

Figure S1. The scatter plot of class Alphaproteobacteria on prostate cancer in the PRACTICAL consortium

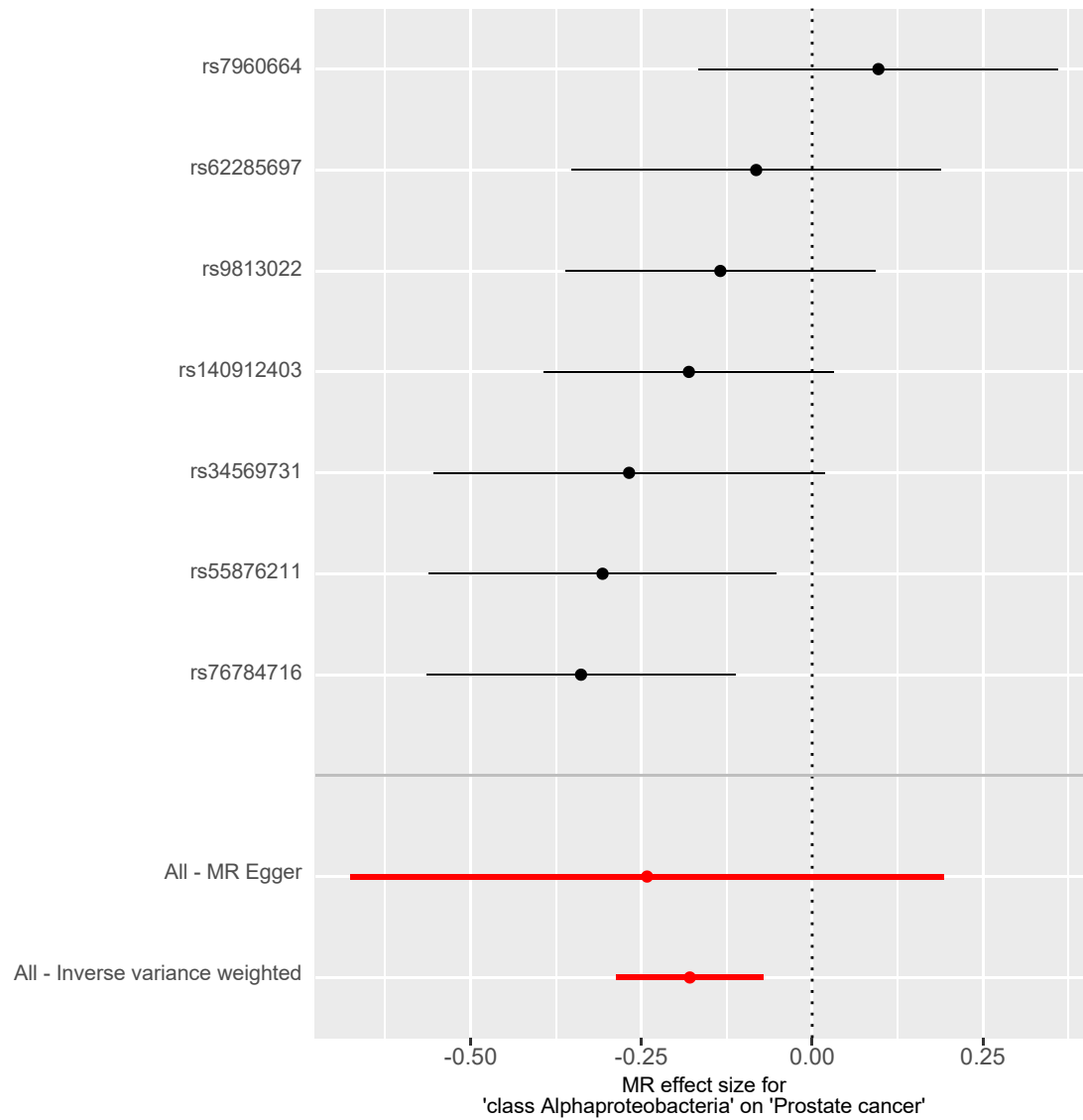


Figure S2. The forest plot of class Alphaproteobacteria on prostate cancer in the PRACTICAL consortium

