

## BMA-CRM Simulator version 2.2.4

### Model

Target Toxicity Probability	0.200
Safety Stopping Probability (Upper Limit $Pr(\text{tox})$ at Lowest Dose)	0.900
Maximum Sample Size	30
Cohort Size	1
Starting Dose Level	1
Toxicity Assessment Period (Days)	42
Use Data Augmentation (DA)	False

Prior **Median** Probabilities of Toxicity at Each Dose Level:

Prob Set	1
Dose	Prob.
1	0.150
2	0.200
3	0.260
4	0.310
5	0.360

### Simulation Settings

Number of Simulated Trials	1000
Random Number Generator Seed	1052
Accrual Rate (Patients per Month)	3.38
Proportion of Toxicities Observed in Second Half of Assessment Period	0.700

### Scenarios and Results

Scenario: s1

Dose Level	True Prob(tox)	Selection Probability	# of Subjects Treated	# of Toxicities
1	0.050	0.00	2.4	0.1
2	0.080	0.03	3.1	0.2
3	0.100	0.14	4.0	0.4
4	0.150	0.20	4.9	0.7

5	0.190	0.58	14.2	2.7
<b>Probability of Early Termination: 0.05</b>				
<b>Toxicities per Trial: 4.2</b>				
<b>Total Trial Time (Months): 36.80</b>				

**Scenario: s2**

<b>Dose Level</b>	<b>True Prob(tox)</b>	<b>Selection Probability</b>	<b># of Subjects Treated</b>	<b># of Toxicities</b>
1	0.200	0.25	8.6	1.7
2	0.250	0.14	4.2	1.0
3	0.260	0.11	3.0	0.8
4	0.270	0.08	2.1	0.6
5	0.290	0.07	3.6	1.1
<b>Probability of Early Termination: 0.35</b>				
<b>Toxicities per Trial: 5.1</b>				
<b>Total Trial Time (Months): 26.29</b>				

**Scenario: s3**

<b>Dose Level</b>	<b>True Prob(tox)</b>	<b>Selection Probability</b>	<b># of Subjects Treated</b>	<b># of Toxicities</b>
1	0.200	0.38	11.5	2.2
2	0.300	0.15	4.7	1.4
3	0.300	0.05	2.5	0.7
4	0.450	0.01	1.2	0.5
5	0.500	0.00	0.8	0.4
<b>Probability of Early Termination: 0.40</b>				
<b>Toxicities per Trial: 5.3</b>				
<b>Total Trial Time (Months): 23.63</b>				

**Scenario: s4**

<b>Dose Level</b>	<b>True Prob(tox)</b>	<b>Selection Probability</b>	<b># of Subjects Treated</b>	<b># of Toxicities</b>
1	0.200	0.17	6.8	1.4
2	0.210	0.13	3.6	0.8
3	0.220	0.09	2.7	0.6
4	0.230	0.08	2.1	0.5
5	0.240	0.17	5.5	1.3
<b>Probability of Early Termination: 0.36</b>				

**Toxicities per Trial: 4.5**

**Total Trial Time (Months): 25.46**

### Scenario: s5

Dose Level	True Prob(tox)	Selection Probability	# of Subjects Treated	# of Toxicities
1	0.200	0.40	12.4	2.5
2	0.300	0.13	4.6	1.4
3	0.500	0.01	1.5	0.7
4	0.550	0.00	0.5	0.3
5	0.600	0.00	0.3	0.2
<b>Probability of Early Termination: 0.46</b>				
<b>Toxicities per Trial: 5.0</b>				
<b>Total Trial Time (Months): 21.16</b>				

### Scenario: s6

Dose Level	True Prob(tox)	Selection Probability	# of Subjects Treated	# of Toxicities
1	0.190	0.19	7.3	1.4
2	0.200	0.14	4.2	0.8
3	0.230	0.13	3.4	0.8
4	0.250	0.10	2.8	0.7
5	0.300	0.10	3.8	1.2
<b>Probability of Early Termination: 0.34</b>				
<b>Toxicities per Trial: 4.9</b>				
<b>Total Trial Time (Months): 27.31</b>				

### Scenario: s7

Dose Level	True Prob(tox)	Selection Probability	# of Subjects Treated	# of Toxicities
1	0.100	0.26	9.7	1.0
2	0.200	0.43	9.2	1.9
3	0.330	0.16	4.7	1.5
4	0.450	0.02	1.7	0.8
5	0.550	0.00	0.9	0.5
<b>Probability of Early Termination: 0.14</b>				
<b>Toxicities per Trial: 5.6</b>				
<b>Total Trial Time (Months): 33.47</b>				

**Scenario: s8**

Dose Level	True Prob(tox)	Selection Probability	# of Subjects Treated	# of Toxicities
1	0.050	0.21	9.7	0.5
2	0.200	0.55	11.7	2.4
3	0.400	0.16	4.7	1.9
4	0.500	0.00	1.3	0.7
5	0.560	0.00	0.6	0.3
<b>Probability of Early Termination: 0.07</b>				
<b>Toxicities per Trial: 5.7</b>				
<b>Total Trial Time (Months): 36.20</b>				

**Scenario: s9**

Dose Level	True Prob(tox)	Selection Probability	# of Subjects Treated	# of Toxicities
1	0.100	0.11	6.5	0.7
2	0.150	0.24	5.9	0.9
3	0.200	0.22	5.0	1.0
4	0.250	0.15	3.8	0.9
5	0.300	0.14	5.3	1.6
<b>Probability of Early Termination: 0.13</b>				
<b>Toxicities per Trial: 5.1</b>				
<b>Total Trial Time (Months): 34.85</b>				

