

This is a draft paper for discussion. It should not be quoted, cited or reproduced.

<b>Table 2. BMD, BMDL10, AIC and pvalue data obtained from BMDS for Chromium IV, 1,2 Dichloroethane and benzo(a)pyrene</b>					
<b>Model Fit</b>	<b>AIC</b>	<b>Goodness of Fit value p&gt;0.1</b>	<b>BMD</b>	<b>BMDL</b>	<b>Accept model</b>
<b>Chromium Male Mice SI/Duodenum adenoma</b>					
<b>Stochastic Models</b>					
Gamma	136.762	0.6922	112.547	64.0023	Yes
Multistage-Cancer	136.831	0.6831	115.486	63.6699	Yes
<b>Distribution Probability models</b>					
Logistic	135.44	0.7042	149.985	124.109	Yes
Log-Logistic	136.752	0.6947	111.553	60.2745	Yes
Probit	135.186	0.7673	139.684	114.1	Yes
Log-Probit	134.901	0.8219	121.707	91.7217	Yes
Quantal Linear	135.5	0.7320	88.2482	60.8373	Yes
Weibull	136.777	0.6903	112.921	63.9277	Yes
<b>Chromium Male Mice SI/Duodenum/jejunum/ileum adenoma</b>					
<b>Stochastic Models</b>					
Gamma	132.27	0.8888	106.1	64.95	Yes
Multistage-Cancer	132.194	0.5677	78.7493	55.8967	Yes
<b>Distribution Probability models</b>					
Logistic	132.263	0.8920	105.0	63.63	Yes
Log-Logistic	131.392	0.6957	144.469	120.661	Yes
Probit	130.214	0.9786	107.883	82.9354	Yes
Log-Probit	130.215	0.9784	107.915	82.958	Yes
Quantal Linear	132.194	0.5677	78.7492	55.8967	Yes
Weibull	132.324	0.8663	107.225	64.6377	Yes

This is a draft paper for discussion. It should not be quoted, cited or reproduced.

<b>Model Fit</b>	<b>AIC</b>	<b>Goodness of Fit value p&gt;0.1</b>	<b>BMD</b>	<b>BMDL</b>	<b>Accept model</b>
<b>Chromium Male Mice SI/Duodenum/jejunum/ileum carcinoma</b>					
<b>Stochastic Models</b>					
Gamma	88.3058	0.5505	253.759	128.842	Yes
Multistage-Cancer	88.3058	0.5505	253.756	128.842	Yes
<b>Distribution Probability models</b>					
Logistic	89.1423	0.4995	277.34	197.014	Yes
Log-Logistic	88.2541	0.5519	251.014	121.531	Yes
Probit	89.0441	0.5098	276.387	188.755	Yes
Log-probit	89.8217	0.3972	279.086	176.588	Yes
Quantal Linear	88.3058	0.5505	253.756	128.842	Yes
Weibull	88.3058	0.5505	253.756	128.842	Yes
<b>Model Fit</b>	<b>AIC</b>	<b>Goodness of Fit value p&gt;0.1</b>	<b>BMD</b>	<b>BMDL</b>	<b>Accept model</b>
<b>Chromium Female Mice SI/Duodenum adenoma</b>					
<b>Stochastic Models</b>					
Gamma	140.875	0.0342	130.601	96.5626	No
Multistage-Cancer	140.875	0.0342	130.601	96.5626	No
<b>Distribution Probability models</b>					
Logistic	156.231	0.0000	294.167	236.95	No
Log-Logistic	139.526	0.0765	115.361	80.9918	No
Probit	155.067	0.0001	271.685	217.333	No
Log-probit	153.135	0.0001	176.113	131.946	No
Quantal Linear	140.875	0.0342	130.601	96.5626	No
Weibull	140.875	0.0342	130.601	96.5626	No

This is a draft paper for discussion. It should not be quoted, cited or reproduced.