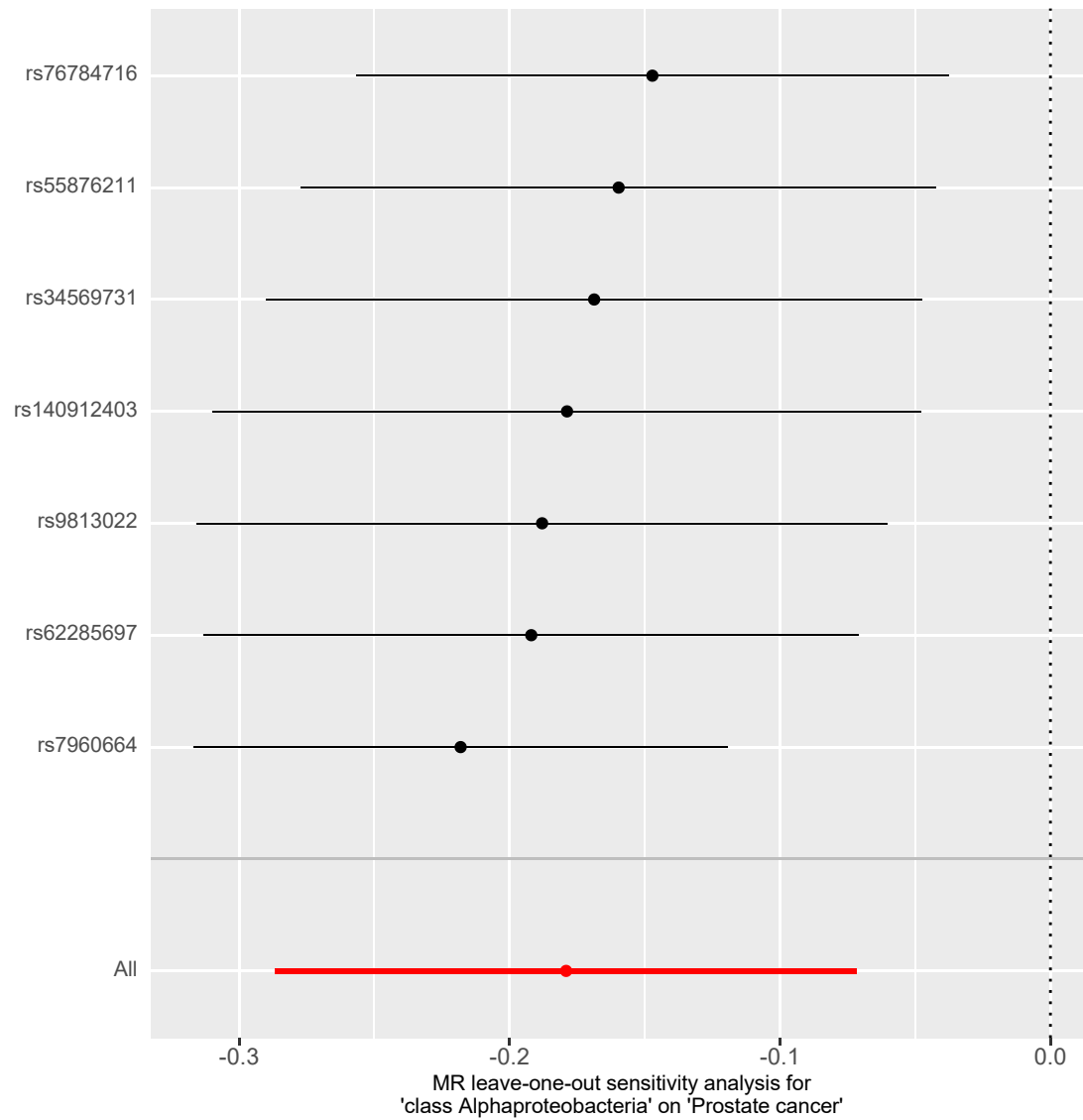


Figure S3. The leave-one-out test of class Alphaproteobacteria on prostate cancer in the PRACTICAL consortium

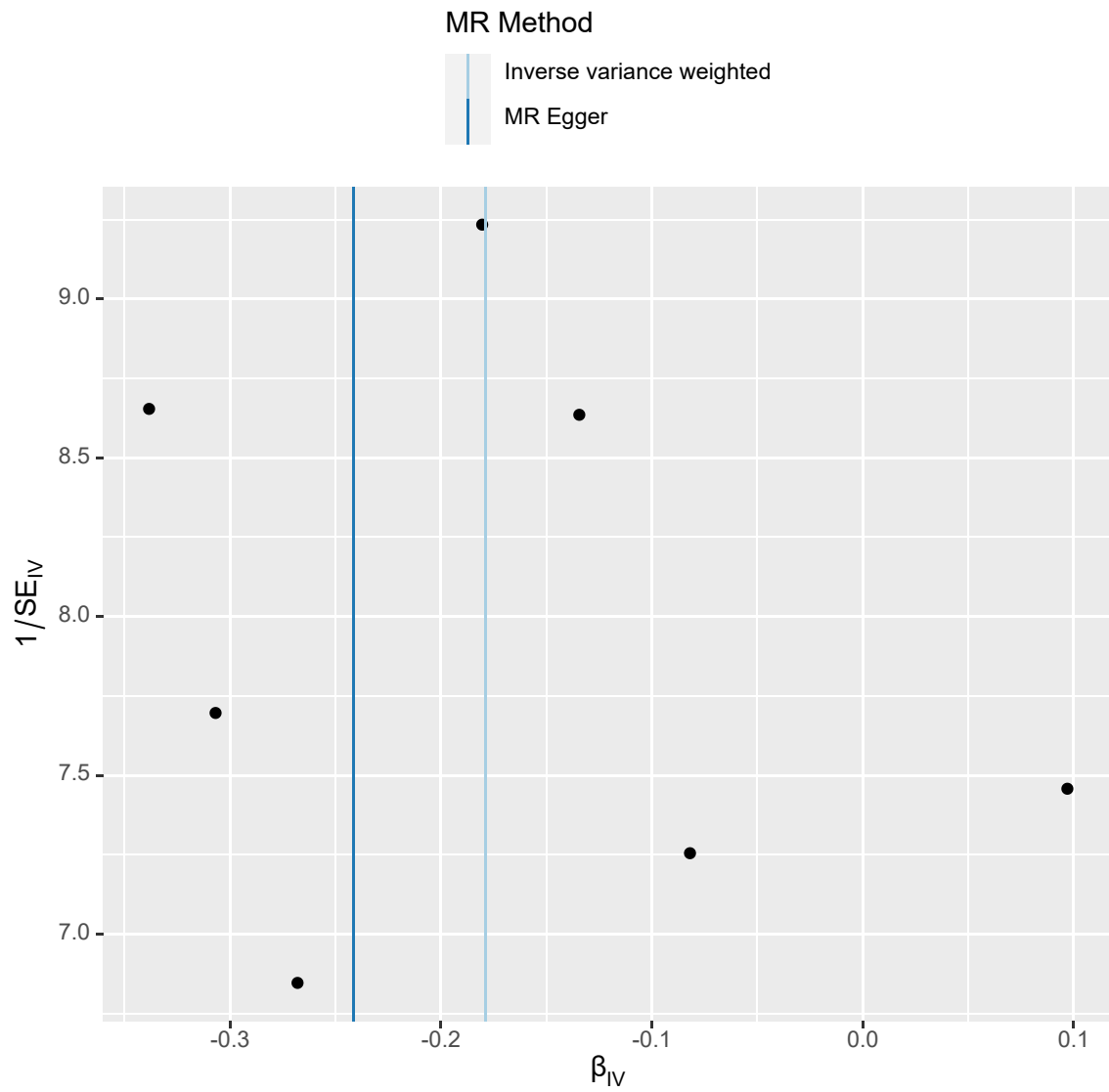


Figure S4. The funnel plot of class Alphaproteobacteria on prostate cancer in the PRACTICAL consortium

