## Table 1A COMPARISON OF VARIOUS SUPPLEMENTAL PROCEDURES TO DETERMINE LD50, CI and Slope (Hybrid Method)

METHOD	ESTMATED LD <sub>50</sub> (range)	EST		ANIMALS USED Median		
(2000 simulations each unless		MEDIAN (range)	<b>Factor</b>	Difference	Slope	
specified in the footnote)			95%/5%	High-Median		
TRUE SIGMA 0.12 Slope 8.3						
BEST CASE <sup>1</sup>	250 (199-314)	0.12 (0.09-0.185)	2.0	0.06	8.3	30+
10 at LD13, 45, & $70^2$	250 (200-291)	0.13 (0.036-0.21)	5.8	0.08	7.6	30
7 at LD13, 45, & 70 <sup>3</sup>	250 (205-297)	0.15 (0.032-0.22)	6.2	0.07	6.7	21
5 at LD13, 45, & 70 <sup>4</sup>	250 (199-304)	0.12 (0.036-0.23)	6.4	0.11	8.3	15
10 at LD13 & 70; & 5 at 45 <sup>5</sup>	250 (192-304)	0.12 (0.036-0.21)	5.8	0.09	8.3	25
10 at LD13 & 45 <sup>6</sup>	250 (209-293)	0.129 (0.036-0.23)	6.3	0.10	7.8	20
10 at LD13 & $70^7$	169 (169-203)	0.23 (0.23-30)				
10 at LD13, 40, & 87 <sup>8</sup>	291 (241-308)	0.211 (0.118-0.268)	2.3	0.075	4.7	30
10 at LD13, 40, & 87 <sup>9</sup>	291 (241-305)	0.18 (0.12-0.27)	2.3	0.09	4.7	30
7 at LD13, 40, & 87 <sup>10</sup>	296 (238-308)	0.2 ( 0.15+P54-0.28)	2.0	0.08	5.0	21
5 at LD13, 40, & 87 <sup>11</sup>	282 (230-307)	0.22 (0.17-0.29)	1.7	0.07	4.5	15
10 at LD13 & 87; & 5 at 40 <sup>12</sup>	282 (230-307)	0.22 (0.17-0.27)	1.6	0.05	4.5	20
10 atLD13 and LD87	NONE	CONVERGED				

<sup>1</sup>Only includes the 769 out of 1000 runs that converged

<sup>3</sup> Only includes the 1047 runs that converged

<sup>5</sup> Only includes the 929 runs that converged

<sup>7</sup> Only includes the 59 runs that converged

<sup>9</sup> Only includes the 584 runs that converged

<sup>11</sup> Only includes the 418 runs that converged

<sup>2</sup> Only includes the 1154 runs that converged

<sup>4</sup> Only includes the 884 runs that converged

<sup>6</sup> Only includes the 575 out of 1000 runs that converged

<sup>8</sup> Only includes the 315 out of 1000 runs that converged

<sup>10</sup> Only includes the 496 runs that converged

<sup>12</sup> Only includes the 428 runs that converged

## Table 1<sub>B</sub> **COMPARISON OF VARIOUS SUPPLEMENTAL PROCEDURES TO DETERMINE** LD<sub>50</sub>, CI and Slope (Multiple UDP)

METHOD	ESTMATED LD <sub>50</sub> (range)	ESTI	ANIMALS USED Median				
(2000 simulations each unless		MEDIAN (range)	Factor	Difference	Slope		
specified in the footnote)			95%/5%	High-Median			
TRUE SIGMA 0.12 Slope 8.							
BEST CASE <sup>1</sup>	250 (199-314)	0.12 (0.09-0.185)	2.0	0.06	8.3	30+	
Multiple UDP 6, 3 <sup>2</sup>	251 (207-312)	0.1 (0.035-0.21)	6.0	0.10	10	30	
Multiple UDP $5, 3^3$	250 (202-305)	0.12 (0.032-0.20)	6.25	0.08	8.3	25	
Multiple UDP 4,3 <sup>4</sup>	247 (197-318)	0.119 (0.074-0.23)	3.1	0.11	8.4	21	
Multiple UDP 4,2 <sup>5</sup>	249 (196-318)	0.119 (0.074-0.22)	3.0	0.10	8.4	16	
Multiple UDP 3,3 <sup>6</sup>	248 (191-326)	0.098 (0.058-0.227)	3.9	0.129	10.2	16	
Current 401* (LD <sub>50</sub> =50)	51 (46-54)	0.04 (0.02-0.05)	2.5	0.01	25	15	

