Supplemental Material

Shift models for dose finding in partially ordered groups

Bethany Jablonski Horton, Nolan A. Wages, and Mark R. Conaway
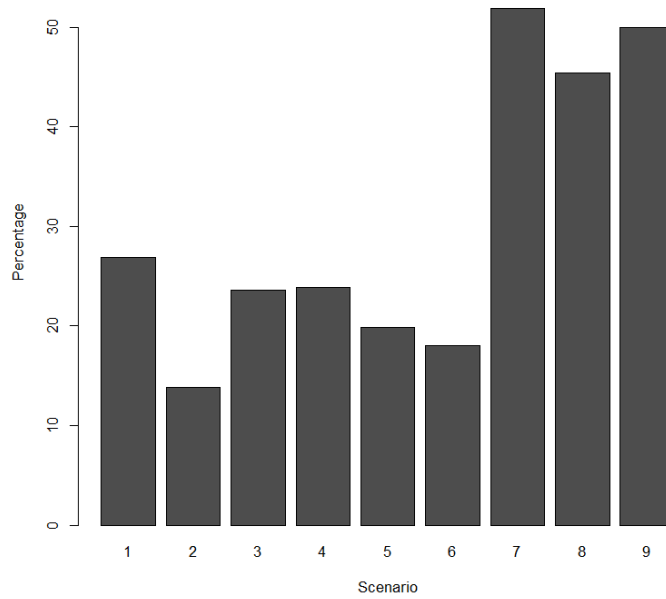

Figure S1: Independent CRM trials: simulations with at least 1 dose reversal (N=45)

1

Table S1: Independent CRM trials: magnitude of reversals

Scenario	0	1	2	3	4
		Magnitude of reversals			
1	73.1%	15.9%	8.3%	2.1%	0.6%
2	86.2%	10.2%	2.7%	0.6%	0.3%
3	76.4%	16.4%	5.9%	1.1%	0.2%
4	76.1%	16.4%	6.0%	1.2%	0.3%
5	80.1%	13.7%	4.8%	1.4%	0.0%
6	82.0%	11.2%	5.2%	1.3%	0.3%
7	48.1%	24.9%	18.8%	6.8%	1.4%
8	54.6%	25.7%	15.8%	3.4%	0.5%
9	50.0%	27.5%	14.7%	6.5%	1.3%

Table S2: Discrepancies: Percentage of trials with unequal MTDs between groups where MTD is the same (N=45)

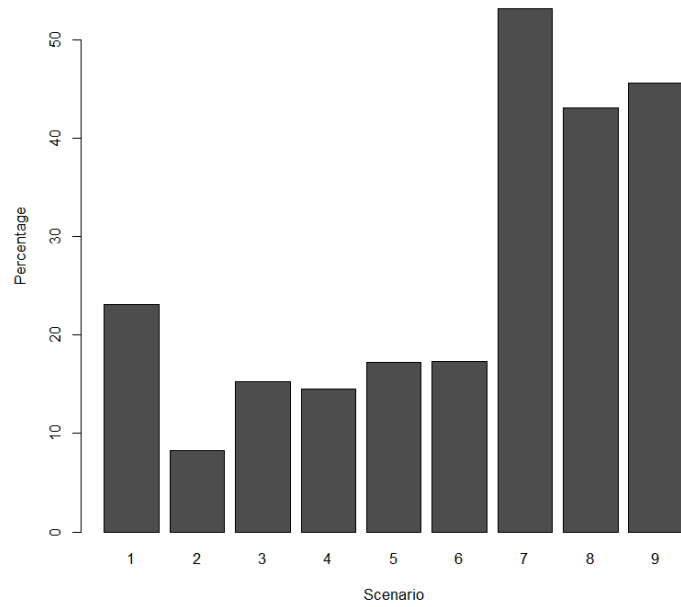| Scenario	Method	0	1	2	3	4
		Magnitude of discrepancy				
1	Proposed method	36.2%	30.1%	26.0%	7.7%	0%
	Independent CRM trials	22.6%	36.7%	27.2%	11.0%	2.5%
2	Proposed method	22.7%	27.1%	37.3%	13.2%	0%
	Independent CRM trials	12.7%	28.9%	30.4%	23.6%	4.4%
7	Proposed method	37.3%	32.1%	24.2%	6.4%	0%
	Independent CRM trials	6.5%	31.6%	38.1%	20.1%	3.7%
8	Proposed method	36.7%	36.4%	22.4%	4.5%	0%
	Independent CRM trials	10.0%	40.4%	35.5%	11.3%	2.8%
9	Proposed method	31.6%	31.6%	28.4%	8.4%	0%
	Independent CRM trials	6.0%	29.9%	37.1%	22.5%	4.5%