<b>Model Fit</b>	<b>AIC</b>	<b>Goodness of Fit value p&gt;0.1</b>	<b>BMD</b>	<b>BMDL</b>	<b>Accept model</b>
<b>Chromium Female Mice SI/Duodenum carcinoma</b>					
<b>Stochastic Models</b>					
Gamma	50.7282	0.9858	458.797	327.85	Yes
Multistage-Cancer	50.5157	0.8580	546.668	311.11	Yes
<b>Distribution Probability models</b>					
Logistic	51.8548	0.7622	489.464	415.792	Yes
Log-logistic	50.747	0.9843	460.097	326.746	Yes
Probit	51.6094	0.8165	481.383	396.195	Yes
Log-probit	48.7475	0.9924	443.789	322.613	Yes
Quantal Linear	50.5157	0.8580	546.668	311.11	Yes
Weibull	50.759	0.9832	462.004	331.524	Yes
<b>Model Fit</b>	<b>AIC</b>	<b>Goodness of Fit value p&gt;0.1</b>	<b>BMD</b>	<b>BMDL</b>	<b>Accept model</b>
<b>Chromium Female Mice SI/jejunum adenoma</b>					
<b>Stochastic Models</b>					
Gamma	67.8598	0.3341	531.648	298.65	Yes
Multistage-Cancer	67.8526	0.3343	529.898	298.867	Yes
<b>Distribution Probability models</b>					
Logistic	66.3457	0.5046	524.748	409.901	Yes
Log-logistic	67.8575	0.3342	531.761	292.494	Yes
Probit	66.2204	0.5190	522.558	392.466	Yes
Log-probit	66.5087	0.4230	498.12	338.527	Yes
Quantal Linear	65.888	0.5259	552.934	297.803	Yes
Weibull	67.8607	0.3339	532.384	298.621	Yes

This is a draft paper for discussion. It should not be quoted, cited or reproduced.

<b>Model Fit</b>	<b>AIC</b>	<b>Goodness of Fit value p&gt;0.1</b>	<b>BMD</b>	<b>BMDL</b>	<b>Accept model</b>
<b>Chromium Female Mice SI/Duodenum/jejunum or ileum adenoma</b>					
<b>Stochastic Models</b>					
Gamma	160.406	0.0633	99.4214	75.7882	No
Multistage-Cancer	160.406	0.0633	99.4214	75.7882	No
<b>Distribution Probability models</b>					
Logistic	176.098	0.0000	242.536	198.714	No
Log-logistic	158.602	0.1593	84.0041	60.4328	Yes
Probit	174.712	0.0001	222.938	182.19	No
Log-probit	170.528	0.0007	150.311	117.157	No
Quantal Linear	160.406	0.0633	99.4214	75.7882	No
Weibull	160.406	0.0633	99.4214	75.7882	No
<b>Model Fit</b>	<b>AIC</b>	<b>Goodness of Fit value p&gt;0.1</b>	<b>BMD</b>	<b>BMDL</b>	<b>Accept model</b>
<b>Chromium Female Mice SI/Duodenum/jejunum or ileum carcinoma</b>					
<b>Stochastic Models</b>					
Gamma	95.8788	0.7240	380.979	223.374	Yes
Multistage-Cancer	95.8788	0.7240	380.979	223.374	Yes
<b>Distribution Probability models</b>					
Logistic	96.7681	0.5880	456.088	351.861	Yes
Log-logistic	97.862	0.5189	377.362	213.429	Yes
Probit	96.6231	0.6106	445.14	332.446	Yes
Log-probit	97.3739	0.4618	434.943	295.122	Yes
Quantal Linear	95.8788	0.7240	380.979	223.374	Yes
Weibull	95.8788	0.7240	380.979	223.374	Yes

This is a draft paper for discussion. It should not be quoted, cited or reproduced.