<sup>1</sup> Only includes the 769 out of 1000 runs that converged <sup>3</sup> Only includes the 1272 runs that converged <sup>5</sup> Only includes the 542 out of 1000 runs that converged

<sup>2</sup> Only includes the 1147 runs that converged <sup>4</sup> Only includes the 513 out of 1000 runs that converged

<sup>6</sup> Only includes the 507 out of 1000 runs that converged

\* Five at 20, 50, and 100 mg/kg, and 130 out of 1000 runs converged

## Table 2A **COMPARISON OF VARIOUS SUPPLEMENTAL PROCEDURES TO DETERMINE** LD<sub>50</sub>, CI and Slope (Hybrid Method)

METHOD	ESTMATED LD <sub>50</sub> (range)	ES		ANIMALS USED Median		
(2000 simulations each unless		MEDIAN (range)	Factor	Difference	Slope	
specified in the footnote)			(95%/5%)	High-Median		
	TRUE SIGMA 0.5 Slope					
BEST CASE <sup>1</sup>	250 (146-427)	0.507(0.375-0.769)	2.05	0.262	2	30+
10 at LD13, 45, & $70^2$	257 (155-418)	0.44 (0.13-0.72)	5.5	0.28	2.3	30
7 at LD13, 45, & $70^3$	265 (141-447)	0.41 (0.064-0.75)	11.7	0.34	2.44	21
5 at LD13, 45, & $70^4$	255 (136-477)	0.41 (0.040-0.81)	11.7	0.40	2.44	15
10 at LD13 & 70; & 5 at $45^5$	265 (150-482)	0.44 (0.12-0.73)	6	0.29	2.3	25
10 at LD13 & 45 <sup>6</sup>	216 (89.2-402)	0.24 (0.026-0.778)	29	0.53	4.1	20
10 at LD13 & 70 <sup>7</sup>	268 (143-488)	0.45 (0.30-0.77)	2.6	0.32	2.2	20
10 at LD13, 40, & 87 <sup>8</sup>	228 (122-425)	0.369 (0.048-0.711)	32.5	0.342	2.7	30
10 at LD13, 40, & 87 <sup>9</sup>	228 (131-423)	0.39 (0.15-0.71)	4.8	0.32	2.6	30
7 at LD13, 40, & 87 <sup>10</sup>	230 (114-453)	0.37 (0.19-0.74)	3.9	0.37	2.7	21
5 at LD13, 40, & 87 <sup>11</sup>	230 (110-471)	0.36 (0.20-0.76)	3.8	0.40	2.8	15
10 at LD13 & 87; & 5 at 40 <sup>12</sup>	231 (130-448)	0.41 (0.21-0.72)	3.4	0.31	2.4	25
10 atLD13 and LD87	245 (123-494)	0.58 (0.38-0.79)	2.1	0.21	1.72	20

<sup>1</sup> Only includes the 783 out of 1000 runs that converged

<sup>3</sup> Includes all runs, however 63 did not converge

<sup>5</sup> Includes all runs, however 42 did not converge

<sup>7</sup> Only includes the 1727 runs that converged
 <sup>9</sup> Includes all runs, however 93 did not converge
 <sup>11</sup> Only includes the 1705 runs that converged

<sup>13</sup> Only includes the 1104 runs that converged

<sup>2</sup> Includes all runs, however 30 did not converge

<sup>4</sup> Includes all runs, however 85 did not converge

<sup>6</sup> Includes all 1000 runs, however 75 did not converge
 <sup>8</sup> Includes all 1000 runs, however 11 did not converge
 <sup>10</sup> Only includes the 1803 runs that converged

