|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Number of variables | Experimental design  (treatment-control) | Effect size (δ) | Percent altered | | | | | |
| 0% | 5% | 10% | 15% | 20% | 25% |
| 10,000 | 2-2 | 1.3 | 2.6 | 3 | 5 | 4 | 5 | 5 |
| 1.5 | 2.1 | 5 | 12 | 19 | 25 | 31 |
| 1.8 | 2.3 | 10 | 28 | 50 | 66 | 75 |
| 2 | 2.2 | 11 | 36 | 63 | 85 | 91 |
| 4 | 2.2 | 13 | 49 | 79 | 96 | 100 |
| 4-4 | 1.3 | 3.8 | 6 | 15 | 20 | 24 | 24 |
| 1.5 | 5.0 | 23 | 62 | 91 | 98 | 99 |
| 1.8 | 2.9 | 53 | 98 | 100 | 100 | 100 |
| 2 | 3.8 | 62 | 100 | 100 | 100 | 100 |
| 4 | 4.0 | 78 | 100 | 100 | 100 | 100 |
| 8-8 | 1.3 | 3.6 | 13 | 29 | 46 | 56 | 57 |
| 1.5 | 4.3 | 50 | 97 | 100 | 100 | 100 |
| 1.8 | 4.9 | 92 | 100 | 100 | 100 | 100 |
| 2 | 4.9 | 97 | 100 | 100 | 100 | 100 |
| 4 | 3.9 | 99 | 100 | 100 | 100 | 100 |
| 16-16 | 1.3 | 4.6 | 23 | 55 | 77 | 88 | 90 |
| 1.5 | 4.3 | 83 | 100 | 100 | 100 | 100 |
| 1.8 | 5.0 | 100 | 100 | 100 | 100 | 100 |
| 2 | 4.8 | 100 | 100 | 100 | 100 | 100 |
| 4 | 4.7 | 100 | 100 | 100 | 100 | 100 |
| 100,000 | 2-2 | 1.3 | 3.0 | 7 | 16 | 19 | 27 | 26 |
| 1.5 | 2.2 | 21 | 54 | 75 | 83 | 88 |
| 1.8 | 1.7 | 49 | 86 | 97 | 100 | 100 |
| 2 | 2.3 | 56 | 91 | 100 | 100 | 100 |
| 4 | 1.5 | 67 | 96 | 100 | 100 | 100 |
| 4-4 | 1.3 | 4.5 | 28 | 76 | 93 | 98 | 98 |
| 1.5 | 3.2 | 96 | 100 | 100 | 100 | 100 |
| 1.8 | 3.8 | 100 | 100 | 100 | 100 | 100 |
| 2 | 4.1 | 100 | 100 | 100 | 100 | 100 |
| 4 | 4.4 | 100 | 100 | 100 | 100 | 100 |
| 8-8 | 1.3 | 6.7 | 68 | 99 | 100 | 100 | 100 |
| 1.5 | 4.3 | 100 | 100 | 100 | 100 | 100 |
| 1.8 | 4.6 | 100 | 100 | 100 | 100 | 100 |
| 2 | 5.1 | 100 | 100 | 100 | 100 | 100 |
| 4 | 4.5 | 100 | 100 | 100 | 100 | 100 |
| 16-16 | 1.3 | 4.0 | 95 | 100 | 100 | 100 | 100 |
| 1.5 | 4.4 | 100 | 100 | 100 | 100 | 100 |
| 1.8 | 4.6 | 100 | 100 | 100 | 100 | 100 |
| 2 | 4.6 | 100 | 100 | 100 | 100 | 100 |
| 4 | 5.1 | 100 | 100 | 100 | 100 | 100 |

Table S1