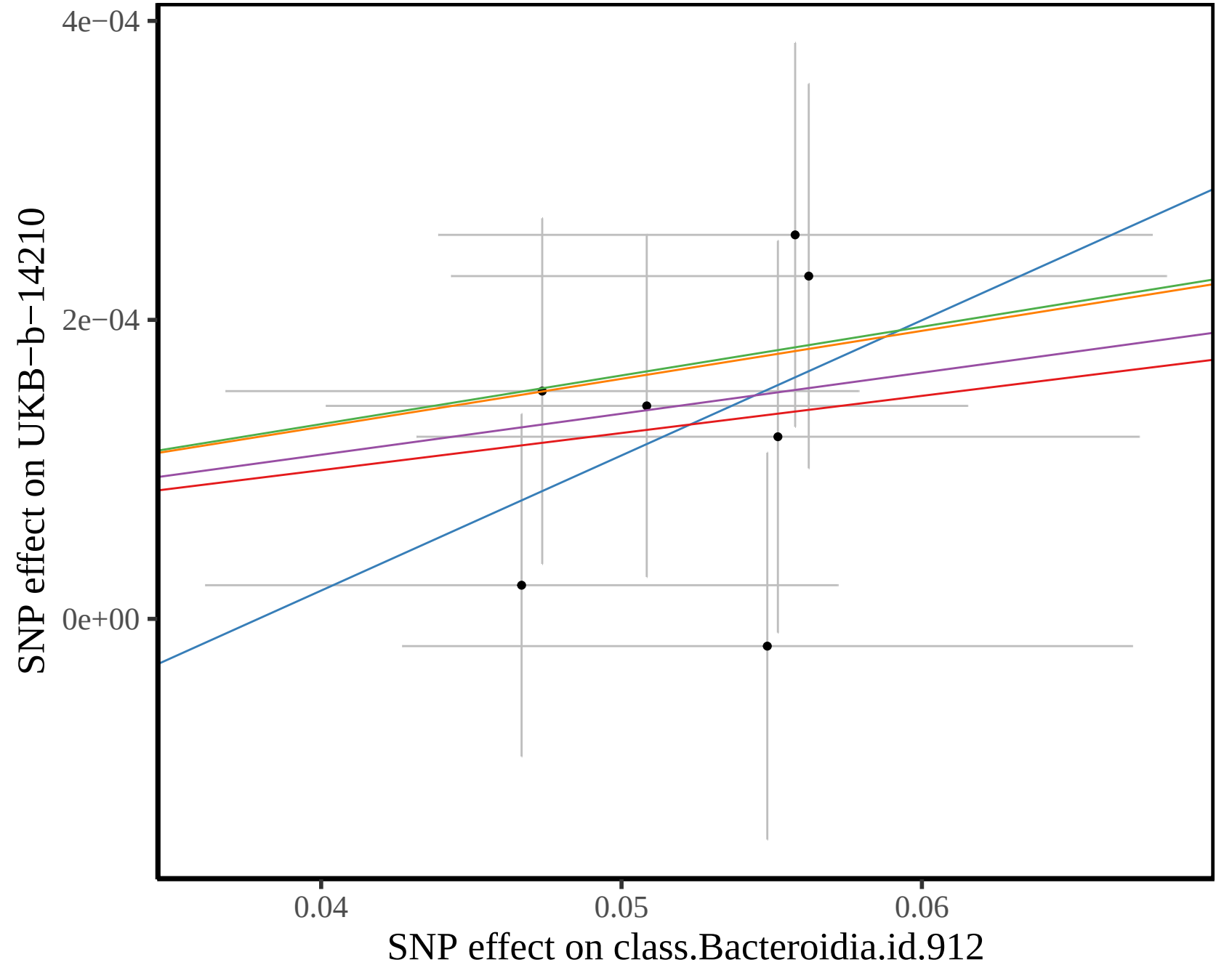


Supplementary Figure 1

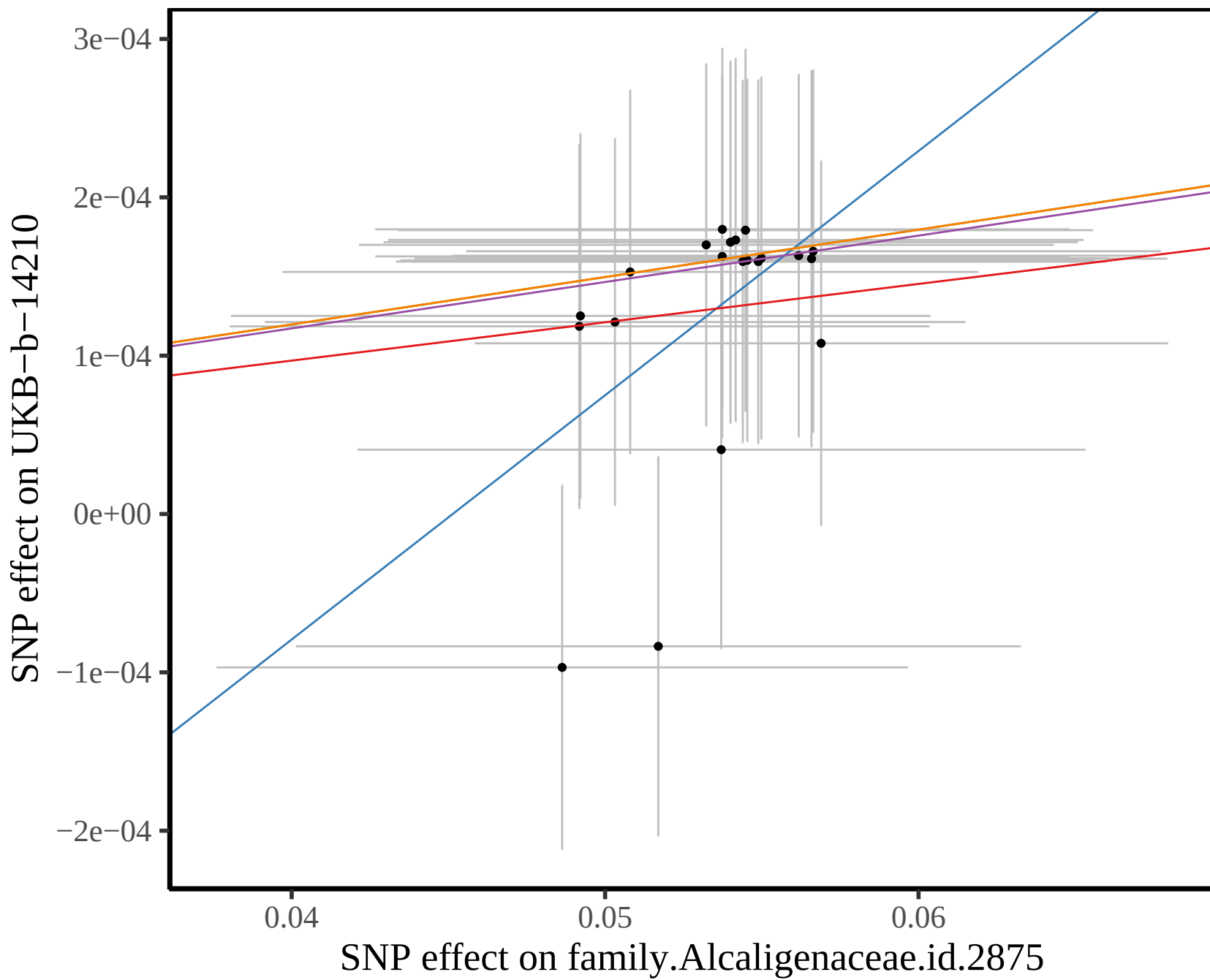
MR Test

- Inverse variance weighted
- MR Egger
- Simple mode
- Weighted median
- Weighted mode



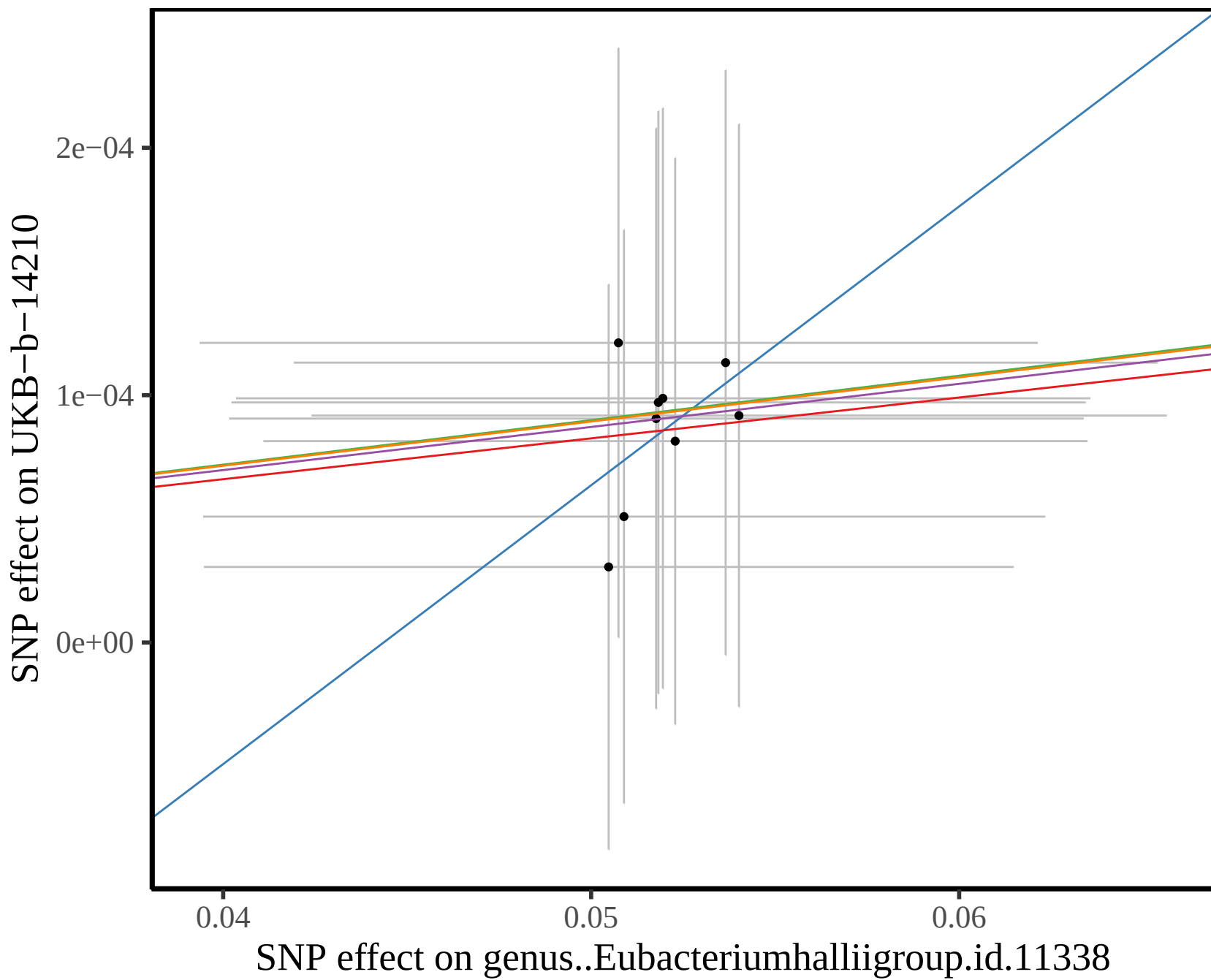
MR Test

- Inverse variance weighted
- MR Egger
- Simple mode
- Weighted median
- Weighted mode



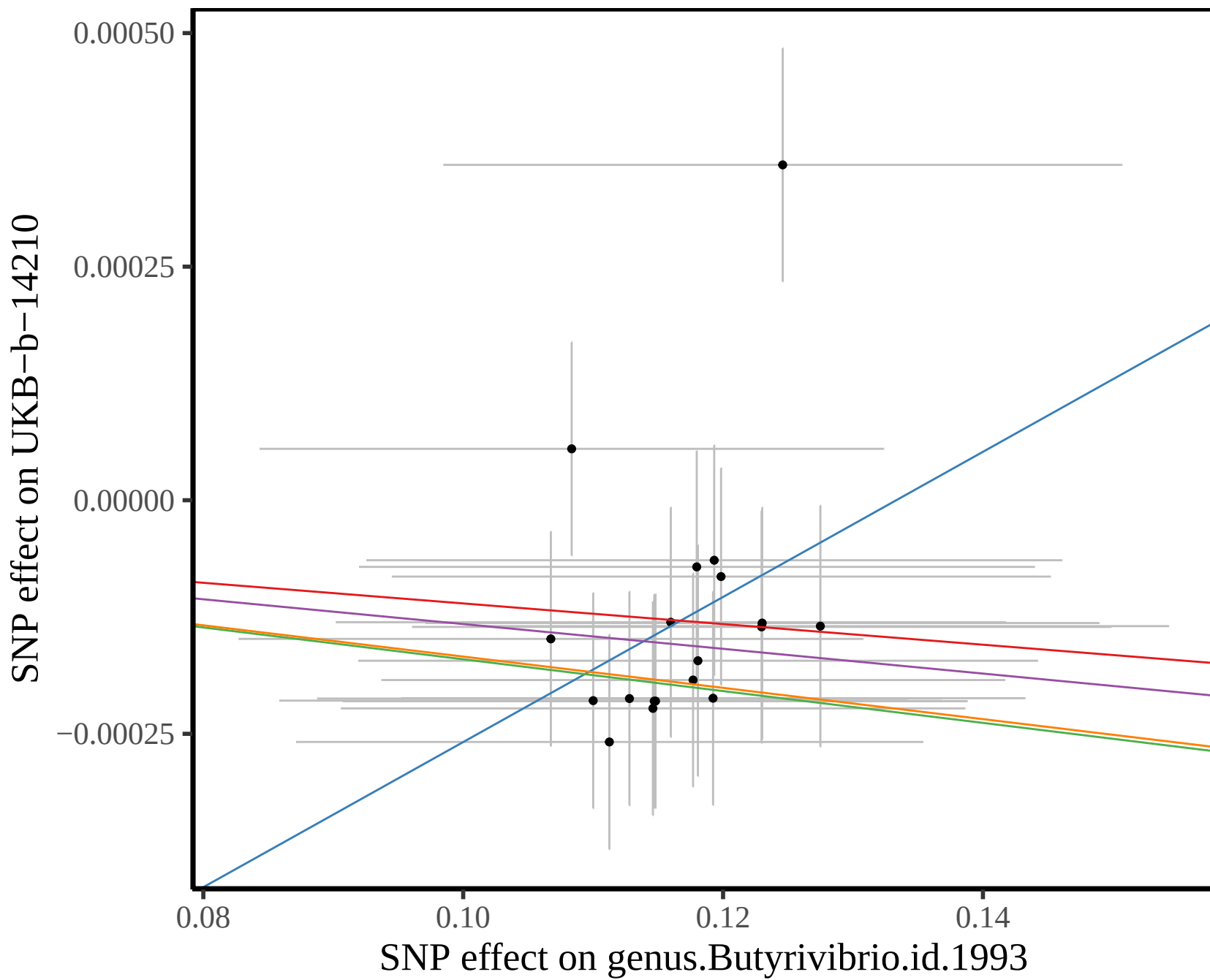
MR Test

- Inverse variance weighted
- MR Egger
- Simple mode
- Weighted median
- Weighted mode



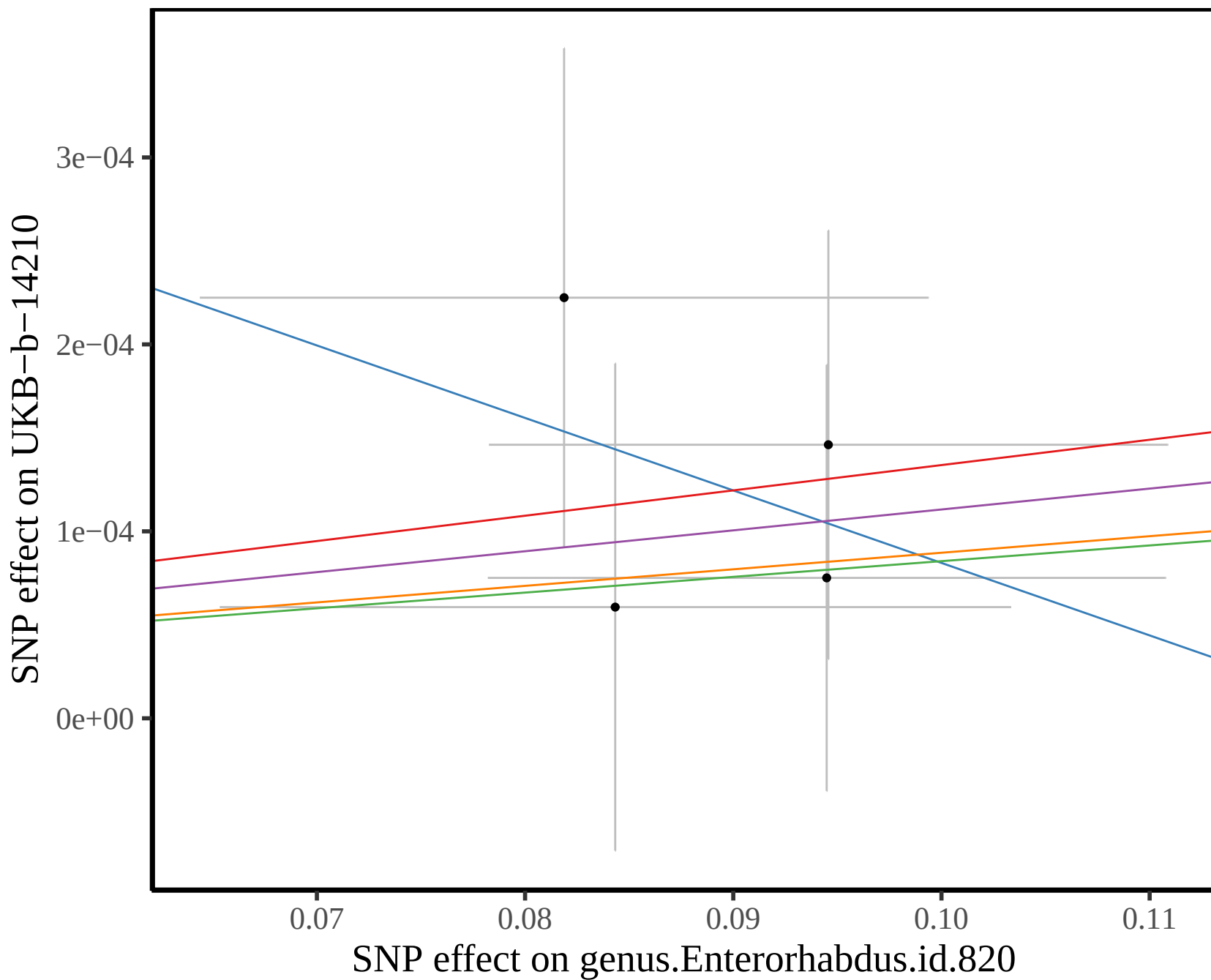
MR Test

- Inverse variance weighted
- MR Egger
- Simple mode
- Weighted median
- Weighted mode



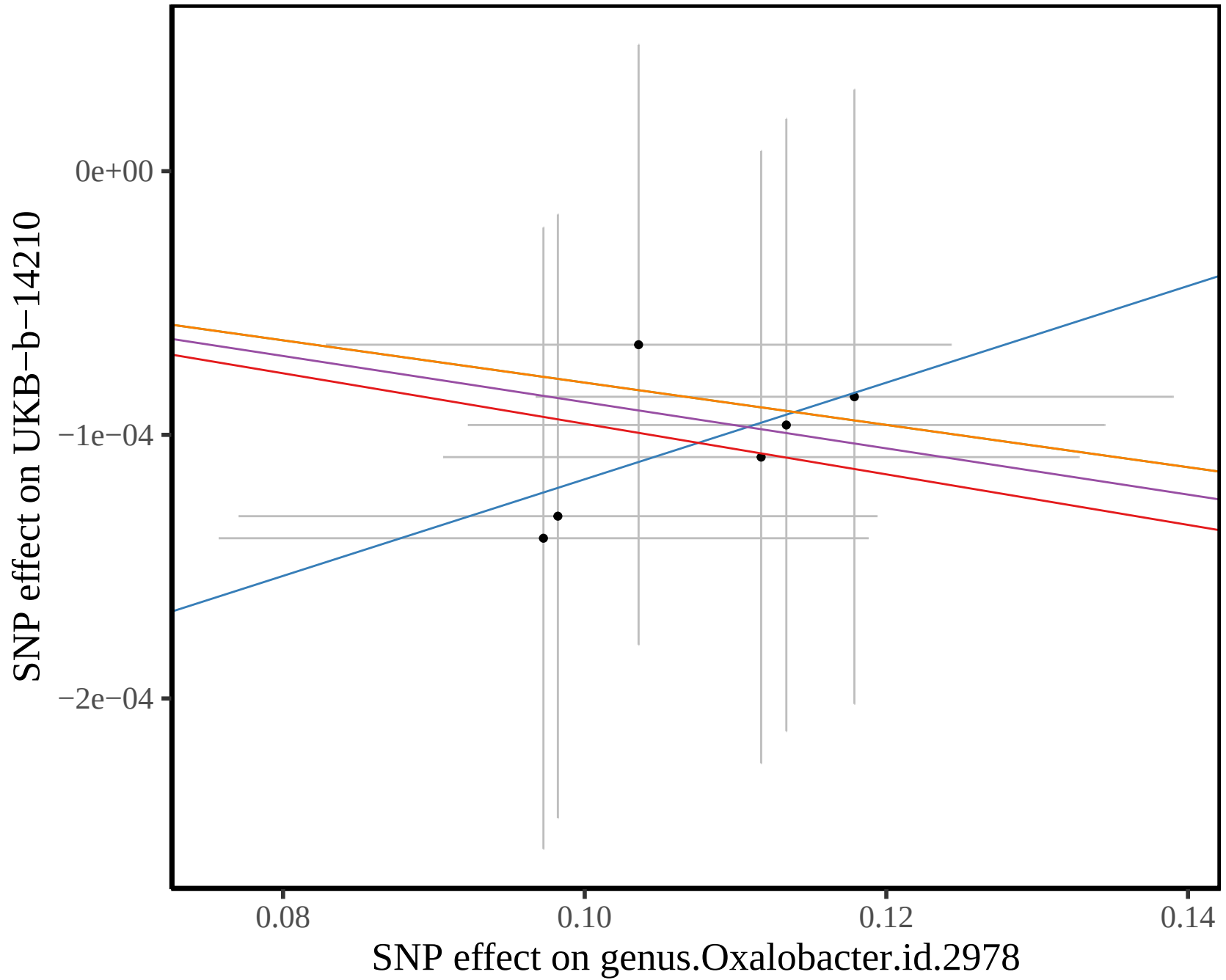
MR Test

- Inverse variance weighted
- MR Egger
- Simple mode
- Weighted median
- Weighted mode



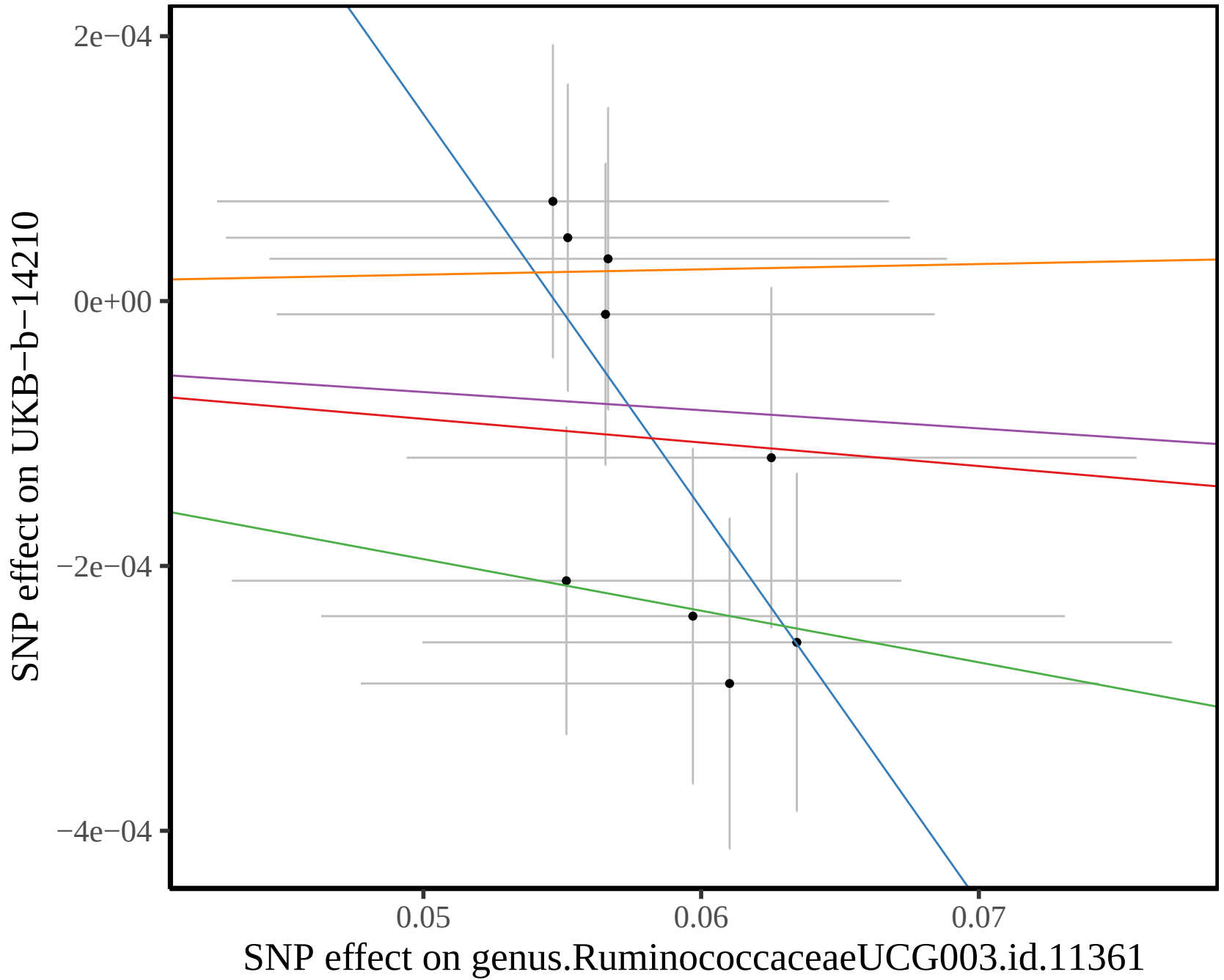
MR Test

- Inverse variance weighted
- MR Egger
- Simple mode
- Weighted median
- Weighted mode