<sup>12</sup> Only includes the 1753 runs that converged

## Table 2B **COMPARISON OF VARIOUS SUPPLEMENTAL PROCEDURES TO DETERMINE** LD<sub>50</sub>, CI and Slope (Multiple UDP)

METHOD	ESTMATED LD <sub>50</sub> (range)	EST	ANIMALS USED Median			
(2000 simulations each unless		MEDIAN (range)	<b>Factor</b>	Difference	Slope	
specified in the footnote)		TRUE SIGMA 0.5	(95%/5%)	High-Median	Slope	2
BEST CASE <sup>1</sup>	250 (146-427)	0.507(0.375-0.769)	2.05	0.262	2	30+
Multiple UDP 6, 3 <sup>2</sup>	247 (138-444)	0.42 (0.18-0.74)	4.1	`0.32	2.38	30
Multiple UDP 5, 3 <sup>3</sup>	250 (138-455)	0.41 (0.15-0.75)	5	0.34	2.44	25
Multiple UDP 4,3	247 (131-469)	0.4 (0.147-0.761)	5.17	0.361	2.5	21
Multiple UDP 4,2	249 (131-470)	0.38 (0.083-0.82)	9.9	0.44	2.6	16
Multiple UDP 3,3	250 (129-490)	0.37 (0.011-0.75)	68	0.38	2.7	15
Current 401* (LD <sub>50</sub> =50)	51 (19-155)	0.41 (0.04-1.5)	37.5	1.09	2.4	15

<sup>1</sup> Only includes the 783 out of 1000 runs that converged <sup>3</sup> Includes all runs, however 22 did not converge

<sup>2</sup> Includes all runs, however 14 did not converge

\*Five at 20, 50, and 100 mg/kg, and 1930 runs converged

## Table 3A **COMPARISON OF VARIOUS SUPPLEMENTAL PROCEDURES TO DETERMINE** LD<sub>50.</sub> CI and Slope (Hybrid Method)

METHOD	ESTMATED LD <sub>50</sub> (range)	EST		ANIMALS USED Median		
(2000 simulations each unless		MEDIAN (range)	Factor	Difference	Slope	
specified in the footnote)			95%/5%	High-Mean		
	TRUE SIGMA 1.25 Slope					
BEST CASE <sup>1</sup>	250 (65.4-955)	1.27 (0.938-1.92)	2.0	0.65	0.79	30+
10 at LD13, 45, & 70 <sup>2</sup>	237 (76-875)	1.06 (0.53-2.6)	4.9	1.54	0.94	30
7 at LD13, 45, & 70 <sup>3</sup>	226 (58-925)	1.0 (0.47-2.8)	5.9	1.8	1.0	21
5 at LD13, 45, & $70^4$	242 (55-1103)	0.91 (0.36-3.0)	8.3	2.09	1.1	15
10 at LD13 & 70; & 5 at 45 <sup>5</sup>	243 (67-973)	1.1 (0.5-2.8)	3.4	1.7	0.9	25
10 at LD13 & $45^6$	182 (36-998)	0.96 (0.2-3.37)	16.8	2.41	1.04	20
10 at LD13 & 70 <sup>7</sup>	244 (63-1060)	1.1 (0.53-2.6)	4.9	1.5	0.9	20
10 at LD13, 40, & 87 <sup>8</sup>	242 (80.8-762)	1.13 (0.63-2.21)	3.5	1.08	0.88	30
10 at LD13, 40, & 87	248 (75-760)	1.14 (0.63-2.2)	3.5	1.06	0.87	30
7 at LD13, 40, & 87 <sup>9</sup>	236 (67-925)	1.1 (0.57-2.6)	4.5	1.5	0.90	21
5 at LD13, 40, & 87 <sup>10</sup>	244 (55-1238)	1.0 (0.34-2.9)	2.9	1.9	1.0	15
10 at LD13 & 87; & 5 at 40 <sup>11</sup>	236 (75-833)	1.1 (0.61-2.4)	3.9	1.3	0.9	25
10 atLD13 and LD87 <sup>12</sup>	251 (27-2269)	1.7 (0.88-7.5)	8.5	5.8	0.64	20

<sup>1</sup> Only includes the 768 out of 1000 runs that converged <sup>3</sup> Includes all runs, however 1 did not converge

