

**UDP Results for the RC Millimole Regression****Starting One Dose Lower Than Estimated LD50****5000 mg/kg Upper Limit****Results for 46 chemicals for the 3T3 NRU and 47 chemicals for the NHK NRU**

(see notes to Table 6-4 for chemicals excluded)

**Summary of Animals Used by Cell Type**

Cell	Sigma	Method	Std. Error	Animals	Difference	P-Value*	% Savings
3T3	0.12	Cyto	0.295	7.20	0.91	<b>0.0163</b>	11.2%
		Default	0.255	8.11			
	0.25	Cyto	0.272	8.03	0.93	<b>0.0088</b>	10.4%
		Default	0.250	8.96			
	0.5	Cyto	0.217	8.79	0.97	<b>0.0014</b>	10.0%
		Default	0.208	9.77			
	1.25	Cyto	0.175	9.36	0.98	<b>&lt;.0001</b>	9.4%
		Default	0.167	10.34			
	2	Cyto	0.150	9.43	0.88	<b>&lt;.0001</b>	8.5%
		Default	0.132	10.30			
Average Animal Difference:						0.93	

  

NHK	0.12	Cyto	0.299	7.33	0.79	<b>0.0232</b>	9.7%
		Default	0.249	8.12			
	0.25	Cyto	0.283	8.14	0.80	<b>0.0185</b>	9.0%
		Default	0.239	8.94			
	0.5	Cyto	0.232	8.93	0.82	<b>0.0024</b>	8.4%
		Default	0.196	9.75			
	1.25	Cyto	0.189	9.47	0.91	<b>&lt;.0001</b>	8.8%
		Default	0.155	10.38			
	2	Cyto	0.168	9.57	0.74	<b>&lt;.0001</b>	7.1%
		Default	0.124	10.31			
Average Animal Difference:						0.81	

**Summary of Animal Deaths by Cell Type**

Cell Type	Sigma	Method	3 Animals at Limit Dose	5 Reversals	Likelihood Ratio	Max Animals	Animals Used	Animals Dead	% Deaths
3T3	0.12	Cyto	23.8%	49.7%	23.7%	2.8%	7.20	3.26	45.3%
		Default	23.3%	51.3%	21.7%	3.6%	8.11	3.43	42.3%
	0.25	Cyto	22.8%	30.0%	41.5%	5.7%	8.03	3.59	44.7%
		Default	22.5%	31.4%	38.6%	7.5%	8.96	3.78	42.2%
	0.5	Cyto	20.2%	18.5%	51.5%	9.8%	8.79	3.95	44.9%
		Default	19.6%	18.9%	48.0%	13.5%	9.77	4.16	42.6%
	1.25	Cyto	14.2%	12.9%	58.6%	14.2%	9.36	4.38	46.8%
		Default	13.2%	13.3%	53.2%	20.3%	10.34	4.62	44.7%
	2	Cyto	11.9%	12.1%	61.6%	14.4%	9.43	4.49	47.6%
		Default	10.4%	12.3%	56.7%	20.5%	10.30	4.73	45.9%
NHK	0.12	Cyto	25.3%	49.1%	22.6%	2.9%	7.33	3.26	44.5%
		Default	25.0%	50.5%	20.9%	3.6%	8.12	3.38	41.7%
	0.25	Cyto	24.3%	29.6%	40.1%	6.0%	8.14	3.58	44.0%
		Default	23.9%	31.1%	37.6%	7.3%	8.94	3.71	41.6%
	0.5	Cyto	21.6%	18.3%	49.5%	10.6%	8.93	3.96	44.3%
		Default	21.1%	18.7%	47.0%	13.2%	9.75	4.10	42.0%
	1.25	Cyto	15.0%	12.8%	57.3%	15.0%	9.47	4.38	46.3%
		Default	13.9%	13.1%	52.4%	20.5%	10.38	4.59	44.2%
	2	Cyto	11.9%	12.0%	60.4%	15.6%	9.57	4.52	47.3%
		Default	10.8%	12.2%	56.2%	20.7%	10.31	4.69	45.6%

