue) concentration

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

Lambdaz = Non-compartmental analysis (NCA) terminal elimination rate constant, NCA ke or kelim

 $t_{1/2}$  = Lambda<sub>z</sub> half-life,  $t_{1/2}$ , the terminal elimination half-life based on non-compartmental analysis

CI = Clearance, includes total clearance

 $V_1$  = 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

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

\*\* END OF REPORT \*\*