<sup>5</sup> All runs converged

<sup>7</sup> Includes all runs, however 1 did not converge

<sup>9</sup> Includes all runs, however 2 did not converge

<sup>11</sup> Includes all runs, however 3 did not converge

<sup>2</sup> All runs converged

<sup>4</sup> Includes all runs, however 8 did not converge

<sup>6</sup> All 1000 runs converged

<sup>8</sup> All 1000 runs converged

<sup>10</sup> Includes all runs, however 8 did not converge

<sup>12</sup> Includes all runs, however 16 did not converge

# Table 3B COMPARISON OF VARIOUS SUPPLEMENTAL PROCEDURES TO DETERMINE LD50, CI and Slope (Multiple UDP)

METHOD	ESTMATED LD <sub>50</sub> (range)	ESTIMATED SIGMA				ANIMALS USED Median
(2000 simulations each unless		MEDIAN (range)	Factor	Difference	Slope	
specified in the footnote)		TRUE SIGMA 1.25	95%/5%	High-Mean	Slope	0.8
1						
BEST CASE <sup>1</sup>	250 (65.4-955)	1.27 (0.938-1.92)	2.0	0.65	0.79	30+
Multiple UDP 6, 3 <sup>2</sup>	213 (54-1378)	1.1 (0.52-3.1)	6.0	2.0	0.9	30
Multiple UDP 5, 3	200 (50-1481)	1.0 (0.48-3.5)	7.3	2.5	1.0	20
Multiple UDP 4,3	189 (41-1277)	1.05 (0.40-3.78)	9.4	2.73	0.95	21
Multiple UDP 4,2	209 (45-1051)	0.96 (0.4-3.9)	9.8	2.94	1.04	16
Multiple UDP 3,3	195 (43-1239)	0.93 (0.34-4.47)	13	3.54	1.07	16
Current 401* (LD <sub>50</sub> =50)	51 (7.4-846)	0.63 (-14- 15)	2.5	14.37	1.6	15

<sup>1</sup> Only includes the 768 out of 1000 runs that converged

 $^2$  Includes 11 runs where sigma was <0, that were set to high values

\* Five at 20, 50, and 100 mg/kg, and all runs converged

## Table 4A **COMPARISON OF VARIOUS SUPPLEMENTAL PROCEDURES TO DETERMINE** LD<sub>50.</sub> CI and Slope (Hybrid Method)

METHOD	ESTMATED LD <sub>50</sub> (range)	ESTIMATED SIGMA				ANIMALS USED Median
(2000 simulations each unless		MEDIAN (range)	Factor	Difference	Slope	
specified in the footnote)			95%/5%	High-Mean		
		TRUE SIGMA 2.00			Slope	0.5
BEST CASE <sup>1</sup>	250 (5.6-11078)	1.92 (0.52-3.08)	5.9	1.16	0.52	30+
10 at LD13, 45, & $70^2$	233 (29-2187)	1.6 (0.73-8.3)	11.37	6.7	0.625	30
7 at LD13, 45, & $70^3$	217 (21-2544)	1.5 (0.6-27)	45	25.5	0.67	21
5 at LD13, 45, & $70^4$	229 (20-2843)	1.3 (0.5->5.5)	>11	>4.2	0.77	15
10 at LD13 & 70; & 5 at $45^5$	239 (27-2438)	1.5 (0.74-7.7)	10.4	6.2	0.67	25
10 at LD13 & 45 <sup>6</sup>	164 (17.2-2961)	1.27 (0.09-5.3)	58.4	4.04	0.79	20
10 at LD13 & $70^7$	240 (20-3017)	1.6 (0.73-12.0)	16.4	10.4	0.625	20
10 at LD13, 40, & 87 <sup>8</sup>	234 (34.7-2056)	1.67 (0.88-5.14)	5.8	3.47	0.6	30
10 at LD13, 40, & 87	236 (32-2048)	1.7 (0.86-6.9)	8.0	5.2	0.58	30
7 at LD13, 40, & 87 <sup>9</sup>	242 (26-3011)	1.6 (0.77-13)	16.8	11.4	0.625	21
5 at LD13, 40, & 87 <sup>10</sup>	229 (19-4039)	1.6 (0.68-23)	33.8	21.4	0.625	15
10 at LD13 & 87; & 5 at 40 <sup>11</sup>	238 (30-1806)	1.7 (0.88-6.2)	7.0	4.5	0.58	25
10 atLD13 and LD87 <sup>12</sup>	251 (27-2269)	1.7 (0.88-7.5)	8.5	5.8	0.58	20