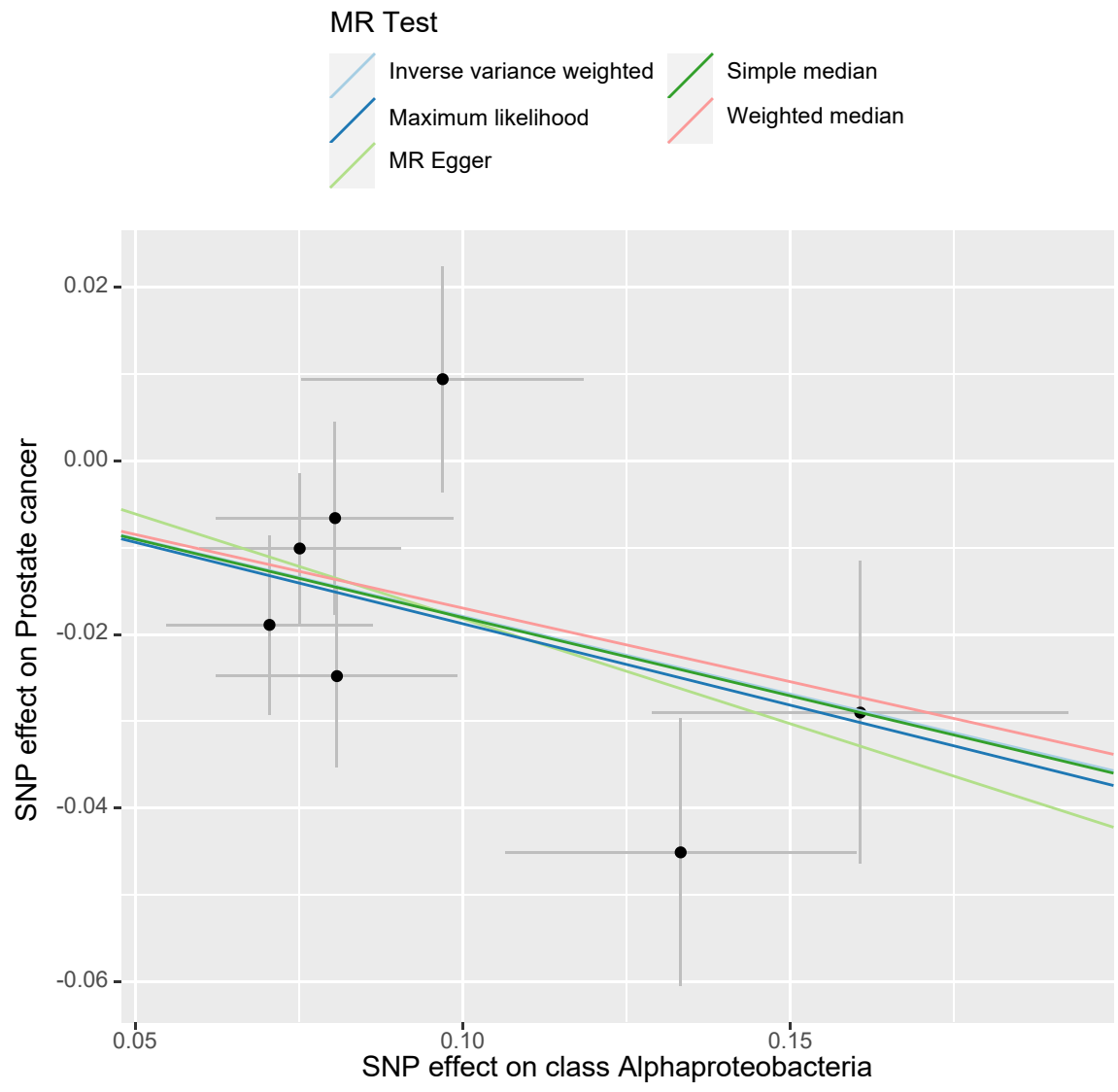


Figure S5. The scatter plot of family Porphyromonadaceae on prostate cancer in the PRACTICAL consortium

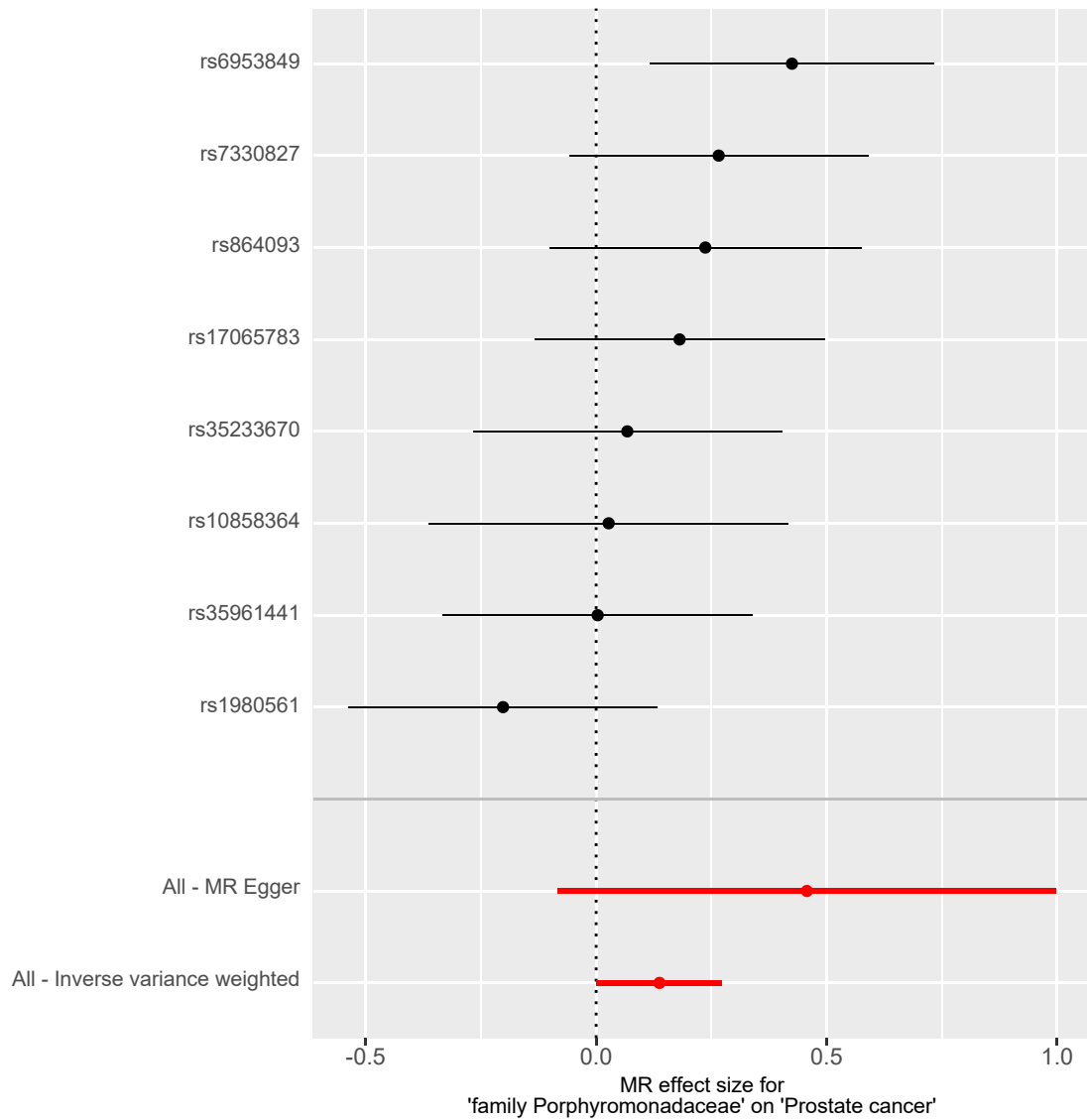


Figure S6. The forest plot of family Porphyromonadaceae on prostate cancer in the PRACTICAL consortium