**Summary of Animals Used by GHS Toxicity Category and Cell Type**

Toxcat	Cell	Sigma	Method	Std. Error	Animals	Difference	P-Value*	% Savings
1	3T3	0.12	Cyto	0.735	9.87	0.78	0.4011	7.3%
			Default	0.478	10.65			
		0.25	Cyto	0.687	10.42	0.86	0.3538	7.6%
			Default	0.294	11.28			
		0.5	Cyto	0.639	10.80	0.95	0.1937	8.1%
			Default	0.158	11.76			
		1.25	Cyto	0.556	11.14	0.94	0.1354	7.8%
			Default	0.133	12.08			
		2	Cyto	0.473	10.99	0.87	0.1354	7.3%
			Default	0.122	11.86			
Average Animal Difference:								0.88
2	NHK	0.12	Cyto	0.540	10.72	-0.09	0.4011	-0.8%
			Default	0.490	10.63			
		0.25	Cyto	0.542	11.35	-0.29	0.1627	-2.6%
			Default	0.374	11.06			
		0.5	Cyto	0.501	11.79	-0.25	0.1627	-2.2%
			Default	0.251	11.54			
		1.25	Cyto	0.453	12.00	-0.03	0.2285	-0.3%
			Default	0.159	11.97			
		2	Cyto	0.437	11.78	-0.06	0.2670	-0.6%
			Default	0.136	11.72			
Average Animal Difference:								-0.15
2	3T3	0.12	Cyto	0.779	8.04	0.004	0.1618	0.05%
			Default	0.236	8.04			
		0.25	Cyto	0.676	8.66	-0.12	0.1618	-1.3%
			Default	0.143	8.54			
		0.5	Cyto	0.723	9.15	-0.09	0.3429	-1.0%
			Default	0.183	9.06			
		1.25	Cyto	0.684	9.67	-0.17	0.3429	-1.8%
			Default	0.150	9.50			
		2	Cyto	0.538	9.83	-0.20	0.2732	-2.0%
			Default	0.094	9.64			
Average Animal Difference:								-0.11
2	NHK	0.12	Cyto	0.362	7.35	0.87	0.0645	10.5%
			Default	0.307	8.22			
		0.25	Cyto	0.190	8.01	0.78	<b>0.0167</b>	8.8%
			Default	0.171	8.79			
		0.5	Cyto	0.241	8.48	0.86	<b>0.0331</b>	9.2%
			Default	0.242	9.34			
		1.25	Cyto	0.196	9.00	0.76	<b>0.0331</b>	7.8%
			Default	0.212	9.76			
		2	Cyto	0.110	9.30	0.46	<b>0.0464</b>	4.7%
			Default	0.134	9.76			
Average Animal Difference:								0.74

**Summary of Animals Used by GHS Toxicity Category and Cell Type**

Toxcat	Cell	Sigma	Method	Std. Error	Animals	Difference	P-Value*	% Savings
3	3T3	0.12	Cyto	0.261	6.59	0.03	0.3772	0.5%
			Default	0.351	6.63			
		0.25	Cyto	0.278	6.95	0.01	0.4688	0.2%
			Default	0.333	6.96			
		0.5	Cyto	0.184	7.61	0.09	0.4073	1.2%
			Default	0.230	7.70			
		1.25	Cyto	0.081	8.68	0.01	0.4073	0.1%
			Default	0.101	8.69			
		2	Cyto	0.059	9.12	0.02	0.4073	0.2%
			Default	0.070	9.14			
Average Animal Difference:								0.03
4	NHK	0.12	Cyto	0.428	7.02	-0.11	0.4073	-1.5%
			Default	0.376	6.92			
		0.25	Cyto	0.355	7.26	-0.04	0.5000	-0.6%
			Default	0.336	7.22			
		0.5	Cyto	0.264	7.88	-0.06	0.4688	-0.7%
			Default	0.218	7.82			
		1.25	Cyto	0.137	8.77	-0.01	0.4688	-0.1%
			Default	0.122	8.76			
		2	Cyto	0.094	9.19	-0.03	0.4688	-0.4%
			Default	0.059	9.16			
Average Animal Difference:								-0.05
3	3T3	0.12	Cyto	0.203	6.69	0.61	0.1354	8.3%
			Default	0.349	7.30			
		0.25	Cyto	0.111	7.42	0.65	0.1118	8.1%
			Default	0.321	8.07			
		0.5	Cyto	0.061	7.91	0.84	0.0746	9.6%
			Default	0.337	8.76			
		1.25	Cyto	0.057	8.63	0.65	<b>0.0388</b>	7.0%
			Default	0.216	9.28			
		2	Cyto	0.067	8.97	0.52	<b>0.0094</b>	5.5%
			Default	0.136	9.49			
Average Animal Difference:								0.65
4	NHK	0.12	Cyto	0.231	6.71	0.60	0.0917	8.2%
			Default	0.338	7.31			
		0.25	Cyto	0.124	7.45	0.61	0.0917	7.6%
			Default	0.313	8.06			
		0.5	Cyto	0.058	7.93	0.81	0.0917	9.3%
			Default	0.337	8.74			
		1.25	Cyto	0.043	8.66	0.65	<b>0.0193</b>	6.9%
			Default	0.212	9.31			
		2	Cyto	0.038	9.04	0.42	<b>0.0152</b>	4.4%
			Default	0.136	9.46			
Average Animal Difference:								0.62