Model Fit	AIC	Goodness of Fit value $p>0.1$	BMD	BMDL	Accept model
<b>Chromium Female Mice SI/Duodenum/jejunum or ileum carcinoma/adenoma</b>					
<b>Stochastic Models</b>					
Gamma	189.404	0.1371	76.6887	58.8744	Yes
Multistage-Cancer	189.404	0.1371	76.6887	58.8744	Yes
<b>Distribution Probability models</b>					
Logistic	201.511	0.0004	188.139	155.778	No
Log-logistic	189.891	0.1535	61.0265	43.916	Yes
Probit	200.062	0.0007	172.873	143.575	No
Log-probit	194.478	0.0119	119.79	93.617	No
Quantal Linear	189.404	0.1371	76.6887	58.8744	Yes
Weibull	189.404	0.1371	76.6887	58.8744	Yes
Model Fit	AIC	Goodness of Fit value $p>0.1$	BMD	BMDL	Accept model
<b>Benzo(a)pyrene Rats Male hepatocellular tumours (Kroese et al., 2001)</b>					
<b>Stochastic Models</b>					
Gamma	105.929	0.0992	2.87627	1.93232	No
Multistage-Cancer	115.595	0.0072	1.01779	0.829274	No
<b>Distribution Probability models</b>					
Logistic	115.263	0.0000	3.79007	2.9885	No
Log-logistic	102.702	0.9813	3.27836	2.45297	Yes
Probit	124.795	0.0000	3.35044	2.69852	No
Log-probit	103.125	0.7764	3.15656	2.41951	Yes
Quantal Linear	115.595	0.0072	1.01779	0.829274	No
Weibull	108.65	0.0343	2.31392	1.51824	No

This is a draft paper for discussion. It should not be quoted, cited or reproduced.

Model Fit	AIC	Goodness of Fit value $p>0.1$	BMD	BMDL	Accept model
<b>Benzo(a)pyrene Rats Female hepatocellular tumours (Kroese et al., 2001)</b>					
<b>Stochastic Models</b>					
Gamma	95.4087	0.0021	3.36729	2.39181	No
Multistage-Cancer	110.354	0.0006	1.02962	0.838056	No
<b>Distribution Probability models</b>					
Logistic	103.98	0.0000	4.16632	3.25656	No
Log-logistic	89.9219	0.6988	3.8204	2.91656	Yes
Probit	116.02	0.0000	3.53318	2.82199	No
Log-probit	91.0184	0.3344	3.59431	2.81729	Yes
Quantal Linear	110.354	0.0006	1.02962	0.838056	No
Weibull	100.175	0.0013	2.59093	1.75748	No
Model Fit	AIC	Goodness of Fit value $p>0.1$	BMD	BMDL	Accept model
<b>Benzo(a)pyrene Mice Female Forestomach (Culp et al., 1998)</b>					
<b>Stochastic Models</b>					
Gamma	103.641	0.0001	0.620945	0.32092	No
Multistage-Cancer	104.136	0.0118	0.344073	0.26908	No
<b>Distribution Probability models</b>					
Logistic	114.59	0.0000	1.06005	0.830463	No
Log-logistic	96.5611	0.3697	0.830814	0.538203	Yes
Probit	131.287	0.0000	1.08536	0.871777	No
Log-probit	97.6637	0.1332	0.764865	0.516754	Yes
Quantal Linear	104.136	0.0118	0.344073	0.26908	No
Weibull	105.234	0.0009	0.465298	0.281326	No

This is a draft paper for discussion. It should not be quoted, cited or reproduced.

<b>Model Fit</b>	<b>AIC</b>	<b>Goodness of Fit value p&gt;0.1</b>	<b>BMD</b>	<b>BMDL</b>	<b>Accept model</b>
<b>Benzo(a)pyrene Mice Female Esophagus (Culp et al., 1998)</b>					
<b>Stochastic Models</b>					
Gamma	82.8002	0.9828	5.18074	3.44144	Yes
Multistage-Cancer	82.8806	0.9632	5.42215	3.69105	Yes
<b>Distribution Probability models</b>					
Logistic	84.9608	0.4366	8.12357	6.43354	Yes
Log-logistic	82.8204	0.9778	5.16902	3.40249	Yes
Probit	84.3571	0.5550	7.22428	5.7393	Yes
Log-probit	82.7396	0.9988	4.83713	3.30642	Yes
Quantal Linear	89.8875	0.0828	2.39556	1.78064	No
Weibull	82.8713	0.9640	5.44404	3.48257	Yes
<b>Model Fit</b>	<b>AIC</b>	<b>Goodness of Fit value p&gt;0.1</b>	<b>BMD</b>	<b>BMDL</b>	<b>Accept model</b>
<b>Benzo(a)pyrene Mice Female Tongue (Culp et al., 1998)</b>					
<b>Stochastic Models</b>					
Gamma	87.0237	0.9700	5.57089	3.60939	Yes
Multistage-Cancer	87.1449	0.9184	6.06335	3.83257	Yes
<b>Distribution Probability models</b>					
Logistic	89.2723	0.4074	8.78979	7.07424	Yes
Log-logistic	87.0425	0.9656	5.54956	3.54096	Yes
Probit	88.7324	0.5067	7.89672	6.34757	Yes
Log-probit	86.927	0.9963	5.14983	3.70271	Yes
Quantal Linear	90.8632	0.2293	3.08421	2.24914	Yes
Weibull	87.0919	0.9519	5.80544	3.63733	Yes