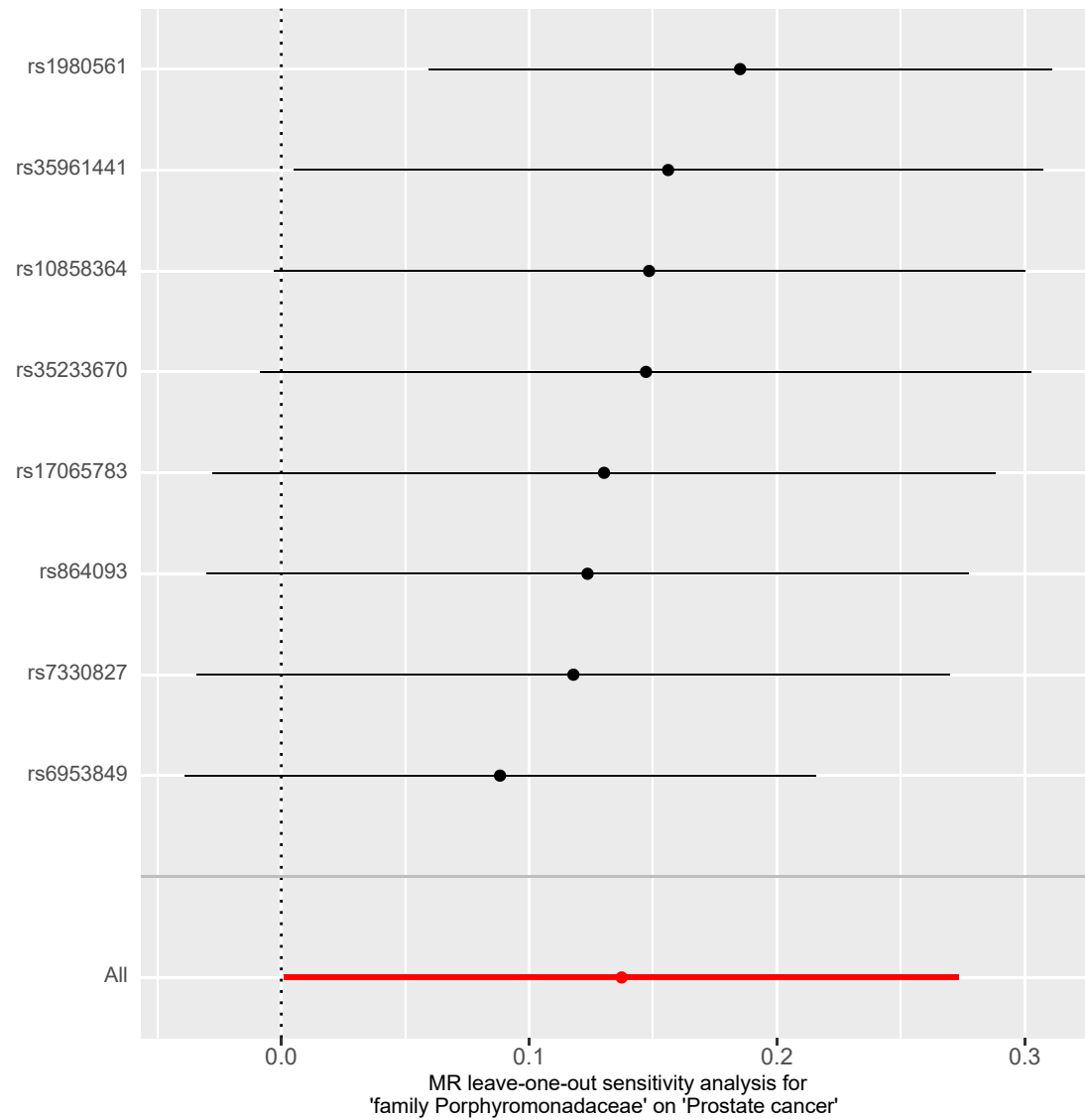


Figure S7. The leave-one-out test of family Porphyromonadaceae on prostate cancer in the PRACTICAL consortium

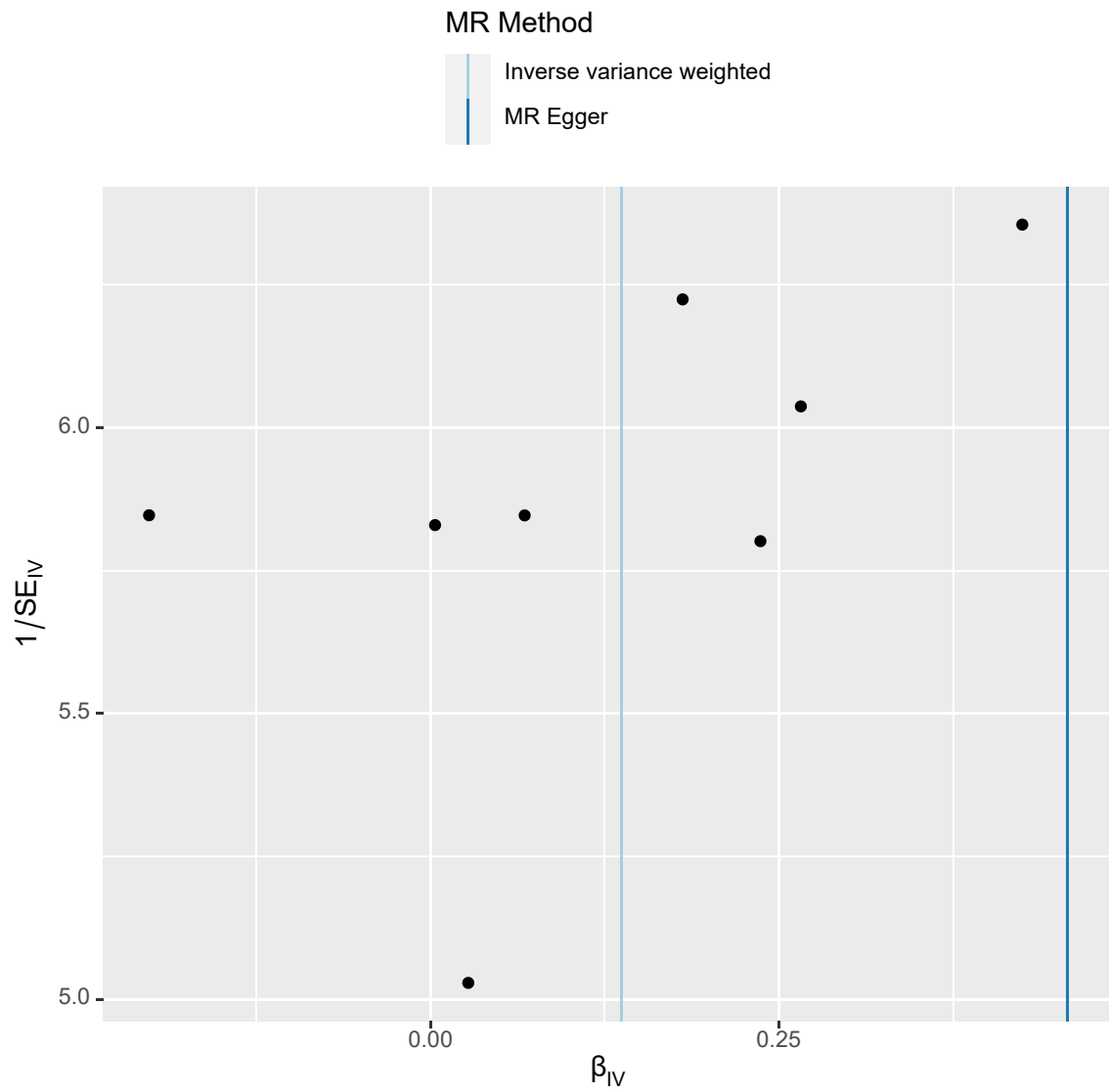


Figure S8. The funnel plot of family Porphyromonadaceae on prostate cancer in the PRACTICAL consortium



