Comparison of Prevalence of or Risk for a Disorder in the Relatives of Probands:
Results Predicted by Klein and Riso and Results Derived from Simulated Data

Model	Relatives		Comparison of prevalence of or risk for a disorder in the relatives of probands					
			Probands					
AF	A-only	KR prediction	A-only=AB	A-only=B-only	A-only>C	AB=B-only	AB>C	B-only>C
		1. observed rates	4.9%=6.8%	4.9%=7.4%	4.9%>2.3%	6.8%=7.4%	6.8%>2.3%	7.4%>2.3%
		1. odds ratio (95% CI's)	1.4 (0.6-3.4)	1.5 (0.7-3.3)	2.2 (1.1-4.3)	1.1 (0.6-2.0)	3.1 (1.8-5.4)	3.3 (2.3-4.8)
		2. observed rates	7.7%=9.1%	7.7%=8.5%	7.7%>4.7%	9.1%=8.5%	9.1%>4.7%	8.5%>4.7%
		2. odds ratio (95% CI's)	1.2 (0.7-2.1)	1.1 (0.7-1.8)	1.7 (1.2-2.4)	1.1 (0.6-1.9)	2.0 (1.3-3.2)	1.9 (1.3-2.7)
	AB	KR prediction	A-only=AB	A-only=B-only[1]	A-only>C	AB=B-only	AB>C[2]	B-only>C[2]
		1. observed rates	11.6%=7.3%	11.6%>7.0%	11.6%>2.3%	7.3%=7.0%	7.3%>2.3%	7.0%>2.3%
		1. odds ratio (95% CI's)	1.7 (0.8-3.3)	1.8 (1.0-3.0)	5.6 (3.5-8.9)	1.0 (0.6-2.0)	3.4 (1.9-5.8)	3.2 (2.2-4.7)
		2. observed rates	5.1%=4.3%	5.1%=3.4%	5.1%>2.6%	4.3%=3.4%	4.3%=2.6%	3.4%=2.6%
		2. odds ratio (95% CI's)	1.2 (0.6-2.6)	1.5 (0.8-3.1)	2.0 (1.3-3.2)	1.3 (0.6-3.0)	1.7 (0.9-3.3)	1.3 (0.8-2.4)
	B-only	KR prediction	A-only=AB	A-only=B-only	A-only>C[2]	AB=B-only	AB>C[2]	B-only>C[2]
		1. observed rates	14.2%=17.3%	14.2%=12.6%	14.2%>5.3%	17.3%=12.6%	17.3%>5.3%	12.6%>5.3%
		1. odds ratio (95% CI's)	1.3 (0.8-2.1)	1.2 (0.7-1.8)	3.0 (2.0-4.4)	1.5 (1.0-2.2)	3.7 (2.6-5.3)	2.6 (2.0-3.4)
		2. observed rates	6.6%=6.8%	6.6%=6.1%	6.6%=5.0%	6.8%=6.1%	6.8%=5.0%	6.1%=5.0%
		2. odds ratio (95% CI's)	1.0 (0.5-1.9)	1.1 (0.6-1.9)	1.3 (0.9-2.0)	1.1 (0.6-2.1)	1.4 (0.8-2.3)	1.2 (0.8-1.9)
RM	A-only	KR prediction	A-only>AB[1,2]	A-only>B-only	A-only>C	AB>B-only[2]	AB>C	B-only=C
		1. observed rates	9.3%=5.8%	9.3%>1.8%	9.3%>2.2%	5.8%>1.8%	5.8%>2.2%	2.2%=1.8%
		1. odds ratio (95% CI's)	1.7 (0.8-3.5)	5.5 (2.4-12.7)	4.7 (2.9-7.5)	3.3 (1.3-8.1)	2.8 (1.5-5.1)	1.2 (0.6-2.4)
		2. observed rates	10.9%=8.2%	10.9%>5.5%	10.9%>4.7%	8.2%=5.5%	8.2%>4.7%	5.5%=4.7%
		2. odds ratio (95% CI's)	1.4 (0.8-2.4)	2.1 (1.2-3.6)	2.5 (1.8-3.4)	1.5 (0.8-2.9)	1.8 (1.1-2.9)	1.2 (0.8-1.9)