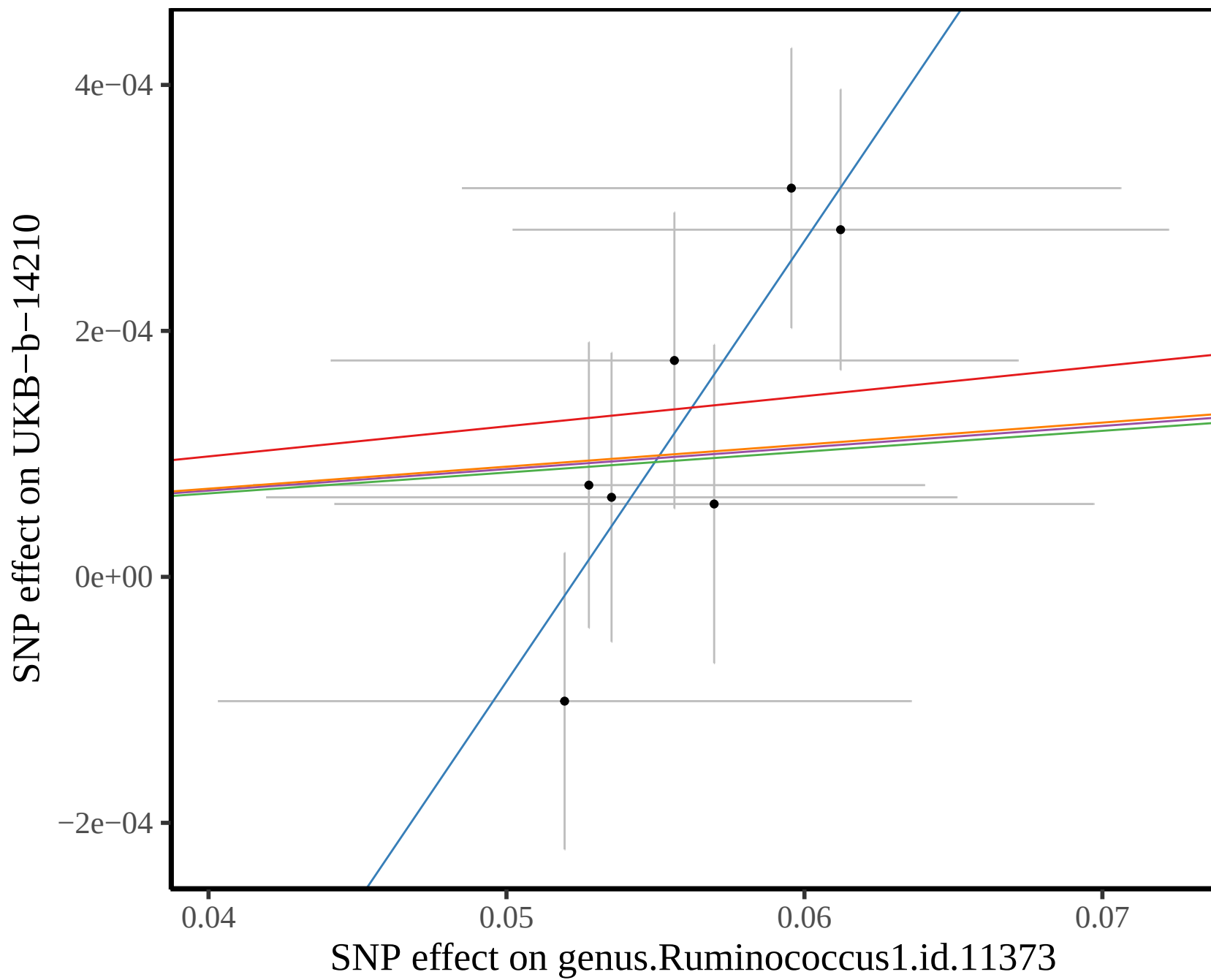
MR Test

- Inverse variance weighted
- MR Egger
- Simple mode
- Weighted median
- Weighted mode



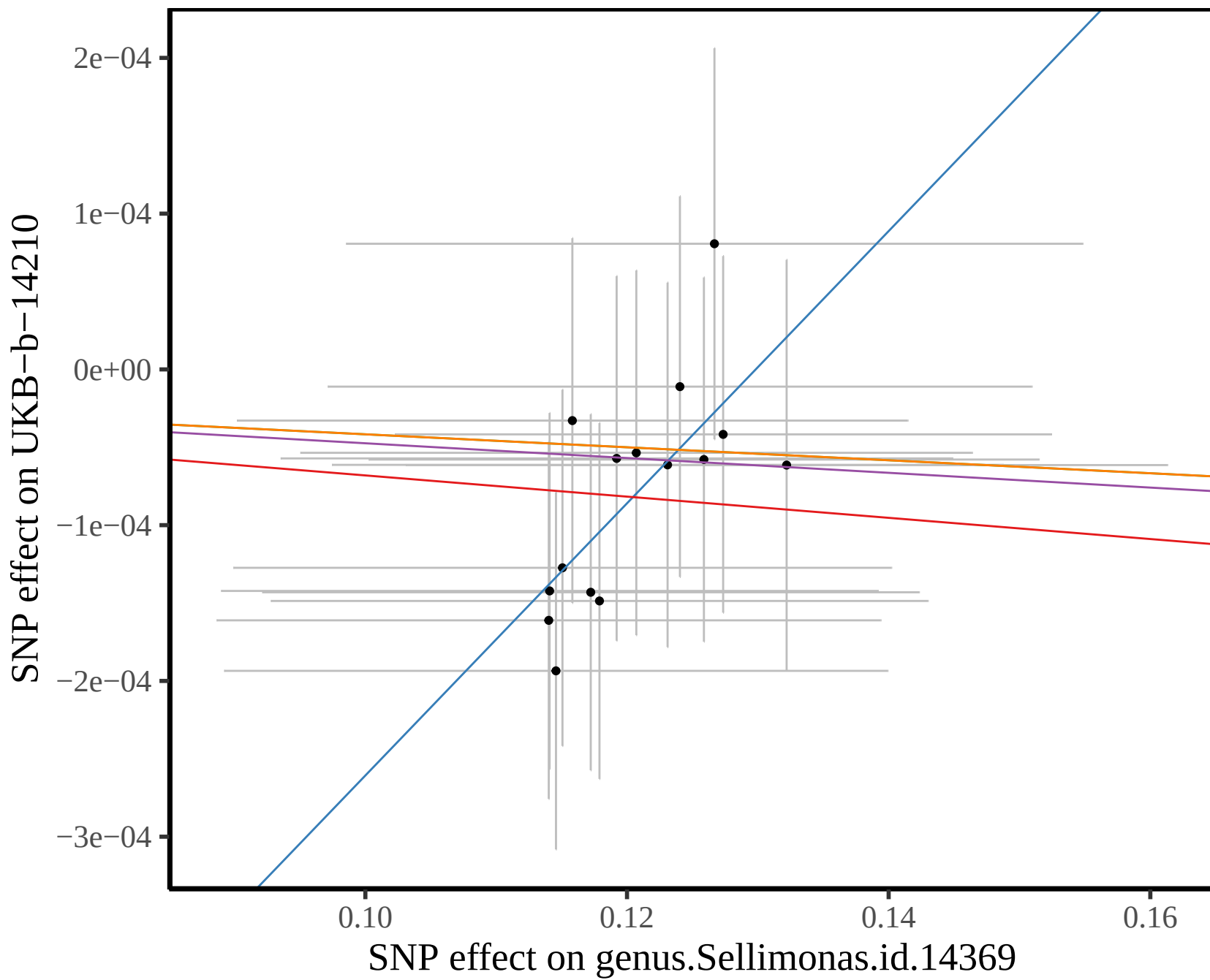
MR Test

- Inverse variance weighted
- MR Egger
- Simple mode
- Weighted median
- Weighted mode



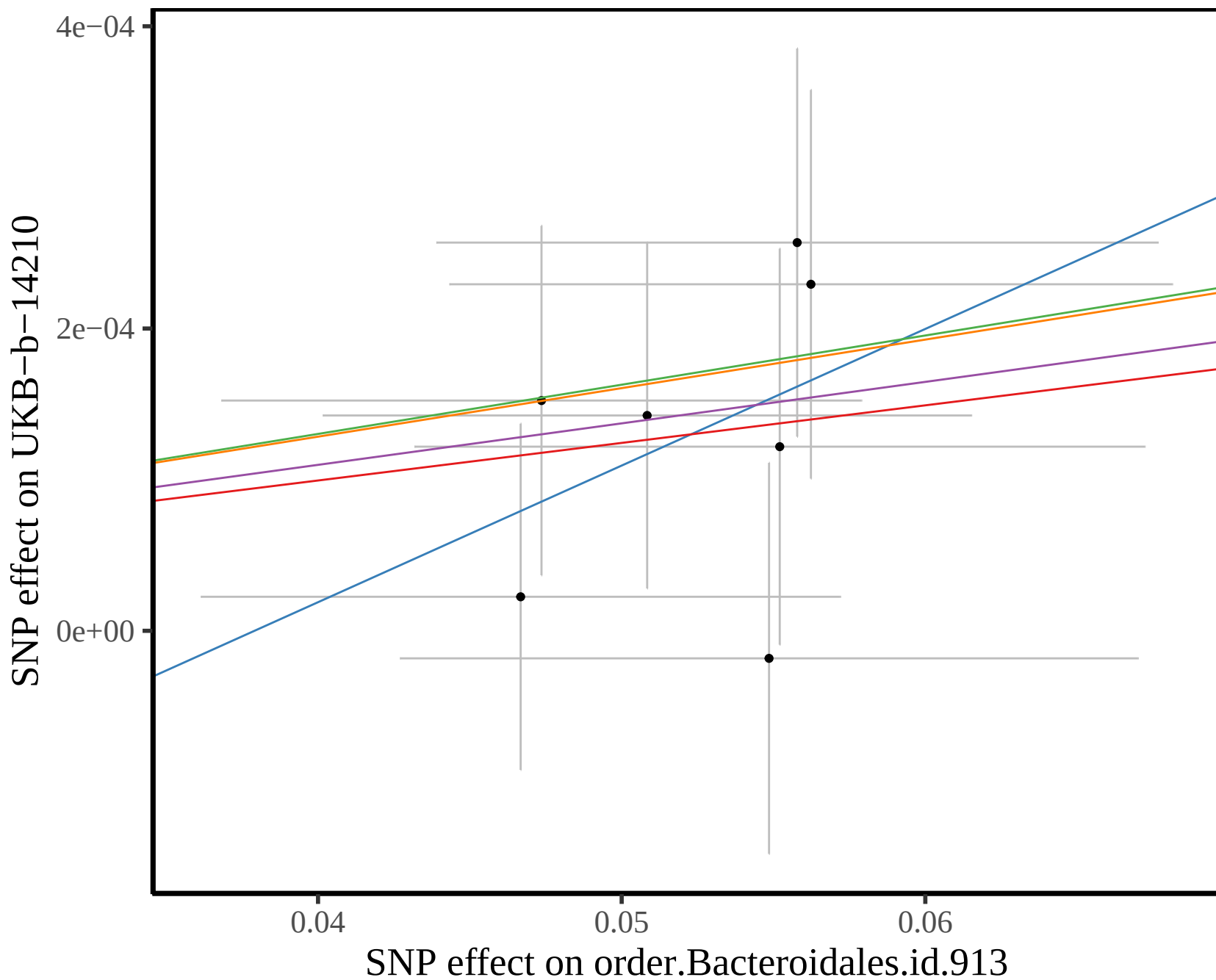
MR Test

- Inverse variance weighted
- MR Egger
- Simple mode
- Weighted median
- Weighted mode



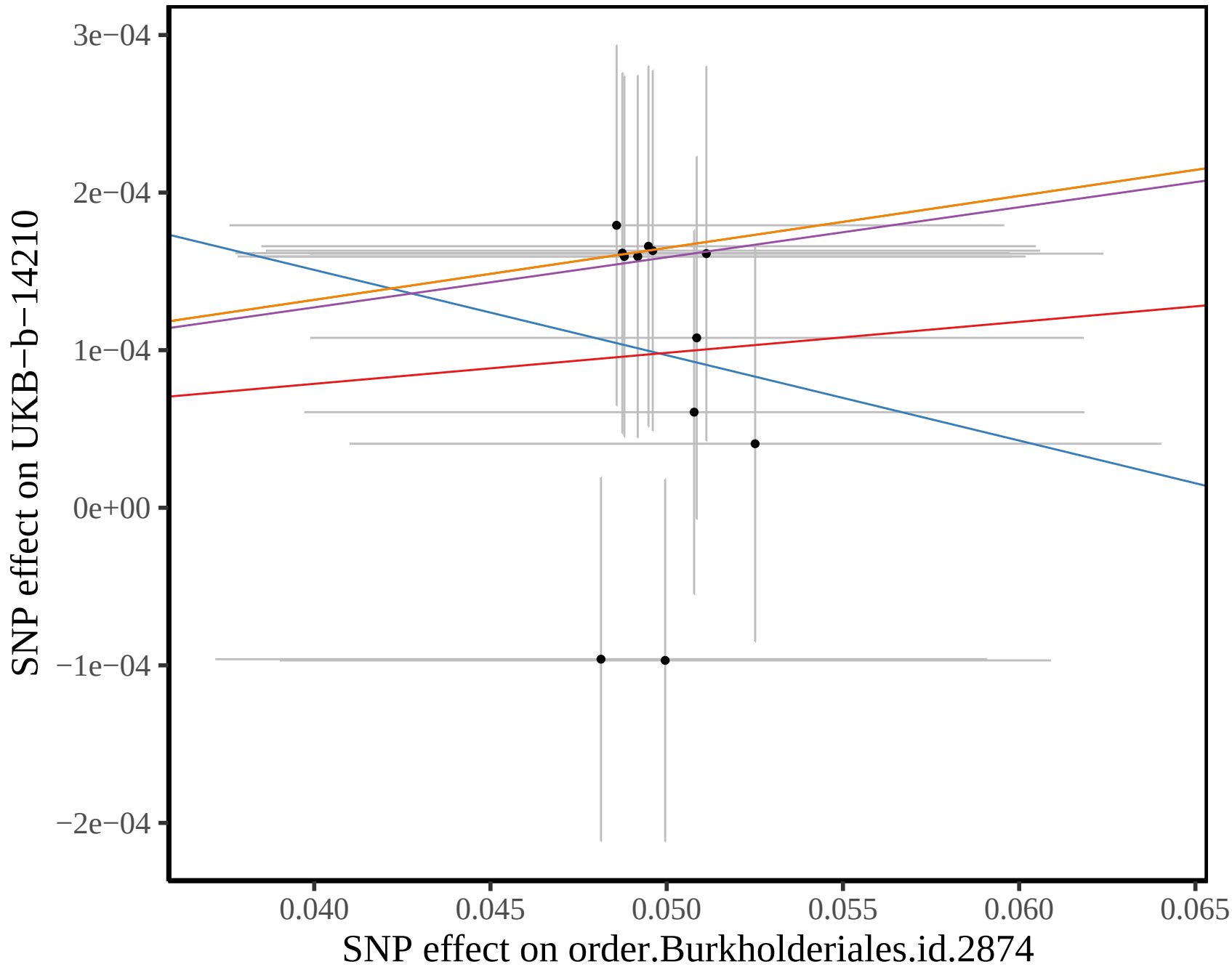
MR Test

- Inverse variance weighted
- MR Egger
- Simple mode
- Weighted median
- Weighted mode



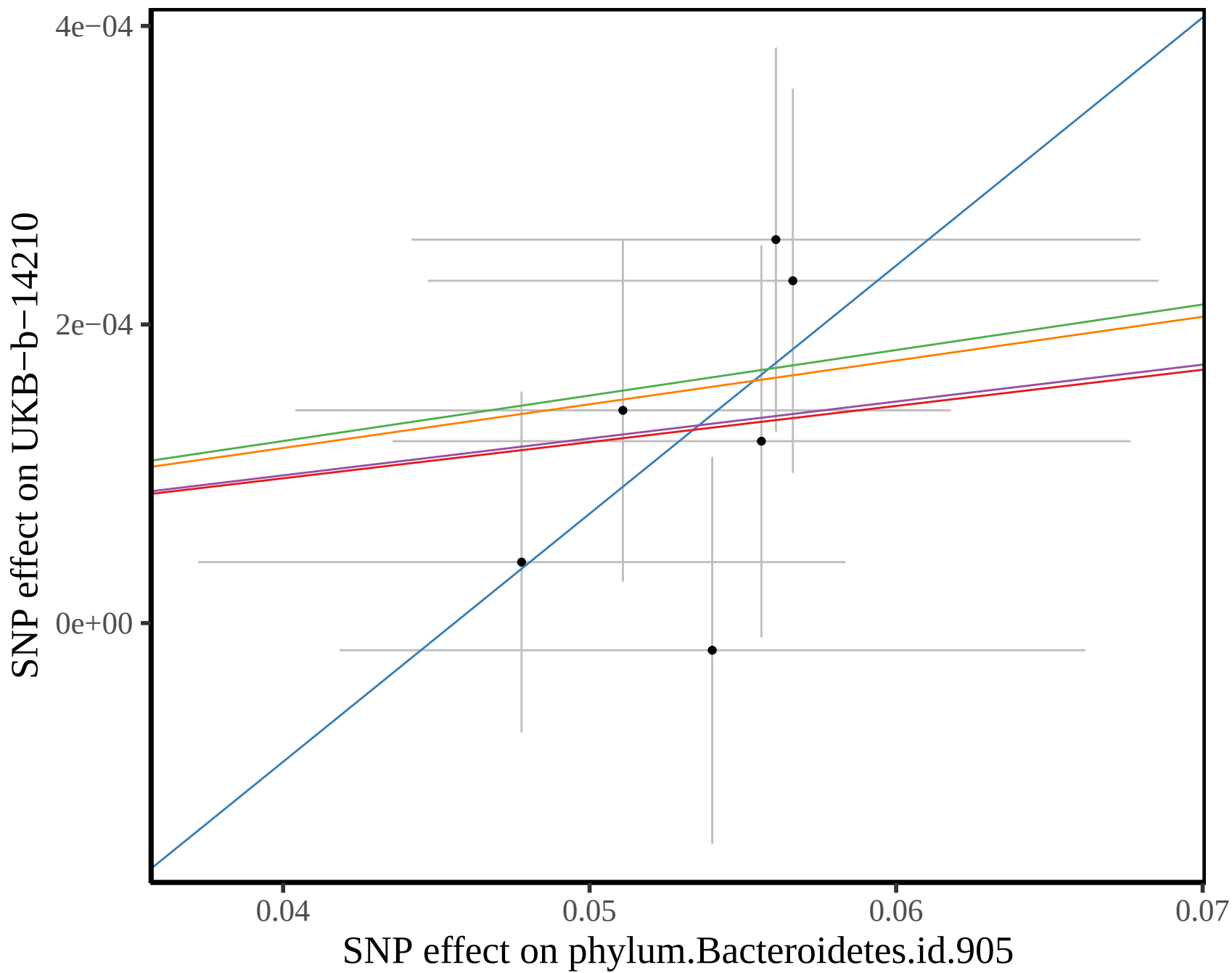
MR Test

- Inverse variance weighted
- MR Egger
- Simple mode
- Weighted median
- Weighted mode