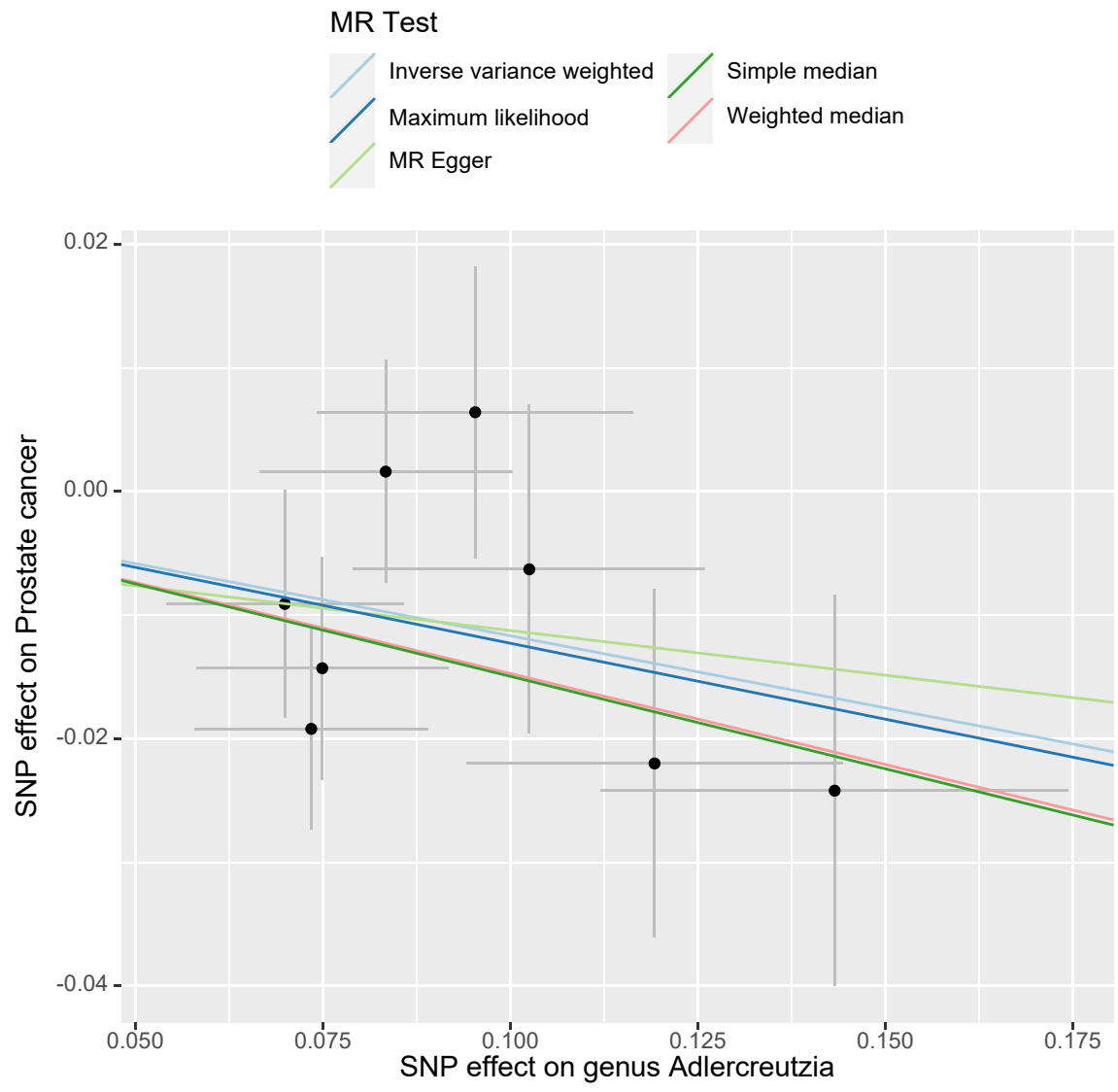


Figure S9. The scatter plot of genus Adlercreutzia on prostate cancer in the PRACTICAL consortium