### Summary of Animals Used by GHS Toxicity Category and Cell Type

Toxcat	Cell	Sigma	Method	Std. Error	Animals	Difference	P-Value*	% Savings
5	3T3	0.12	Cyto	0.340	7.81	1.36	<b>0.0121</b>	14.8%
			Default	0.259	9.16			
		0.25	Cyto	0.285	8.76	1.51	<b>0.0018</b>	14.7%
			Default	0.149	10.28			
		0.5	Cyto	0.201	9.23	1.52	<b>0.0004</b>	14.1%
			Default	0.084	10.75			
		1.25	Cyto	0.159	9.24	1.43	<b>0.0004</b>	13.4%
			Default	0.067	10.68			
		2	Cyto	0.122	9.19	1.18	<b>0.0004</b>	11.4%
			Default	0.048	10.37			
Average Animal Difference:								1.40
6	NHK	0.12	Cyto	0.326	7.88	1.25	<b>0.0059</b>	13.7%
			Default	0.249	9.13			
		0.25	Cyto	0.258	8.79	1.46	<b>0.0011</b>	14.3%
			Default	0.135	10.26			
		0.5	Cyto	0.196	9.29	1.45	<b>0.0004</b>	13.5%
			Default	0.078	10.73			
		1.25	Cyto	0.127	9.21	1.49	<b>0.0004</b>	13.9%
			Default	0.049	10.69			
		2	Cyto	0.094	9.20	1.13	<b>0.0004</b>	11.0%
			Default	0.048	10.33			
Average Animal Difference:								1.36
6	3T3	0.12	Cyto	0.450	4.99	1.70	<b>0.0032</b>	25.4%
			Default	0.370	6.69			
		0.25	Cyto	0.523	6.30	1.62	<b>0.0257</b>	20.4%
			Default	0.437	7.92			
		0.5	Cyto	0.394	8.05	1.54	<b>0.0102</b>	16.1%
			Default	0.271	9.59			
		1.25	Cyto	0.293	9.03	1.88	<b>0.0007</b>	17.3%
			Default	0.057	10.91			
		2	Cyto	0.263	8.92	1.84	<b>0.0007</b>	17.1%
			Default	0.035	10.75			
Average Animal Difference:								1.72
6	NHK	0.12	Cyto	0.439	5.19	1.45	<b>0.0183</b>	21.8%
			Default	0.345	6.64			
		0.25	Cyto	0.530	6.40	1.42	0.0729	18.2%
			Default	0.433	7.83			
		0.5	Cyto	0.405	8.17	1.35	<b>0.0239</b>	14.2%
			Default	0.279	9.52			
		1.25	Cyto	0.306	9.24	1.66	<b>0.0006</b>	15.3%
			Default	0.042	10.90			
		2	Cyto	0.312	9.20	1.60	<b>0.0011</b>	14.8%
			Default	0.032	10.80			
Average Animal Difference:								1.50

Notes:

\*P-Value is from one-side Wilcoxon Signed Ranked test for difference in animal use between the default and cytotoxicity methods. **Boldfaced** values are significant values at Numbers are numbers of animals unless otherwise specified

Sigma - reciprocal of slope

Cyto= using NRU-determined starting dose

Default - using default starting dose of 175 mg/kg