This is a draft paper for discussion. It should not be quoted, cited or reproduced.

<b>Model Fit</b>	<b>AIC</b>	<b>Goodness of Fit value p&gt;0.1</b>	<b>BMD</b>	<b>BMDL</b>	<b>Accept model</b>
<b>Benzo(a)pyrene Mice Female Larynx (Culp et al., 1998)</b>					
<b>Stochastic Models</b>					
Gamma	54.2651	0.4608	8.93542	5.25499	Yes
Multistage-Cancer	54.2651	0.4608	8.93542	5.25499	Yes
<b>Distribution Probability models</b>					
Logistic	59.2667	0.0848	13.7498	10.1768	Yes
Log-logistic	54.0904	0.5175	8.6427	4.82291	Yes
Probit	59.0659	0.0899	13.3302	9.55097	No
Log-probit	60.2389	0.0416	13.2989	7.7081	No
Quantal Linear	54.2651	0.4608	8.93542	5.25499	Yes
Weibull	54.2651	0.4608	8.93542	5.25499	Yes
<b>Model Fit</b>					
<b>Model Fit</b>	<b>AIC</b>	<b>Goodness of Fit value p&gt;0.1</b>	<b>BMD</b>	<b>BMDL</b>	<b>Accept model</b>
<b>1,2 dichloroethane Rat Male Oral gavage Stomach Squamous cell carcinoma</b>					
<b>Stochastic Models</b>					
Gamma	73.8361	1.0000	64.473	38.7993	Yes
Multistage-Cancer	72.3504	0.7830	57.8488	37.2343	Yes
<b>Distribution Probability models</b>					
Logistic	73.8361	1.0000	64.473	38.7993	Yes
Log-logistic	73.8361	1.0000	64.4544	37.2987	Yes
Probit	74.7365	0.4303	73.2994	59.7145	Yes
Log-probit	71.8697	0.9831	64.4263	49.2839	Yes
Quantal Linear	72.3504	0.7830	57.8488	37.2343	Yes
Weibull	73.8361	1.0000	64.473	38.7993	Yes

This is a draft paper for discussion. It should not be quoted, cited or reproduced.

Model Fit	AIC	Goodness of Fit value $p > 0.1$	BMD	BMDL	Accept model
<b>1,2 dichloroethane Rat Male Oral gavage Stomach Squamous cell fibromas</b>					
<b>Stochastic Models</b>					
Gamma	71.8924	0.6970	64.0647	40.5033	Yes
Multistage-Cancer	71.8924	0.6970	64.0647	40.5033	Yes
<b>Distribution Probability models</b>					
Logistic	75.3621	0.2219	94.2187	65.9661	Yes
Log-Logistic	71.7941	0.7357	63.0168	38.3503	Yes
Probit	75.2505	0.2280	91.2338	62.8524	Yes
Log-probit	75.9387	0.1432	88.7036	51.693	Yes
Quantal Linear	71.8924	0.6970	64.0647	40.5033	Yes
Weibull	71.8924	0.6970	64.0647	40.5033	Yes
Model Fit	AIC	Goodness of Fit value $p > 0.1$	BMD	BMDL	Accept model
<b>1,2 dichloroethane Rat Female Oral gavage mammary adenocarcinomas</b>					
<b>Stochastic Models</b>					
Gamma	94.1821	0.1296	76.6654	60.4663	Yes
Multistage-Cancer	106.36	0.0008	41.5251	26.6628	No
<b>Distribution Probability models</b>					
Logistic	99.9346	0.0011	57.0587	45.8502	No
Log-logistic	94.1108	0.1354	87.428	61.3823	Yes
Probit	101.192	0.0011	52.7058	42.1531	No
Log-probit	96.1107	na	84.6439	59.6778	No
Quantal Linear	106.36	0.0008	41.5251	26.6628	No
Weibull	94.1108	0.1354	87.428	61.3823	Yes

This is a draft paper for discussion. It should not be quoted, cited or reproduced.