	AB	KR prediction	A-only=AB[1]	A-only=B-only[1]	A-only=C[2]	AB=B-only	AB=C[1,2]	B-only=C[1,2]
		1. observed rates	2.9%<10.1%	2.9%<9.3%	2.9%=2.4%	10.1%=9.3%	10.1%>2.4%	9.3%>2.4%
		1. odds ratio (95% CI's)	3.8 (1.5-9.6)	3.5 (1.5-8.4)	1.2 (0.5-2.7)	1.1 (0.6-1.9)	4.5 (2.9-7.2)	4.2 (3.0-5.8)

			A-only vs AB	A-only vs B-only	A-only vs C	AB vs B-only	AB vs C	B-only vs C
		2. observed rates	4.8%=5.3%	4.8%=7.9%	2.7%<4.8%	5.3%=7.9%	5.3%>2.7%	7.9%>2.7%
		2. odds ratio (95% CI's)	1.1 (0.5-2.3)	1.7 (1.0-3.0)	1.9 (1.2-3.0)	1.5 (0.8-3.0)	2.1 (1.1-3.7)	3.2 (2.1-4.7)
	B-only	KR prediction	A-only<AB	A-only<B-only	A-only=C	AB<B-only[1]	AB>C	B-only>C
		1. observed rates	6.8%<18.7%	6.8%<22.2%	6.8%=5.0%	18.7%=22.2%	18.7%>5.0%	22.2%>5.0%
		1. odds ratio (95% CI's)	3.1 (1.7-5.8)	3.9 (2.2-6.8)	1.4 (0.8-2.4)	1.2 (0.8-1.8)	4.4 (3.1-6.1)	5.5 (4.4-6.8)
		2. observed rates	3.7%<9.4%	3.7%<18.0%	3.7%=3.9%	9.4%<18.0%	9.4%>3.9%	18.0%>3.9%
		2. odds ratio (95% CI's)	2.7 (1.4-5.3)	5.8 (3.3-10.2)	1.1 (0.6-1.8)	2.1 (1.3-3.5)	2.5 (1.6-4.0)	5.4 (4.1-7.0)
RMA	A-only	KR prediction	A-only=AB	A-only>B-only	A-only>C	AB>B-only	AB>C	B-only=C
		1. observed rates	10.5%=9.2%	10.5%>2.7%	10.5%>2.3%	9.2%>2.7%	9.2%>2.3%	2.7%=2.3%
		1. odds ratio (95% CI's)	1.2 (0.6-2.3)	4.2 (2.0-8.8)	5.0 (3.0-8.3)	3.6 (1.7-7.6)	4.3 (2.6-7.1)	1.2 (0.7-2.2)
		2. observed rates	12.2%=10.7%	12.2%>4.3%	12.2%>4.8%	10.7%>4.3%	10.7%>4.8%	4.3%=4.8%
		2. odds ratio (95% CI's)	1.2 (0.7-1.9)	3.1 (1.7-5.5)	2.8 (2.0-3.7)	2.7 (1.4-5.2)	2.4 (1.5-3.7)	1.1 (0.7-1.9)
	AB	KR prediction	A-only=AB	A-only>B-only[2]	A-only>C	AB>B-only	AB>C	B-only=C[1,2]
		1. observed rates	14.9%=11.7%	14.9%>3.8%	14.9%>2.3%	11.7%>3.8%	11.7%>2.3%	3.8%>2.3%
		1. odds ratio (95% CI's)	1.3 (0.7-2.4)	4.4 (2.3-8.3)	7.6 (4.9-11.7)	3.3 (1.8-6.3)	5.8 (3.7-9.0)	1.7 (1.0-2.9)
		2. observed rates	7.2%=9.1%	7.2%=4.8%	7.2%>2.6%	9.1%>4.8%	9.1%>2.6%	4.8%>2.6%
		2. odds ratio (95% CI's)	1.3 (0.7-2.3)	1.5 (0.8-2.8)	2.9 (2.0-4.4)	2.0 (1.0-3.8)	3.8 (2.4-6.2)	1.9 (1.2-3.2)
	B-only	KR prediction	A-only=AB[2]	A-only<B-only	A-only=C	AB<B-only	AB=C[2]	B-only>C
		1. observed rates	3.8%=4.6%	3.8%<23.8%	3.8%=4.6%	4.6%<23.8%	4.6%=4.6%	23.8%>4.6%