<sup>1</sup> Includes all 1000 runs, however 228 did not converge
<sup>3</sup> Includes 76 runs where sigma was <0, that were set to high values</li>
<sup>5</sup> Includes 40 runs where sigma was <0, that were set to high values</li>
<sup>7</sup> Includes 67 runs where sigma was <0, that were set to high values</li>

 $^{9}$  Includes 61 runs where sigma was <0, that were set to high values

<sup>11</sup> Includes 24 runs where sigma was <0, that were set to high values

<sup>2</sup> Includes 41 runs where sigma was <0, that were set to high values</li>
<sup>4</sup> Includes 101 runs where sigma was <0, that were set to high values</li>
<sup>6</sup> Includes (1K) 48 runs where sigma was <0, that were set to high values</li>
<sup>8</sup> Includes (1K) 12 runs where sigma was <0, that were set to high values</li>

<sup>10</sup> Includes 81 runs where sigma was <0, that were set to high values

<sup>12</sup> Includes 41 runs where sigma was <0, that were set to high values

## Table 4B **COMPARISON OF VARIOUS SUPPLEMENTAL PROCEDURES TO DETERMINE** LD<sub>50</sub>, CI and Slope (Multiple UDP)

METHOD	ESTMATED LD <sub>50</sub> (range)	ESTIMATED SIGMA				ANIMALS USED Median
(2000 simulations each unless specified in the footnote)		MEDIAN (range)	<b>Factor</b> 95%/5%	<b>Difference</b> High-Mean	Slope	
TRUE SIGMA 2.00 Slope						0.5
BEST CASE <sup>1</sup>	250 (5.6-11078)	1.92 (0.52-3.08)	5.9	1.16	0.52	30+
Multiple UDP 6, $3^2$	162 (19-5635)	1.6 (0.73-27)	37	25.4	0.625	30
Multiple UDP 5, $3^3$	156 (16-4947	1.5 (0.69-34)	49.2	32.5	0.67	20
Multiple UDP 4,3	158 (12-6186)	1.6 (0.6-1000 <sup>+</sup> )			0.625	21
Multiple UDP 4,2		1.33 (0.54-1000+)			0.75	16
Multiple UDP 3,3		1.41 (0.5-1000 <sup>+</sup> )			0.71	15
Current 401 (LD <sub>50</sub> =50)						

 $^2$  Includes 77 runs where sigma was <0, that were set to high values

<sup>1</sup> Includes all runs, however 228 did not converge <sup>3</sup> Includes 11 runs where sigma was <0, that were set to high values

<sup>+</sup> Negative values set to 1000

#### Table 5

## COMPARISON OF VARIOUS SUPPLEMENTAL PROCEDURES TO DETERMINE LD<sub>50</sub>, CI and Slope (Multiple UDP)

METHOD	ESTMATED LD <sub>50</sub> (range)	ESTI	ESTIMATED SIGMA				
		MEDIAN (range)	Factor	Difference	Slope		
			95%/5%	High-Mean			
		TRUE SIGMA 0.25			Slope	4	
Multiple UDP 6, 3 <sup>1</sup>	250 (183-342)	0.2 (0.0059-0.38)	63.0	0.18	5.0	30	
Multiple UDP 5, $3^2$	250 (183-345)	0.2 (0.0033-0.38)	115.1	0.18	5.0	20	

<sup>1</sup> Includes all runs, however 110 did not converge <sup>2</sup> Includes all runs, however 205 did not converge

#### Table 6

#### **COMPARISON OF VARIOUS SUPPLEMENTAL PROCEDURES TO DETERMINE** LD<sub>50</sub>, CI and Slope **Comparison of Acceptable Methods**