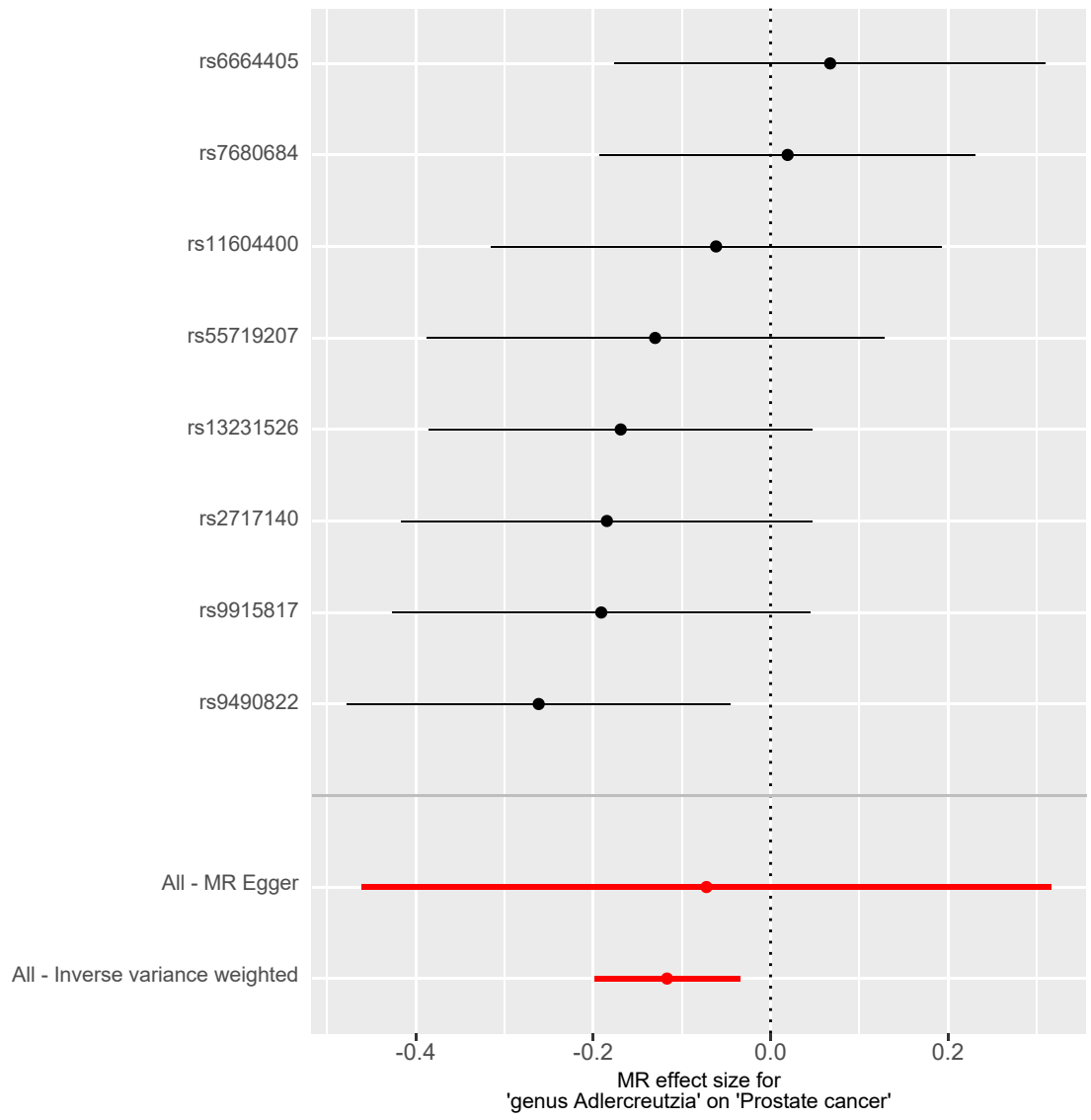


Figure S10. The forest plot of genus Adlercreutzia on prostate cancer in the PRACTICAL consortium

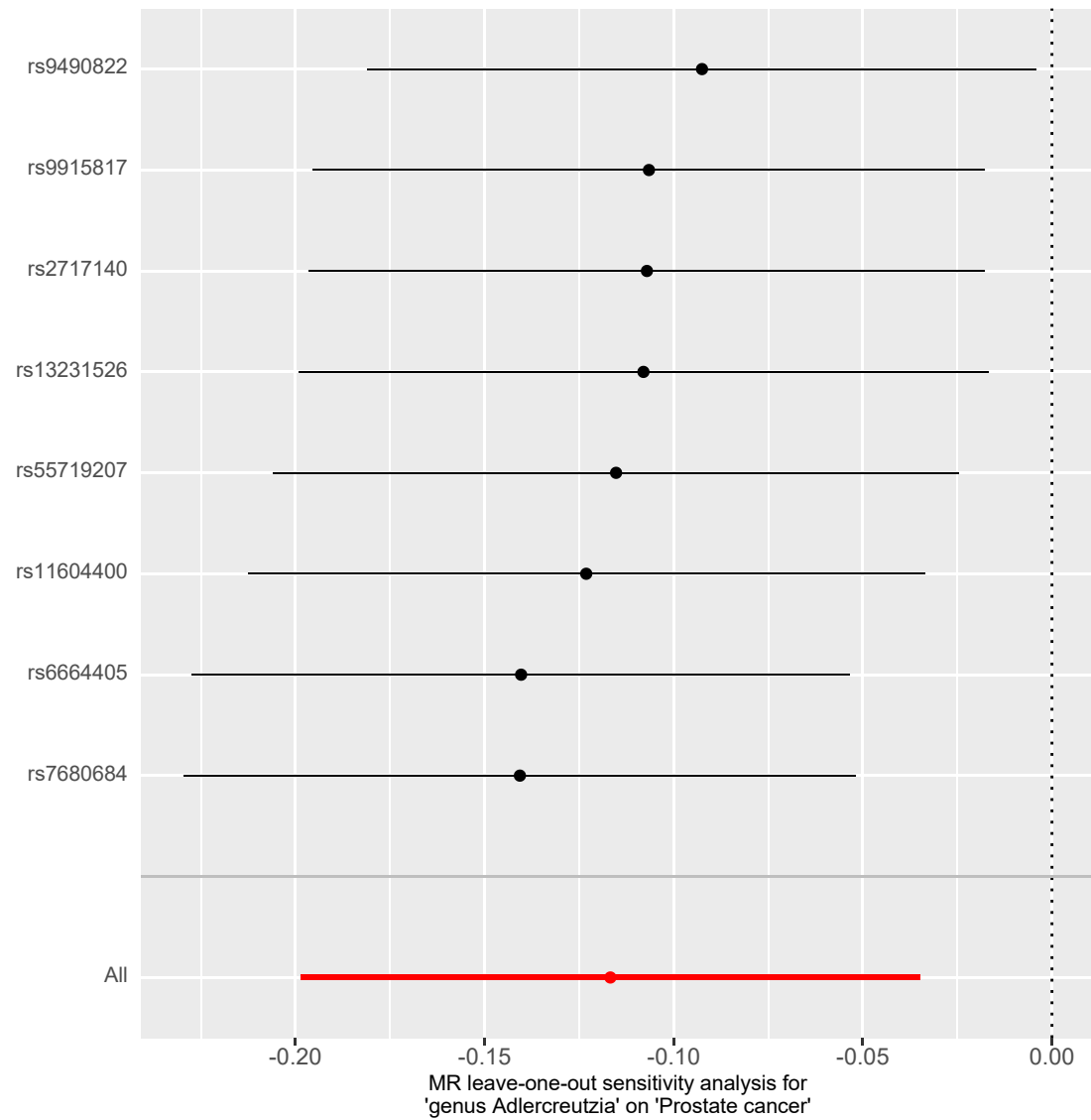


Figure S11. The leave-one-out test of genus Adlercreutzia on prostate cancer in the PRACTICAL consortium