		1. odds ratio (95% CI's)	1.2 (0.4-3.5)	8.0 (3.5-18.5)	1.2 (0.5-2.8)	6.5 (3.2-13.1)	1.0 (0.5-2.0)	6.4 (5.2-8.0)
		2. observed rates	4.0%<8.3%	4.0%<17.2%	4.0%=4.0%	8.3%<17.2%	8.3%>4.0%	17.2%>4.0%
		2. odds ratio (95% CI's)	2.2 (1.1-4.4)	5.0 (2.9-8.8)	1.0 (0.6-1.7)	2.3 (1.3-4.0)	2.1 (1.3-3.5)	4.9 (3.8-6.5)
RMB	A-only	KR prediction	A-only>AB	A-only>B-only	A-only>C	AB=B-only	AB=C	B-only=C
		1. observed rates	10.7%>2.3%	10.7%>2.3%	10.7%>2.1%	2.3%=2.3%	2.3%=2.1%	2.3%=2.1%
		1. odds ratio (95% CI's)	5.0 (1.9-13.5)	5.0 (2.3-10.8)	5.7 (3.6-9.2)	1.0 (0.3-3.0)	1.1 (0.5-2.8)	1.1 (0.6-2.2)
		2. observed rates	14.6%>5.4%	14.6%>5.1%	14.6%>4.5%	5.4%=5.1%	5.4%=4.5%	5.1%=4.5%
		2. odds ratio (95% CI's)	3.0 (1.5-5.8)	3.2 (1.9-5.5)	3.6 (2.7-4.8)	1.1 (0.5-2.3)	1.2 (0.6-2.2)	1.1 (0.7-1.8)
	AB	KR prediction	A-only<AB[1]	A-only<B-only	A-only=C	AB=B-only[1]	AB>C	B-only>C
		1. observed rates	4.2%=4.6%	4.2%<10.7%	4.2%=2.4%	4.6%<10.7%	4.6%>2.4%	10.7%>2.4%
		1. odds ratio (95% CI's)	1.1 (0.4-2.8)	2.7 (1.3-5.9)	1.8 (0.9-3.7)	2.5 (1.2-5.0)	2.0 (1.0-3.8)	4.9 (3.6-6.8)

		2. observed rates	1.5%<10.6%	1.5%<7.7%	1.5%=2.3%	10.6%=7.7%	10.6%>2.3%	7.7%>2.3%
		2. odds ratio (95% CI's)	7.9 (3.2-19.8)	5.5 (2.3-13.5)	1.6 (0.7-3.5)	1.4 (0.8-2.6)	5.1 (3.2-8.1)	3.6 (2.4-5.4)
	B-only	KR prediction	A-only<AB	A-only<B-only	A-only=C	AB=B-only	AB>C	B-only>C
		1. observed rates	4.2%<20.2%	4.2%<23.3%	4.2%=5.0%	20.2%=23.3%	20.2%>5.0%	23.3%>5.0%
		1. odds ratio (95% CI's)	5.8 (2.7-12.5)	7.0 (3.3-14.5)	1.2 (0.6-2.4)	1.2 (0.8-1.7)	4.8 (3.5-6.7)	5.8 (4.7-7.3)
		2. observed rates	4.1%<14.2%	4.1%<19.8%	4.1%=4.2%	14.2%=19.8%	14.2%>4.2%	19.8%>4.2%
		2. odds ratio (95% CI's)	3.9 (2.1-7.2)	5.8 (3.4-9.9)	1.0 (0.6-1.7)	1.5 (1.0-2.3)	3.8 (2.6-5.6)	5.6 (4.3-7.3)
EM	A-only	KR prediction	A-only>AB[1,2]	A-only>B-only	A-only>C	AB>B-only	AB>C	B-only=C
		1. observed rates	8.7%=6.8%	8.7%>2.2%	8.7%>2.1%	6.8%>2.2%	6.8%>2.1%	2.2%=2.1%
		1. odds ratio (95% CI's)	1.3 (0.6-2.7)	4.3 (1.9-9.4)	4.4 (2.7-7.4)	3.3 (1.5-7.5)	3.4 (2.0-5.9)	1.0 (0.5-2.0)
		2. observed rates	11.2%=9.7%	11.2%>5.1%	11.2%>4.9%	9.7%>5.1%	9.7%>4.9%	5.1%=4.9%
		2. odds ratio (95% CI's)	1.2 (0.7-2.0)	2.3 (1.4-4.0)	2.4 (1.8-3.3)	2.0 (1.1-3.7)	2.1 (1.3-3.2)	1.0 (0.7-1.6)