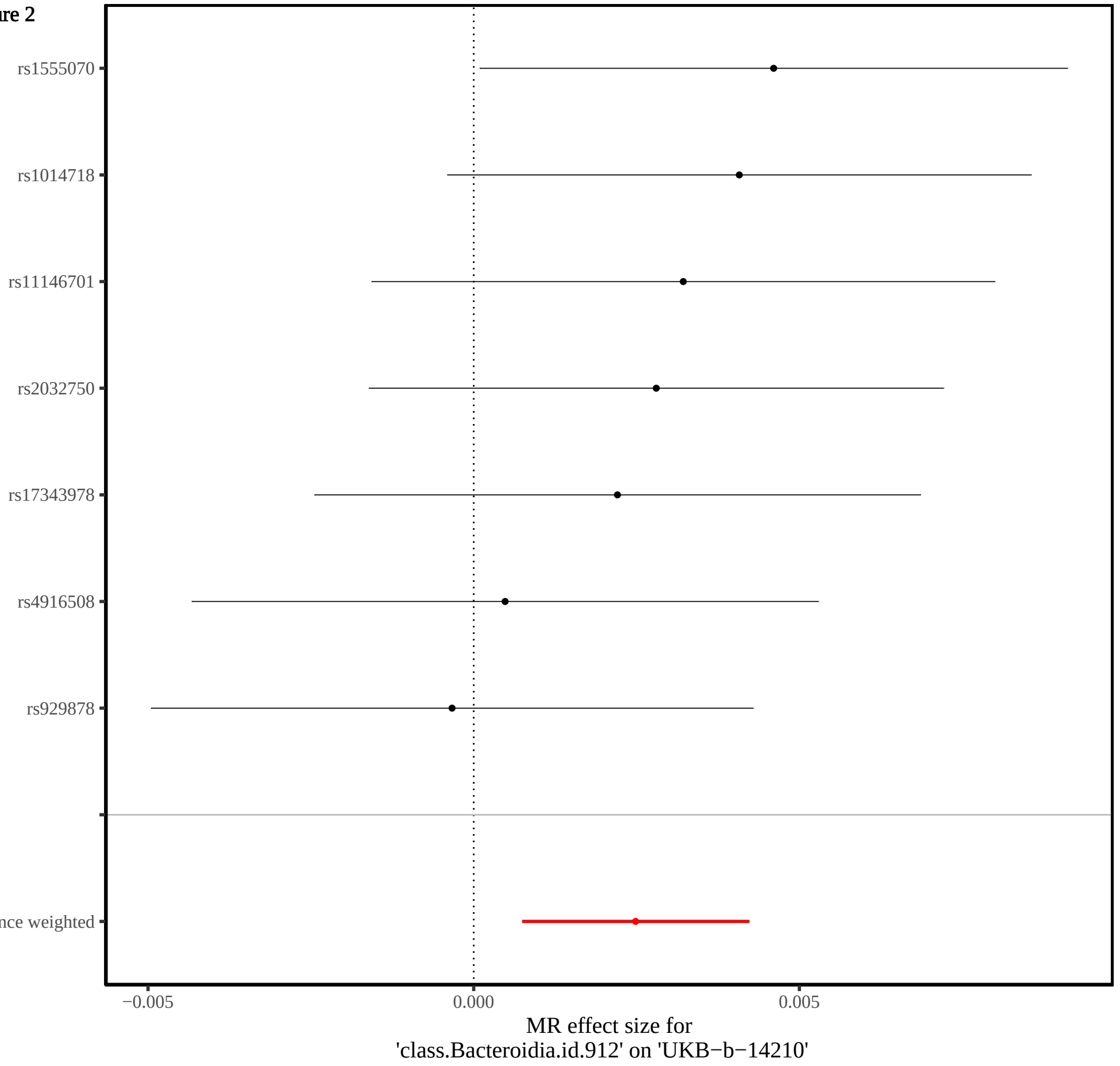


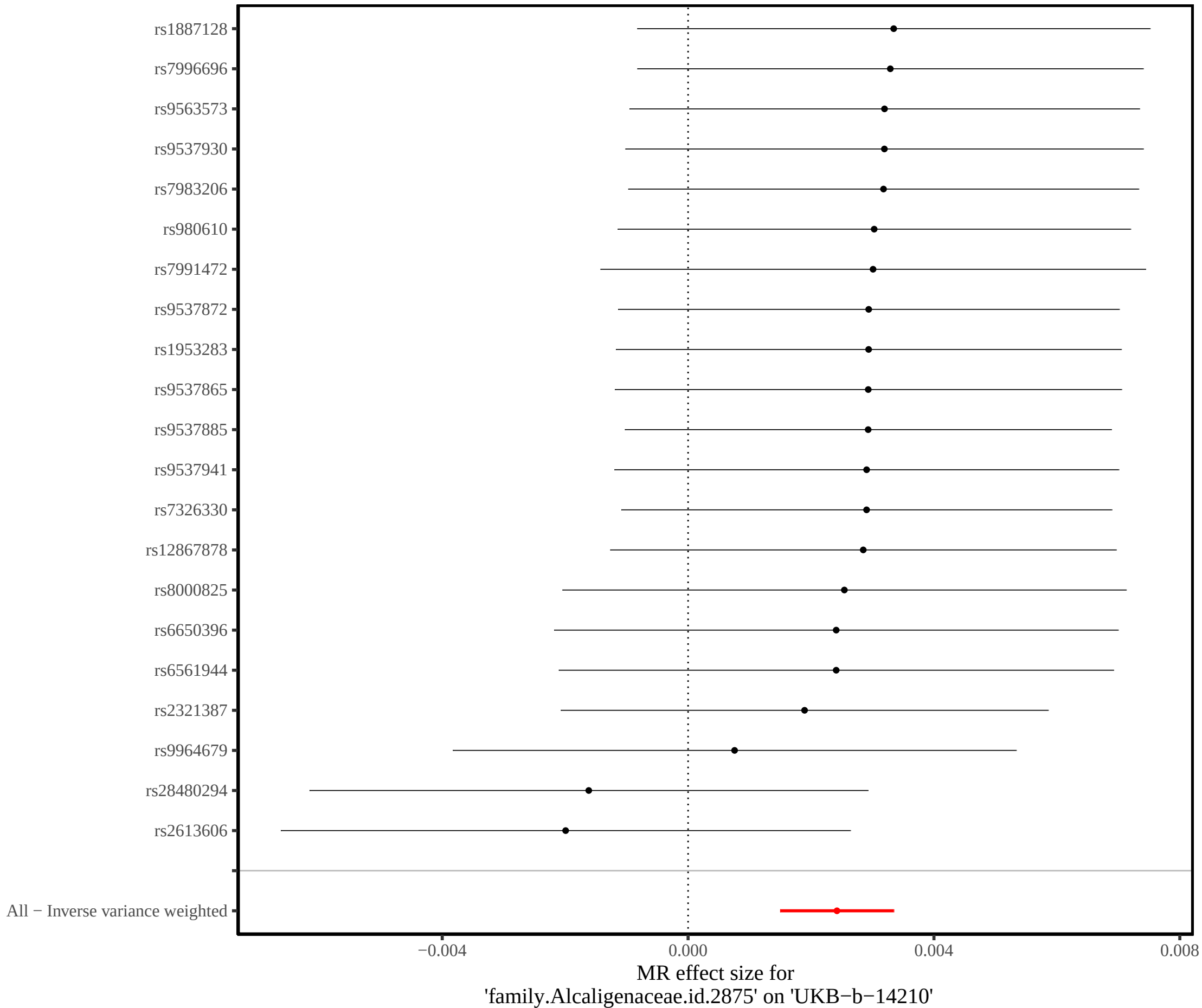
MR Test

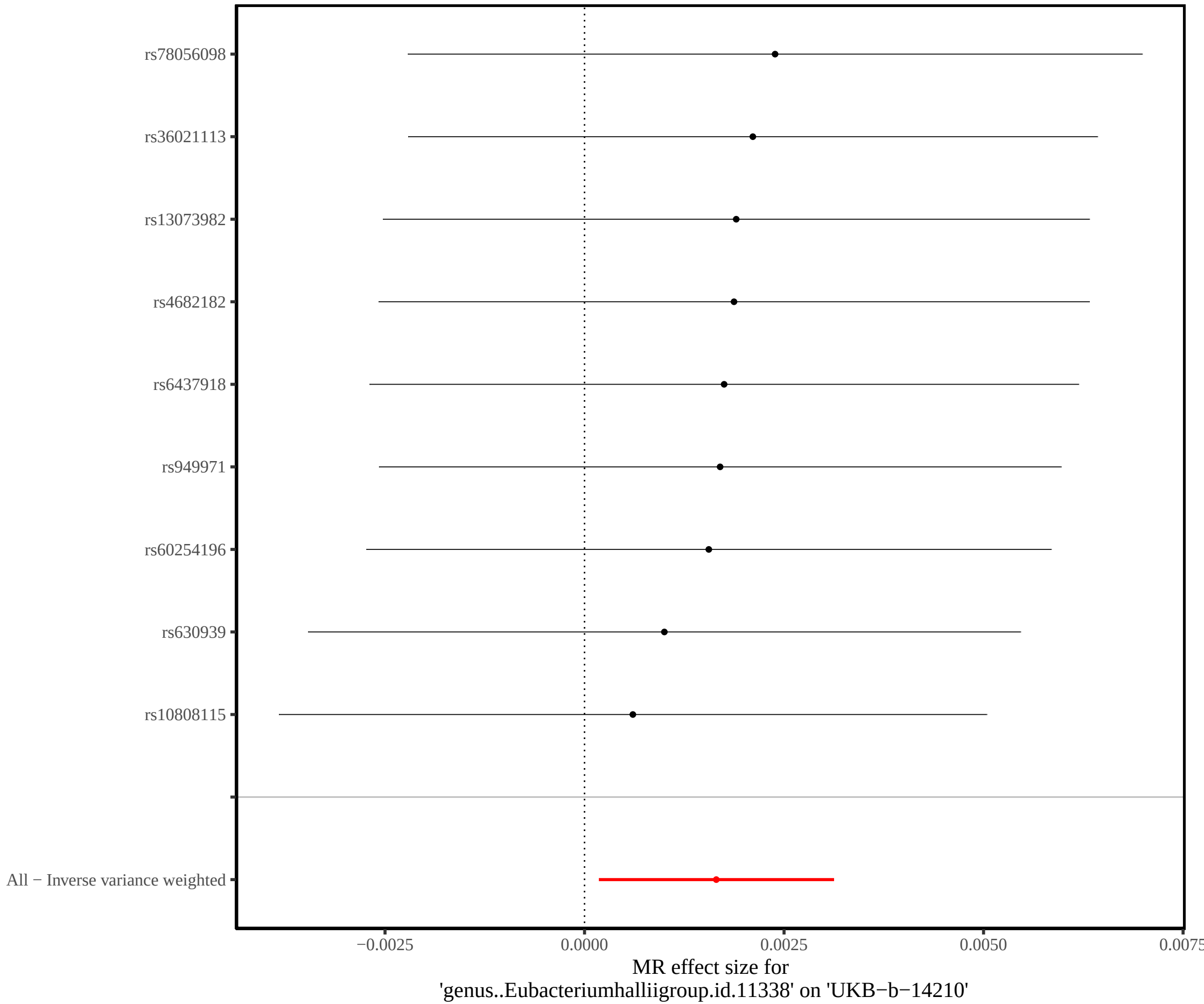
- Inverse variance weighted
- MR Egger
- Simple mode
- Weighted median
- Weighted mode