METHOD	ESTMATED LD <sub>50</sub> (range)	EST		ANIMALS USED Median		
(2000 simulations each unless		MEDIAN (range)	Factor	Difference	Slope	
specified in the footnote)			95%/5%	High-Median		
TRUE SIGMA 0.12 Slope 8.						
${\sf BEST} \ {\sf CASE}^1$	250 (199-314)	0.12 (0.09-0.185)	2.0	0.06	8.3	30+
10 at LD13, 45, & 70 <sup>2</sup>	250 (200-291)	0.13 (0.036-0.21)	5.8	0.08	7.6	30
10 at LD13, 45, & $70^2$	250 (208-291)	0.115 (0.036-0.205)	5.6	0.17	8.7	30
7 at LD13, 45, & $70^3$	250 (205-297)	0.15 (0.032-0.22)	6.2	0.07	6.7	21
5 at LD13, 45, & 70 <sup>4</sup>	250 (199-304)	0.12 (0.036-0.23)	6.4	0.11	8.3	15
10 at LD13 & 70; & 5 at $45^5$	250 (192-304)	0.12 (0.036-0.21)	5.8	0.09	8.3	25
10 at LD13 & 45 <sup>6</sup>	250 (209-293)	0.129 (0.036-0.23)	6.3	0.10	7.8	20
Multiple UDP 6, $3^7$	251 (207-312)	0.1 (0.035-0.21)	6.0	0.10	10	30
Multiple UDP $5, 3^8$	250 (202-305)	0.12 (0.032-0.20)	6.25	0.08	8.3	25
Multiple UDP 4,3 <sup>9</sup>	247 (197-318)	0.119 (0.074-0.23)	3.1	0.11	8.4	21
Multiple UDP 4,2 <sup>10</sup>	249 (196-318)	0.119 (0.074-0.22)	3.0	0.10	8.4	16

<sup>1</sup> Only includes the 769 out of 1000 runs that converged

<sup>3</sup> Only includes the 1047 runs that converged

<sup>5</sup> Only includes the 929 runs that converged

<sup>7</sup> Only includes the 1147 runs that converged

<sup>9</sup> Only includes the 513 runs that converged

<sup>2</sup>Only includes the 1154 runs that converged

<sup>4</sup> Only includes the 884 runs that converged
<sup>6</sup> Only includes the 575 out of 1000 runs that converged
<sup>8</sup> Only includes the 1272 runs that converged

<sup>10</sup> Only includes the 542 runs that converged

#### Table 7 **COMPARISON OF VARIOUS SUPPLEMENTAL PROCEDURES TO DETERMINE** LD<sub>50</sub>, CI and Slope **Comparison of Acceptable Methods**

METHOD	ESTMATED LD <sub>50</sub> (range)	ES		ANIMALS USED Median		
(2000 simulations each unless		MEDIAN (range)	Factor	Difference	Slope	
specified in the footnote)			(95%/5%)	High-Median		
TRUE SIGMA 0.5 Slope 2						
$BEST CASE^1$	250 (146-427)	0.507(0.375-0.769)	2.05	0.262	2	30+
10 at LD13, 45, & 70 <sup>2</sup>	257 (155-418)	0.44 (0.13-0.72)	5.5	0.28	2.3	30
10 at LD13 & 70 <sup>3</sup>	268 (143-488)	0.45 (0.30-0.77)	2.6	0.32	2.2	20
10 at LD13, 40, & 87 <sup>4</sup>	228 (131-423)	0.39 (0.15-0.71)	4.8	0.32	2.6	30
7 at LD13, 40, & 87 <sup>5</sup>	230 (114-453)	0.37 (0.19-0.74)	3.9	0.37	2.7	21
5 at LD13, 40, & 87 <sup>6</sup>	230 (110-471)	0.36 (0.20-0.76)	3.8	0.40	2.8	15
10 at LD13 & 87; & 5 at $40^7$	231 (130-448)	0.41 (0.21-0.72)	3.4	0.31	2.4	25
10 atLD13 and LD87	245 (123-494)	0.58 (0.38-0.79)	2.1	0.21	1.72	20
Multiple UDP 6, 3 <sup>8</sup>	247 (138-444)	0.42 (0.18-0.74)	4.1	`0.32	2.38	30
Multiple UDP 5, 3 <sup>9</sup>	250 (138-455)	0.41 (0.15-0.75)	5	0.34	2.44	25
Multiple UDP 4,3	247 (131-469)	0.4 (0.147-0.761)	5.17	0.361	2.5	21

<sup>1</sup> Only includes the 783 out of 1000 runs that converged
<sup>3</sup> Only includes the 1727 runs that converged
<sup>5</sup> Only includes the 1803 runs that converged
<sup>7</sup> Only includes the 1753 runs that converged
<sup>9</sup> Includes all runs, however 22 did not converge