Model Fit	AIC	Goodness of Fit value $p > 0.1$	BMD	BMDL	Accept model
<b>1,2 dichloroethane Mice male Oral gavage Alveolar/bronchiolar adenomas</b>					
<b>Stochastic Models</b>					
Gamma	73.3032	0.9999	138.605	109.575	Yes
Multistage-Cancer	79.4921	0.0401	81.2951	55.2592	No
<b>Distribution Probability models</b>					
Logistic	73.3423	0.8866	150.445]	122.956	Yes
Log-logistic	73.3032	1.0000	141.094	109.77	Yes
Probit	73.3103	0.9515	144.721	117.431	Yes
Log-probit	73.3032	1.0000	136.096	108.505	Yes
Quantal Linear	79.4921	0.0401	81.2951	55.2592	No
Weibull	73.3032	1.0000	143.021	110.482	Yes
Model Fit	AIC	Goodness of Fit value $p > 0.1$	BMD	BMDL	Accept model
<b>1,2 dichloroethane Mice female Oral gavage Alveolar/bronchiolar adenomas</b>					
<b>Stochastic Models</b>					
Gamma	115.925	n/a	136.614	63.5157	No
Multistage-Cancer	115.243	0.2581	82.8114	57.6605	Yes
<b>Distribution Probability models</b>					
Logistic	113.934	0.9207	137.259	112.566	Yes
Log-logistic	115.925	n/a	136.474	58.7816	No
Probit	113.948	0.8772	129.169	105.032	Yes
Log-probit	115.925	n/a	137.479	92.883	No
Quantal Linear	115.243	0.2581	82.8114	57.6605	Yes
Weibull	115.925	n/a	135.834	63.5157	No

This is a draft paper for discussion. It should not be quoted, cited or reproduced.

Model Fit	AIC	Goodness of Fit value $p>0.1$	BMD	BMDL	Accept model
<b>1,2 dichloroethane Mice female Oral gavage mammary gland adenocarcinoma</b>					
<b>Stochastic Models</b>					
Gamma	90.7464	0.4137	111.454	75.8027	Yes
Multistage-Cancer	90.7464	0.4137	111.454	75.8027	Yes
<b>Distribution Probability models</b>					
Logistic	95.1012	0.0733	183.412	135.503	No
Log-logistic	90.5644	0.4567	106.366	69.1591	Yes
Probit	94.8885	0.0766	173.561	128.255	No
Log-probit	92.54	0.1628	137.324	107.552	Yes
Quantal Linear	90.7464	0.4137	111.454	75.8027	Yes
Weibull	90.7464	0.4137	111.454	75.8027	Yes
Model Fit	AIC	Goodness of Fit value $p>0.1$	BMD	BMDL	Accept model
<b>1,2 dichloroethane Male Rat inhalation subcutaneous fibromas</b>					
<b>Stochastic Models</b>					
Gamma	205.171	0.5669	16.686	8.56502	Yes
Multistage-Cancer	205.171	0.5669	16.686	8.56502	Yes
<b>Distribution Probability models</b>					
Logistic	205.47	0.4909	20.8	13.1594	Yes
Log-logistic	205.069	0.5959	15.2811	7.10833	Yes
Probit	205.433	0.4997	20.2816	12.5698	Yes
Log-probit	206.244	0.3347	25.2813	15.2032	Yes
Quantal Linear	205.171	0.5669	16.686	8.56502	Yes
Weibull	Failed to compute BMD				

This is a draft paper for discussion. It should not be quoted, cited or reproduced.