2

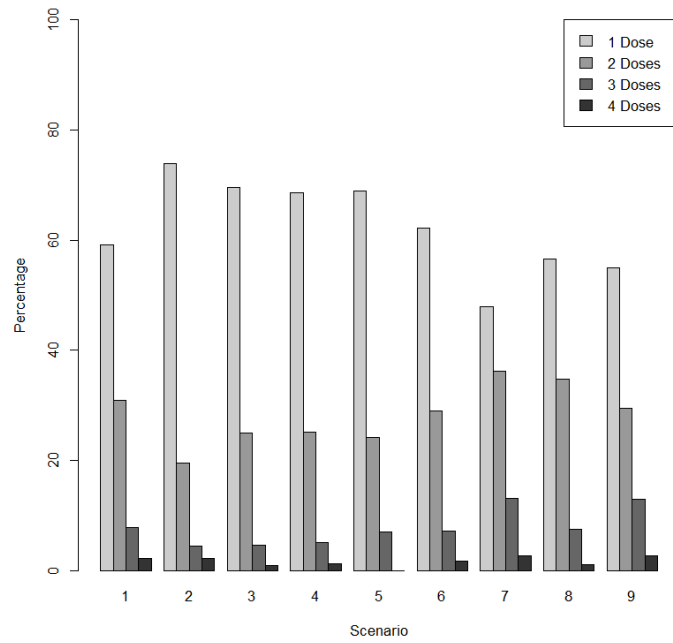Figure S2: Independent CRM trials: simulations with at least 1 dose reversal (N=72)

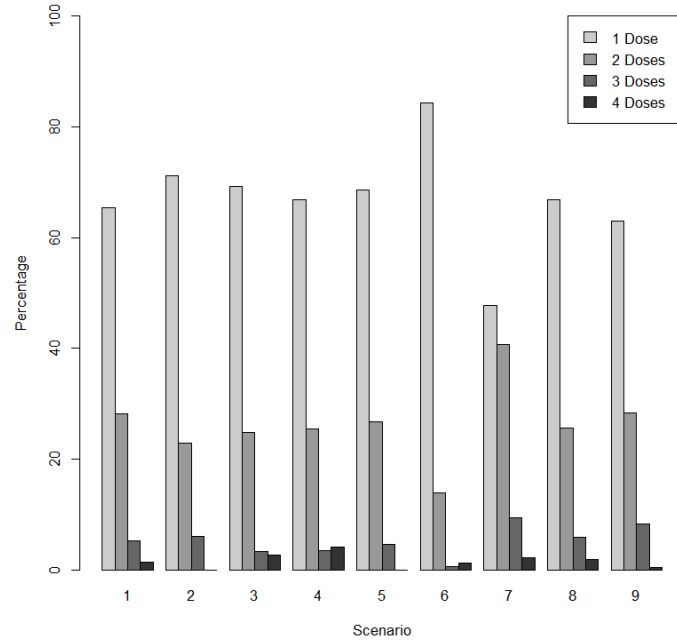Figure S3: Independent CRM trials: maximum discrepancy in MTD selection (N=45)

3

Figure S4: Independent CRM trials: maximum discrepancy in MTD selection (N=72)
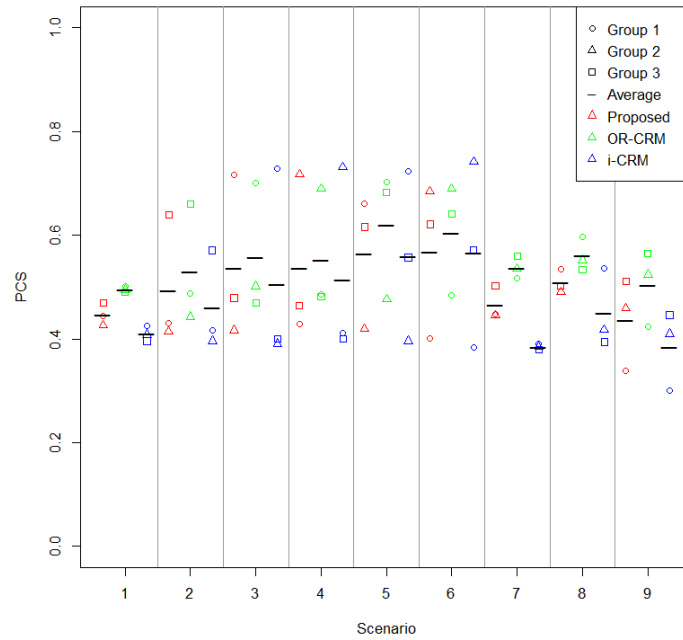