	AB	KR prediction	A-only=AB	A-only=B-only	A-only=C[1,2]	AB=B-only[1]	AB=C[1,2]	B-only=C[1,2]
		1. observed rates	9.2%=11.7%	9.2%=6.7%	9.2%>2.0%	11.7%>6.7%	11.7%>2.0%	6.7%>2.0%
		1. odds ratio (95% CI's)	1.3 (0.7-2.4)	1.4 (0.8-2.6)	4.9 (3.0-8.1)	1.9 (1.1-3.2)	6.4 (4.2-9.9)	3.5 (2.4-5.1)
		2. observed rates	5.9%=9.3%	5.9%=7.7%	5.9%>2.3%	9.3%=7.7%	9.3%>2.3%	7.7%>2.3%
		2. odds ratio (95% CI's)	1.6 (0.9-3.0)	1.3 (0.8-2.3)	2.7 (1.7-4.1)	1.2 (0.7-2.2)	4.3 (2.7-6.9)	3.5 (2.4-5.2)
	B-only	KR prediction	A-only<AB	A-only<B-only	A-only=C	AB<B-only[1]	AB>C	B-only>C
		1. observed rates	2.6%<16.4%	2.6%<18.7%	2.6%=5.0%	16.4%=18.7%	16.4%>5.0%	18.7%>5.0%
		1. odds ratio (95% CI's)	7.4 (2.8-19.1)	8.6 (3.5-21.6)	2.0 (0.8-4.8)	1.2 (0.8-1.8)	3.7 (2.6-5.3)	4.4 (3.5-5.5)
		2. observed rates	4.0%<8.1%	4.0%<17.1%	4.0%=4.3%	8.1%<17.1%	8.1%>4.3%	17.1%>4.3%
		2. odds ratio (95% CI's)	2.1 (1.0-4.2)	4.9 (2.8-8.6)	1.1 (0.6-1.8)	2.4 (1.4-4.0)	2.0 (1.2-3.2)	4.6 (3.5-6.0)
EMA	A-only	KR prediction	A-only=AB	A-only>B-only	A-only>C	AB>B-only	AB>C	B-only=C
		1. observed rates	7.6%=7.8%	7.6%>2.0%	7.6%>2.3%	7.8%>2.0%	7.8%>2.3%	2.0%=2.3%
		1. odds ratio (95% CI's)	1.0 (0.5-2.2)	4.0 (1.7-9.5)	3.4 (2.0-6.0)	4.1 (1.8-9.6)	3.5 (2.0-6.1)	1.2 (0.6-2.3)
		2. observed rates	9.3%=12.2%	9.3%>4.6%	9.3%>4.9%	12.2%>4.6%	12.2%>4.9%	4.6%=4.9%
		2. odds ratio (95% CI's)	1.4 (0.8-2.3)	2.1 (1.2-3.8)	2.0 (1.4-2.8)	2.9 (1.6-5.4)	2.7 (1.8-4.1)	1.1 (0.7-1.7)
	AB	KR prediction	A-only=AB	A-only>B-only[2]	A-only>C	AB>B-only	AB>C	B-only=C[2]
		1. observed rates	8.6%=12.3%	8.6%>3.3%	8.6%>2.5	12.3%>3.3%	12.3%>2.5%	3.3%=2.5%
		1. odds ratio (95% CI's)	1.5 (0.8-2.9)	2.8 (1.3-5.7)	3.7 (2.2-6.3)	4.1 (2.1-8.1)	5.6 (3.6-8.6)	1.3 (0.8-2.3)

			A-only/AB	A-only/B-only	A-only/C	AB/B-only	AB/C	B-only/C
		2. observed rates	5.3%=8.5%	5.3%=4.6%	5.3%>2.5%	8.5%>4.6%	8.5%>2.5%	4.6%>2.5%
		2. odds ratio (95% CI's)	1.7 (0.9-3.1)	1.2 (0.6-2.2)	2.2 (1.4-3.4)	1.9 (1.0-3.8)	3.6 (2.2-5.9)	1.8 (1.1-3.0)
	B-only	KR prediction	A-only=AB	A-only<B-only	A-only=C	AB<B-only	AB=C	B-only>C
		1. observed rates	4.5%=7.8%	4.5%<24.2%	4.5%=5.2%	7.8%<24.2%	7.8%=5.2%	24.2%>5.2%
