GRP=22, NTP 1988 (No.273) male Osborne-Mendel rat Kidney adenoma+carcinoma (oral gavage)

N.total	N.52wk	N.tumors
48	47	0
49	46	2
49	34	3

DOSE METRICS
mg/kg-day

appl.dose	adj.dose*	ABioactDCVCBW34.med
0	0	0
500	357.142857	4.18241
1000	714.285714	9.40237

* adjusted doses: 500 and 1000 mg/kg-day, adjusted by factor 5days/7days (gavaged 5 days per week)

poly-3 calculation

N.52wk+	N.poly3		Max.T
47	42	col 21:68	106
46	36	col 69:117	103
34	26	col 118:166	103

MSW time to tumor model
P(dose, Time) = 1 - exp(-1 * (Time^c) * (b0 - b1*dose - b2*dose^2))
Parameter estimates

3.5671	3.57339	**c**
0	0	**b0**
9.92E-12	9.00E-10	**b1**
3.02E-15	0	**b2**

Expected number of tumors

0.00	0.00
2.93	2.89
6.20	6.25

adj appl.dose	Tumor Context	Time	poly3 wgts
0	C	27	0.0165262
0	C	53	0.125
0	C	71	0.300509
0	C	83	0.4800834
0	C	83	0.4800834
0	C	84	0.4976457
0	C	89	0.5919056
0	C	90	0.6120825
0	C	91	0.6327127
0	C	98	0.790243
0	C	99	0.8146818
0	C	100	0.8396193
0	C	101	0.8650606
0	C	102	0.8910107
0	C	102	0.8910107
0	C	105	0.9719643
0	C	106	1
0	C	106	1
0	C	106	1
0	C	106	1
0	C	106	1
0	C	106	1
0	C	106	1
0	C	106	1
0	C	106	1
0	C	106	1
0	C	106	1
0	C	106	1
0	C	106	1
0	C	106	1

				Human Equivalent Doses (BMD)				Human Equivalent Doses (BMDL)			
				inhal	inhal	oral	oral	inhal	inhal	oral	oral
Dose Metric	BMR	BMD.rat	BMDL.rat	ppm.hF	ppm.hM	mg.kgd.hF	mg.kgd.hM	ppm.hF	ppm.hM	mg.kgd.hF	mg.kgd.hM
Applied dose	0.1	576.58	241.657	576.58	576.58	163.0815	156.9162	241.657	241.657	68.35092	65.766946
	0.05	302.172	117.532	302.172	302.172	85.46715	82.2361	117.532	117.532	33.24307	31.986331
ABioactDCVCBW34.m	0.1	7.25678	3.02444	2.239948	2.241845	1.472673	1.408809	0.933553	0.934343	0.613772	0.5871556
	0.05	3.53286	1.47244	1.090487	1.09141	0.71695	0.685859	0.454498	0.454882	0.298813	0.285855

0	C	106	1
0	C	106	1
0	C	106	1
0	C	106	1
0	C	106	1
0	C	106	1
0	C	106	1
0	C	106	1
0	C	106	1
0	C	106	1
0	C	106	1
0	C	106	1
0	C	106	1
0	C	106	1
0	C	106	1
0	C	106	1
0	C	106	1
0	C	106	1
0	C	106	1
357.1428571	C	2	7.321E-06
357.1428571	C	38	0.0502157
357.1428571	C	49	0.1076655
357.1428571	C	58	0.1785551
357.1428571	C	58	0.1785551
357.1428571	C	64	0.2398989
357.1428571	C	65	0.2513208
357.1428571	C	68	0.2877498
357.1428571	C	70	0.3138936
357.1428571	C	70	0.3138936
357.1428571	C	79	0.4512005
357.1428571	C	80	0.4685525
357.1428571	I	80	1
357.1428571	C	83	0.5232661
357.1428571	C	83	0.5232661
357.1428571	C	87	0.6026235
357.1428571	C	88	0.6236434
357.1428571	C	91	0.6896242
357.1428571	I	92	1
357.1428571	C	93	0.7361006
357.1428571	C	94	0.760102
357.1428571	C	96	0.8096588
357.1428571	C	97	0.8352251
357.1428571	C	97	0.8352251
357.1428571	C	98	0.861324
357.1428571	C	99	0.887961
357.1428571	C	99	0.887961
357.1428571	C	99	0.887961
357.1428571	C	100	0.9151417
357.1428571	C	103	1
357.1428571	C	103	1
357.1428571	C	103	1
357.1428571	C	103	1
357.1428571	C	103	1