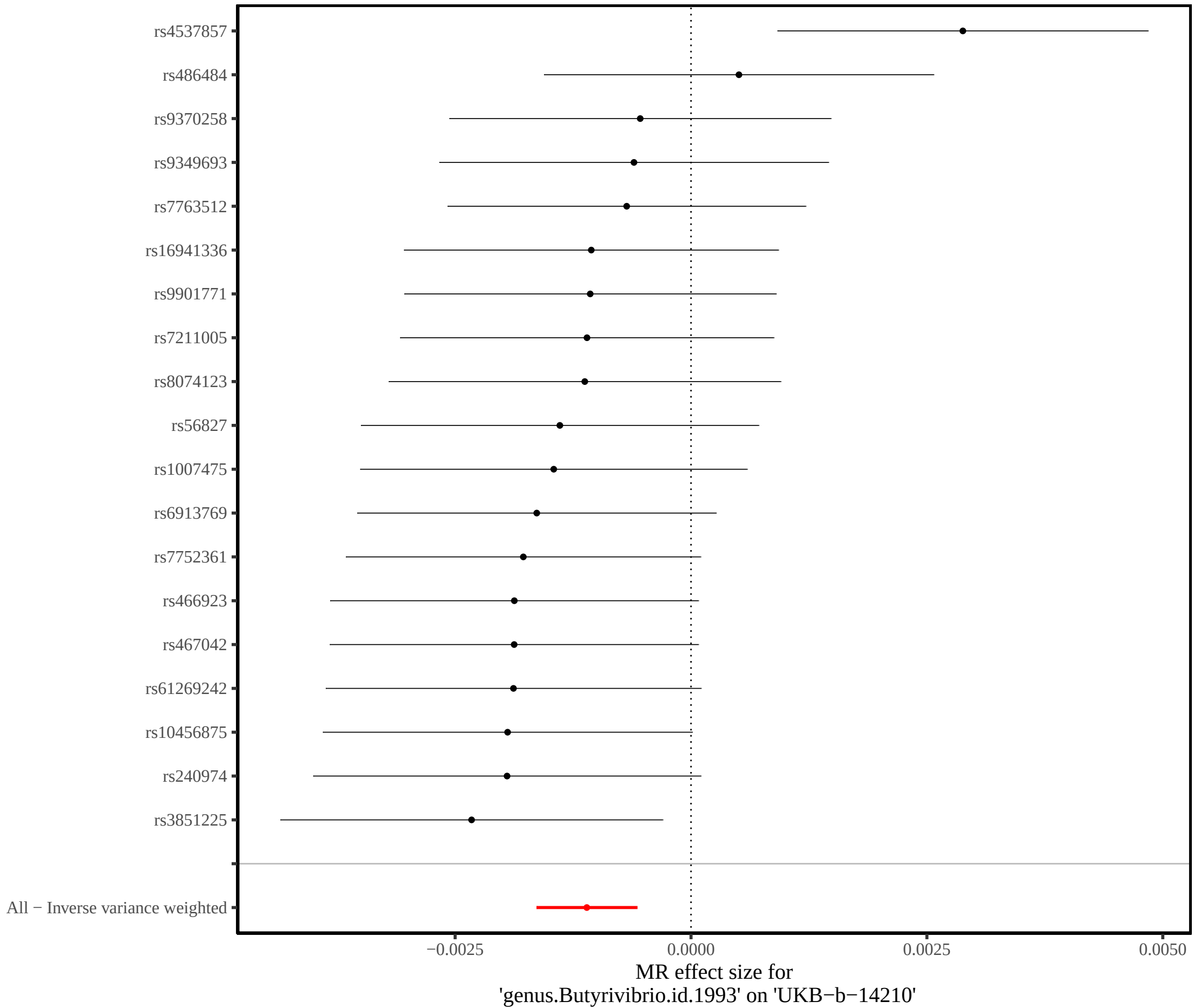


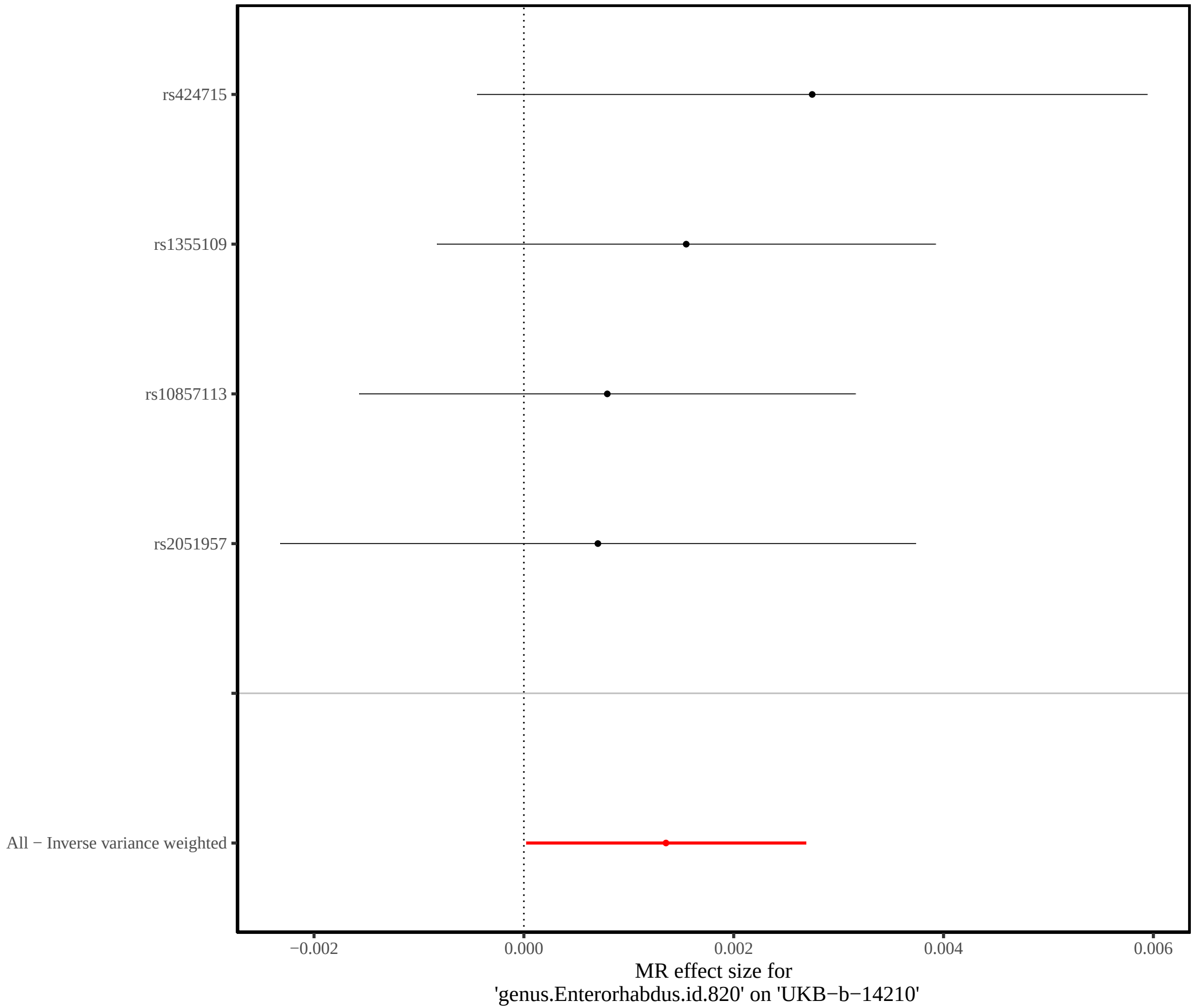
Supplementary Figure 2

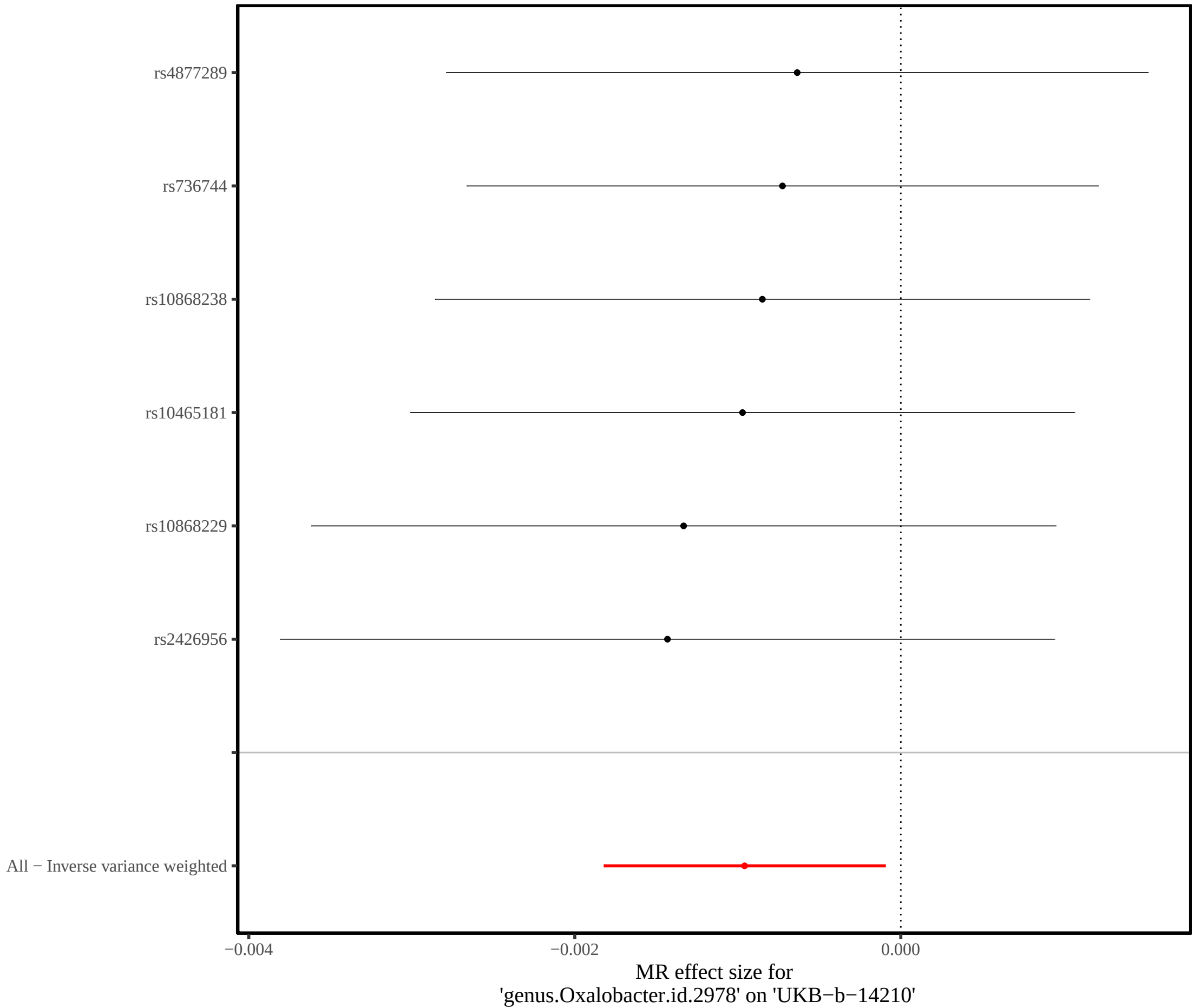


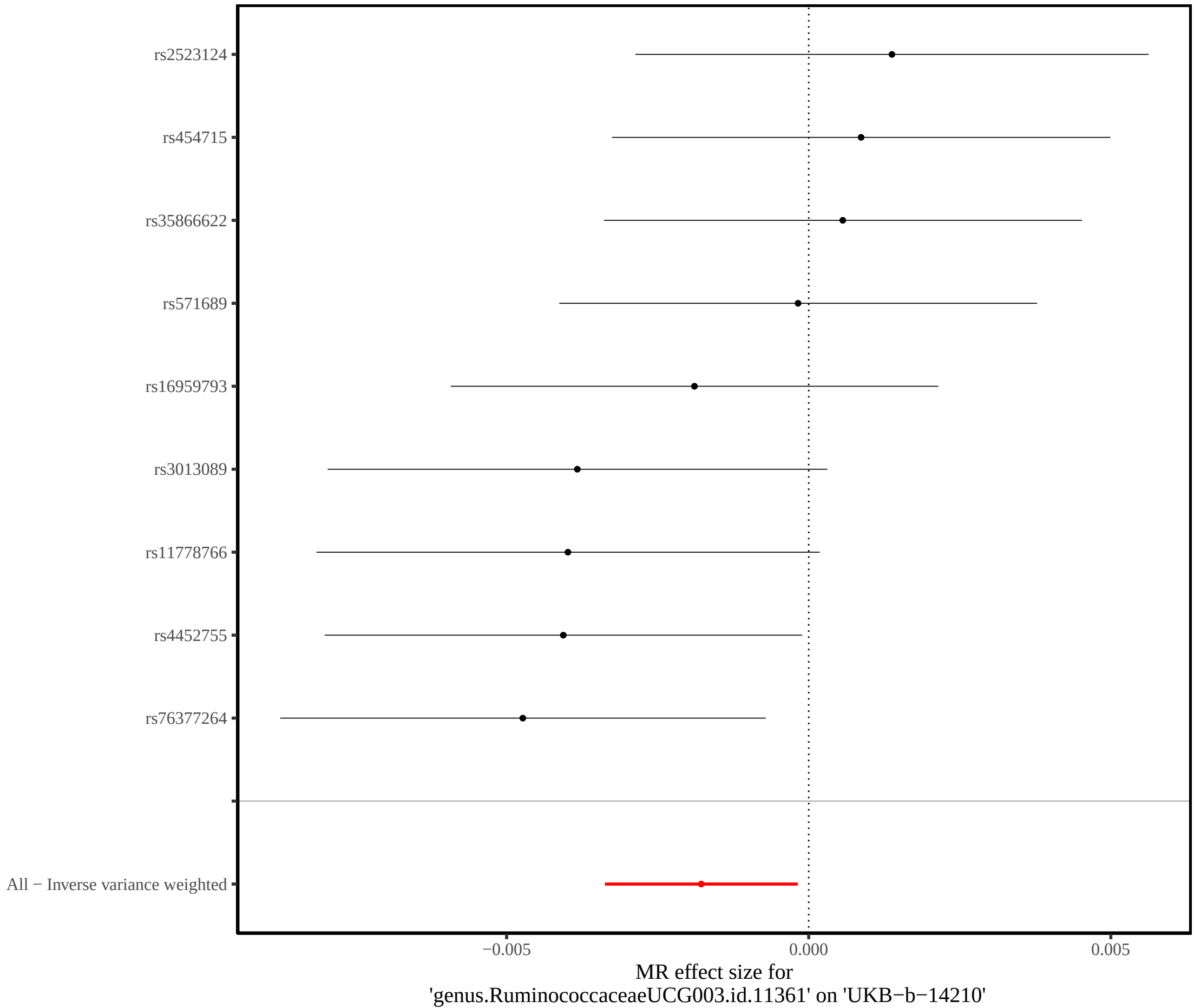


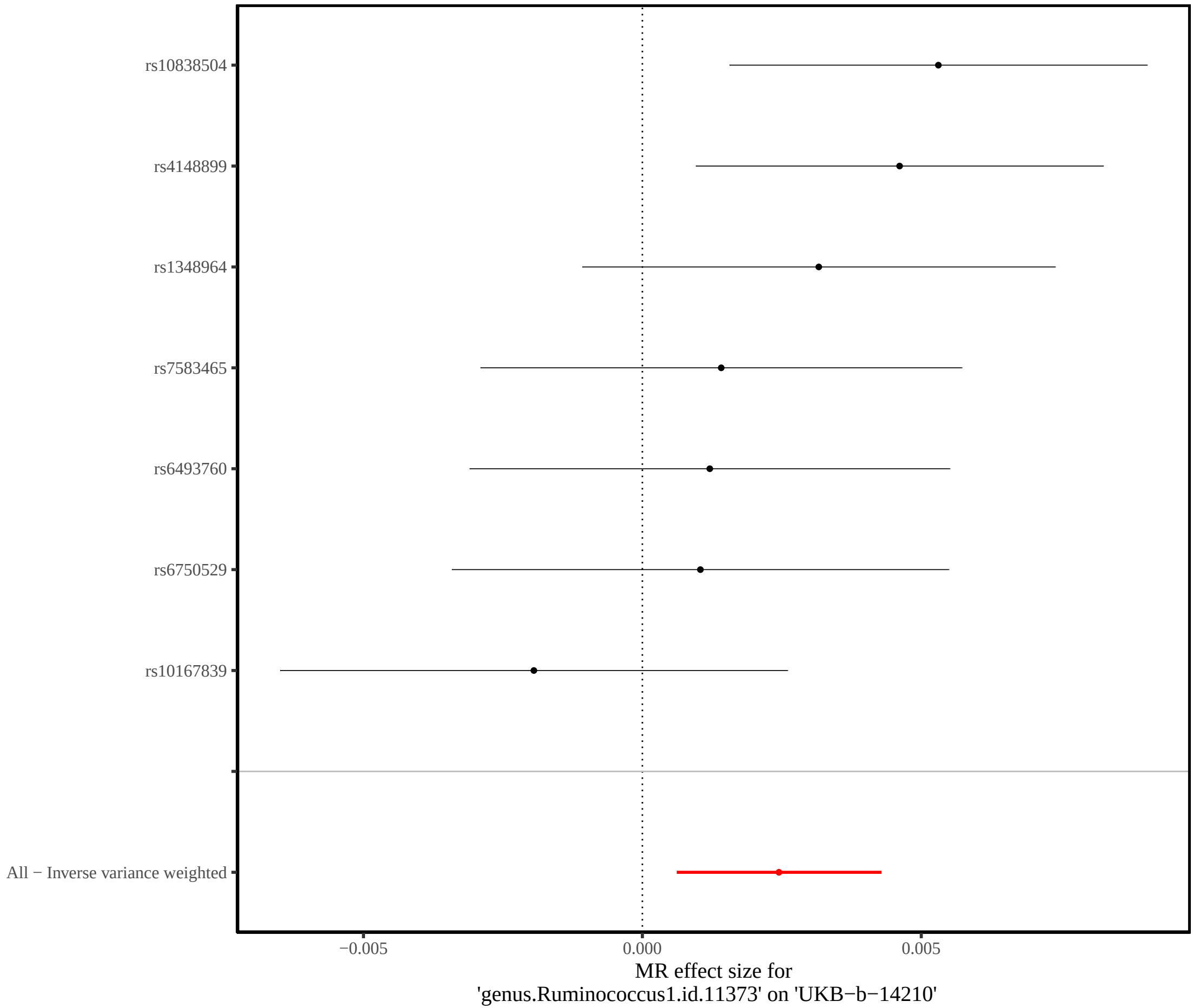


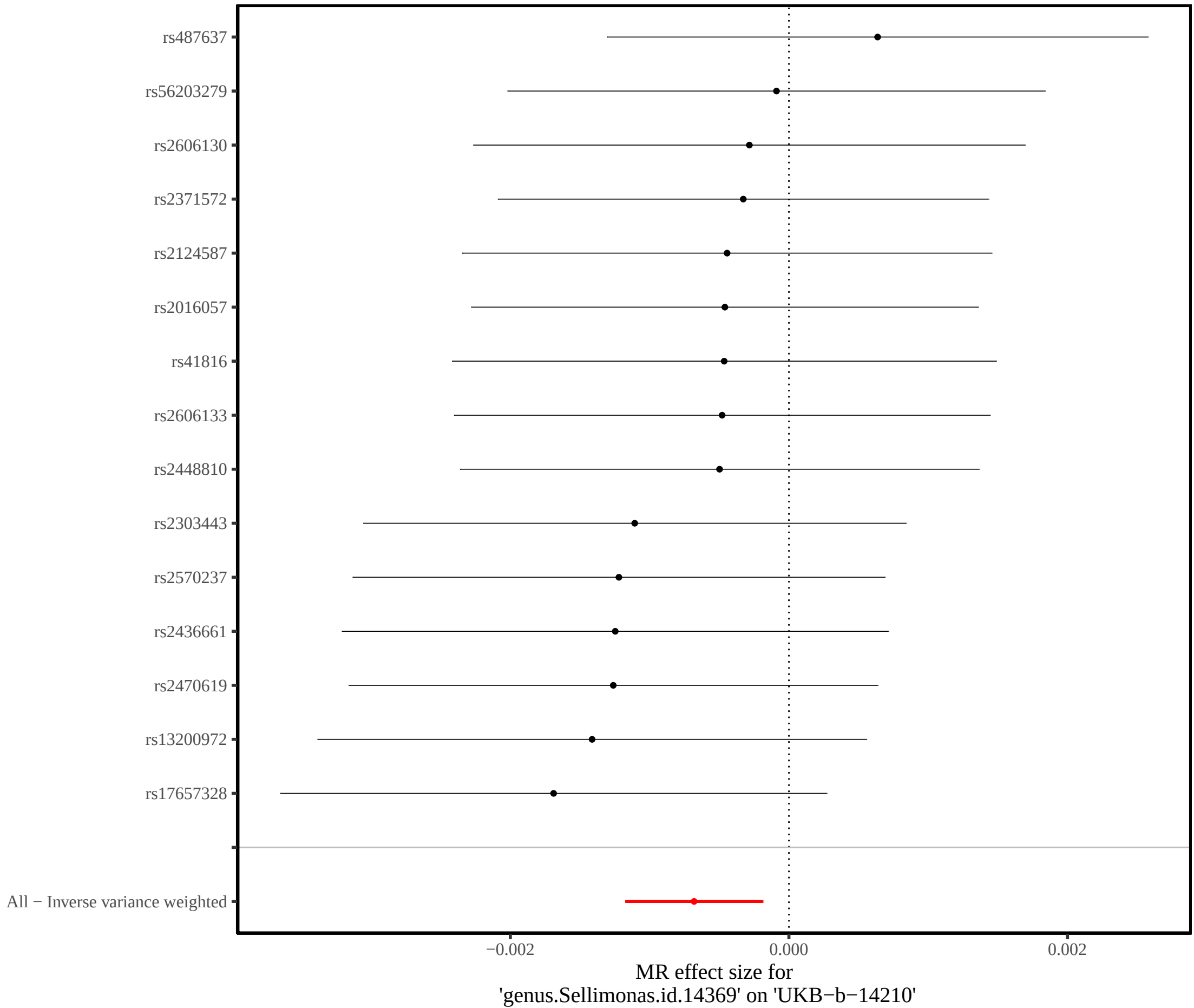


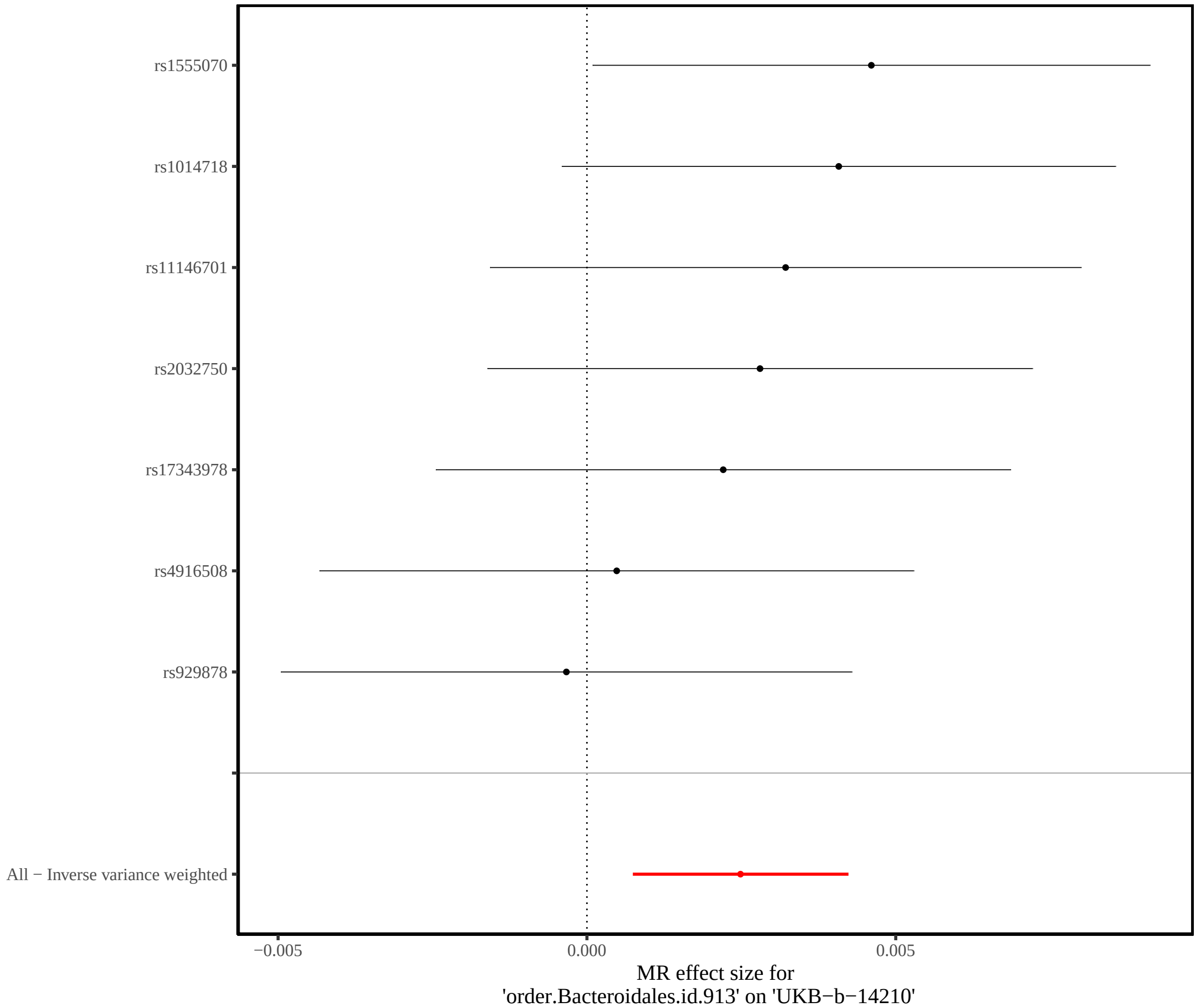


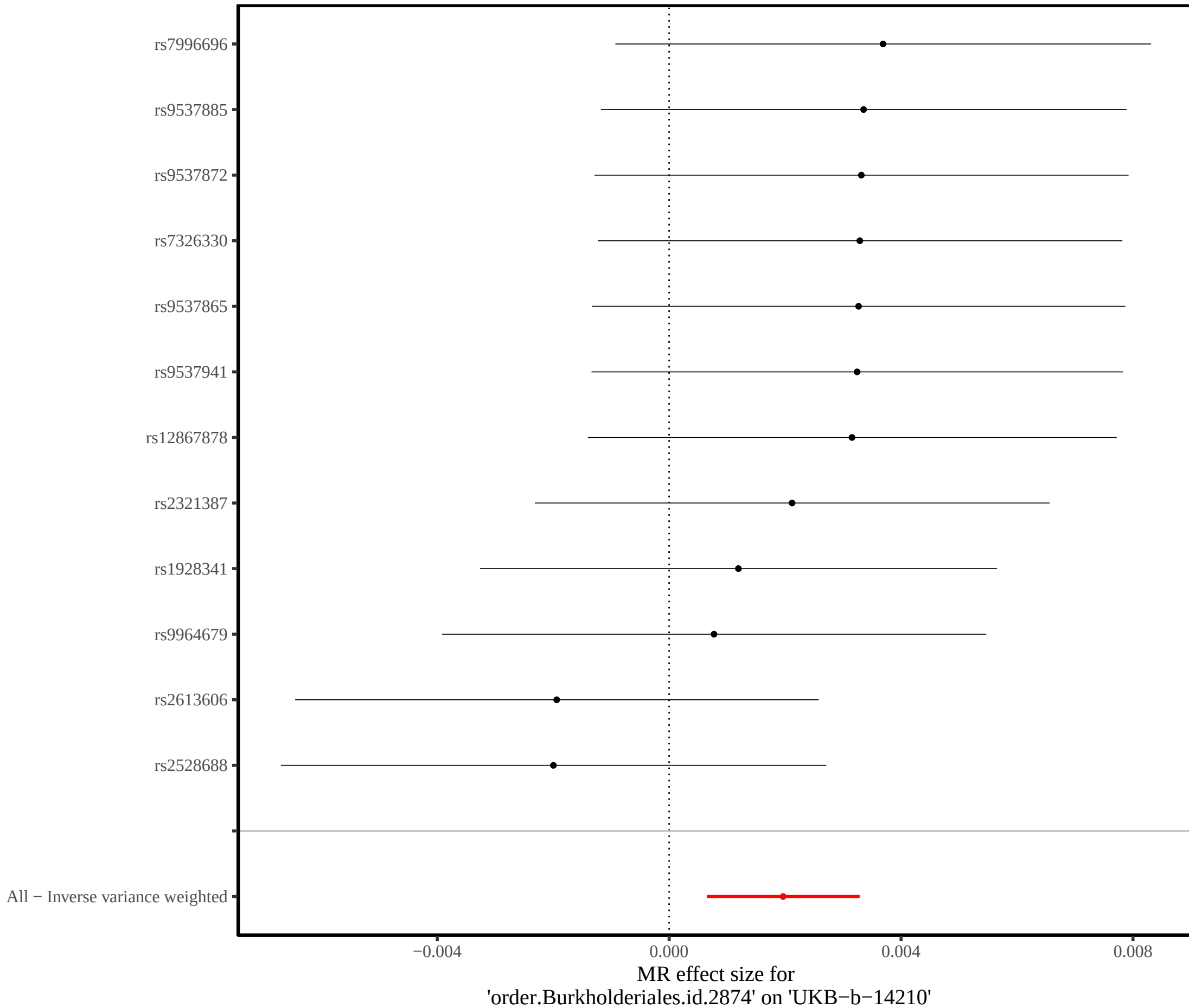


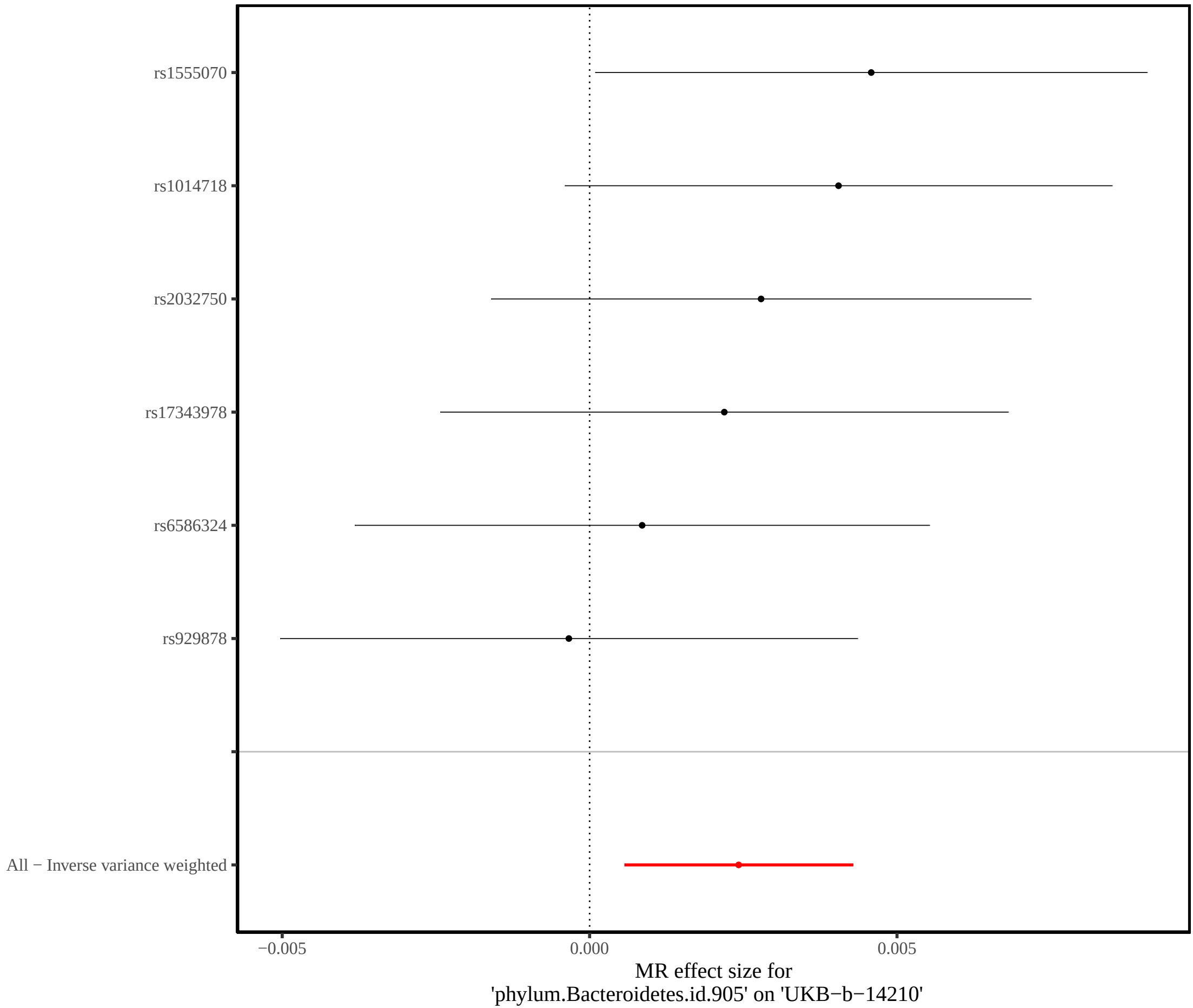








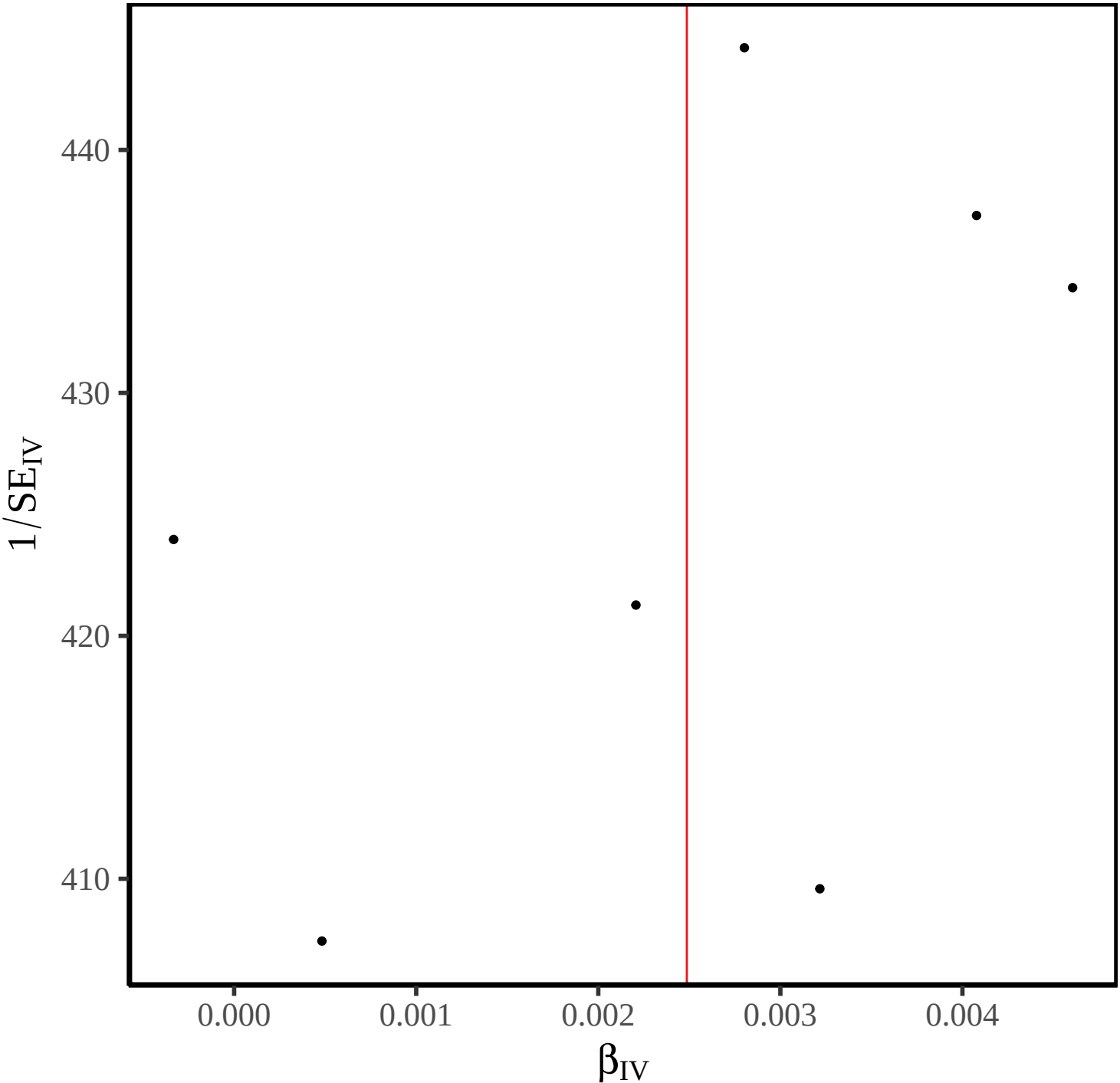




Supplementary Figure 3

MR Method

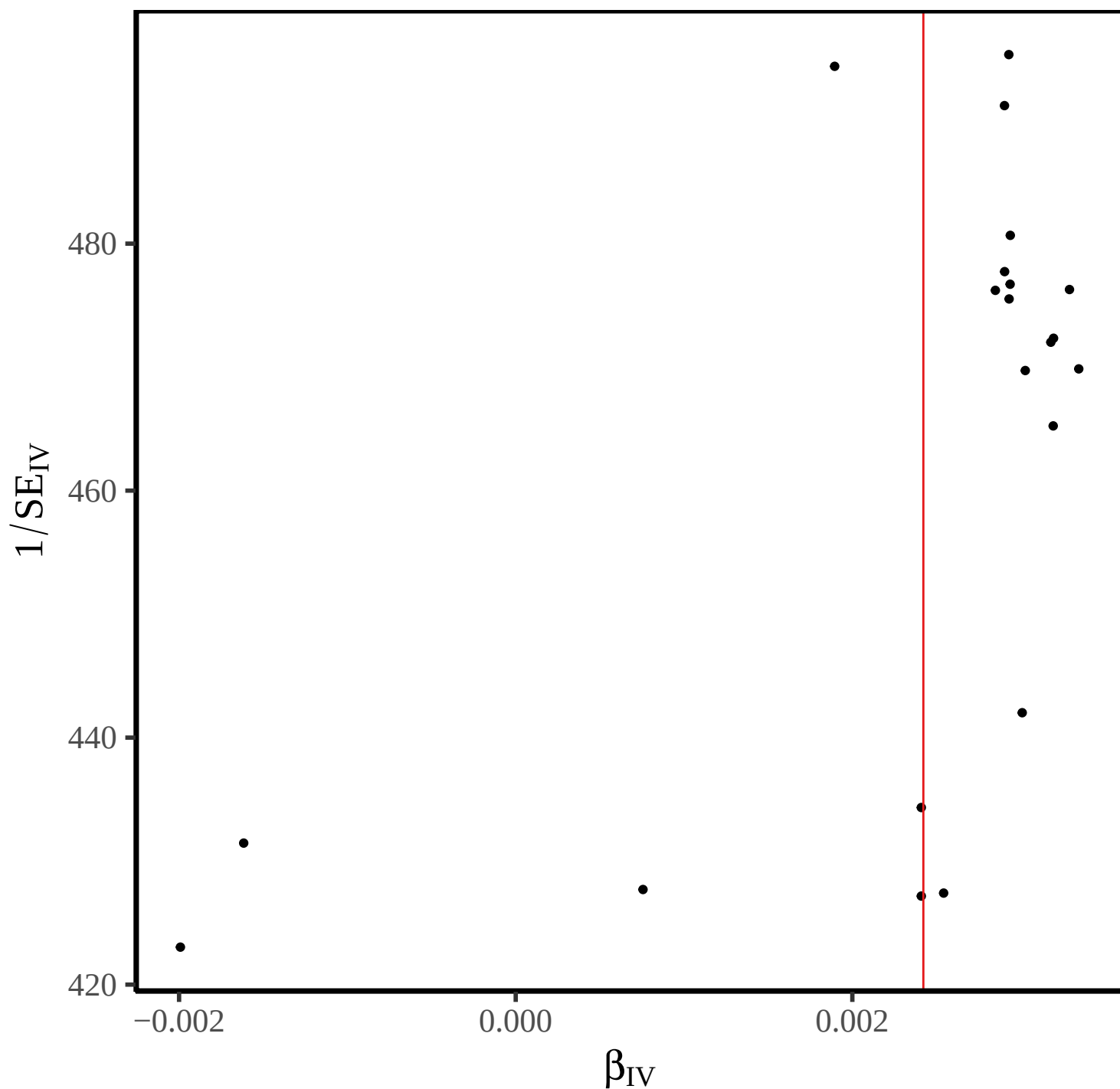
| Inverse variance weighted



class.Bacteroidia.id.912

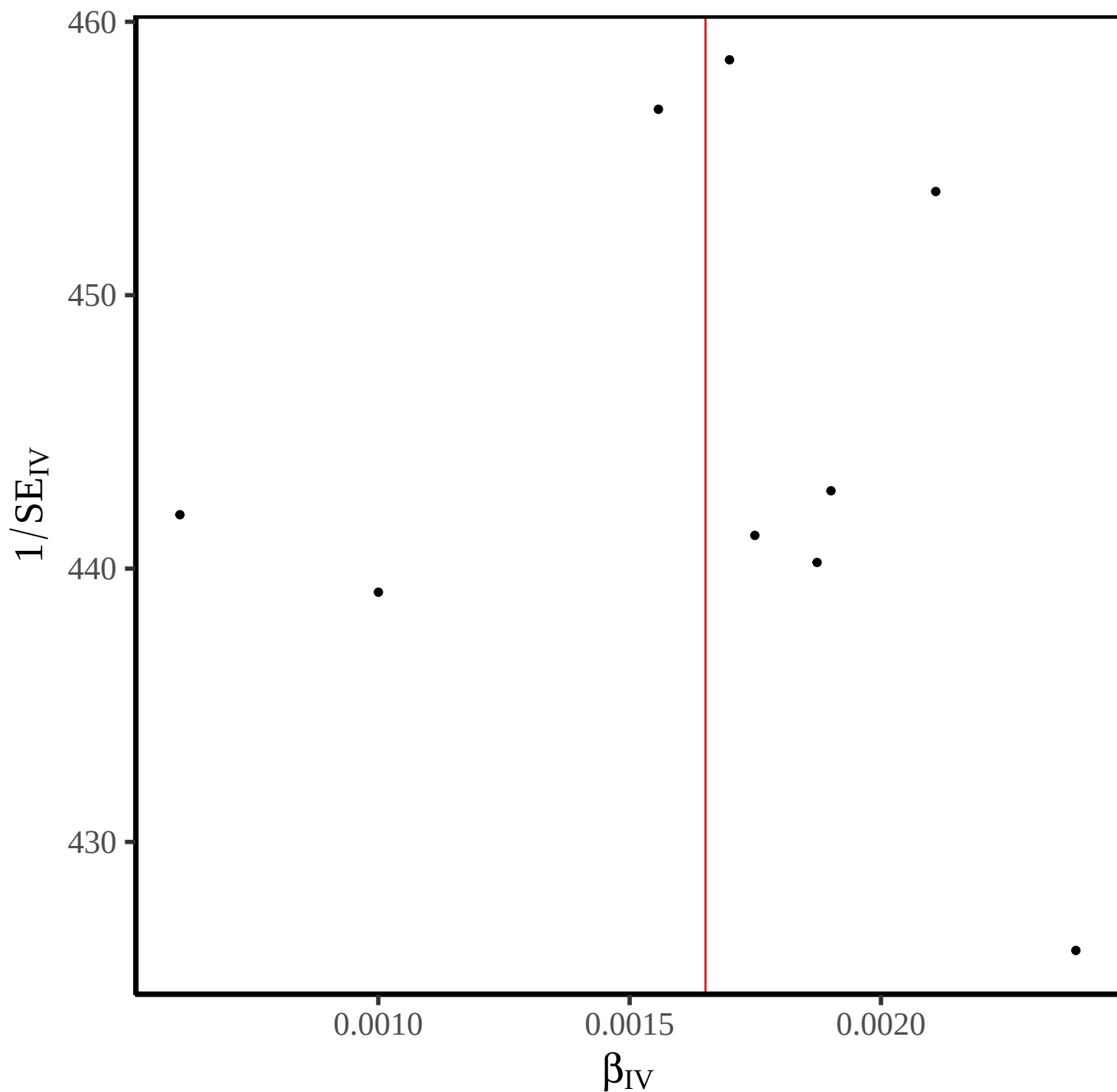