		1. odds ratio (95% CI's)	1.8 (0.7-4.3)	6.8 (3.2-14.1)	1.2 (0.6-2.4)	3.8 (2.2-6.6)	1.5 (0.9-2.6)	5.8 (4.7-7.2)
		2. observed rates	4.4%=4.4%	4.4%<17.9%	4.4%=4.2%	4.4%<17.9%	4.4%=4.2%	17.9%>4.2%
		2. odds ratio (95% CI's)	1.0 (0.4-2.3)	4.7 (2.8-7.9)	1.1 (0.7-1.7)	4.7 (2.3-9.6)	1.1 (0.5-2.1)	5.0 (3.8-6.4)
EMB	A-only	KR prediction	A-only>AB[2]	A-only>B-only	A-only>C	AB=B-only	AB=C[2]	B-only=C
		1. observed rates	11.5%>2.9%	11.5%>1.2%	11.5%>2.3%	2.9%=1.2%	2.9%=2.3%	1.2%=2.3%
		1. odds ratio (95% CI's)	4.3 (1.6-11.6)	10.4 (3.9-27.8)	5.5 (3.6-8.6)	2.4 (0.7-8.3)	1.3 (0.5-3.1)	1.9 (0.8-4.6)
		2. observed rates	10.4%=7.6%	10.4%>5.4%	10.4%>4.4%	7.6%=5.4%	7.6%>4.4%	5.4%=4.4%
		2. odds ratio (95% CI's)	1.4 (0.8-2.6)	2.0 (1.2-3.4)	2.5 (1.8-3.5)	1.4 (0.7-2.8)	1.8 (1.0-3.1)	1.2 (0.8-1.9)
	AB	KR prediction	A-only<AB	A-only<B-only	A-only=C	AB=B-only[1,2]	AB>C	B-only>C
		1. observed rates	1.0%<18.5%	1.0%<9.7%	1.0%=2.3%	18.5%>9.7%	18.5%>2.3%	9.7%>2.3%
		1. odds ratio (95% CI's)	21.8 (5.2-91.9)	10.3 (2.5-43.2)	2.2 (0.5-9.0)	2.1 (1.3-3.4)	9.9 (6.7-14.4)	4.7 (3.3-6.6)
		2. observed rates	2.7%<17.6%	2.7%<10.6%	2.7%=2.3%	17.6%>10.6%	17.6%>2.3%	10.6%>2.3%
		2. odds ratio (95% CI's)	7.7 (3.9-15.4)	4.3 (2.2-8.4)	1.2 (0.6-2.2)	1.8 (1.1-2.8)	9.1 (6.3-13.3)	5.1 (3.6-7.1)
	B-only	KR prediction	A-only<AB	A-only<B-only	A-only=C	AB=B-only[1]	AB>C	B-only>C
		1. observed rates	5.4%<23.4%	5.4%<15.8%	5.4%=5.3%	23.4%>15.8%	23.4%>5.3%	15.8%>5.3%
		1. odds ratio (95% CI's)	5.3 (2.7-10.6)	3.3 (1.7-6.3)	1.0 (0.6-1.9)	1.6 (1.1-2.4)	5.5 (3.9-7.6)	3.4 (2.6-4.4)
		2. observed rates	4.8%<18.4%	4.8%<13.1%	4.8%=4.6%	18.4%=13.1%	18.4%>4.6%	13.1%>4.6%
		2. odds ratio (95% CI's)	4.5 (2.5-7.8)	3.0 (1.8-5.0)	1.1 (0.7-1.7)	1.5 (1.0-2.3)	4.7 (3.3-6.7)	3.1 (2.4-4.2)
TD	A-only	KR prediction	A-only>AB	A-only>B-only	A-only>C	AB=B-only	AB=C	B-only=C
		1. observed rates	12.3%>3.8%	12.3%>1.6%	12.3%>2.4%	3.8%=1.6%	3.8=2.4%	1.6%=2.4%
		1. odds ratio (95% CI's)	3.5 (1.5-8.1)	8.5 (3.4-21.3)	5.8 (3.6-9.1)	2.4 (0.8-7.0)	1.6 (0.8-3.4)	1.5 (0.6-3.3)
		2. observed rates	15.5%>6.8%	15.5%>3.7%	15.5%>4.6%	6.8%=3.7%	6.8%=4.6%	3.7%=4.6%
		2. odds ratio (95% CI's)	2.5 (1.4-4.7)	4.7 (2.6-8.6)	3.8 (2.9-5.1)	1.9 (0.9-4.1)	1.5 (0.9-2.7)	1.2 (0.7-2.1)