Model Fit	AIC	Goodness of Fit value p>0.1	BMD	BMDL	Accept model
<b>1,2 dichloroethane Male Rat inhalation Mammary gland fibroadenoma</b>					
<b>Stochastic Models</b>					
Gamma	46.5914	0.9150	33.1981	20.9531	Yes
Multistage-Cancer	8.9381e+045	0.0000	21.7714	9.5994e-006	No
<b>Distribution Probability models</b>					
Log-logistic	46.5935	0.9156	33.2288	20.7171	Yes
Probit	47.5493	0.6024	33.7498	26.6323	Yes
Log-probit	47.6962	0.4173	31.2754	21.453	Yes
Quantal Linear	44.9841	0.9453	37.3577	20.4141	Yes
Weibull	46.6024	0.9128	33.2596	21.0234	Yes
Model Fit	AIC	Goodness of Fit value p>0.1	BMD	BMDL	Accept model
<b>1,2 dichloroethane Male Rat inhalation Peritoneal mesothelioma</b>					
<b>Stochastic Models</b>					
Gamma	67.92	0.9982	35.6122	22.7392	Yes
Multistage-Cancer	69.92	na	35.9948	11.488	No
<b>Distribution Probability models</b>					
Logistic	66.0417	0.9431	36.9234	26.8016	Yes
Log-logistic	67.92	0.9993	35.0748	22.5495	Yes
Probit	66.0709	0.9303	37.4598	25.8796	Yes
Log-probit	67.92	0.9993	35.8087	24.5773	Yes
Quantal Linear	66.4166	0.7985	44.7696	21.4276	Yes
Weibull	67.92	0.9993	35.0211	22.7473	Yes

This is a draft paper for discussion. It should not be quoted, cited or reproduced.

<b>Model Fit</b>	<b>AIC</b>	<b>Goodness of Fit value p&gt;0.1</b>	<b>BMD</b>	<b>BMDL</b>	<b>Accept model</b>
<b>1,2 dichloroethane Female Rat inhalation subcutaneous fibromas</b>					
<b>Stochastic Models</b>					
Gamma	46.5935	0.9144	47.3391	29.8602	Yes
Multistage-Cancer	46.6971	0.8893	47.6945	29.9728	Yes
<b>Distribution Probability models</b>					
Logistic	47.6934	0.5679	48.356	39.6413	Yes
Log-logistic	46.5955	0.9150	47.3827	29.5221	Yes
Probit	47.5525	0.6015	48.1312	37.9758	Yes
Log-probit	47.705	0.4169	44.6535	30.586	Yes
Quantal Linear	44.9833	0.9455	53.2433	29.0947	Yes
Weibull	46.6044	0.9122	47.4268	29.9595	Yes
<b>Model Fit</b>	<b>AIC</b>	<b>Goodness of Fit value p&gt;0.1</b>	<b>BMD</b>	<b>BMDL</b>	<b>Accept model</b>
<b>1,2 dichloroethane Female Rat Inhalation mammary gland adenoma</b>					
<b>Stochastic Models</b>					
Gamma	144.783	0.8235	29.3994	15.7704	Yes
Multistage-Cancer	146.775	0.5382	31.823	15.7821	Yes
<b>Distribution Probability models</b>					
Logistic	144.812	0.8159	35.1191	24.6	Yes
Log-logistic	144.789	0.8209	28.4653	14.2508	Yes
Probit	144.803	0.8186	34.2678	23.2847	Yes
Log-probit	145.021	0.7446	37.6335	24.5383	Yes
Quantal Linear	144.783	0.8235	29.3996	15.7704	Yes
Weibull	144.783	0.8235	29.4004	15.7704	Yes

This is a draft paper for discussion. It should not be quoted, cited or reproduced.