MR Method

| Inverse variance weighted



MR Method

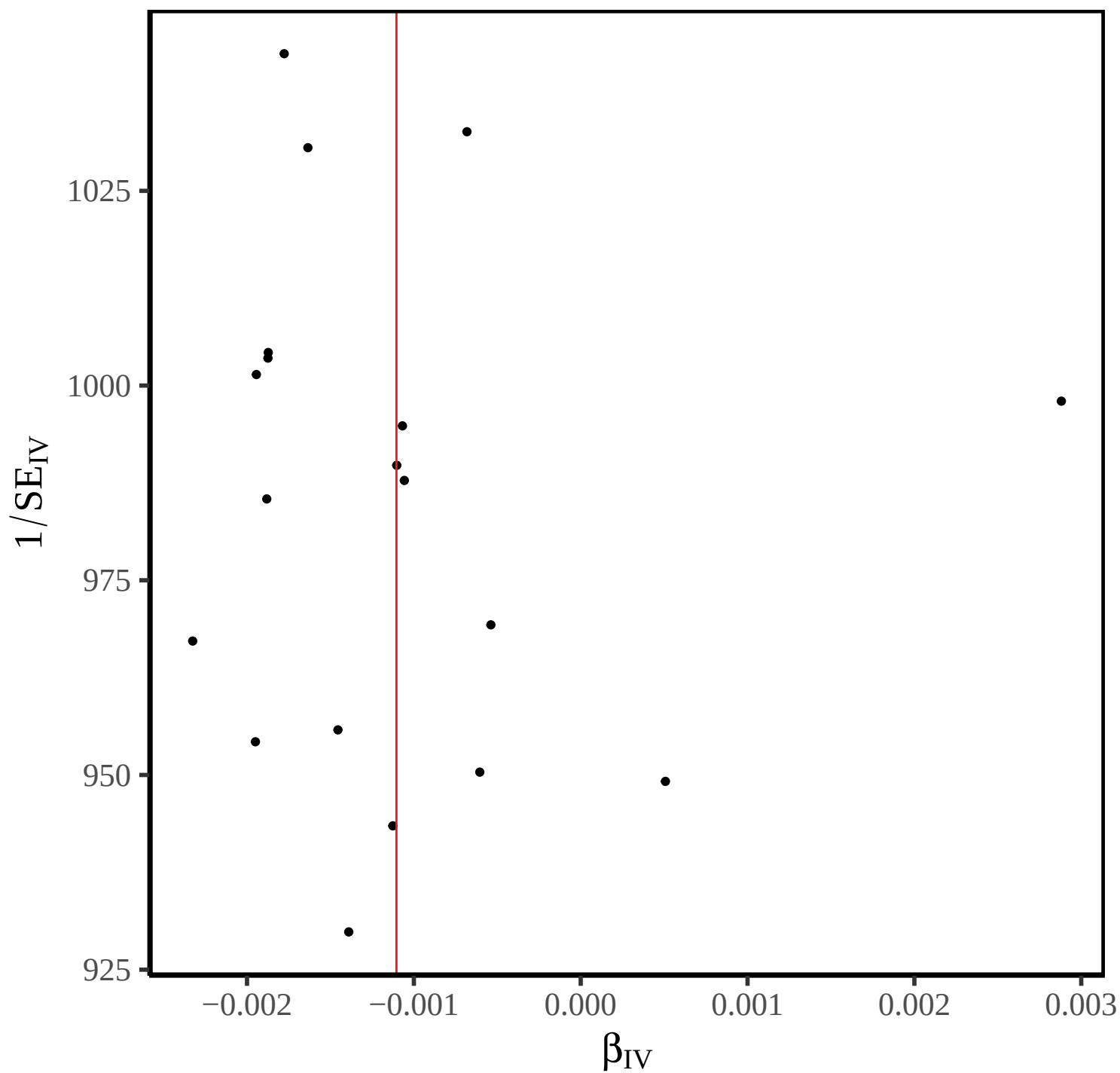
| Inverse variance weighted



genus..Eubacteriumhalliigroup.id.11338

MR Method

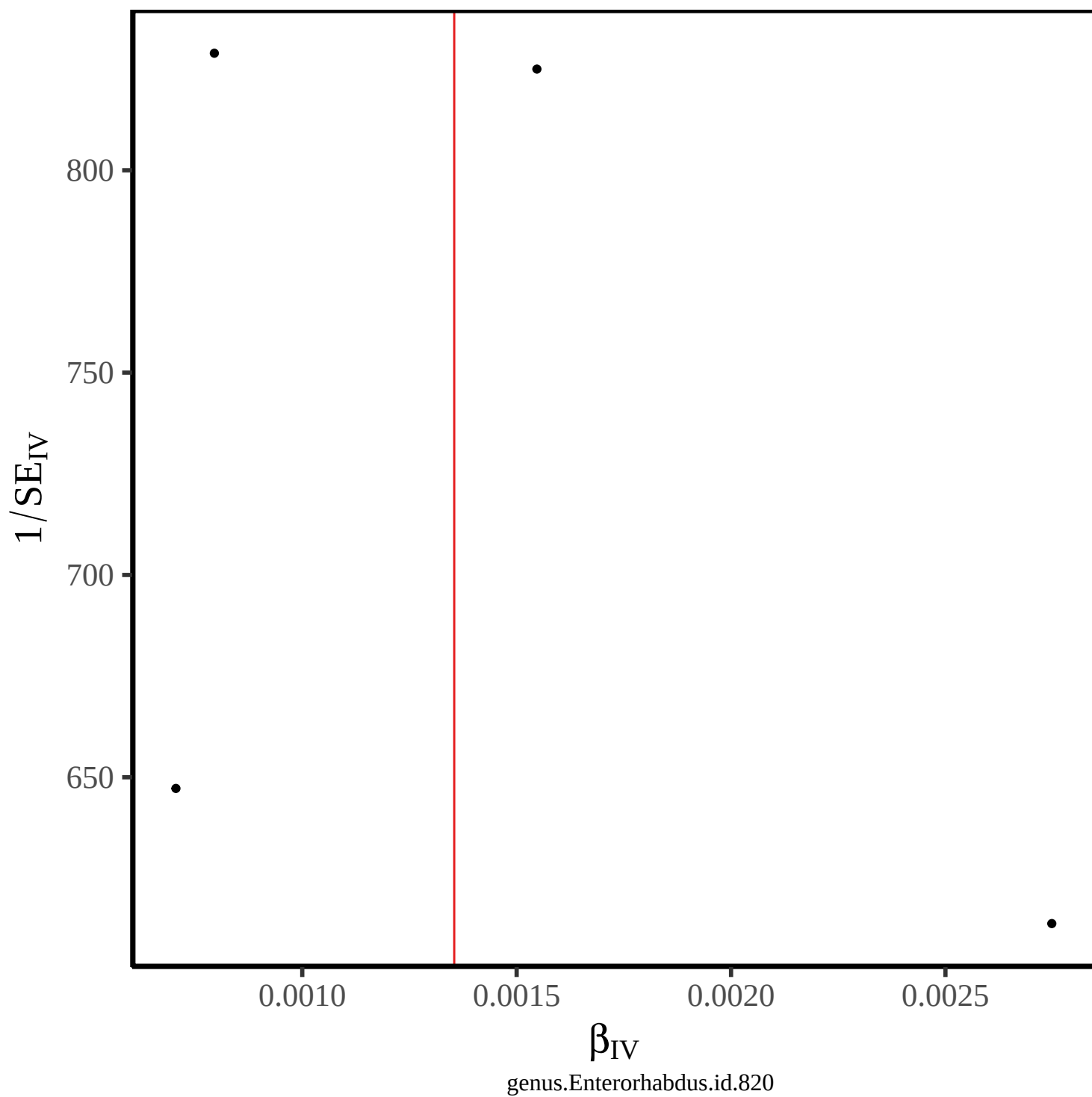
| Inverse variance weighted



genus.Butyrvibrio.id.1993

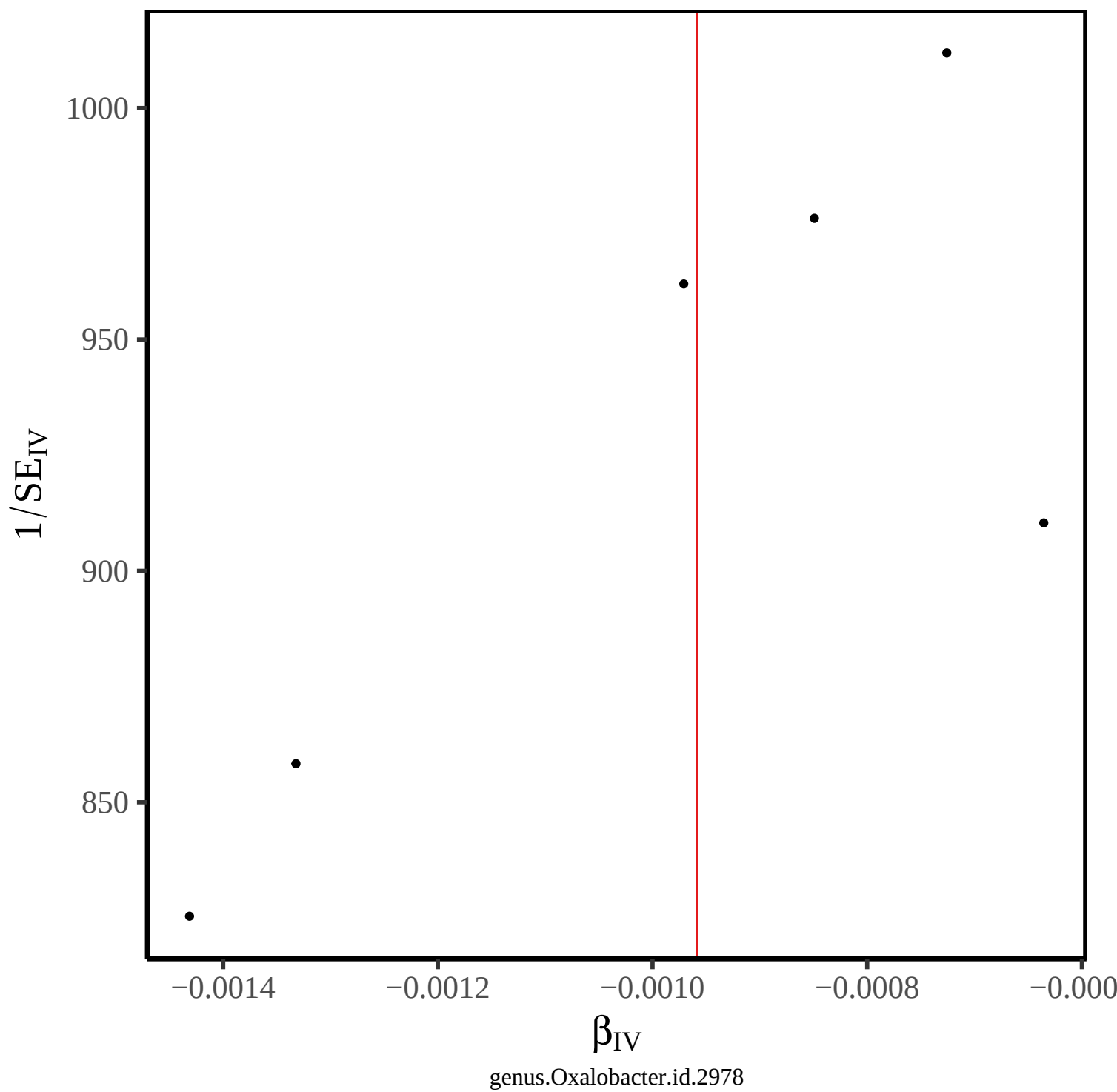
MR Method

| Inverse variance weighted



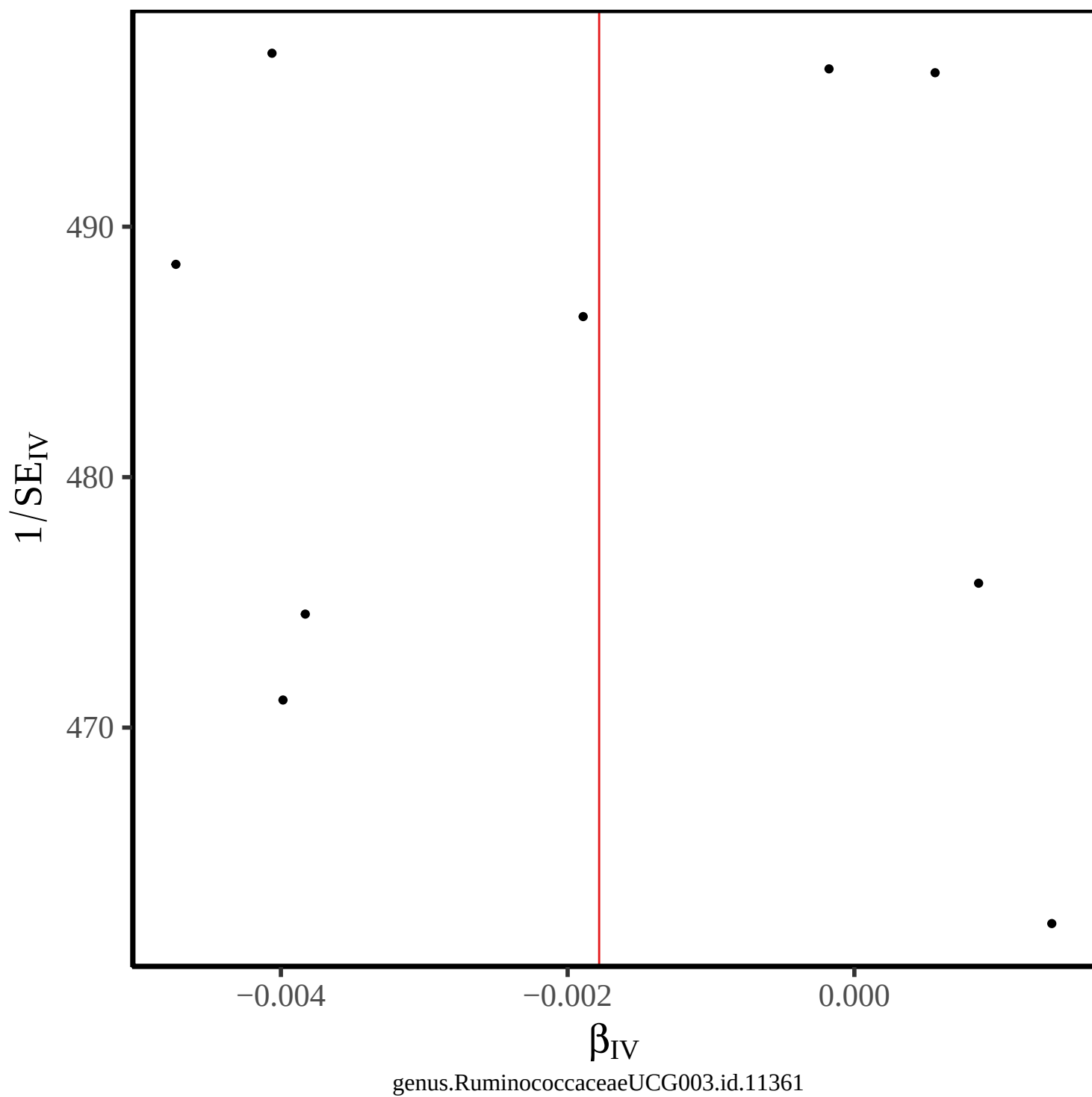
MR Method

| Inverse variance weighted



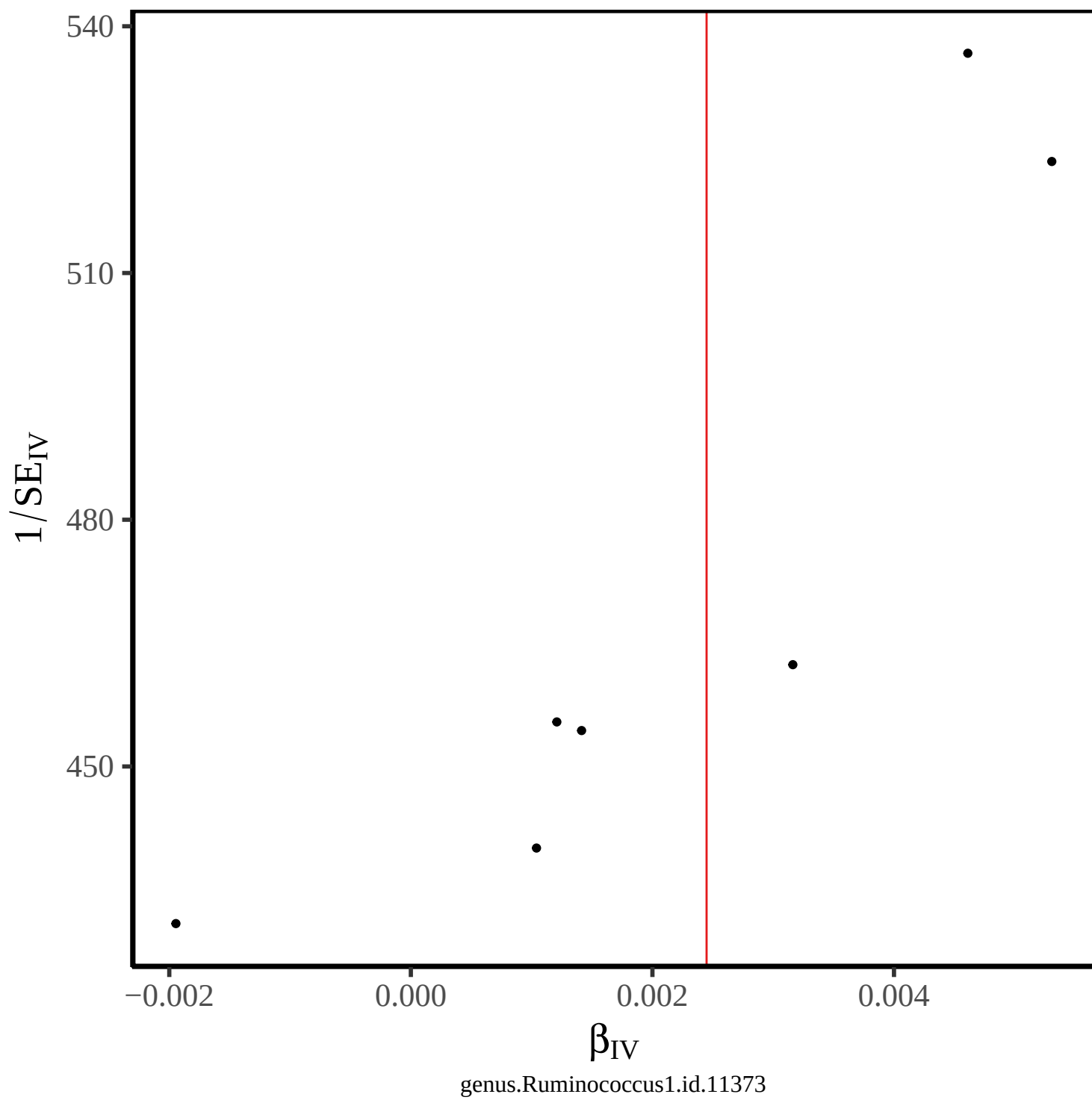
MR Method

| Inverse variance weighted



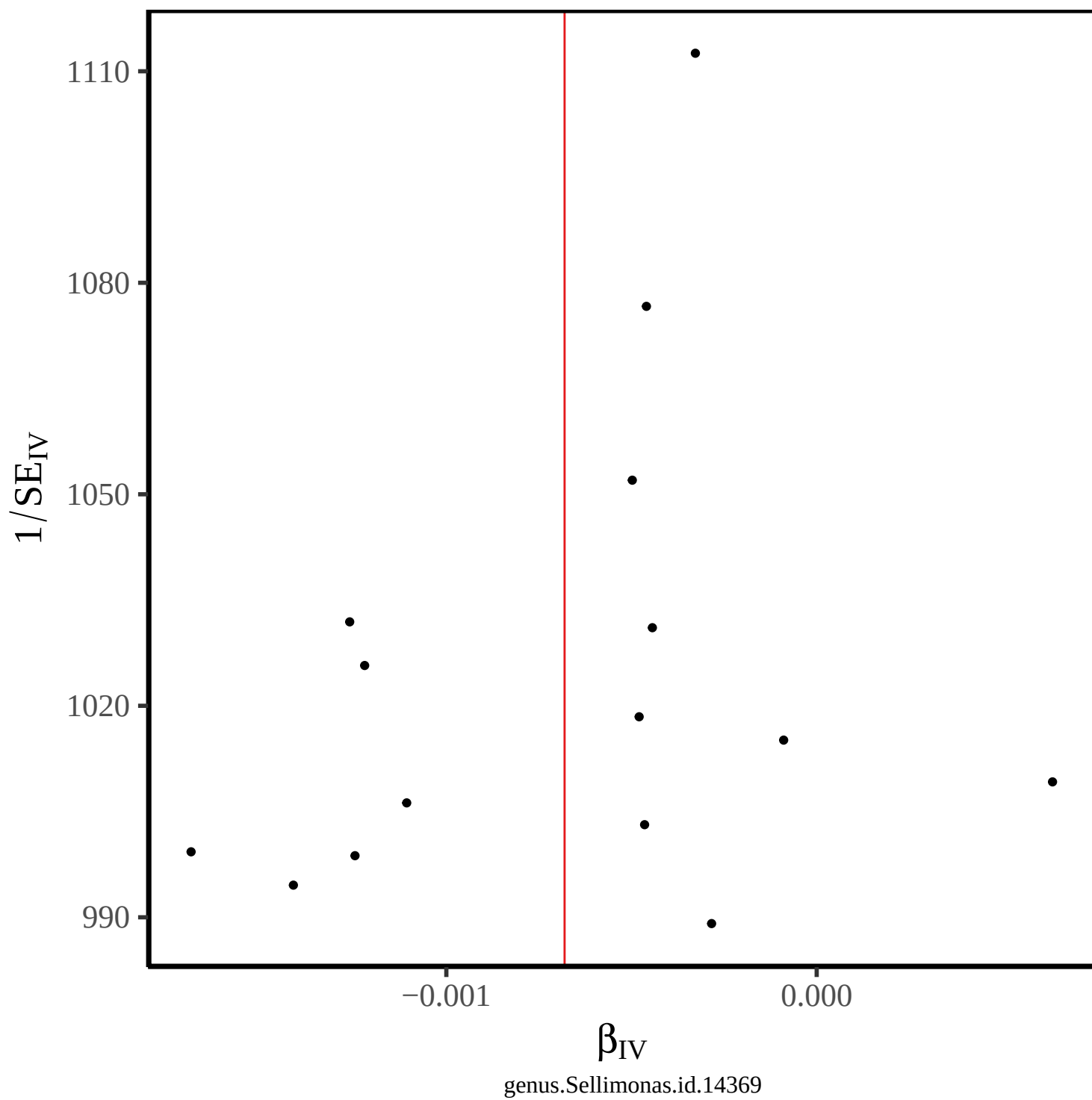
MR Method

| Inverse variance weighted