	AB	KR prediction	A-only<AB	A-only=B-only	A-only=C	AB>B-only	AB>C	B-only=C[1,2]
		1. observed rates	2.4%<22.1%	2.4%=4.2%	2.4%=2.2%	22.1%>4.2%	22.1%>2.2%	4.2%>2.2%
		1. odds ratio (95% CI's)	11.6 (4.1-32.7)	1.8 (0.6-5.5)	1.1 (0.4-2.9)	6.4 (3.6-11.5)	12.5 (9.0-17.4)	2.0 (1.2-3.3)

		2. observed rates	2.7%<23.5%	2.7%=4.2%	2.7%=2.2%	23.5%>4.2%	23.5%>2.2%	4.2%>2.2%
		2. odds ratio (95% CI's)	11.1 (5.5-22.2)	1.6 (0.7-3.6)	1.2 (0.6-2.3)	6.9 (3.9-12.5)	13.6 (9.7-19.0)	2.0 (1.2-3.3)
	B-only	KR prediction	A-only=AB	A-only<B-only	A-only=C	AB<B-only	AB=C[1,2]	B-only>C
		1. observed rates	6.8%=9.9%	6.8%<25.5%	6.8%=4.6%	9.9%<25.5%	9.9%>4.6%	25.5%>4.6%
		1. odds ratio (95% CI's)	1.5 (0.7-3.1)	4.7 (2.5-8.7)	1.5 (0.8-2.7)	3.1 (1.9-5.1)	2.2 (1.4-3.5)	7.0 (5.6-8.8)
		2. observed rates	5.8%=8.2%	5.8%<18.5%	5.8%=3.9%	8.2%<18.5%	8.2%>3.9%	18.5%>3.9%
		2. odds ratio (95% CI's)	1.5 (0.8-2.9)	3.7 (2.3-6.1)	1.5 (1.0-2.4)	2.5 (1.4-4.5)	2.2 (1.3-3.7)	5.6 (4.3-7.3)
CL	A-only	KR prediction	A-only=AB	A-only>B-only[2]	A-only>C	AB>B-only[2]	AB>C	B-only>C[1,2]
		1. observed rates	9.5%=9.1%	9.5%>1.9%	9.5%>2.4%	9.1%>1.9%	9.1%>2.4%	1.9%=2.4%
		1. odds ratio (95% CI's)	1.0 (0.5-2.1)	5.3 (2.3-12.3)	4.3 (2.7-7.0)	5.1 (2.1-12.3)	4.1 (2.4-7.2)	1.2 (0.6-2.5)
		2. observed rates	8.9%=11.1%	8.9%=6.6%	8.9%>5.3%	11.1%=6.6%	11.1%>5.3%	6.6%=5.3%
		2. odds ratio (95% CI's)	1.3 (0.7-2.2)	1.4 (0.8-2.3)	1.8 (1.3-2.5)	1.8 (1.0-3.2)	2.3 (1.4-3.5)	1.3 (0.8-1.9)
	AB	KR prediction	A-only=AB[1,2]	A-only=B-only[1,2]	A-only>C[1]	AB=B-only[1]	AB>C	B-only>C
		1. observed rates	4.0%<16.3%	4.0%<8.8%	4.0%=2.1%	16.3%>8.8%	16.3%>2.1%	8.8%>2.1%
		1. odds ratio (95% CI's)	4.6 (2.1-10.4)	2.3 (1.0-5.0)	2.0 (1.0-4.1)	2.0 (1.2-3.4)	9.2 (6.0-14.0)	4.5 (3.1-6.5)
		2. observed rates	3.9%<13.6%	3.9%<10.0%	3.9%>2.0%	13.6%=10.0%	13.6%>2.0%	10.0%>2.0%
		2. odds ratio (95% CI's)	3.9 (2.1-7.2)	2.7 (1.5-4.9)	2.0 (1.2-3.3)	1.4 (0.8-2.4)	7.7 (5.0-11.7)	5.4 (3.8-7.8)
	B-only	KR prediction	A-only<AB	A-only<B-only	A-only>C[1,2]	AB=B-only[1]	AB>C	B-only>C
		1. observed rates	5.0%<16.3%	5.0%<27.2%	5.0%=5.1%	16.3%<27.2%	16.3%>5.1%	27.2%>5.1%
		1. odds ratio (95% CI's)	3.7 (1.7-7.8)	7.1 (3.7-13.8)	1.0 (0.5-2.0)	1.9 (1.2-3.0)	3.6 (2.4-5.4)	6.9 (5.6-8.5)
