|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | With outcome | Without outcome | Odds | Absolute Risk |
| Has risk factor | 2 | 1 | 2:1 = 2 | 2/3 |
| Does not have risk factor | 1 | 2 | 1:2 = 0.5 | 1/3 |

Odds ratio: 2:1/1:2 = 2/0.5 = 4

Relative risk: 2/3 / 1/3 = 2

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | With outcome | Without outcome | Odds | Absolute Risk |
| Has risk factor | 2 | 998 | 2:998 = 0.002 | 2/1000 = 0.002 |
| Does not have risk factor | 1 | 999 | 1:999 = 0.001 | 1/1000 = 0.001 |

Odds ratio is roughly equal to relative risk = 2

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | With outcome | Without outcome | Odds | Absolute Risk |
| Has risk factor | 2 | 1 | 2:1 = 2 | 2/3 |
| Does not have risk factor | 1 | 2 | 1:2 = 0.5 | 1/3 |

Attributable risk = Risk with risk factor – risk without risk factor = 1/3.

Number needed to treat = 1/absolute risk = 3