Model Fit	AIC	Goodness of Fit value $p>0.1$	BMD	BMDL	Accept model
<b>1,2 dichloroethane Female Rat Inhalation mammary gland fibroadenoma</b>					
<b>Stochastic Models</b>					
Gamma	140.563	0.1168	23.741	13.0785	Yes
Multistage-Cancer	140.723	0.1090	23.8693	12.9114	Yes
<b>Distribution Probability models</b>					
Logistic	138.884	0.2621	29.1937	22.5156	Yes
Log-logistic	140.541	0.1180	23.1128	11.8357	Yes
Probit	138.824	0.2682	27.8272	21.0077	Yes
Log-probit	139.134	0.2205	28.5846	19.5705	Yes
Quantal Linear	138.79	0.2677	20.8261	12.8434	Yes
Weibull	140.587	0.1156	23.827	13.0525	Yes
Model Fit	AIC	Goodness of Fit value $p>0.1$	BMD	BMDL	Accept model
<b>1,2 dichloroethane Female Rat inhalation Mammary gland adenocarcinoma</b>					
<b>Stochastic Models</b>					
Gamma	67.92	0.1531	49.7743	38.3196	Yes
Multistage-Cancer	66.048	0.3506	52.1043	38.4956	Yes
<b>Distribution Probability models</b>					
Logistic	66.7127	0.2929	54.6538	38.6978	Yes
Log-logistic	67.92	0.1531	49.127	38.4027	Yes
Probit	66.7996	0.2891	56.1827	37.6206	Yes
Log-probit	67.92	0.1531	49.9943	37.2512	Yes
Quantal Linear	67.4053	0.2645	74.9753	33.452	Yes
Weibull	67.92	0.1531	49.0849	38.6712	Yes

This is a draft paper for discussion. It should not be quoted, cited or reproduced.

Model Fit	AIC	Goodness of Fit value $p > 0.1$	BMD	BMDL	Accept model
<b>1,2 dichloroethane Male mice inhalation liver hemangiosarcoma</b>					
<b>Stochastic Models</b>					
Gamma	107.75	0.0694	88.4721	38.3734	No
Multistage-Cancer	107.75	0.0694	88.4721	38.3734	No
<b>Distribution Probability models</b>					
Logistic	108.593	0.0682	122.134	69.4668	No
Log-logistic	107.605	0.0694	81.5841	32.6929	No
Probit	108.514	0.0688	120.101	66.2926	No
Log-probit	109.671	0.0501	142.319	71.943	No
Quantal Linear	107.75	0.0694	88.4721	38.3734	No
Weibull	107.75	0.0694	88.4721	38.3734	No
Model Fit	AIC	Goodness of Fit value $p > 0.1$	BMD	BMDL	Accept model
<b>1,2 dichloroethane Female mice inhalation Bronchiolo-alveolar adenoma</b>					
<b>Stochastic Models</b>					
Gamma	112.285	0.1640	107.634	65.5332	Yes
Multistage-Cancer	110.291	0.3815	108.828	66.8492	Yes
<b>Distribution Probability models</b>					
Logistic	110.834	0.2719	105.718	73.221	Yes
Log-logistic	112.29	0.1641	108.213	64.8208	Yes
Probit	110.906	0.2628	105.985	70.2806	Yes
Log-probit	112.275	0.1632	106.076	69.1161	Yes
Quantal Linear	111.426	0.2162	117.846	58.0709	Yes
Weibull	112.291	0.1642	108.481	65.7953	Yes

This is a draft paper for discussion. It should not be quoted, cited or reproduced.

Model Fit	AIC	Goodness of Fit value $p>0.1$	BMD	BMDL	Accept model
<b>1,2 dichloroethane Female mice inhalation Bronchiolo-alveolar carcinoma</b>					
<b>Stochastic Models</b>					
Gamma	49.7783	0.3162	165.651	101.684	Yes
Multistage-Cancer	47.7848	0.6036	163.438	102.501	Yes
<b>Distribution Probability models</b>					
Logistic	47.9151	0.5642	156.07	105.718	Yes
Log-logistic	49.7831	0.3159	163.569	101.94	Yes
Probit	47.9367	0.5559	164.092	104.55	Yes
Log-probit	47.7969	0.6091	163.523	100.216	Yes
Quantal Linear	48.2649	0.5009	281.901	114.33	Yes
Weibull	49.7843	0.3159	161.845	102.352	Yes
Model Fit	AIC	Goodness of Fit value $p>0.1$	BMD	BMDL	Accept model
<b>1,2 dichloroethane Female mice inhalation Endometrial stromal polyp</b>					
<b>Stochastic Models</b>					
Gamma	72.0637	0.1483	113.62	81.1789	Yes
Multistage-Cancer	70.106	0.3258	113.137	83.0771	Yes
<b>Distribution Probability models</b>					
Logistic	70.8401	0.1976	113.927	86.4781	Yes
Log-logistic	72.0637	0.1483	113.776	81.4052	Yes
Probit	70.9843	0.1852	115.185	83.3609	Yes
Log-probit	72.0637	0.1483	113.612	78.5198	Yes
Quantal Linear	72.208	0.1406	151.291	75.6678	Yes
Weibull	72.0637	0.1483	113.789	82.3439	Yes

