

CV event Yes	a	b
CV event No	c	d
	Smoking No	Smoking Yes

Odds CV event | Smoker

$$= b/d$$

Odds CV event | Non-smoker

$$= a/c$$

Odds CV event  
smoker vs non-smoker

$$= \frac{a/c}{b/d} = \frac{ad}{bc}$$

Odds ratio