<sup>2</sup> Includes all runs, however 30 did not converge
 <sup>4</sup> Includes all runs, however 93 did not converge

<sup>6</sup> Only includes the 1705 runs that converged

<sup>8</sup> Includes all runs, however 14 did not converge

#### Table 8 **COMPARISON OF VARIOUS SUPPLEMENTAL PROCEDURES TO DETERMINE** LD<sub>50</sub>, CI and Slope **Comparison of Acceptable Methods**

METHOD	ESTMATED LD <sub>50</sub> (range)	EST		ANIMALS USED Median		
(2000 simulations each unless specified in the footnote)		MEDIAN (range)	<b>Factor</b> 95%/5%	<b>Difference</b> High-Mean	Slope	
		TRUE SIGMA 1.25			Slope	0.8
$BEST CASE^1$	250 (65.4-955)	1.27 (0.938-1.92)	2.0	0.65	0.79	30+
10 at LD13, 45, & 70 <sup>2</sup>	237 (76-875)	1.06 (0.53-2.6)	4.9	1.54	0.94	30
7 at LD13, 45, & $70^3$	226 (58-925)	1.0 (0.47-2.8)	5.9	1.8	1.0	21
10 at LD13 & 70; & 5 at 45 <sup>4</sup>	243 (67-973)	1.1 (0.5-2.8)	3.4	1.7	0.9	25
10 at LD13 & 70 <sup>5</sup>	244 (63-1060)	1.1 (0.53-2.6)	4.9	1.5	0.9	20
10 at LD13, 40, & 87 <sup>6</sup>	242 (80.8-762)	1.13 (0.63-2.21)	3.5	1.08	0.88	30
10 at LD13, 40, & 87	248 (75-760)	1.14 (0.63-2.2)	3.5	1.06	0.87	30
10 at LD13 & 87; & 5 at 40 <sup>7</sup>	236 (75-833)	1.1 (0.61-2.4)	3.9	1.3	0.9	25
Multiple UDP 6, 3 <sup>8</sup>	213 (54-1378)	1.1 (0.52-3.1)	6.0	2.0	0.9	30
Multiple UDP 5, 3	200 (50-1481)	1.0 (0.48-3.5)	7.3	2.5	1.0	20

<sup>1</sup> Only includes the 768 out of 1000 runs that converged <sup>3</sup> Includes all runs, however 1 did not converge <sup>5</sup> Includes all runs, however 1 did not converge <sup>7</sup> Includes all runs, however 3 did not converge

<sup>2</sup> All runs converged
 <sup>4</sup> All runs converged
 <sup>6</sup> All runs converged
 <sup>8</sup> Includes 11 runs where sigma was <0, that were set to high values</li>

#### Table 9 **COMPARISON OF VARIOUS SUPPLEMENTAL PROCEDURES TO DETERMINE** LD<sub>50</sub>, CI and Slope **Comparison of Acceptable Methods**

METHOD	ESTMATED LD <sub>50</sub> (range)	ESTIMATED SIGMA				ANIMALS USED Median
(2000 simulations each unless		MEDIAN (range)	Factor	Difference	Slope	
specified in the footnote)			95%/5%	High-Mean		
TRUE SIGMA 2.00 Slope						0.5
BEST CASE <sup>1</sup>	250 (5.6-11078)	1.92 (0.52-3.08)	5.9	1.16	0.52	30+
10 at LD13, 40, & 87 <sup>2</sup>	234 (34.7-2056)	1.67 (0.88-5.14)	5.8	3.47	0.6	30
10 at LD13, 40, & 87	236 (32-2048)	1.7 (0.86-6.9)	8.0	5.2	0.58	30
10 at LD13 & 87; & 5 at 40 <sup>3</sup>	238 (30-1806)	1.7 (0.88-6.2)	7.0	4.5	0.58	25
10 atLD13 and LD87 <sup>4</sup>	251 (27-2269)	1.7 (0.88-7.5)	8.5	5.8	0.58	20

 $^2$  Includes 12 runs where sigma was <0, that were set to high values <sup>4</sup> Includes 41 runs where sigma was <0, that were set to high values

<sup>1</sup> Includes all runs, however 228 did not converge <sup>3</sup> Includes 24 runs where sigma was <0, that were set to high values