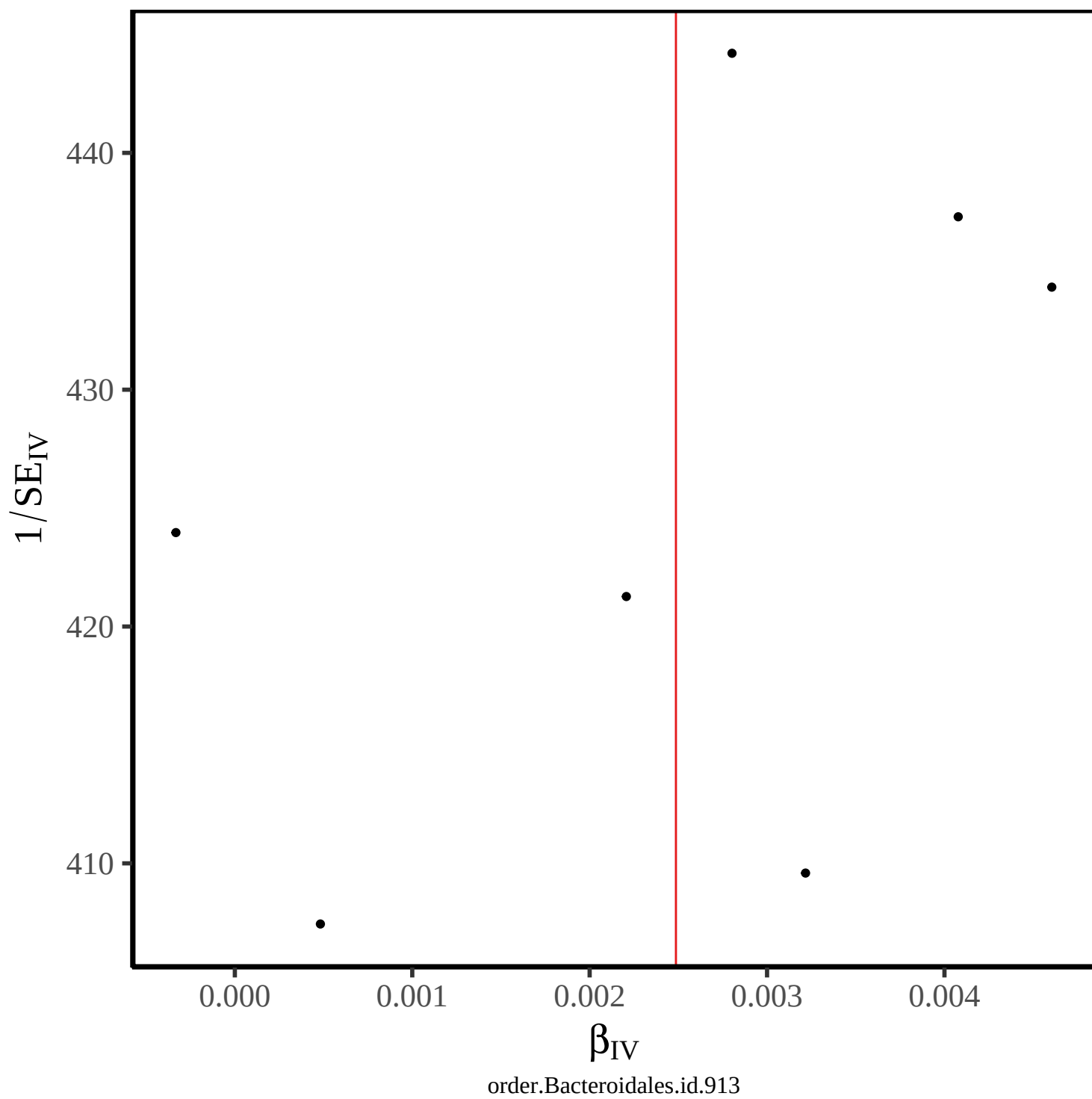
MR Method

| Inverse variance weighted



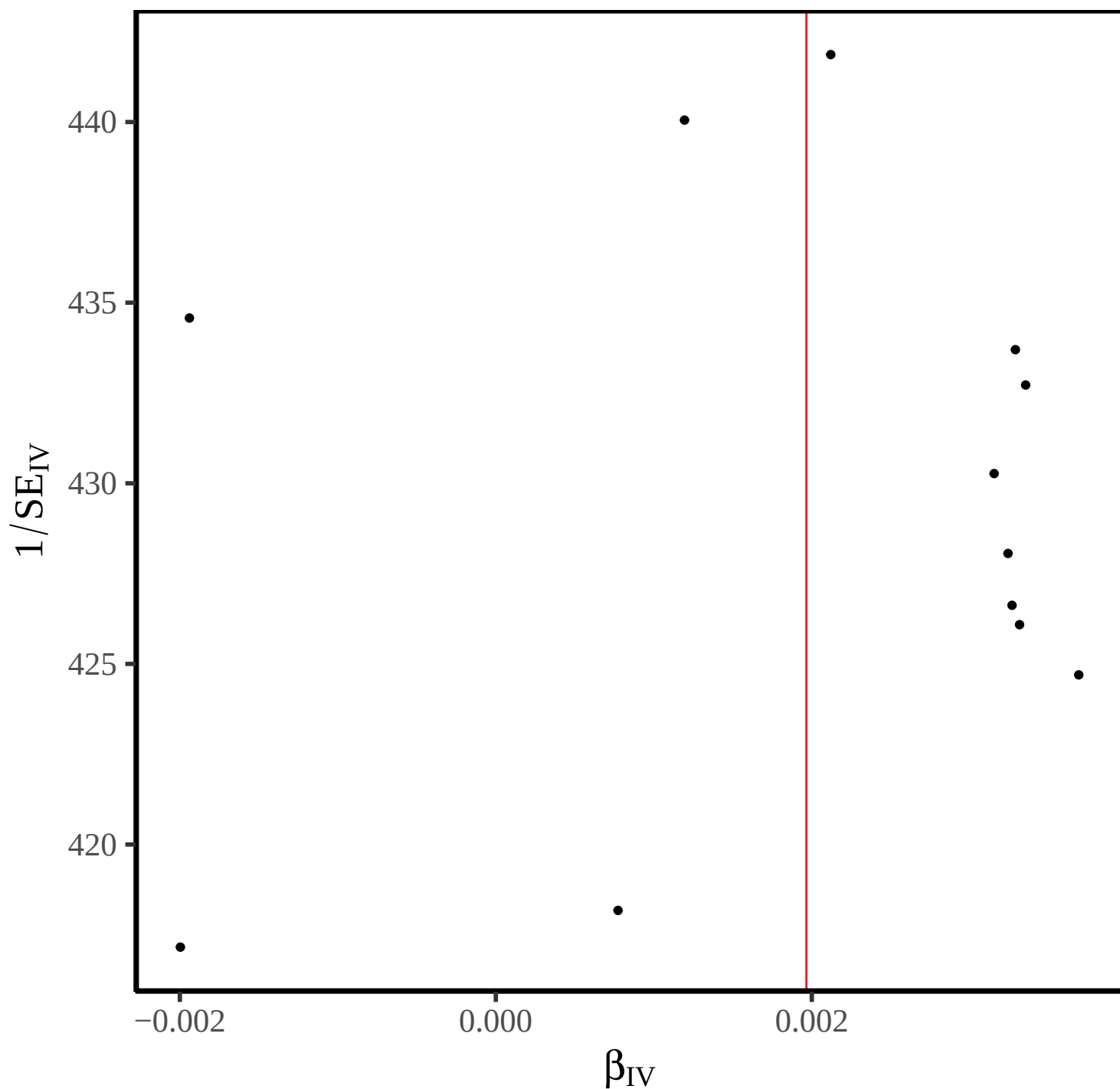
MR Method

| Inverse variance weighted



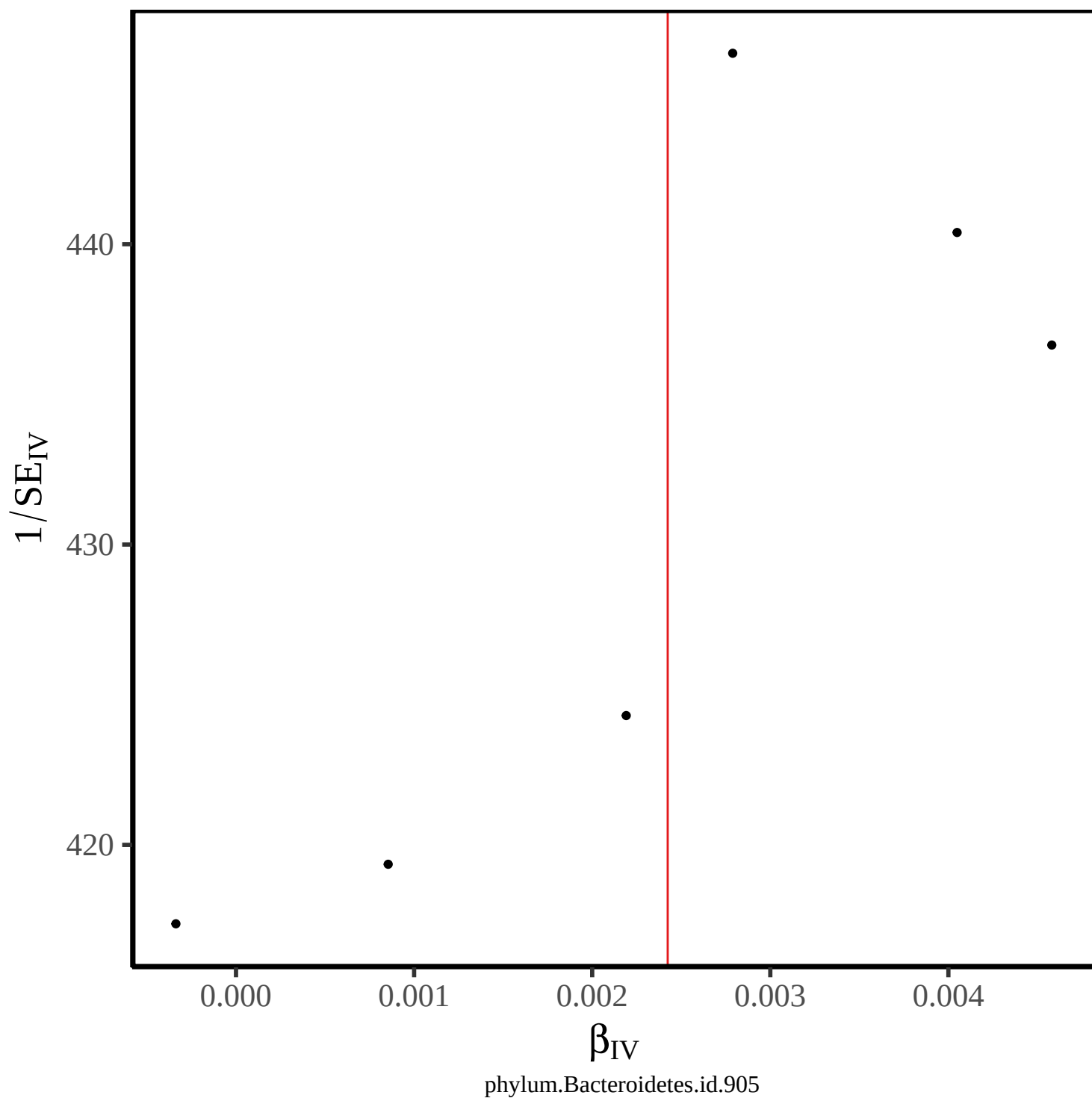
MR Method

| Inverse variance weighted

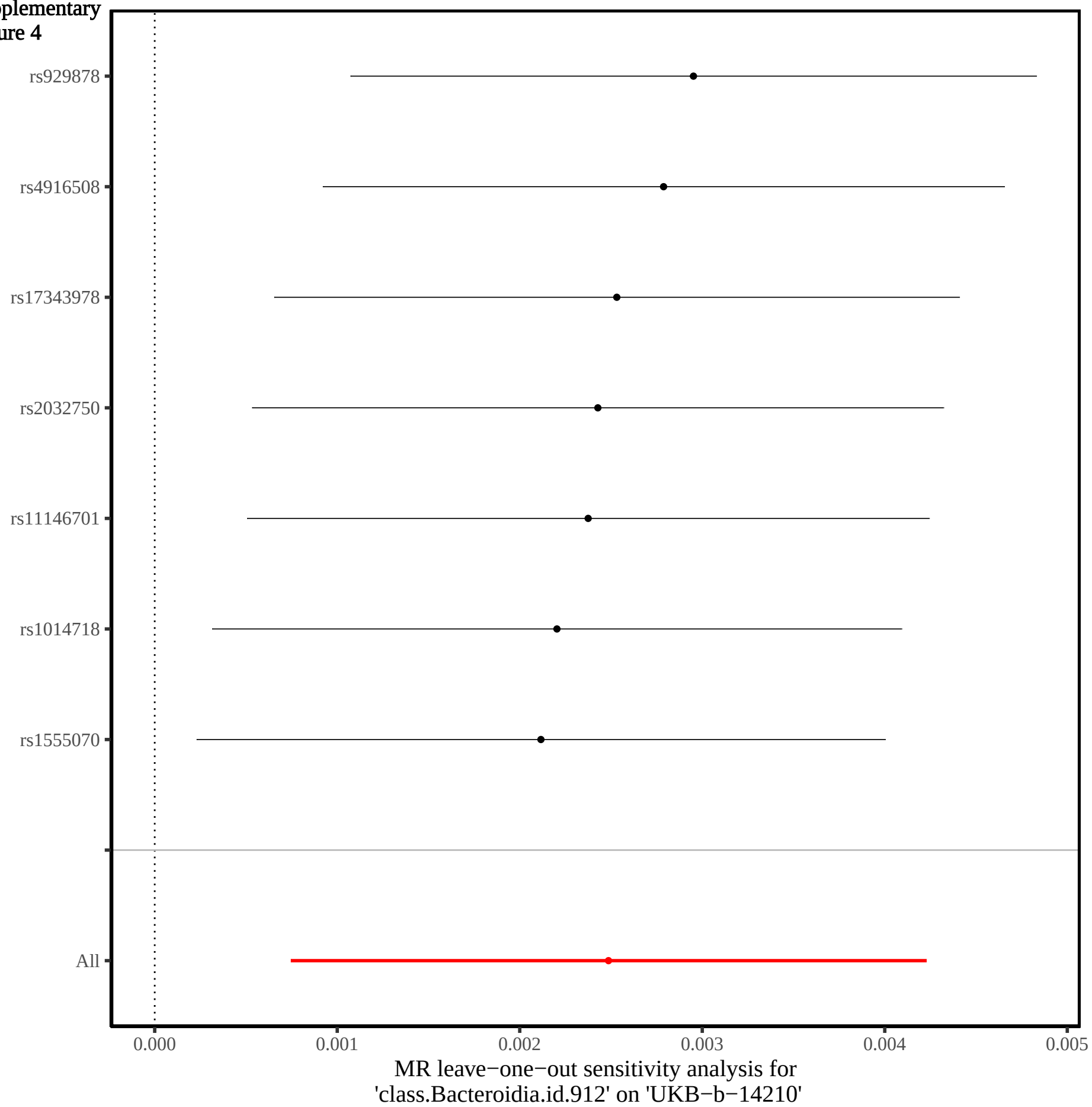


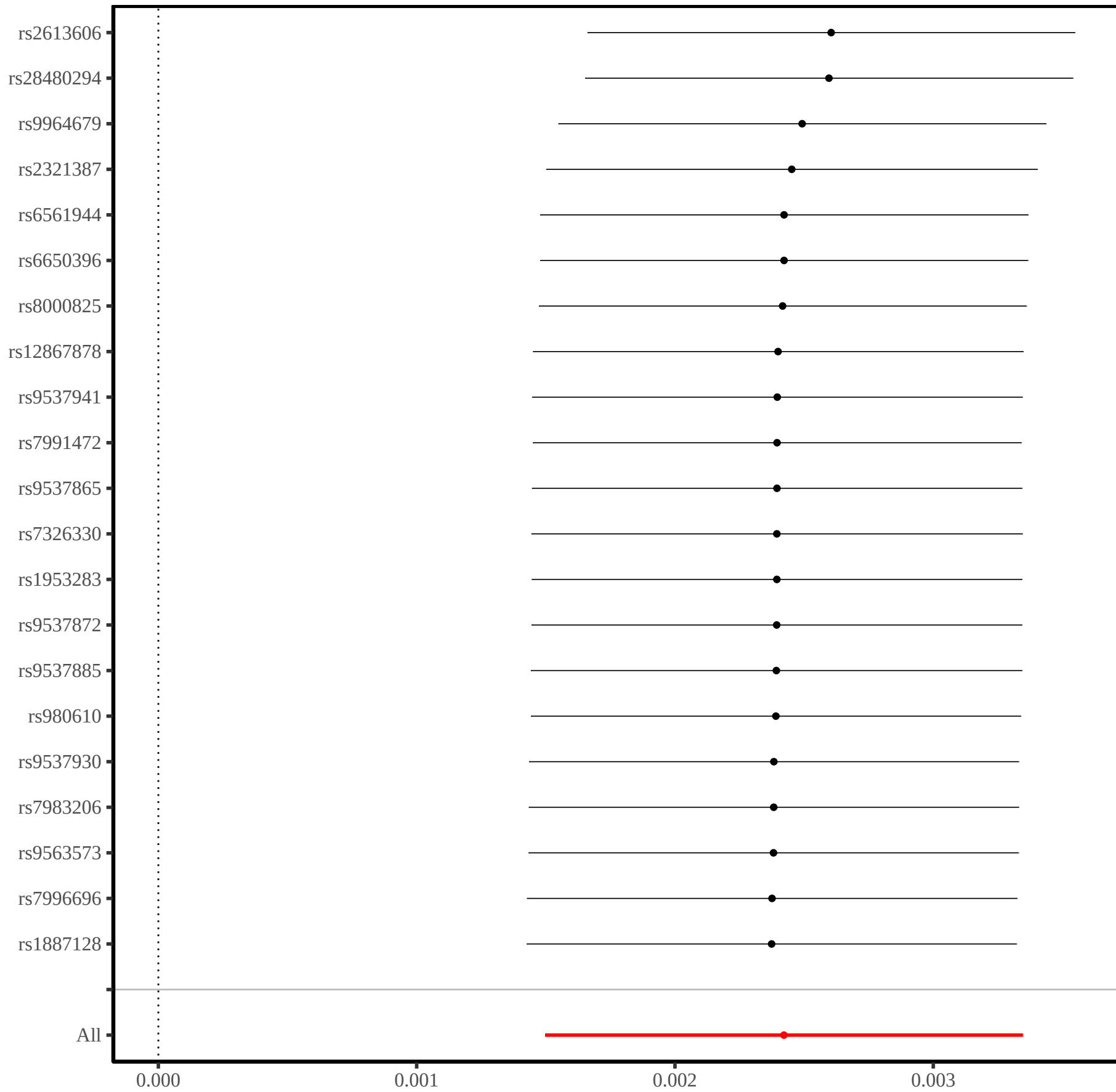
MR Method

| Inverse variance weighted

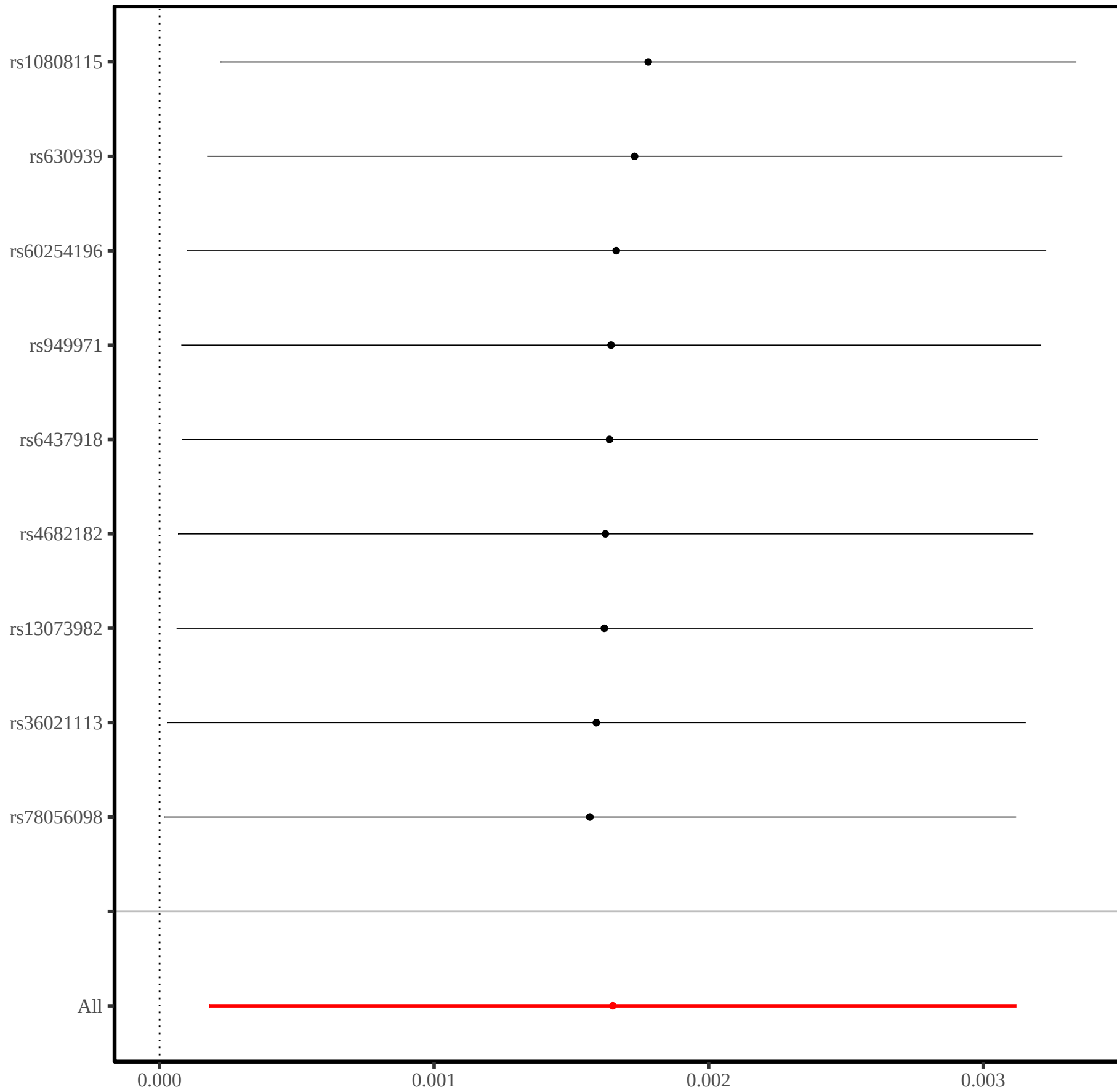


Supplementary
Figure 4

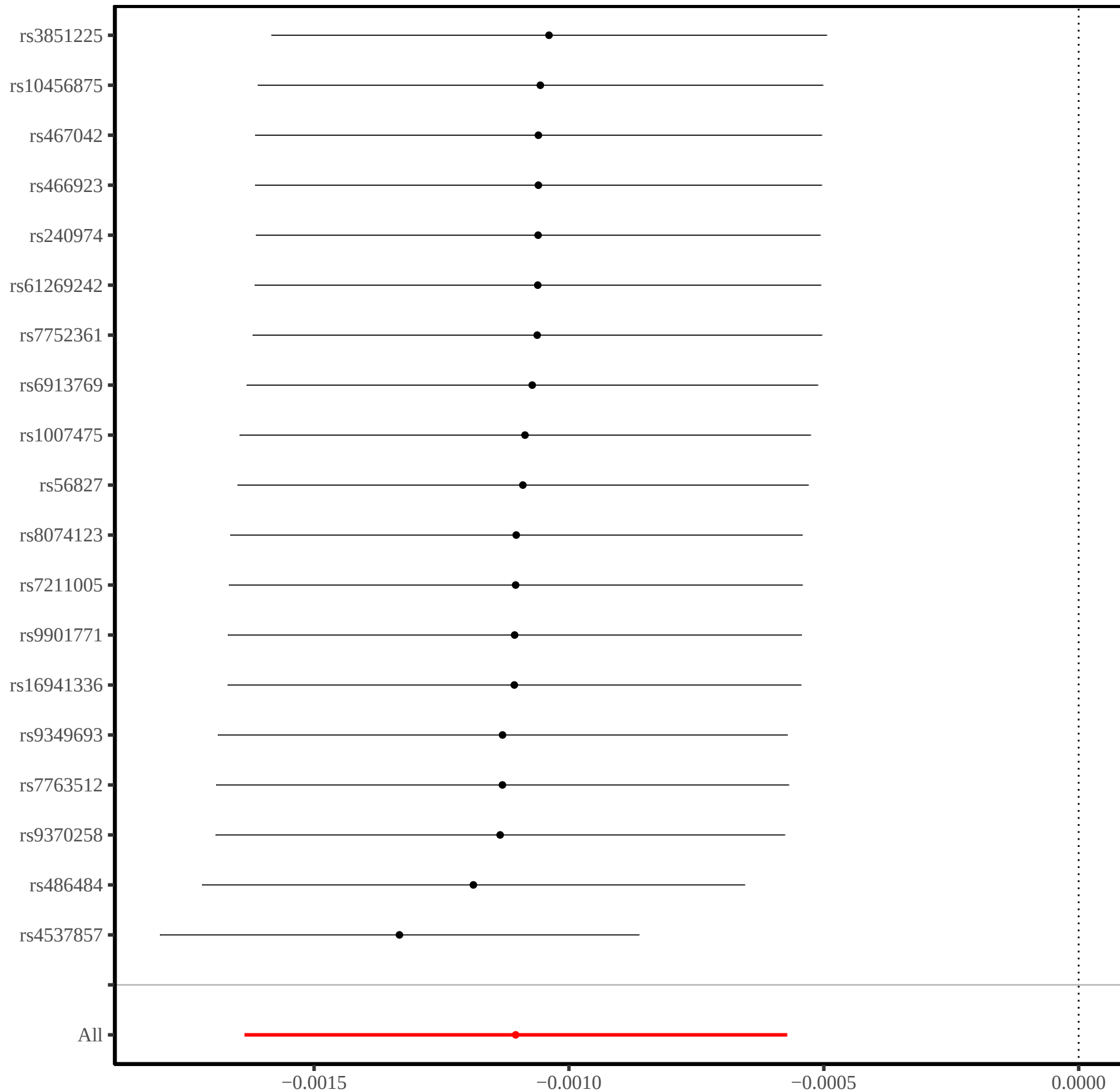




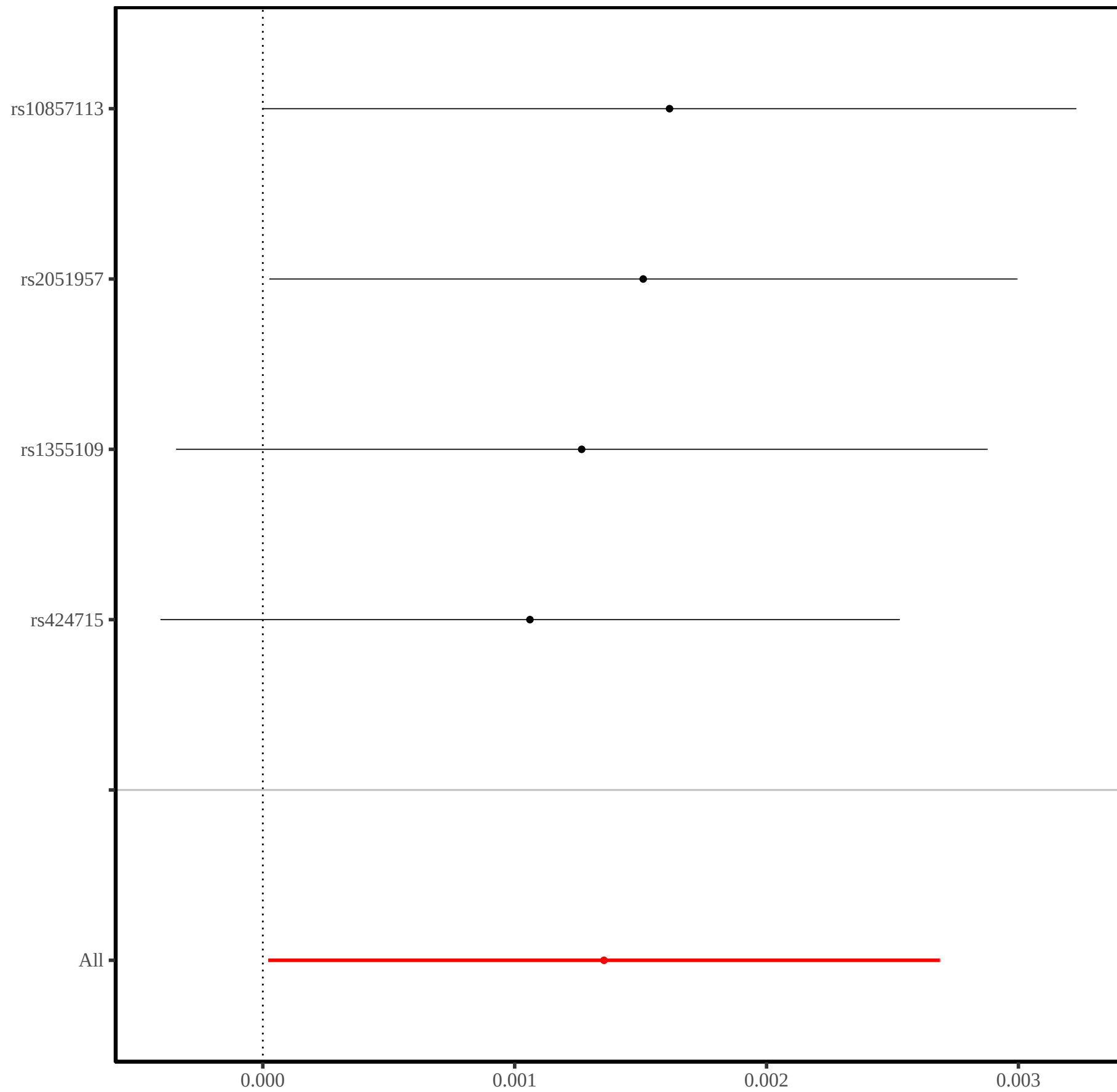
MR leave-one-out sensitivity analysis for
'family.Alcaligenaceae.id.2875' on 'UKB-b-14210'