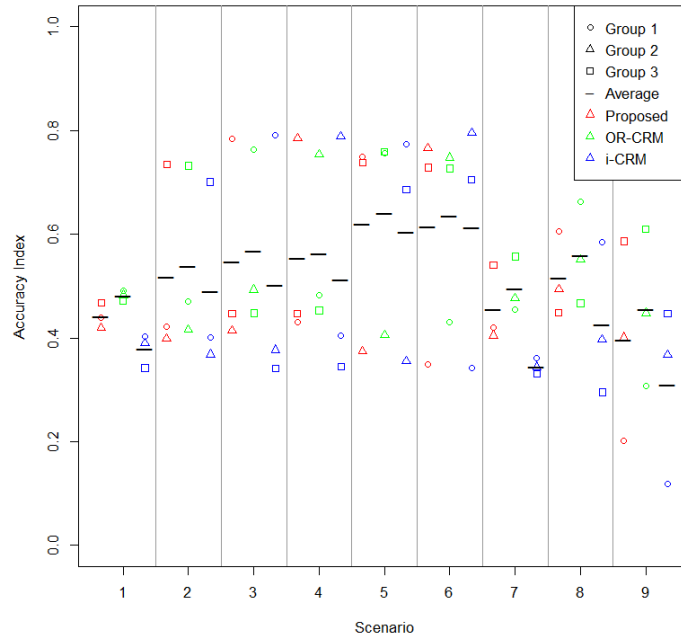Figure S5: Percentage of correct selection (N=72)

4

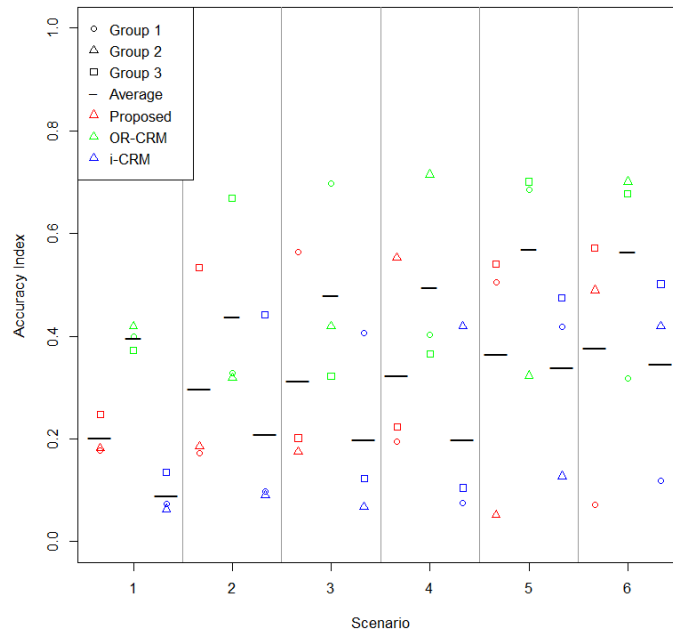Figure S6: Accuracy index for dose selection (N=72)
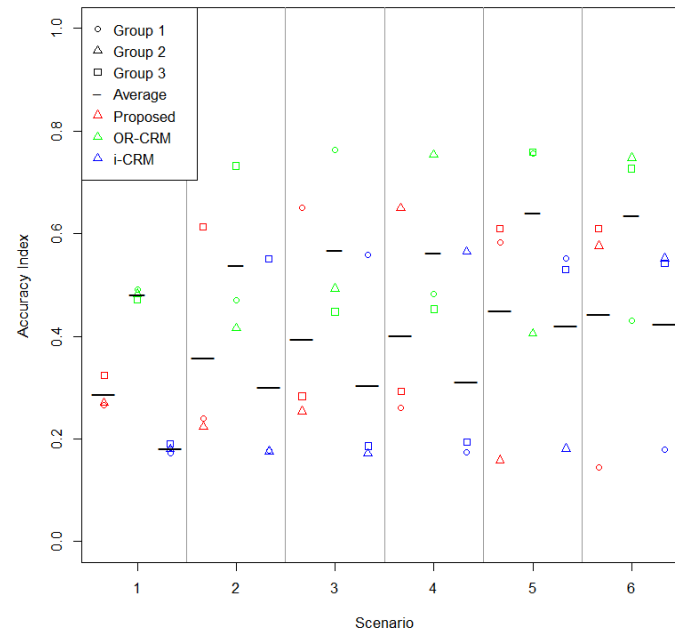

Figure S7: Accuracy index for subject allocation (N=45)

5

Figure S8: Accuracy index for subject allocation (N=72)