357.1428571	C	103	1
357.1428571	C	103	1
357.1428571	C	103	1
357.1428571	C	103	1
357.1428571	C	103	1
357.1428571	C	103	1
357.1428571	C	103	1
357.1428571	C	103	1
357.1428571	C	103	1
357.1428571	C	103	1
357.1428571	C	103	1
357.1428571	C	103	1
357.1428571	C	103	1
357.1428571	C	103	1
357.1428571	C	103	1
714.2857143	C	29	0.0223194
714.2857143	C	29	0.0223194
714.2857143	C	32	0.0299874
714.2857143	C	36	0.0426968
714.2857143	C	37	0.0463547
714.2857143	C	39	0.0542853
714.2857143	C	39	0.0542853
714.2857143	C	40	0.0585691
714.2857143	C	40	0.0585691
714.2857143	C	41	0.0630725
714.2857143	C	42	0.067801
714.2857143	C	46	0.0890762
714.2857143	C	50	0.1143927
714.2857143	C	52	0.1286762
714.2857143	C	52	0.1286762
714.2857143	C	54	0.1441019
714.2857143	C	58	0.1785551
714.2857143	C	58	0.1785551
714.2857143	C	59	0.1879509
714.2857143	C	62	0.2181039
714.2857143	C	69	0.3006323
714.2857143	C	76	0.4017252
714.2857143	C	78	0.4342823
714.2857143	C	80	0.4685525
714.2857143	C	82	0.5045798
714.2857143	C	84	0.5424081
714.2857143	C	85	0.5620114
714.2857143	C	86	0.5820813
714.2857143	C	88	0.6236434
714.2857143	C	95	0.7846196
714.2857143	C	96	0.8096588
714.2857143	C	99	0.887961
714.2857143	C	102	1
714.2857143	I	103	1
714.2857143	C	103	1
714.2857143	C	103	1
714.2857143	C	103	1

714.2857143	C	103	1
714.2857143	C	103	1
714.2857143	C	103	1
714.2857143	C	103	1
714.2857143	C	103	1
714.2857143	C	103	1
714.2857143	C	103	1
714.2857143	C	103	1
714.2857143	C	103	1
714.2857143	C	103	1
714.2857143	I	103	1
714.2857143	I	103	1

GRP=28, NTP 1988 (No.273) male Osborne-Mendel rat Kidney adenoma+carcinoma (oral gavage)

N.total	N.52wk	N.tumors
50	49	0
50	44	6
50	35	2

DOSE METRICS
mg/kg-day

appl.dose	adj.dose*	ABioactDCVCBW34.med
0	0	0
500	357.142857	4.638285
1000	714.285714	10.39305

* adjusted doses: 500 and 1000 mg/kg-day, adjusted by factor 5days/7days (gavaged 5 days per week)

poly-3 calculation

N.52wk+	N.poly3		Max.T
49	37	col 21:70	105
44	34	col 71:120	104
35	27	col 121:170	104

MSW time to tumor model
P(dose, Time) = 1 - exp(-1 * (Time^c) * (b0 - b1*dose - b2*dose^2))
Parameter estimates

10.0396	9.65753	**c**
0	0	**b0**
2.10E-24	8.76E-22	**b1**
0.00E+00	0	**b2**

Expected number of tumors

0.00	0.00
6.24	5.77
11.70	12.01

adj appl.dose	Tumor Context	Time	poly3 wgts
0	C	105	1
0	C	100	0.863838
0	C	88	0.588681
0	C	105	1
0	C	105	1
0	C	102	0.916711
0	C	105	1
0	C	96	0.764268
0	C	105	1
0	C	93	0.694834
0	C	105	1
0	C	93	0.694834
0	C	105	1
0	C	70	0.296296
0	C	67	0.25981
0	C	82	0.476292
0	C	105	1
0	C	105	1
0	C	100	0.863838
0	C	95	0.740633
0	C	105	1
0	C	86	0.549449
0	C	105	1
0	C	105	1
0	C	105	1