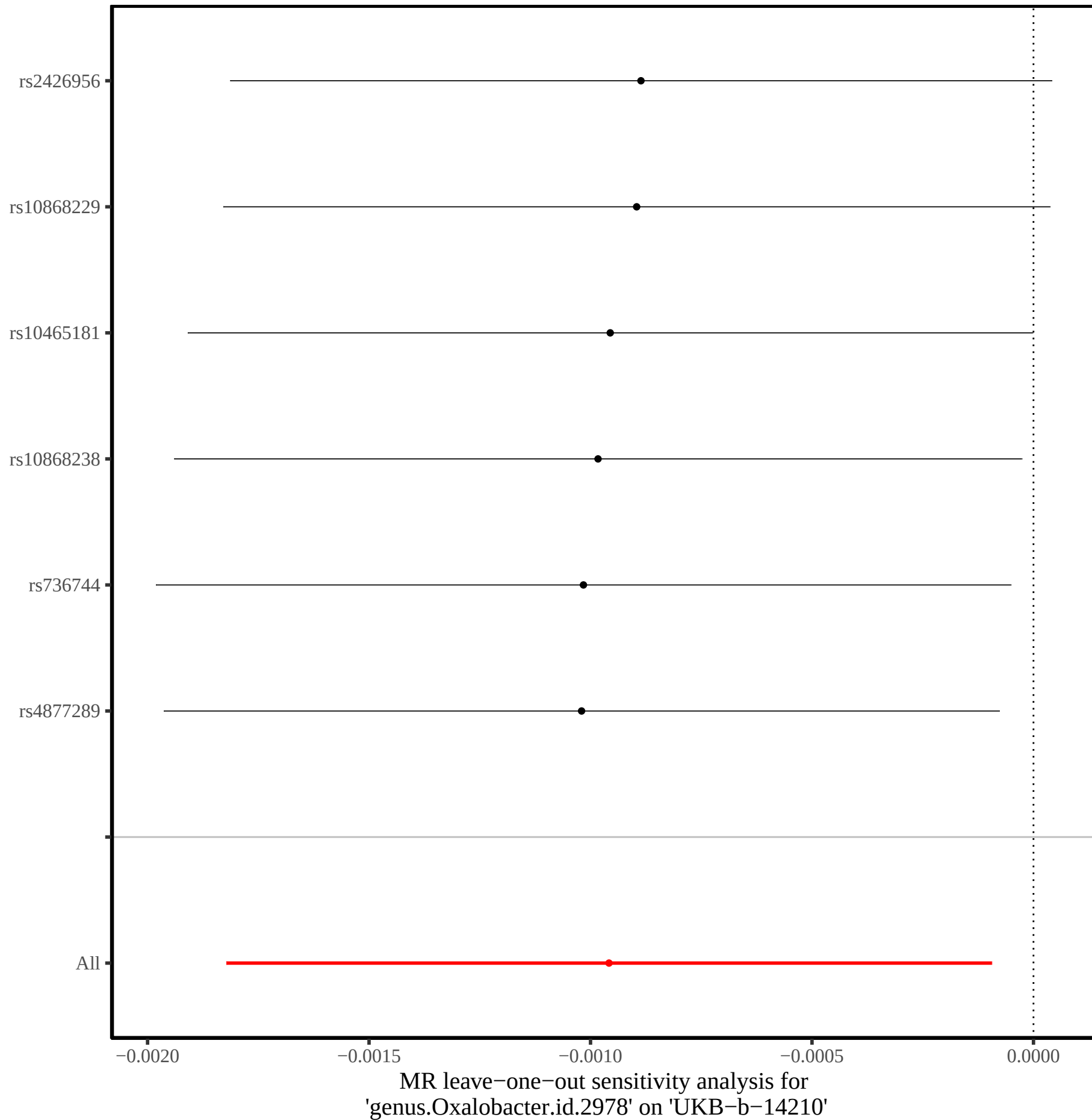


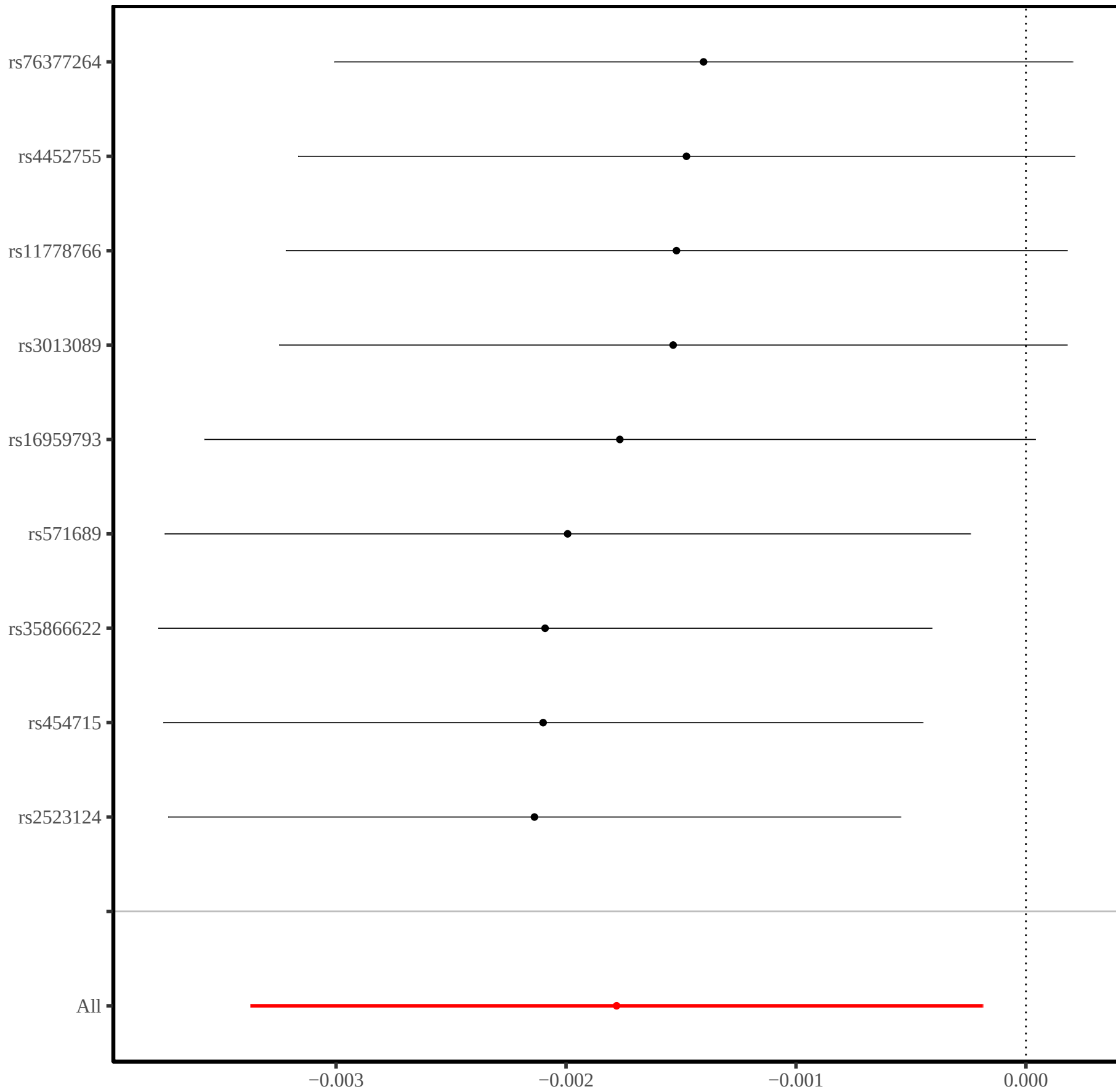
MR leave-one-out sensitivity analysis for
'genus..Eubacteriumhalliigroup.id.11338' on 'UKB-b-14210'

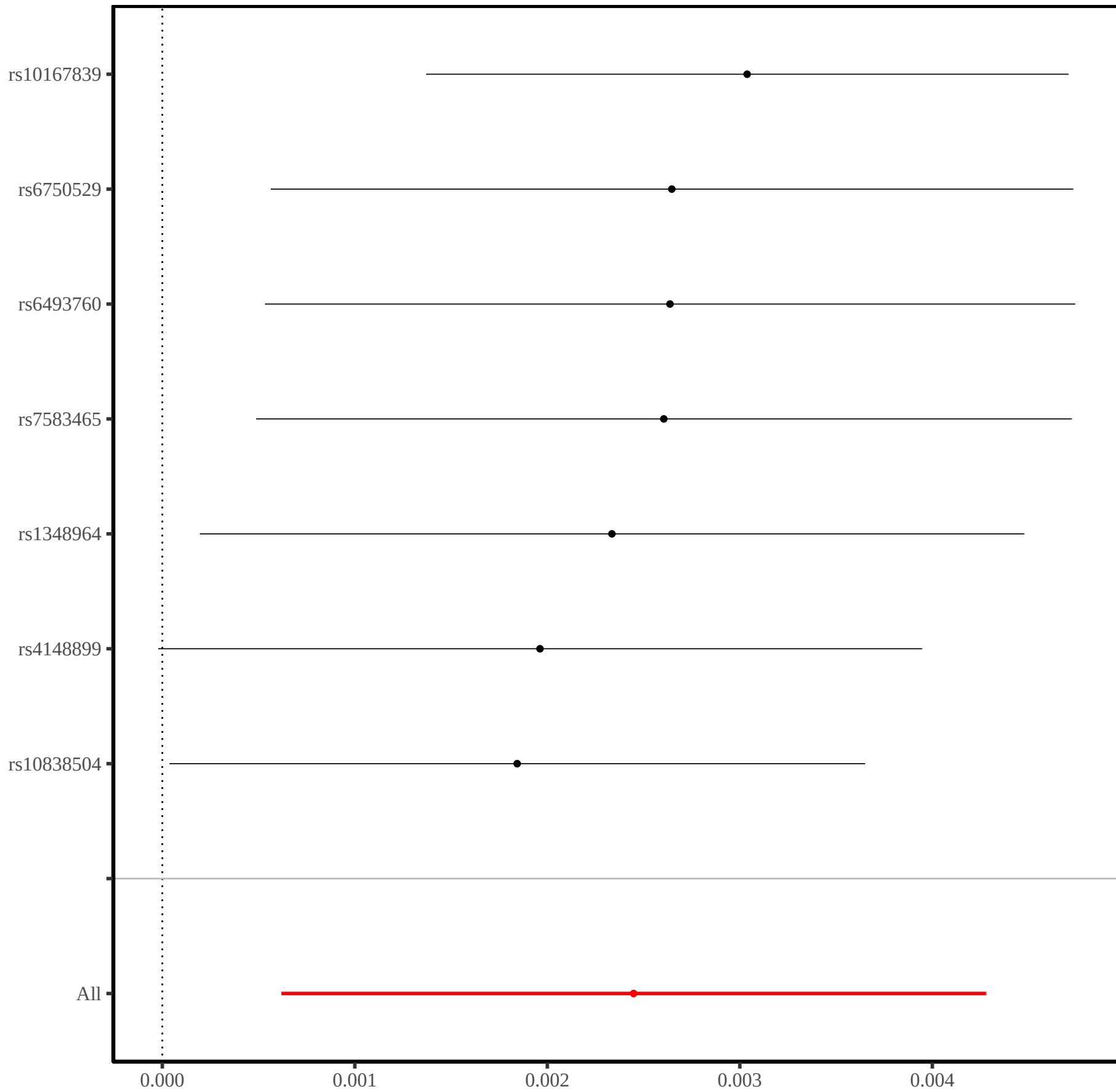


MR leave-one-out sensitivity analysis for
'genus.Butyrivibrio.id.1993' on 'UKB-b-14210'

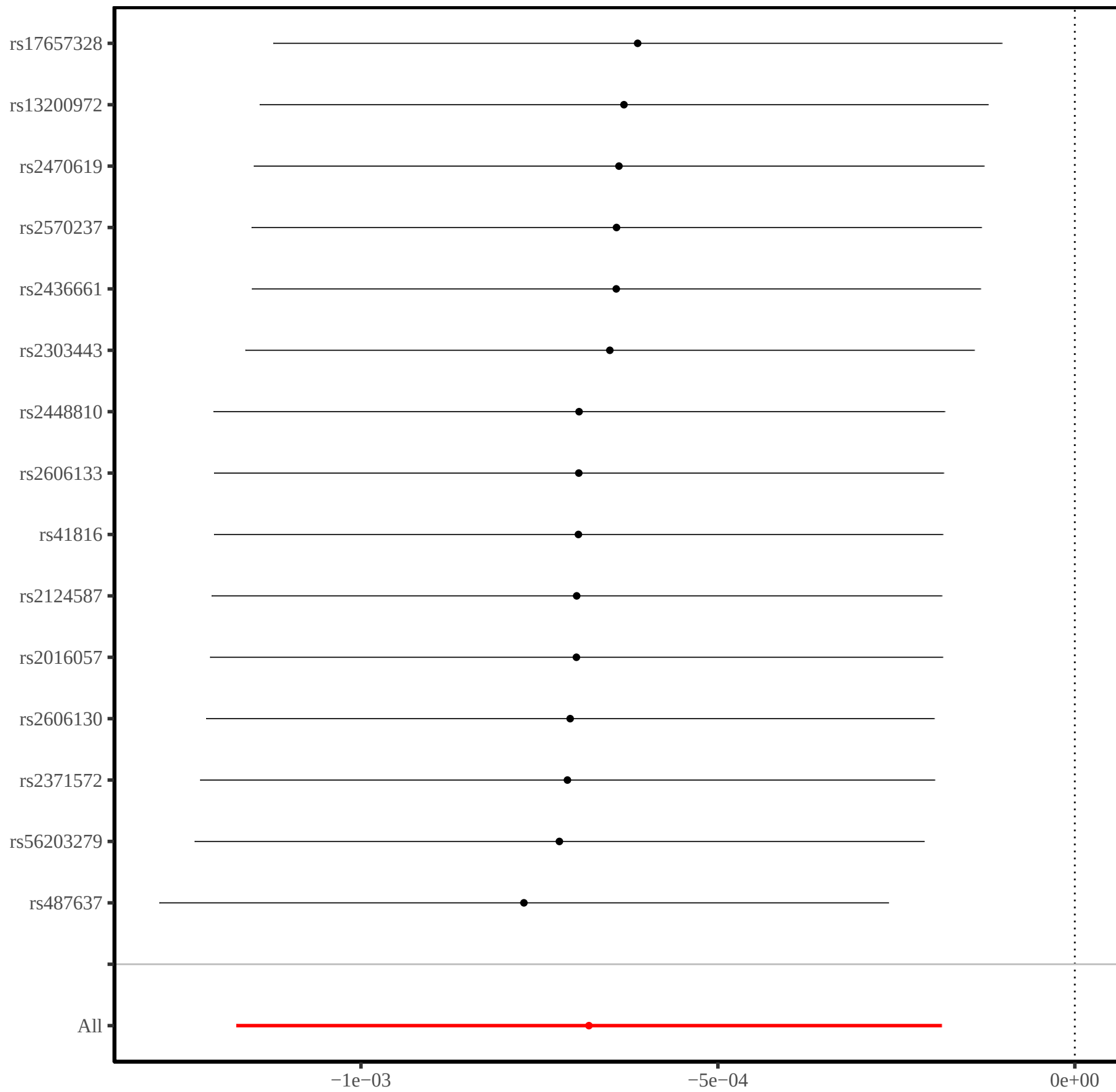




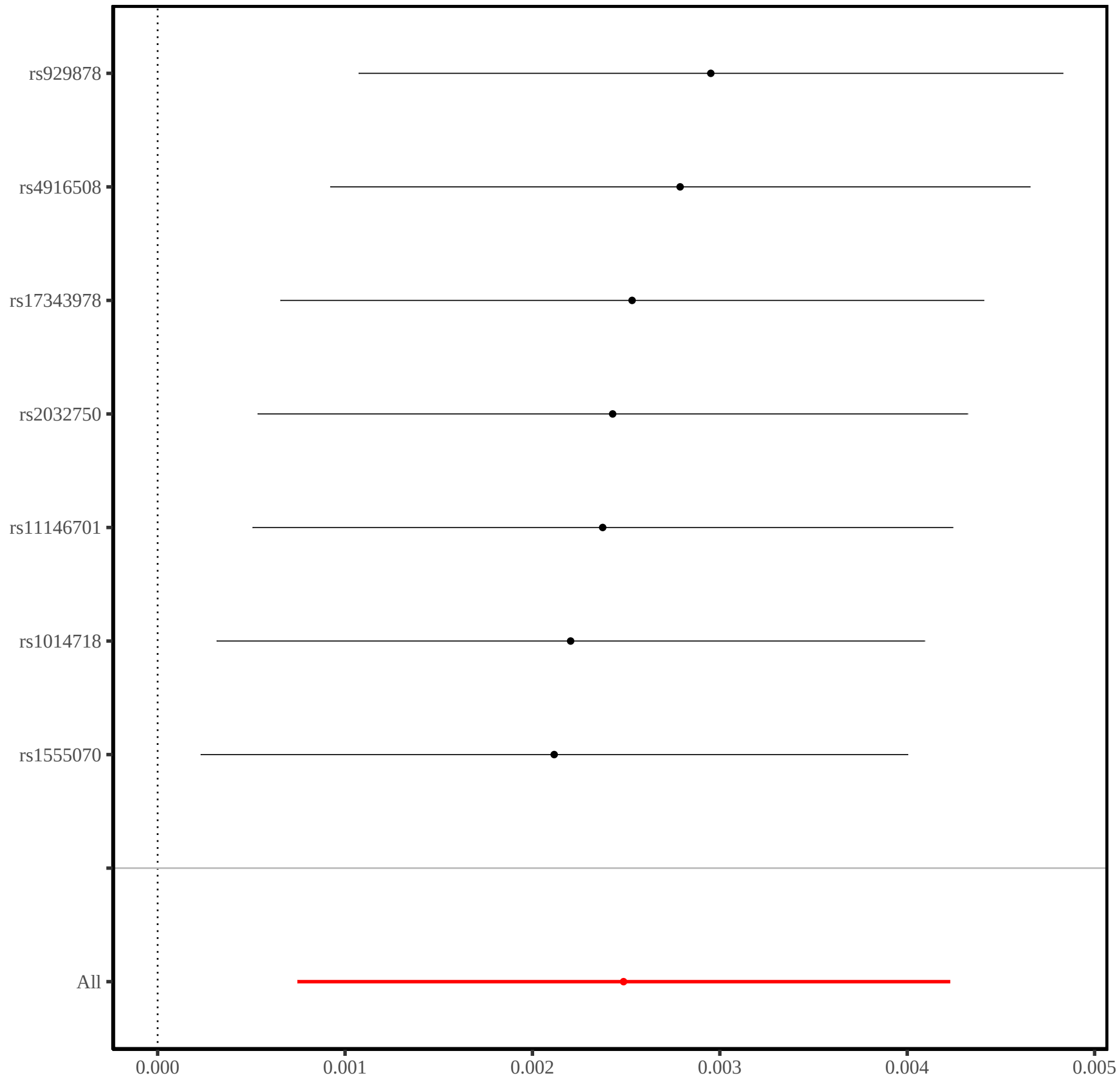




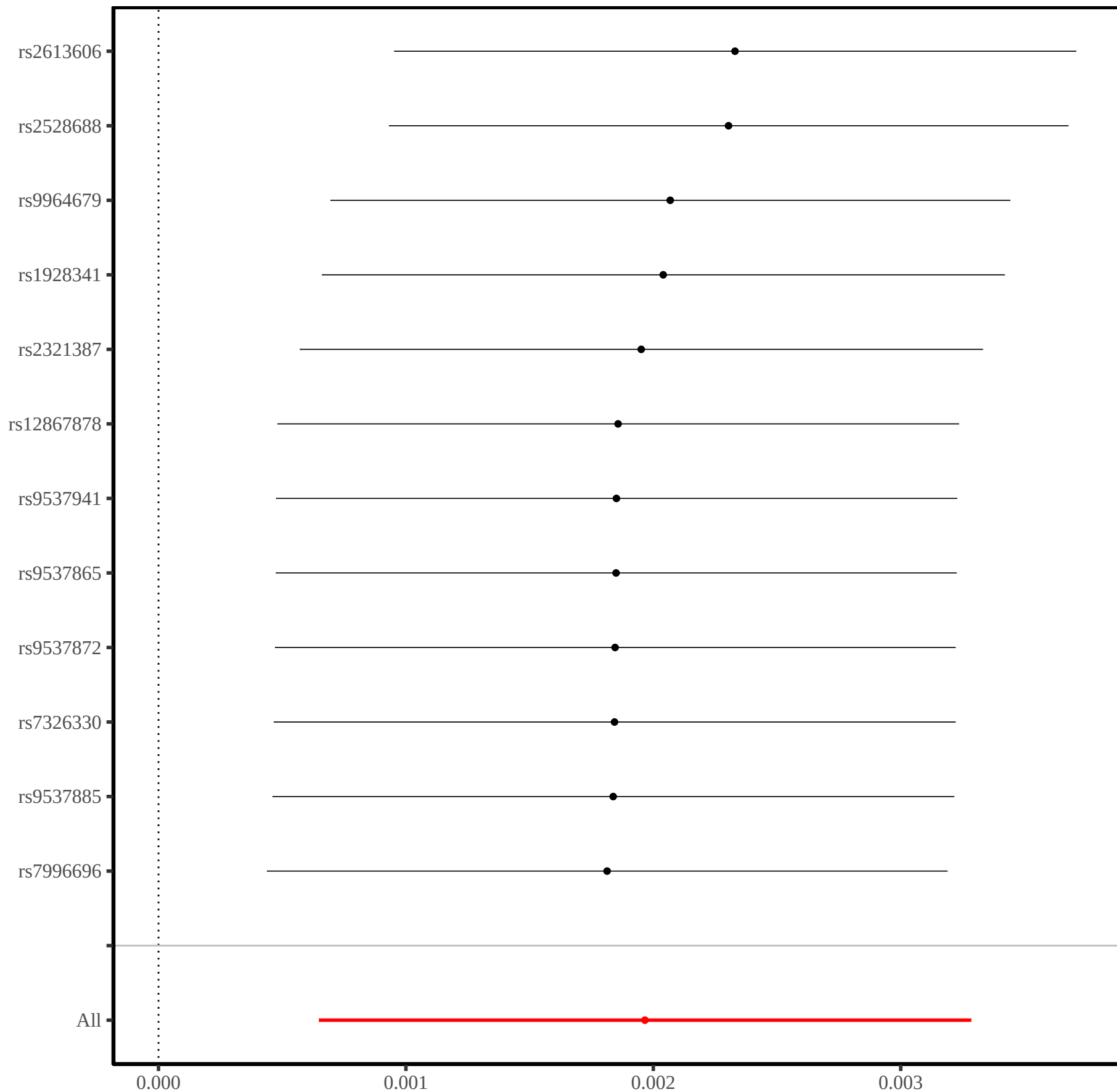
MR leave-one-out sensitivity analysis for
'genus.Ruminococcus1.id.11373' on 'UKB-b-14210'



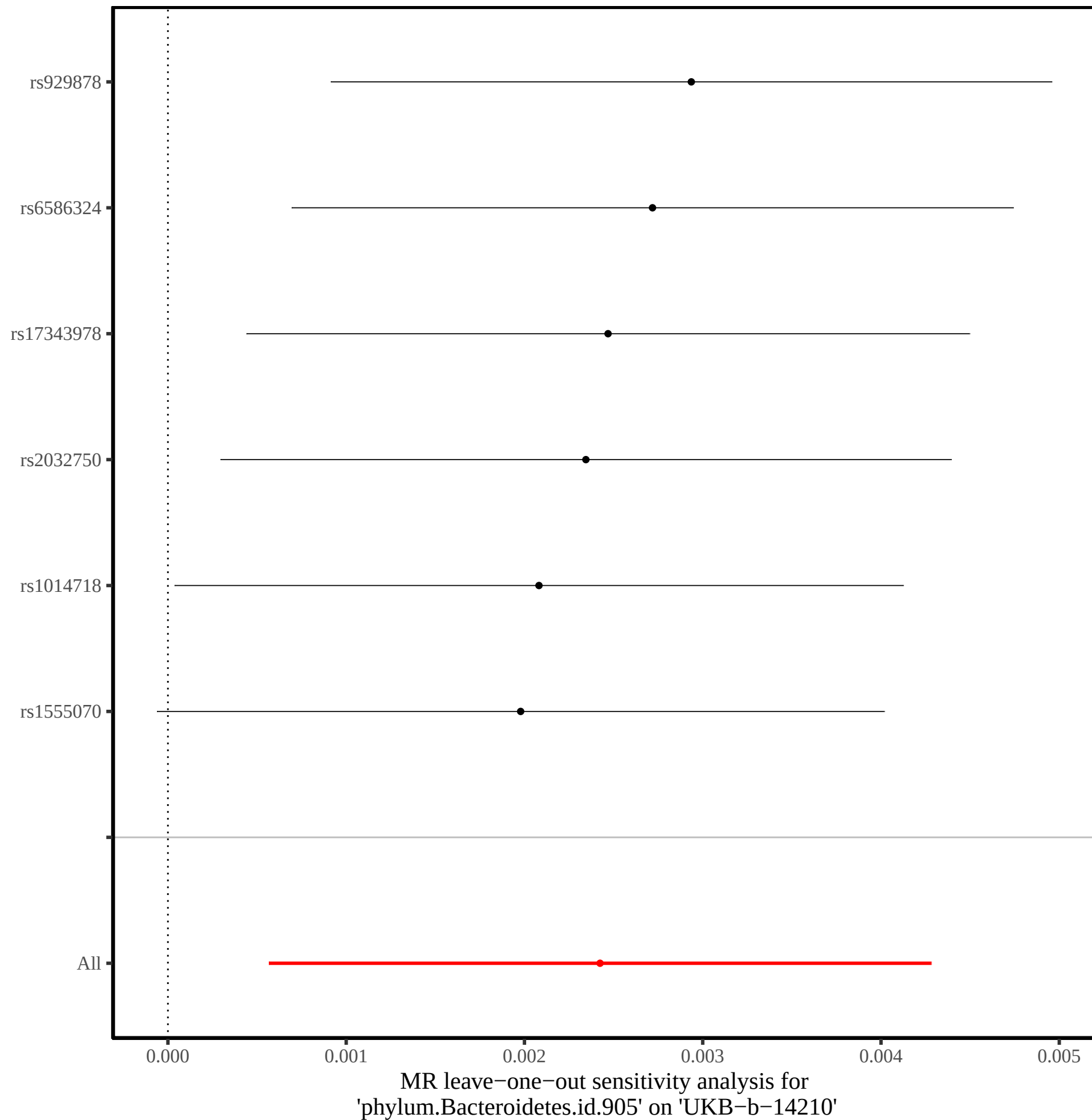
MR leave-one-out sensitivity analysis for
'genus.Sellimonas.id.14369' on 'UKB-b-14210'