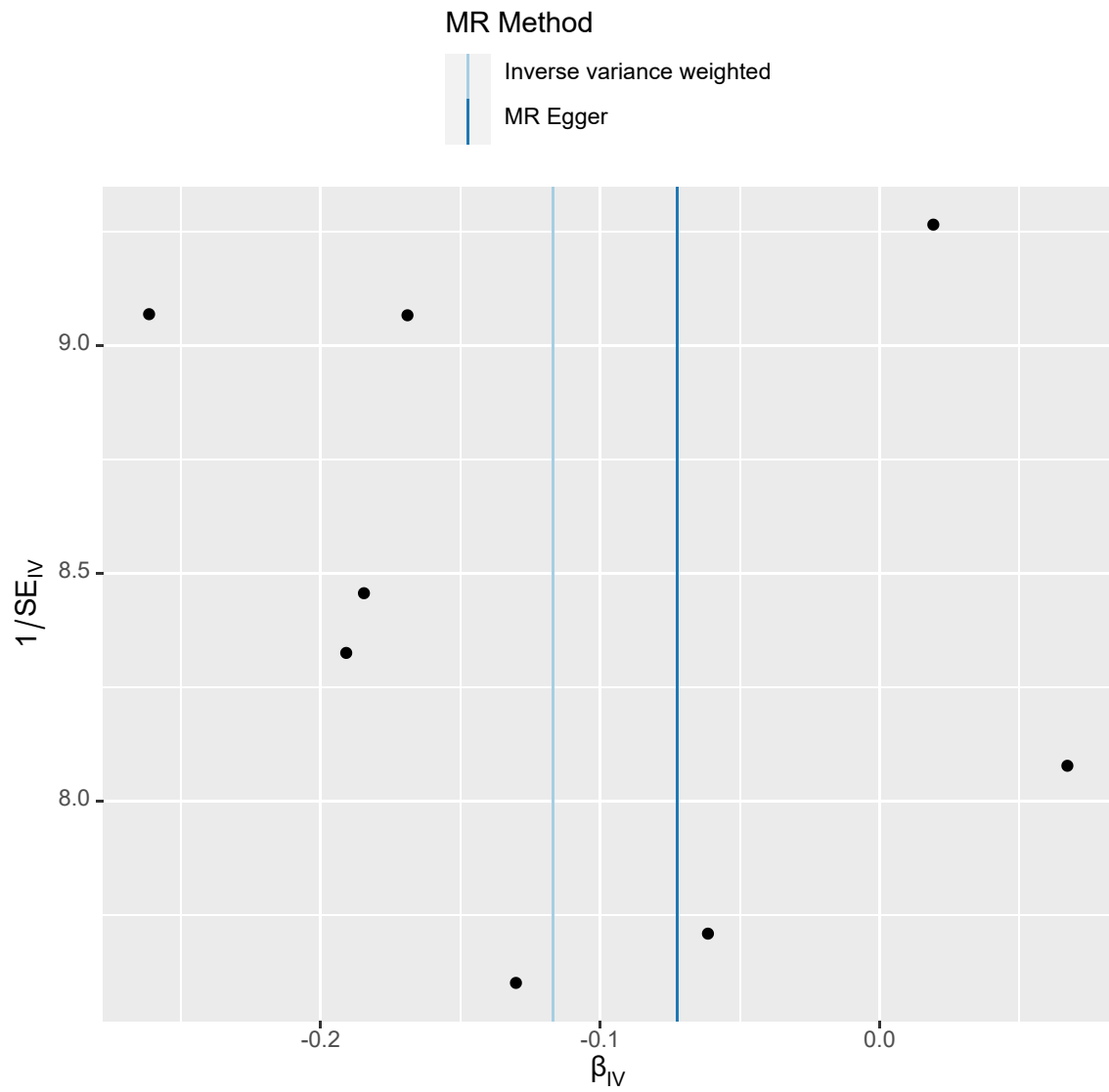


Figure S12. The funnel plot of genus Adlercreutzia on prostate cancer in the PRACTICAL consortium

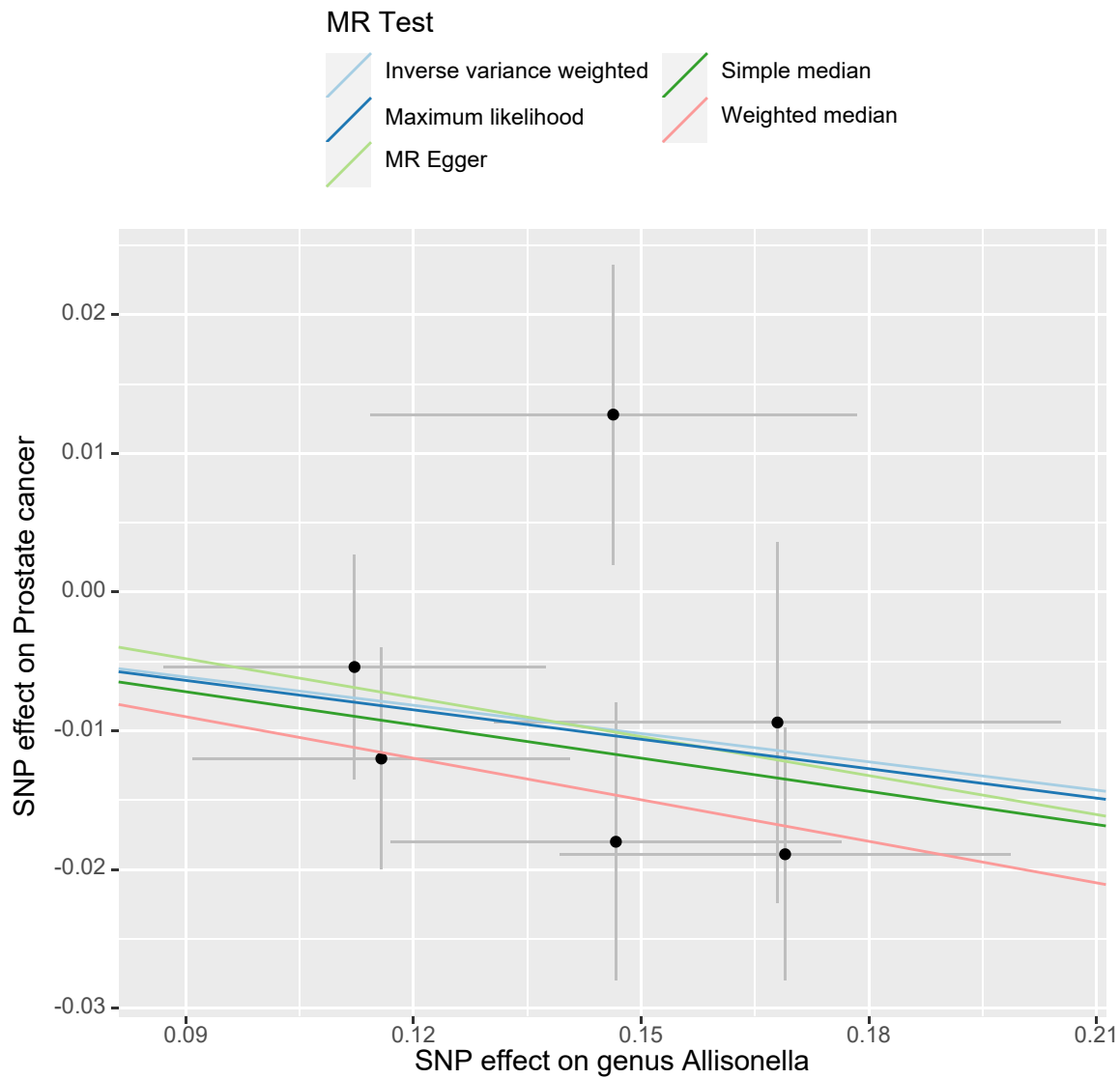


Figure S13. The scatter plot of genus Allisonella on prostate cancer in the PRACTICAL consortium