				Human Equivalent Doses (BMD)				Human Equivalent Doses (BMDL)			
				inhal	inhal	oral	oral	inhal	inhal	oral	oral
Dose Metric	BMR	BMD.rat	BMDL.rat	ppm.hF	ppm.hM	mg.kgd.hF	mg.kgd.hM	ppm.hF	ppm.hM	mg.kgd.hF	mg.kgd.hM
Applied dose	0.1	282.239	144.213	282.239	282.239	84.32109	81.13337	144.213	144.213	43.08475	41.45595
	0.05	137.404	70.1804	137.404	137.404	41.05051	39.49861	70.1804	70.1804	20.96694	20.174292
ABioactDCVCBW34.m	0.1	3.98468	2.02372	1.22995	1.230991	0.808641	0.773574	0.624661	0.62519	0.410689	0.3928788
	0.05	1.93989	0.98537	0.598785	0.599292	0.393676	0.376604	0.304154	0.304411	0.199969	0.1912967

0	C	91	0.650963
0	C	55	0.143721
0	C	67	0.25981
0	C	98	0.813037
0	C	76	0.379204
0	C	92	0.67266
0	C	100	0.863838
0	C	105	1
0	C	105	1
0	C	74	0.350048
0	C	105	1
0	C	81	0.459079
0	C	105	1
0	C	105	1
0	C	91	0.650963
0	C	101	0.890013
0	C	90	0.629738
0	C	105	1
0	C	84	0.512
0	C	55	0.143721
357	C	104	1
357	C	94	0.738386
357	C	88	0.605826
357	C	104	1
357	I	104	1
357	C	11	0.001183
357	C	84	0.526912
357	C	91	0.669922
357	C	104	1
357	C	104	1
357	C	104	1
357	I	104	1
357	I	104	1
357	C	100	0.888996
357	C	70	0.304926
357	C	104	1
357	C	78	0.421875
357	C	83	0.508317
357	C	30	0.024003
357	C	81	0.472449
357	C	68	0.279529
357	C	98	0.836716
357	C	28	0.019515
357	C	100	0.888996
357	C	9	0.000648
357	C	104	1
357	I	104	1
357	C	30	0.024003
357	I	104	1
357	C	92	0.692251
357	C	99	0.862592
357	C	86	0.565451

357	C	104	1
357	C	104	1
357	C	103	0.97143
357	C	42	0.065864
357	C	61	0.201785
357	C	104	1
357	C	80	0.455166
357	C	104	1
357	C	88	0.605826
357	C	78	0.421875
357	C	81	0.472449
357	I	98	1
357	C	89	0.626715
357	C	99	0.862592
357	C	77	0.405856
357	C	66	0.255583
357	C	104	1
357	C	98	0.836716
714	C	71	0.318182
714	C	56	0.156122
714	C	76	0.390248
714	C	66	0.255583
714	C	44	0.075728
714	C	90	0.648078
714	C	104	1
714	I	92	1
714	C	23	0.010816
714	C	104	1
714	C	12	0.001536
714	C	101	0.915934
714	C	84	0.526912
714	C	104	1
714	C	78	0.421875
714	C	104	1
714	C	104	1
714	C	104	1
714	C	46	0.086531
714	C	104	1
714	C	95	0.762203
714	C	44	0.075728
714	C	34	0.034941
714	C	28	0.019515
714	C	104	1
714	I	104	1
714	C	81	0.472449
714	C	104	1
714	C	103	0.97143
714	C	62	0.211873
714	C	55	0.147907
714	C	104	1
714	C	50	0.111125
714	C	89	0.626715

714	C	36	0.041477
714	C	77	0.405856
714	C	100	0.888996
714	C	104	1
714	C	97	0.811363
714	C	46	0.086531
714	C	3	2.4E-05
714	C	96	0.786527
714	C	38	0.048781
714	C	81	0.472449
714	C	104	1
714	C	104	1
714	C	51	0.117926
714	C	21	0.008233
714	C	45	0.08101
714	C	104	1

GRP= 25, NTP 1988 (No. 273) male Marshall rat testis interstitial cell tumor (oral gavage)

N.total	First tumor 32 wk N.32wk	N.tumors
46	46	17
48	31	21
48	38	32

DOSE METRICS

mg/kg-day appl.dose	adj.dose*	TotMetabBW34.med
0	0	0
500	357.142857	756.28
1000	714.285714	1028.26

* adjusted doses: 500 and 1000 mg/kg-day, adjusted by factor 5days/7days (gavaged 5 days per week)

poly-3 calculation

N.32wk+	N.poly3		Max.T
46	36	col 21:66	105
48	23	col 67:114	104
48	33	col 115:162	104

MSW time to tumor model

P(dose, Time) = 1 - exp(-1 * (Time^c) * (b0 - b1*dose - b2*dose^2))

Parameter estimates

3.29287	3.02251	**c**
1.463E-07	4.9927E-07	**b0**
6.09E-01	0.00E+00	**b1**
3.58E-12	4.8721E-12	**b2**