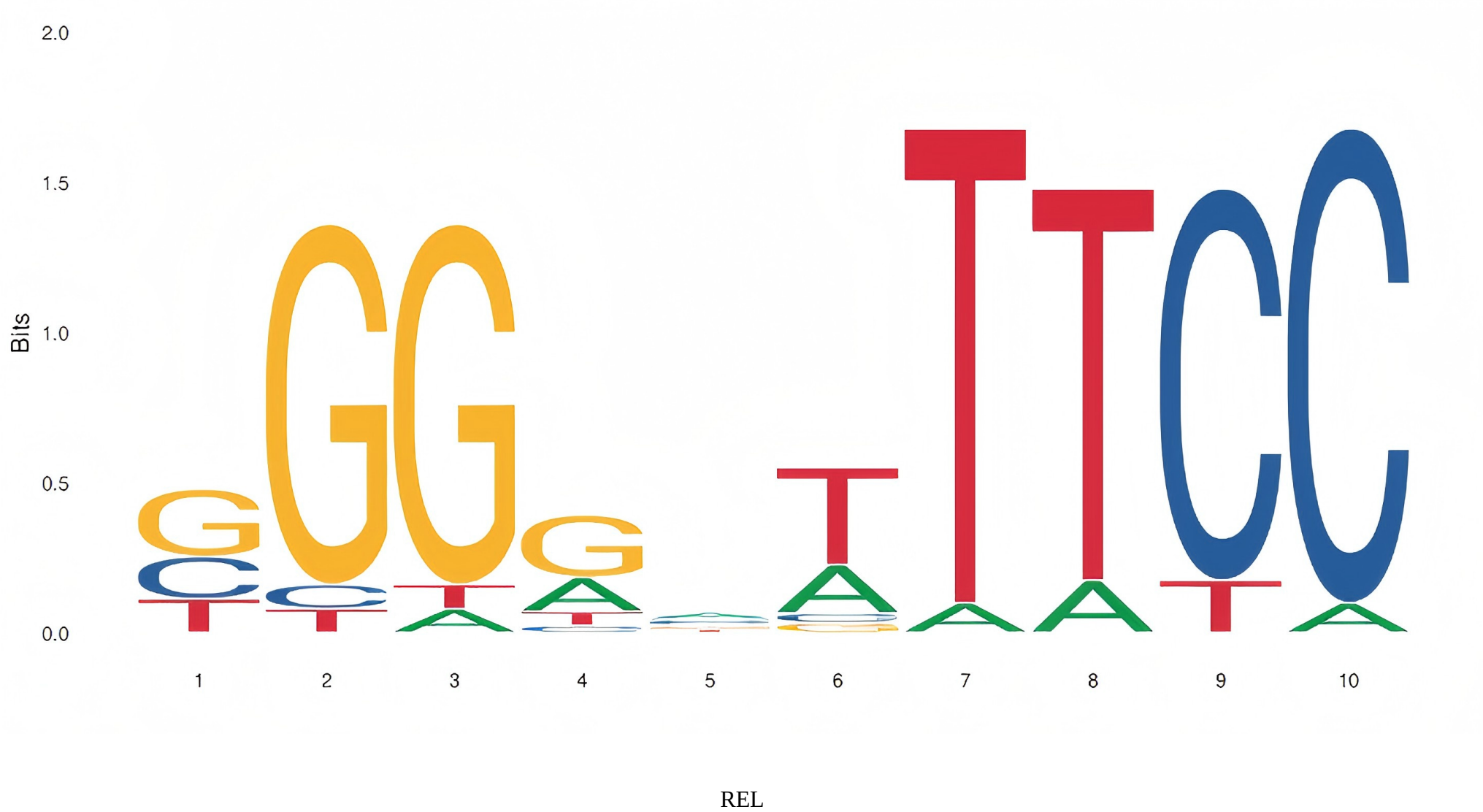
MR leave-one-out sensitivity analysis for
'order.Bacteroidales.id.913' on 'UKB-b-14210'

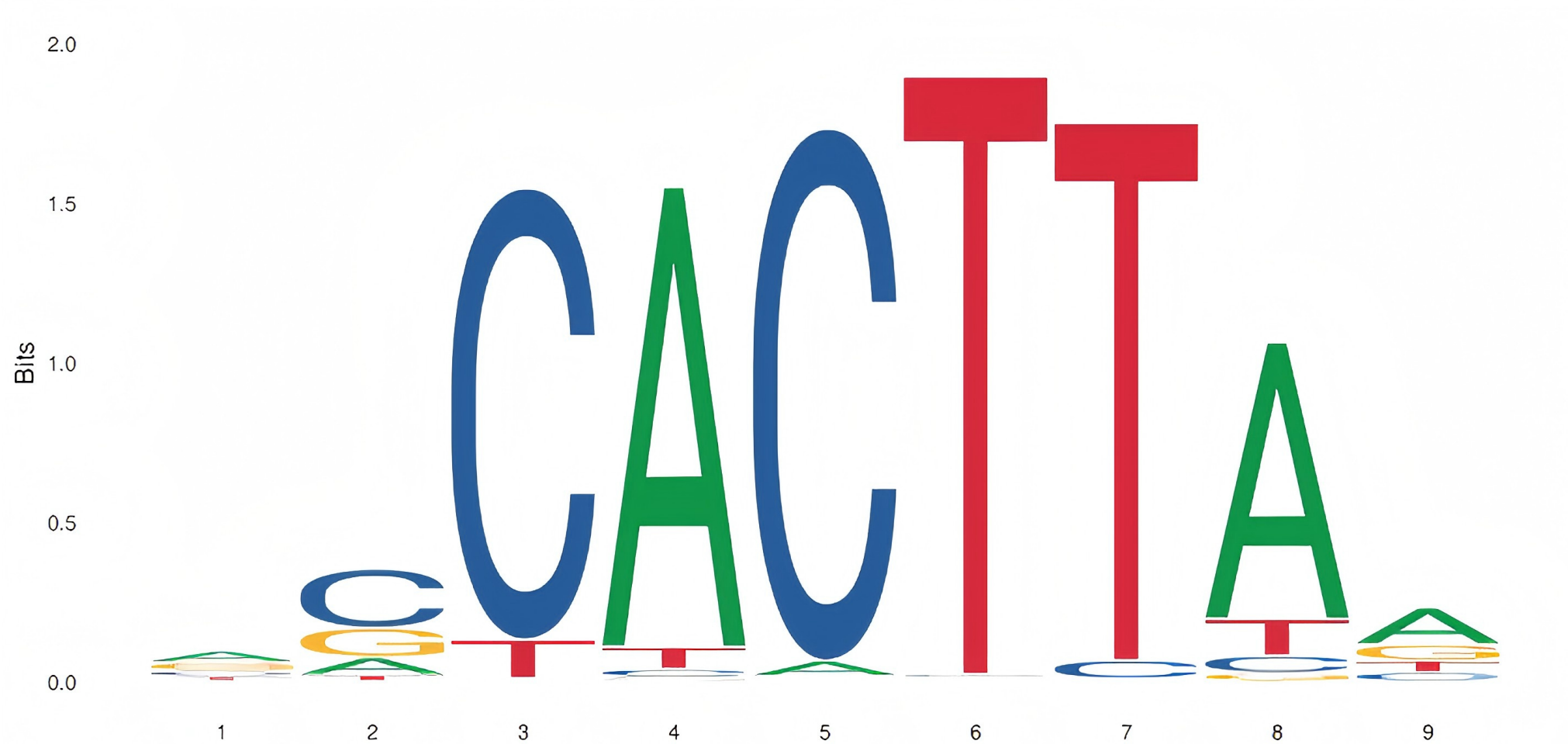


MR leave-one-out sensitivity analysis for
'order.Burkholderiales.id.2874' on 'UKB-b-14210'



Supplementary Figure 5

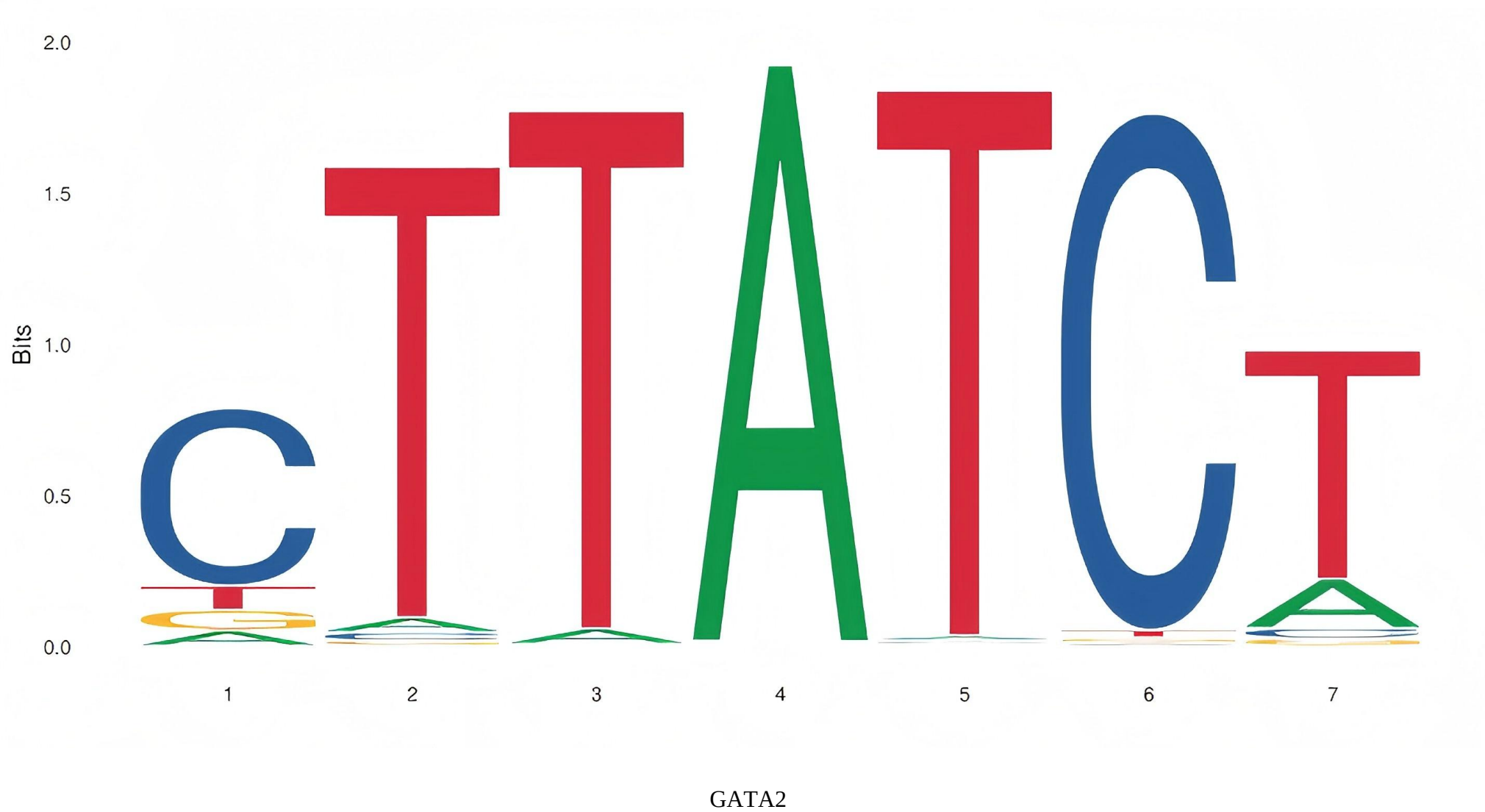




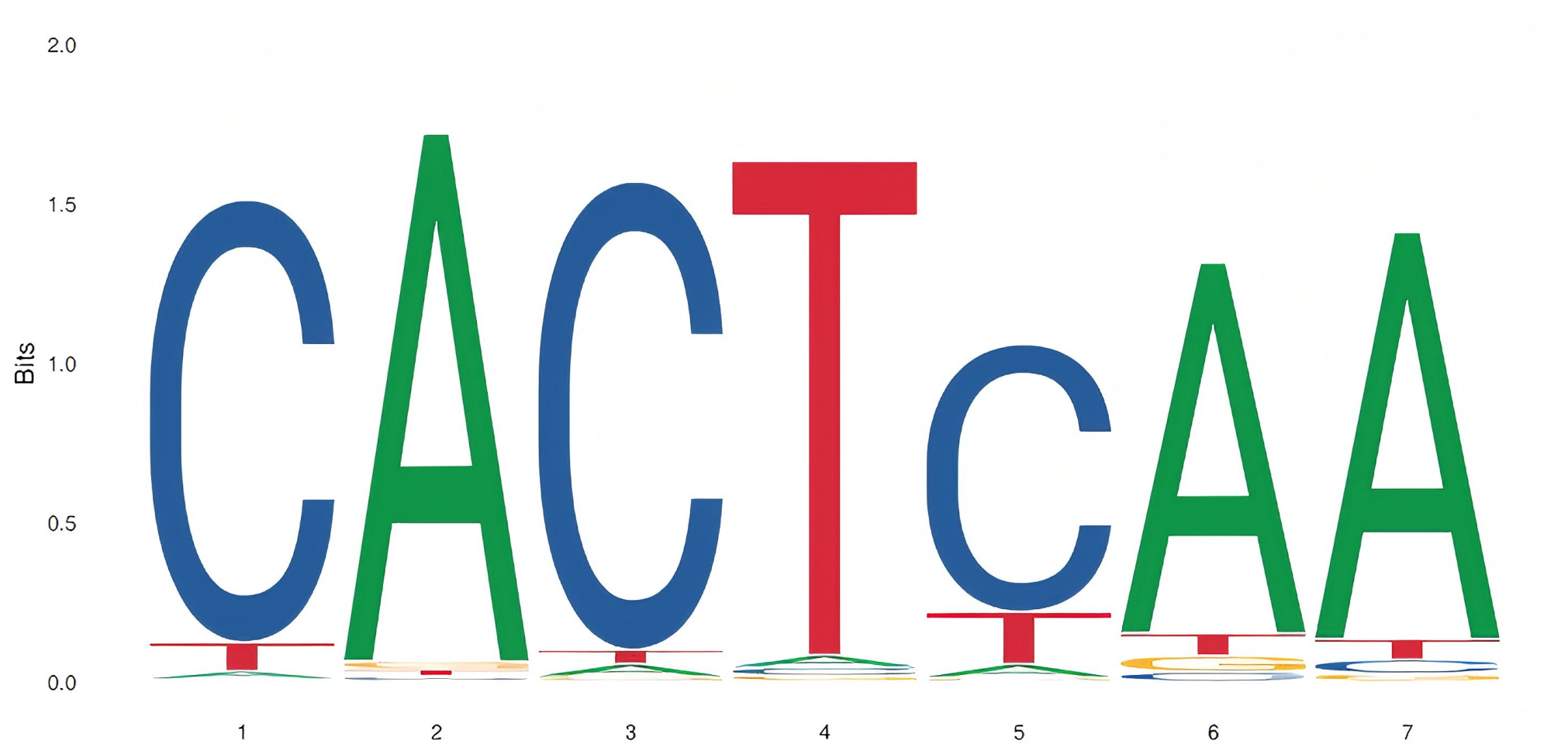
NKX3-2



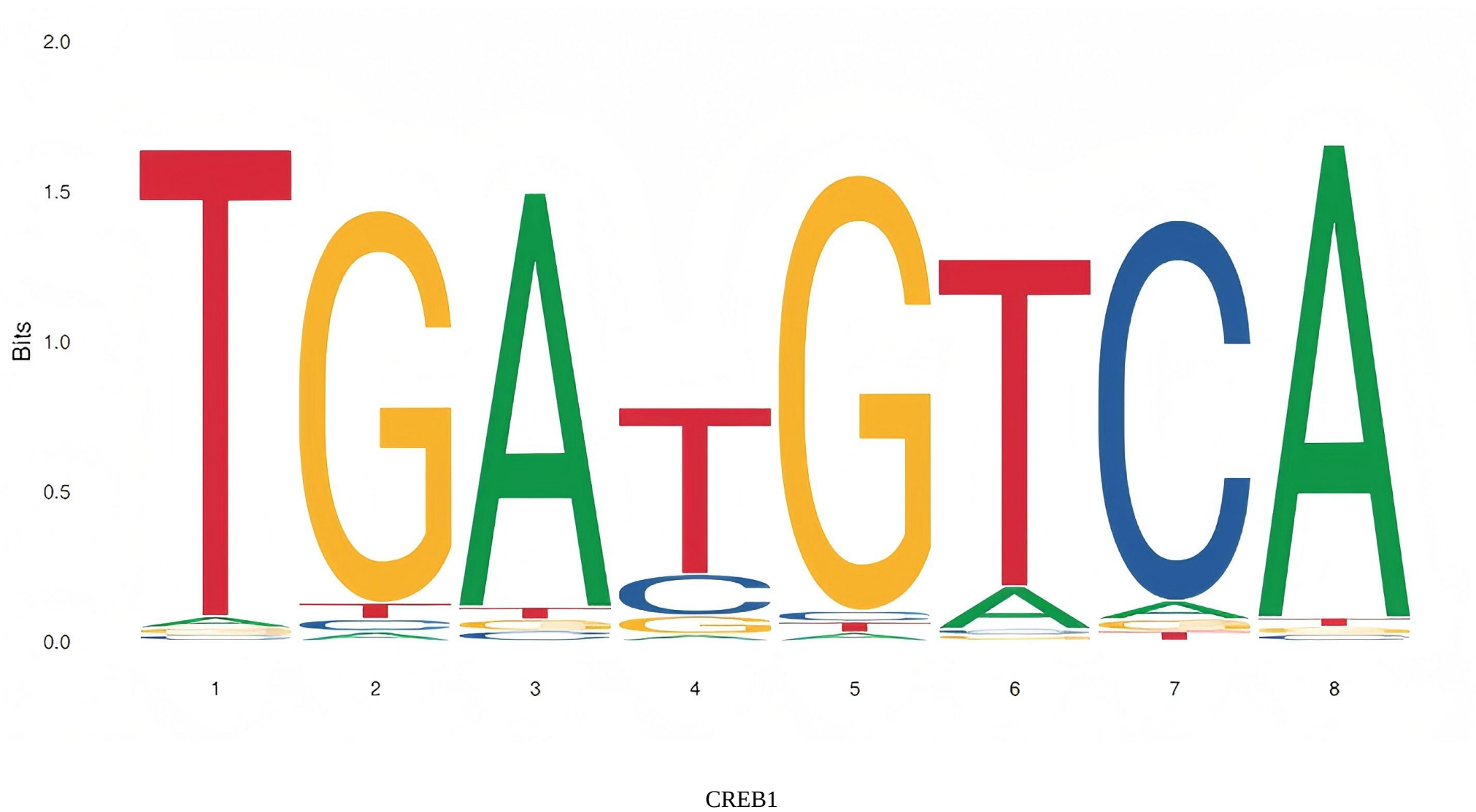
FOXC1

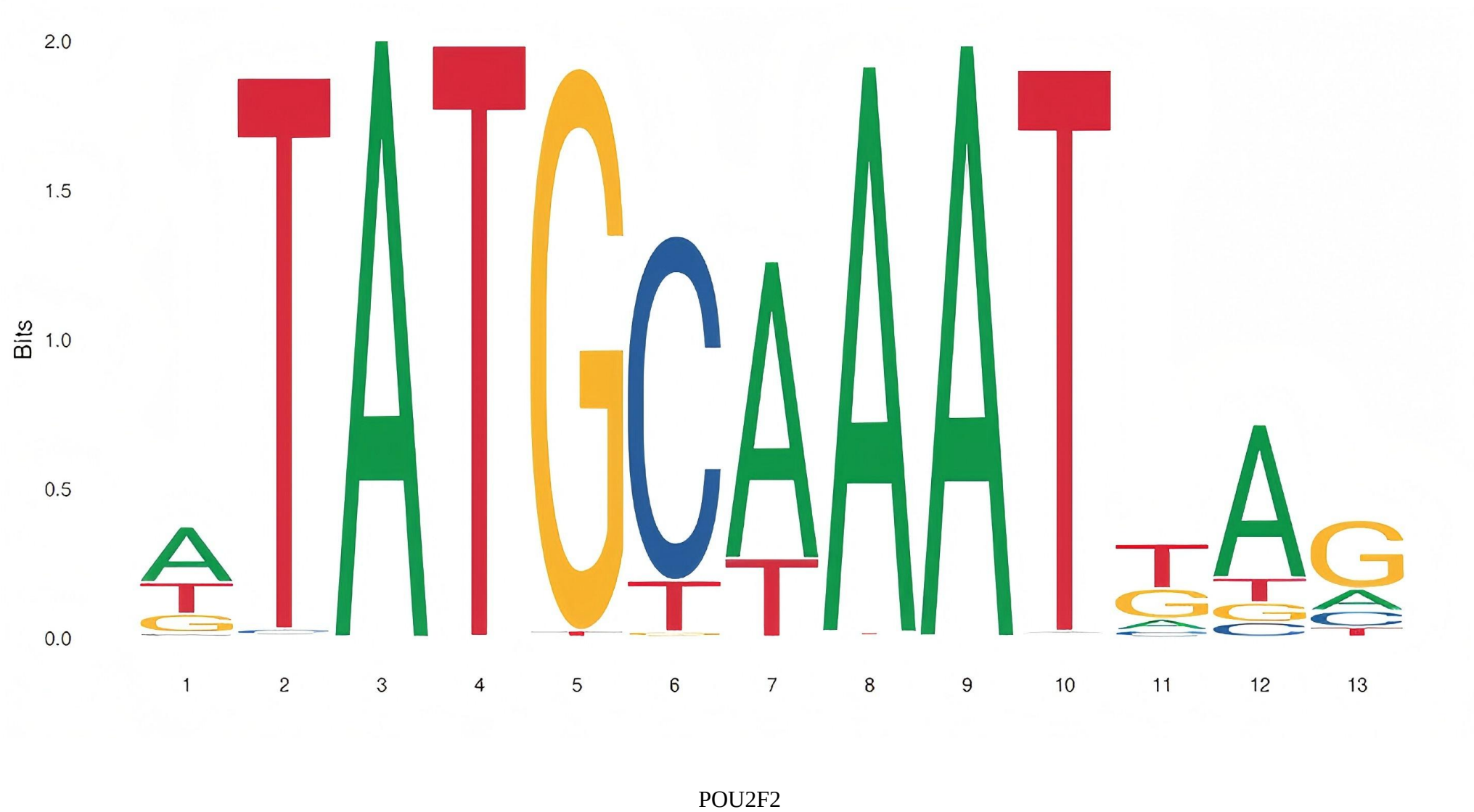


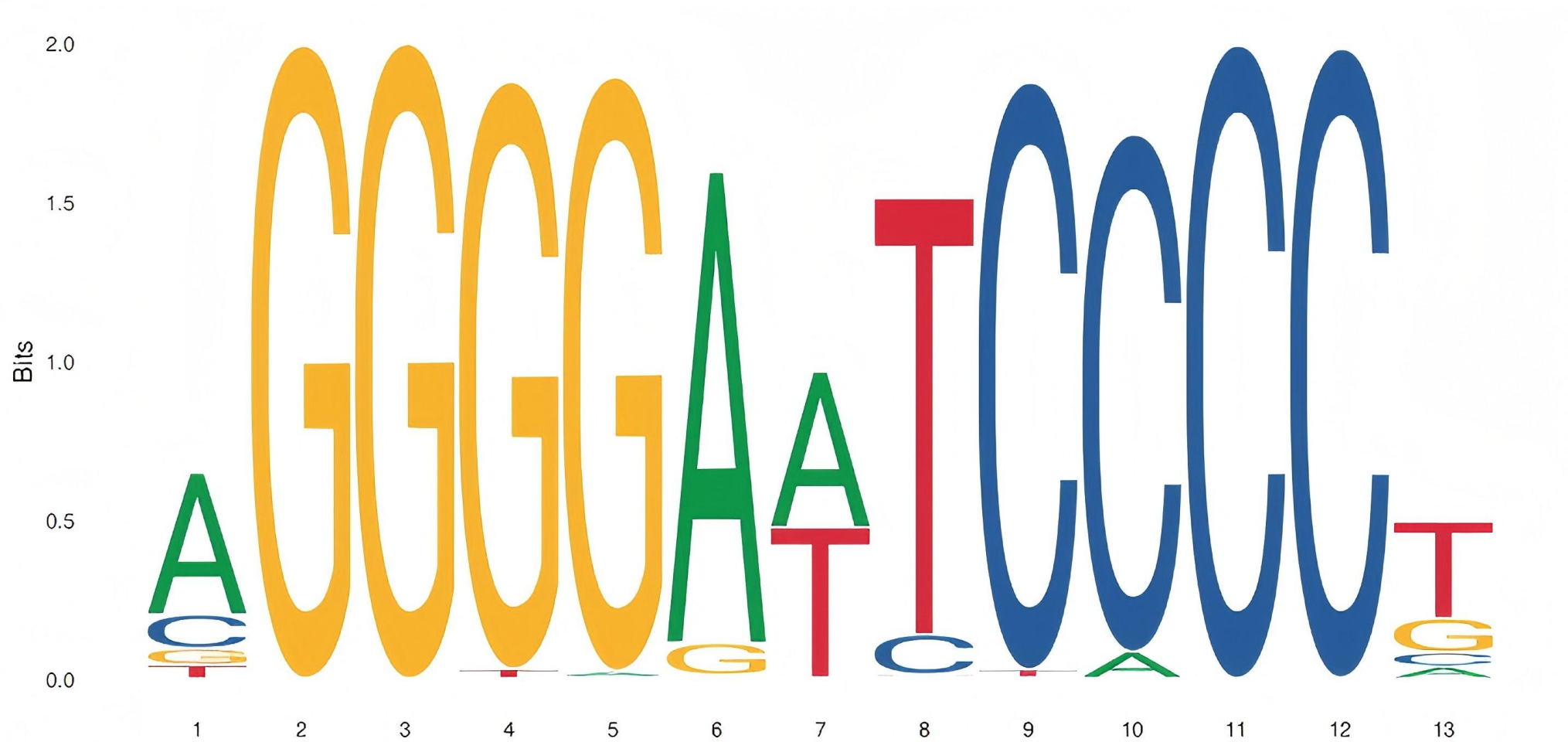




NKX2-5







NFKB1

