## Sample size calculations

1. a
2. Power
3. Estimate of response rate in one group
4. Estimate of response rate in other group
5\% (0.05)
30\%
5. One-sided or two-sided test

|  | \% Group 1 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \% Group 2 | 0 | 10 | 20 | (30) | 40 | 50 | 60 | 70 | 80 | 90 |
| 10 | 74 |  |  |  |  |  |  |  |  |  |
| 20 | 34 | 199 |  |  |  |  |  |  |  |  |
| 30 | 21 | 62 | 293 |  |  |  |  |  |  |  |
| 40 | 15 | 32 | 81 | 356 |  |  |  |  |  |  |
| (50) | 11 | 20 | 39 | $93$ | 387 |  |  |  |  |  |
| 60 | 8 | 13 | 23 | 42 | 97 | 387 |  |  |  |  |
| 70 | 6 | 10 | 14 | 23 | 42 | 93 | 356 |  |  |  |
| 80 | 5 | 7 | 10 | 15 | 23 | 39 | 81 | 293 |  |  |
| 90 | 4 | 5 | 7 | 10 | 14 | 20 | 32 | 62 | 199 |  |
| 100 | 2 | 4 | 5 | 6 | 8 | 11 | 15 | 21 | 34 | 74 |

In order to arrive at $80 \%$ Power with an alpha level of $5 \%$ we'd need 93 study participants in each group.