		2. observed rates	4.8%<16.7%	4.8%<20.4%	4.8%=4.7%	16.7%=20.4%	16.7%>4.7%	4.7%<20.4%
		2. odds ratio (95% CI's)	4.0 (2.3-7.0)	5.1 (3.1-8.4)	1.0 (0.6-1.6)	1.3 (0.8-1.9)	4.1 (2.8-5.9)	5.2 (4.0-6.7)
AB	A-only	KR prediction	A-only=AB	A-only=B-only[2]	A-only>C	AB=B-only[2]	AB>C	B-only>C[1,2]
		1. observed rates	7.1%=6.3%	7.1%=3.7%	7.1%>2.4%	6.3%=3.7%	6.3%>2.4%	3.7%=2.4%
		1. odds ratio (95% CI's)	1.1 (0.5-2.5)	2.0 (0.9-4.2)	3.1 (1.7-5.6)	1.8 (0.8-3.8)	2.8 (1.5-5.0)	1.6 (0.9-2.6)
		2. observed rates	12.3%=8.9%	12.3%>4.6%	12.3%>4.8%	8.9%>4.6%	8.9%>4.8%	4.6%=4.8%
		2. odds ratio (95% CI's)	1.4 (0.8-2.5)	2.9 (1.7-5.2)	2.8 (2.0-3.8)	2.0 (1.0-3.9)	1.9 (1.2-3.0)	1.1 (0.6-1.7)
	AB	KR prediction	A-only=AB[2]	A-only=B-only[2]	A-only>C	AB=B-only[2]	AB>C	B-only>C
		1. observed rates	11.9%=11.9%	11.9%=7.3%	11.9%>1.9%	11.9%=7.3%	11.9%>1.9%	7.3%>1.9%
		1. odds ratio (95% CI's)	1.0 (0.5-1.8)	1.7 (1.0-3.0)	7.0 (4.4-11.1)	1.7 (1.0-3.0)	7.0 (4.4-11.0)	4.1 (2.8-6.0)

		2. observed rates	4.7%<14.0%	4.7%<8.3%	4.7%>2.3%	14.0%>8.3%	14.0%>2.3%	8.3%>2.3%
		2. odds ratio (95% CI's)	3.3 (1.8-5.9)	1.8 (1.0-3.3)	2.1 (1.3-3.5)	1.8 (1.1-3.0)	7.0 (4.8-10.4)	3.9 (2.6-5.8)
	B-only	KR prediction	A-only=AB[1,2]	A-only=B-only[1,2]	A-only=C	AB=B-only[2]	AB=C[1,2]	B-only=C[1,2]
		1. observed rates	5.6%<19.2%	5.6%<18.8%	5.6%=5.0%	19.2%=18.8%	19.2%>5.0%	18.8%>5.0%
		1. odds ratio (95% CI's)	4.0 (2.0-8.3)	3.9 (2.0-7.7)	1.1 (0.6-2.1)	1.0 (0.7-1.5)	4.5 (3.2-6.4)	4.4 (3.5-5.6)
		2. observed rates	4.5%<10.4%	4.5%<16.1%	4.5%=4.5%	10.4%<16.1%	10.4%>4.5%	16.1%>4.5%
		2. odds ratio (95% CI's)	2.5 (1.3-4.7)	4.1 (2.4-7.1)	1.0 (0.6-1.7)	1.6 (1.0-2.7)	2.5 (1.6-3.8)	4.1 (3.1-5.4)
BA	A-only	KR prediction	A-only=AB	A-only=B-only[1]	A-only=C[1,2]	AB=B-only[1]	AB=C[1,2]	B-only=C[1,2]
		1. observed rates	12.3%=10.1%	12.3%>4.5%	12.3%>2.3%	10.1%>4.5%	10.1%>2.3%	4.5%>2.3%
		1. odds ratio (95% CI's)	1.2 (0.6-2.4)	2.9 (1.6-5.4)	6.0 (3.9-9.2)	2.4 (1.2-4.8)	4.8 (2.8-8.2)	2.0 (1.2-3.3)
		2. observed rates	10.6%=11.0%	10.6%=8.2%	10.6%>4.4%	11.0%=8.2%	11.0%>4.4%	8.2%>4.4%
		2. odds ratio (95% CI's)	1.0 (0.6-1.8)	1.3 (0.8-2.2)	2.6 (1.8-3.6)	1.4 (0.8-2.4)	2.7 (1.7-4.1)	1.9 (1.3-2.9)
