

Cross-sectional S4

logistic regression

CS vs NS
smoking related
metabolites

FS vs NS
irreversible
metabolites

CS vs FS
reversible
metabolites

linear regression

FS
slowly reversible
metabolites
(cessation time
related)

longitudinal S4 → F4

linear mixed model

CS, Quitter and NS
reversible metabolites

(associated with
change of smoking
status)

literature, database

Protein-metabolite
network