This is a draft paper for discussion. It should not be quoted, cited or reproduced.

Model Fit	AIC	Goodness of Fit value $p>0.1$	BMD	BMDL	Accept model
<b>1,2 dichloroethane Female mice inhalation Mammary gland adenocarcinoma</b>					
<b>Stochastic Models</b>					
Gamma	77.5254	0.7793	114.747	74.5048	Yes
Multistage-Cancer	77.6265	0.7415	116.041	73.4721	Yes
<b>Distribution Probability models</b>					
Logistic	77.9403	0.6520	116.094	85.0443	Yes
Log-logistic	79.5254	0.4801	114.401	74.1631	Yes
Probit	78.0032	0.6376	117.023	81.8804	Yes
Log-probit	79.5254	0.4801	114.763	80.8419	Yes
Quantal Linear	78.4903	0.5419	132.916	66.2881	Yes
Weibull	79.5254	0.4801	114.387	74.505	Yes
Model Fit	AIC	Goodness of Fit value $p>0.1$	BMD	BMDL	Accept model
<b>1,2 dichloroethane Female mice inhalation Hepatocellular adenoma</b>					
<b>Stochastic Models</b>					
Gamma	72.0637	0.9866	113.616	75.9837	Yes
Multistage-Cancer	70.0904	0.9869	113.041	77.7434	Yes
<b>Distribution Probability models</b>					
Logistic	70.364	0.8652	112.186	86.0375	Yes
Log-logistic	72.0637	0.9867	113.768	75.6309	Yes
Probit	70.4414	0.8348	112.463	82.5945	Yes
Log-probit	72.0637	0.9867	113.616	77.819	Yes
Quantal Linear	71.2628	0.5847	130.524	68.0525	Yes
Weibull	72.0637	0.9867	113.782	76.2888	Yes

This is a draft paper for discussion. It should not be quoted, cited or reproduced.

Model Fit	AIC	Goodness of Fit value $p>0.1$	BMD	BMDL	Accept model
<b>1,2 dichloroethane Mice female Oral gavage uterus endometrial stomal polyp</b>					
<b>Stochastic Models</b>					
Gamma	Not able to compute model				
Multistage-Cancer	41.909	0.6652	371.026	192.62	Yes
<b>Distribution Probability models</b>					
Logistic	44.6311	0.2710	382.79	215.364	Yes
Log-logistic	41.887	0.6737	379.618	191.996	Yes
Probit	44.5819	0.2733	380.917	211.324	Yes
Log-Probit	45.0432	0.2014	359.098	190.27	Yes
Quantal Linear	41.909	0.6652	371.026	192.62	Yes
Weibull	Not able to compute model				
Model Fit	AIC	Goodness of Fit value $p>0.1$	BMD	BMDL	Accept model
<b>1,2 dichloroethane Mice female Oral gavage uterus endometrial stomal sarcoma</b>					
<b>Stochastic Models</b>					
Gamma	43.0254	0.9999	355.302	192.165	Yes
Multistage-Cancer	41.0265	0.9995	370.168	192.171	Yes
<b>Distribution Probability models</b>					
Logistic	43.4513	0.5919	275.099	205.956	Yes
Log-logistic	43.0254	1.0000	357.427	191.958	Yes
Log-probit	41.264	0.8835	267.282	191.232	Yes
Quantal Linear	41.0265	0.9995	370.168	192.171	Yes
Weibull	43.0254	1.0000	354.996	192.183	Yes

This is a draft paper for discussion. It should not be quoted, cited or reproduced.