Expected number of tumors

21.78	21.34
48.00	47.21
48.00	47.96

adj appl.dose	Tumor Context	Time	poly3 wgts
0	C	105	1
0	C	88	0.588681
0	I	105	1
0	I	105	1
0	C	105	1
0	C	57	0.159977
0	C	105	1
0	C	105	1
0	I	104	1
0	C	105	1
0	I	105	1
0	I	105	1
0	I	93	1
0	C	105	1
0	C	62	0.205877
0	C	97	0.788401
0	C	104	0.9717
0	C	105	1
0	I	105	1
0	I	105	1
0	I	105	1
0	I	104	1
0	C	92	0.67266
0	I	79	1
0	C	80	0.442285
0	C	83	0.493931
0	C	105	1
0	C	105	1

				Human Equivalent Doses (BMD)				Human Equivalent Doses (BMDL)			
Dose Metric	BMR	BMD.rat	BMDL.rat	inhal ppm.hF	inhal ppm.hM	oral mg.kgd.hF	oral mg.kgd.hM	inhal ppm.hF	inhal ppm.hM	oral mg.kgd.hF	oral mg.kgd.hM
Applied dose	0.1	33.0643	6.4146	33.0643	33.0643	8.768007	8.436537	6.4146	6.4146	1.701027	1.6367203
	0.05	17.44	3.10	17.44	17.44	4.62	4.45	3.10	3.10	0.82	0.79
TotMetabBW34.med	0.1	131.593	13.9879	11.13474	11.26889	7.022998	6.722847	1.183586	1.197845	0.746521	0.7146163
	0.05	91.8174	6.82648	7.769126	7.862728	4.90021	4.690784	0.577622	0.584582	0.364323	0.3487524

0	C	59	0.177414
0	I	105	1
0	I	105	1
0	C	42	0.064
0	I	104	1
0	I	105	1
0	I	92	1
0	C	69	0.283778
0	C	105	1
0	I	85	1
0	C	53	0.128606
0	C	55	0.143721
0	C	97	0.788401
0	C	90	0.629738
0	C	105	1
0	C	105	1
0	C	49	0.10163
0	C	92	0.67266
357	I	66	1
357	I	104	1
357	C	11	0.001183
357	I	104	1
357	C	69	0.292043
357	C	104	1
357	I	65	1
357	I	104	1
357	C	10	0.000889
357	C	10	0.000889
357	C	23	0.010816
357	I	104	1
357	I	69	1
357	I	50	1
357	C	14	0.002439
357	C	17	0.004368
357	C	32	0.029131
357	C	20	0.007112
357	C	65	0.244141
357	I	57	1
357	C	11	0.001183
357	I	104	1
357	I	104	1
357	I	66	1
357	C	22	0.009466
357	C	51	0.117926
357	C	21	0.008233
357	I	104	1
357	C	51	0.117926
357	C	46	0.086531
357	I	104	1
357	C	55	0.147907

357	I	104	1
357	C	42	0.065864
357	I	104	1
357	I	68	1
357	I	66	1
357	C	38	0.048781
357	C	59	0.182581
357	C	27	0.017498
357	C	12	0.001536
357	C	7	0.000305
357	C	28	0.019515
357	I	71	1
357	C	18	0.005185
357	I	104	1
357	I	65	1
357	C	22	0.009466
714	I	58	1
714	I	57	1
714	I	68	1
714	C	25	0.013891
714	I	76	1
714	I	104	1
714	C	25	0.013891
714	C	5	0.000111
714	I	89	1
714	C	53	0.132351
714	C	24	0.012289
714	C	11	0.001183
714	I	68	1
714	C	43	0.070681
714	I	77	1
714	I	87	1
714	I	104	1
714	I	63	1
714	C	30	0.024003
714	I	83	1
714	I	55	1
714	I	72	1
714	C	26	0.015625
714	I	57	1
714	C	47	0.092298
714	I	32	1
714	C	44	0.075728
714	I	54	1
714	I	100	1
714	I	57	1
714	I	104	1
714	I	104	1
714	I	74	1
714	C	18	0.005185

714	C	16	0.003641
714	I	103	1
714	C	46	0.086531
714	I	86	1
714	C	58	0.173454
714	I	73	1
714	I	104	1
714	I	39	1
714	C	47	0.092298
714	I	82	1
714	I	98	1
714	I	83	1
714	I	34	1
714	I	104	1