



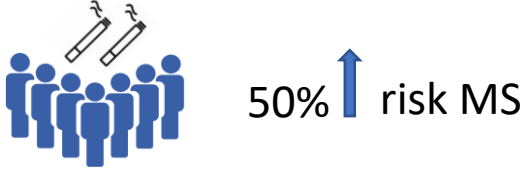
Smoking and multiple sclerosis risk: A Mendelian randomization study

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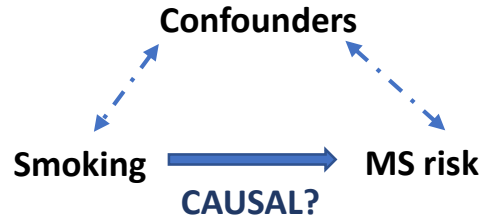
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Observational: smoking increases MS risk

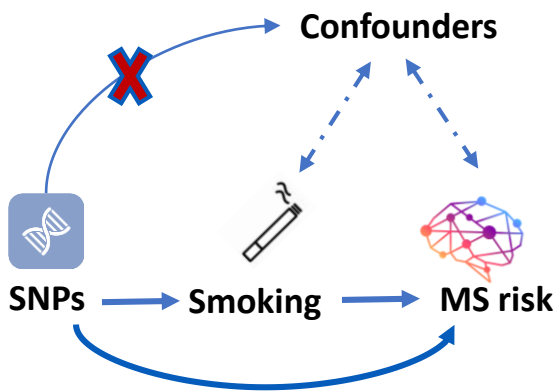


Degelman. Mult Scler Relat Disord 2017

Is smoking a causal risk factor for MS?



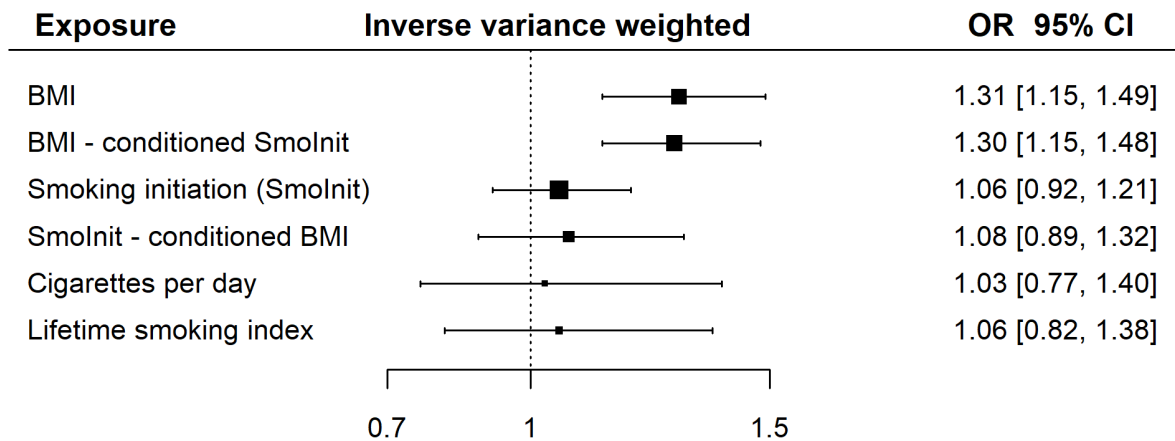
Methodology: Mendelian randomization



Methodology: instrumental variables

Exposure	Outcome	SNPs
Smoking initiation Liu Nat Genet 2019	MS risk	297
Cigarettes per day Liu Nat Genet 2019		
Lifetime smoking index Wootton Psychol Med 2019	IMSGC. Science 2019	111
Body mass index (BMI) Yengo Hum Mol Genet 2019		529

In contrast with genetically predicted BMI, genetically predicted smoking phenotypes are not causally associated with multiple sclerosis risk in Mendelian randomization analyses



OR [95% CI] for MS per SD increase genetically predicted exposure

Genetically predicted BMI increases the risk of MS with 31%, while there is no evidence of a causal effect of the smoking phenotypes on MS. The effect of BMI remains consistent after conditioning on smoking initiation in a multivariable analysis.