	AB	KR prediction	A-only=AB[1,2]	A-only=B-only	A-only>C	AB=B-only[1]	AB>C	B-only>C
		1. observed rates	7.2%<16.5%	7.2%=10.1%	7.2%>1.8%	16.5%>10.1%	16.5%>1.8%	10.1%>1.8%
		1. odds ratio (95% CI's)	2.5 (1.3-4.9)	1.4 (0.8-2.7)	4.2 (2.4-7.3)	1.8 (1.1-2.9)	10.7 (6.9-16.5)	6.1 (4.3-8.6)
		2. observed rates	7.0%<15.1%	7.0%=10.9%	7.0%>2.3%	15.1%=10.9%	15.1%>2.3%	10.9%>2.3%
		2. odds ratio (95% CI's)	2.4 (1.4-4.0)	1.6 (1.0-2.7)	3.2 (2.1-4.9)	1.5 (0.9-2.4)	7.6 (5.2-11.1)	5.2 (3.6-7.4)
	B-only	KR prediction	A-only=AB[1,2]	A-only=B-only[1,2]	A-only>C[1,2]	AB=B-only	AB>C	B-only>C
		1. observed rates	6.3%<18.4%	6.3%<16.1%	6.3%=4.2%	18.4%=16.1%	18.4%>4.2%	16.1%>4.2%
		1. odds ratio (95% CI's)	3.3 (1.7-6.6)	2.9 (1.5-5.3)	1.5 (0.9-2.7)	1.2 (0.7-1.8)	5.1 (3.4-7.6)	4.4 (3.4-5.7)
		2. observed rates	5.8%<15.8%	5.8%<20.4%	5.8%=4.7%	15.8%=20.4%	15.8%>4.7%	20.4%>4.7%
		2. odds ratio (95% CI's)	3.1 (1.8-5.4)	4.2 (2.5-6.9)	1.2 (0.8-2.0)	1.4 (0.9-2.1)	3.9 (2.7-5.5)	5.2 (4.1-6.8)

Note. A "[1]" indicates a discrepancy between the result expected by Klein and Riso and the result derived from data simulated with the first set of model parameters. A "[2]" indicates a discrepancy between the result expected by Klein and Riso and the result derived from data simulated with the second set of model parameters. In the observed rates, a "=" indicates a statistically non-significant difference and a ">" or "<" indicates a statistically significant difference. AF = alternate forms; RM = random multiformity; RMA = random multiformity of A; RMB = random multiformity of B; EM = extreme multiformity; EMA = extreme multiformity of A; EMB = extreme multiformity of B; TD = three independent disorders; CL = correlated liabilities; ACB = A causes B; BCA = B causes A; A-only = presence of A-only; B-only = presence of B-only; AB = presence of both A and B; C = controls; 1. observed rates = observed rates in the first simulation; 1. odds ratio (95% CI's) = odds ratio and 95%

confidence intervals in the first simulation; 2. observed rates = observed rates in the second simulation; 2. odds ratio (95% CI's) = odds ratio and 95% confidence intervals in the second simulation.