**Scenario: s10**

Dose Level	True Prob(tox)	Selection Probability	# of Subjects Treated	# of Toxicities
1	0.100	0.18	7.9	0.8
2	0.190	0.31	7.4	1.4
3	0.200	0.27	6.0	1.2
4	0.400	0.09	3.1	1.3
5	0.500	0.01	1.5	0.7
<b>Probability of Early Termination: 0.16</b>				
<b>Toxicities per Trial: 5.4</b>				
<b>Total Trial Time (Months): 33.98</b>				

**Scenario: s11**

Dose Level	True Prob(tox)	Selection Probability	# of Subjects Treated	# of Toxicities
1	0.050	0.08	6.2	0.3
2	0.150	0.38	8.8	1.4
3	0.200	0.37	7.7	1.6
4	0.400	0.10	3.7	1.4
5	0.450	0.01	1.9	0.9
<b>Probability of Early Termination: 0.06</b>				
<b>Toxicities per Trial: 5.6</b>				
<b>Total Trial Time (Months): 39.09</b>				

**Scenario: s12**

Dose Level	True Prob(tox)	Selection Probability	# of Subjects Treated	# of Toxicities
1	0.180	0.17	6.8	1.2
2	0.190	0.14	4.0	0.8
3	0.200	0.12	3.5	0.7
4	0.240	0.12	3.1	0.7
5	0.260	0.17	5.4	1.4
<b>Probability of Early Termination: 0.28</b>				
<b>Toxicities per Trial: 4.8</b>				
<b>Total Trial Time (Months): 28.69</b>				

**Scenario: s13**

Dose Level	True Prob(tox)	Selection Probability	# of Subjects Treated	# of Toxicities
1	0.050	0.04	4.7	0.2
2	0.120	0.28	7.5	0.9
3	0.200	0.42	8.0	1.6
4	0.300	0.17	4.8	1.5
5	0.400	0.04	3.3	1.4
<b>Probability of Early Termination: 0.06</b>				
<b>Toxicities per Trial: 5.5</b>				
<b>Total Trial Time (Months): 40.04</b>				

**Scenario: s14**

Dose Level	True Prob(tox)	Selection Probability	# of Subjects Treated	# of Toxicities

1	0.050	0.01	2.9	0.1
2	0.080	0.07	3.8	0.3
3	0.120	0.21	5.2	0.6
4	0.200	0.24	5.1	1.1
5	0.220	0.41	11.2	2.4
<b>Probability of Early Termination: 0.06</b>				
<b>Toxicities per Trial: 4.6</b>				
<b>Total Trial Time (Months): 37.79</b>				

**Scenario: s15**

Dose Level	True Prob(tox)	Selection Probability	# of Subjects Treated	# of Toxicities
1	0.120	0.07	4.8	0.6
2	0.140	0.12	4.1	0.6
3	0.160	0.16	4.1	0.6
4	0.200	0.18	3.9	0.8
5	0.220	0.30	8.3	1.9
<b>Probability of Early Termination: 0.18</b>				
<b>Toxicities per Trial: 4.4</b>				
<b>Total Trial Time (Months): 32.80</b>				

**Scenario: s16**

Dose Level	True Prob(tox)	Selection Probability	# of Subjects Treated	# of Toxicities
1	0.050	0.00	2.4	0.1
2	0.060	0.03	3.6	0.2
3	0.070	0.28	7.3	0.5
4	0.200	0.50	8.7	1.8
5	0.400	0.14	6.1	2.5
<b>Probability of Early Termination: 0.06</b>				
<b>Toxicities per Trial: 5.1</b>				
<b>Total Trial Time (Months): 41.38</b>				

**Scenario: s17**

Dose Level	True Prob(tox)	Selection Probability	# of Subjects Treated	# of Toxicities
1	0.050	0.02	3.7	0.2
2	0.070	0.19	6.9	0.5

3	0.180	0.39	9.1	1.6
4	0.200	0.35	6.9	1.4
5	0.800	0.02	2.1	1.7
<b>Probability of Early Termination:</b> 0.04				
<b>Toxicities per Trial:</b> 5.4				
<b>Total Trial Time (Months):</b> 41.96				

**Scenario: s18**

Dose Level	True Prob(tox)	Selection Probability	# of Subjects Treated	# of Toxicities
1	0.050	0.02	3.3	0.2
2	0.100	0.11	4.3	0.5
3	0.150	0.18	4.7	0.7
4	0.190	0.18	4.3	0.8
5	0.200	0.45	11.7	2.3
<b>Probability of Early Termination:</b> 0.06				
<b>Toxicities per Trial:</b> 4.4				
<b>Total Trial Time (Months):</b> 36.75				

**Scenario: s19**

Dose Level	True Prob(tox)	Selection Probability	# of Subjects Treated	# of Toxicities
1	0.200	0.27	8.9	1.8
2	0.250	0.15	4.3	1.1
3	0.280	0.09	2.9	0.8
4	0.300	0.07	1.9	0.6
5	0.350	0.04	2.5	0.8
<b>Probability of Early Termination:</b> 0.39				
<b>Toxicities per Trial:</b> 5.1				
<b>Total Trial Time (Months):</b> 24.95				

**Scenario: s20**

Dose Level	True Prob(tox)	Selection Probability	# of Subjects Treated	# of Toxicities
1	0.250	0.30	10.4	2.6
2	0.300	0.09	3.6	1.1
3	0.400	0.01	1.5	0.6
4	0.500	0.00	0.6	0.3

5	0.600	0.00	0.4	0.2
<b>Probability of Early Termination:</b> 0.60				
<b>Toxicities per Trial:</b> 4.8				
<b>Total Trial Time (Months):</b> 18.63				

Elapsed time: 4 minutes, 18 seconds

## BMA-CRM BackEnd version 2.2.4

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