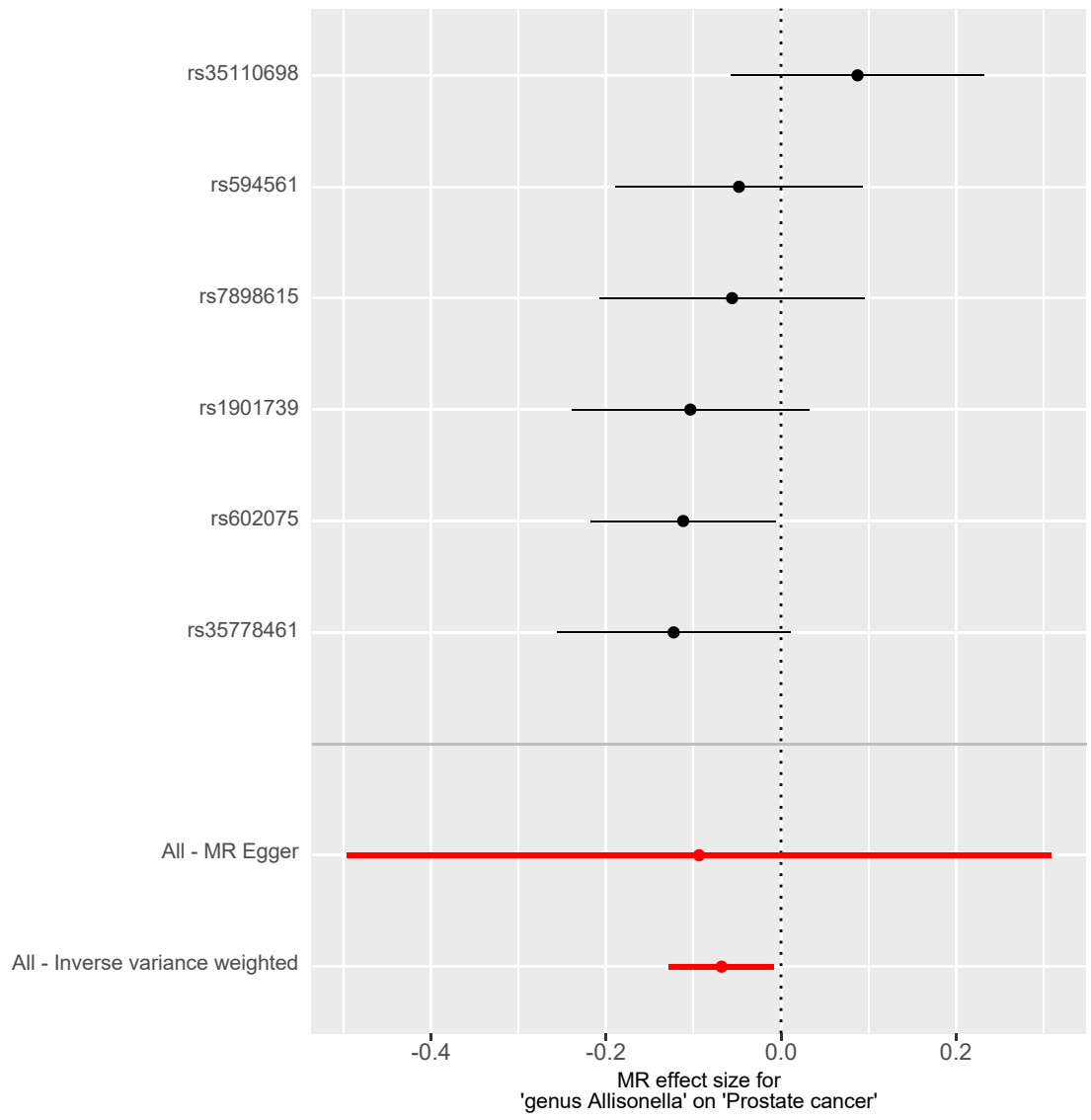


Figure S14. The forest plot of genus Allisonella on prostate cancer in the PRACTICAL consortium

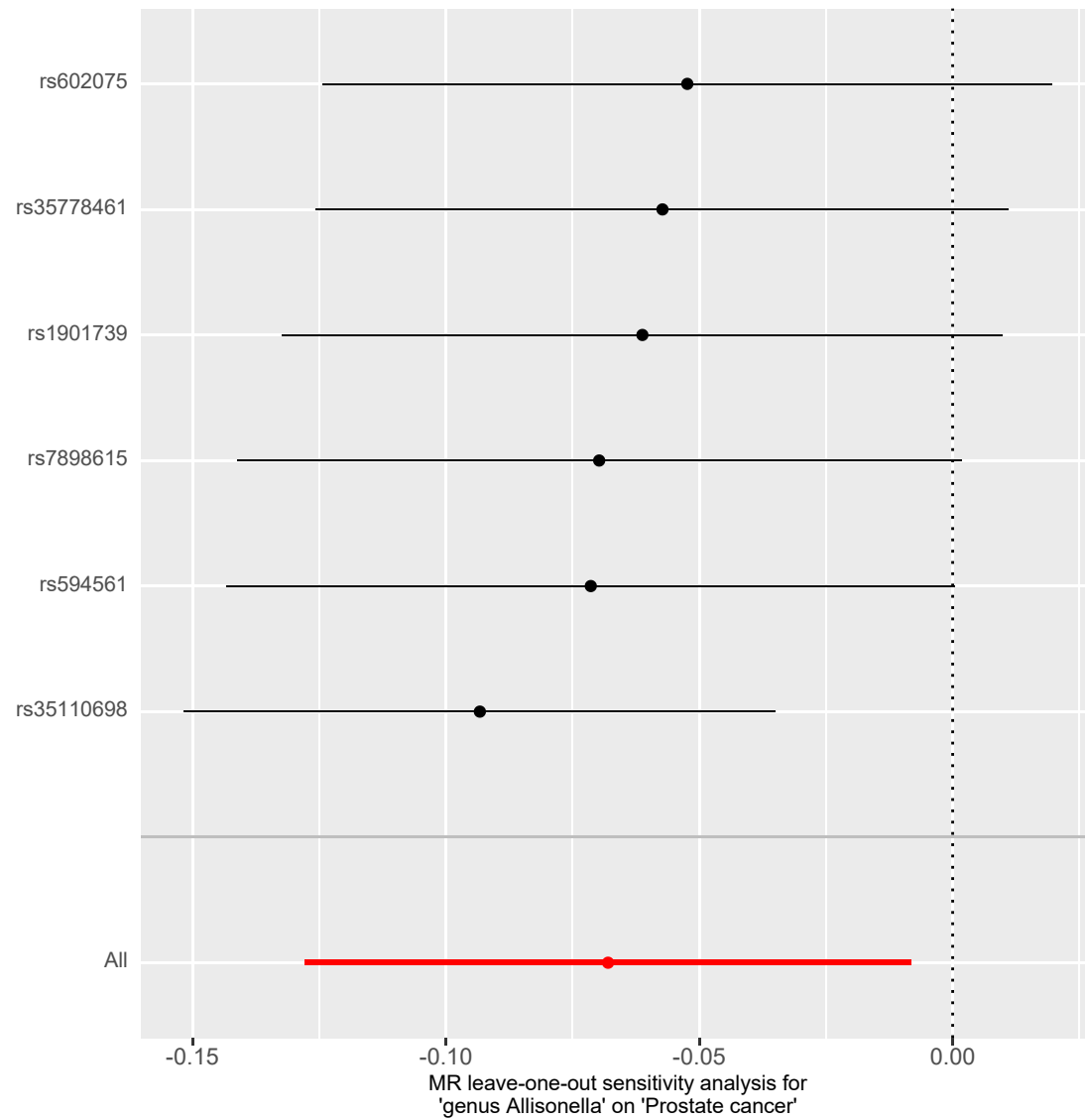


Figure S15. The leave-one-out test of genus Allisonella on prostate cancer in the PRACTICAL consortium

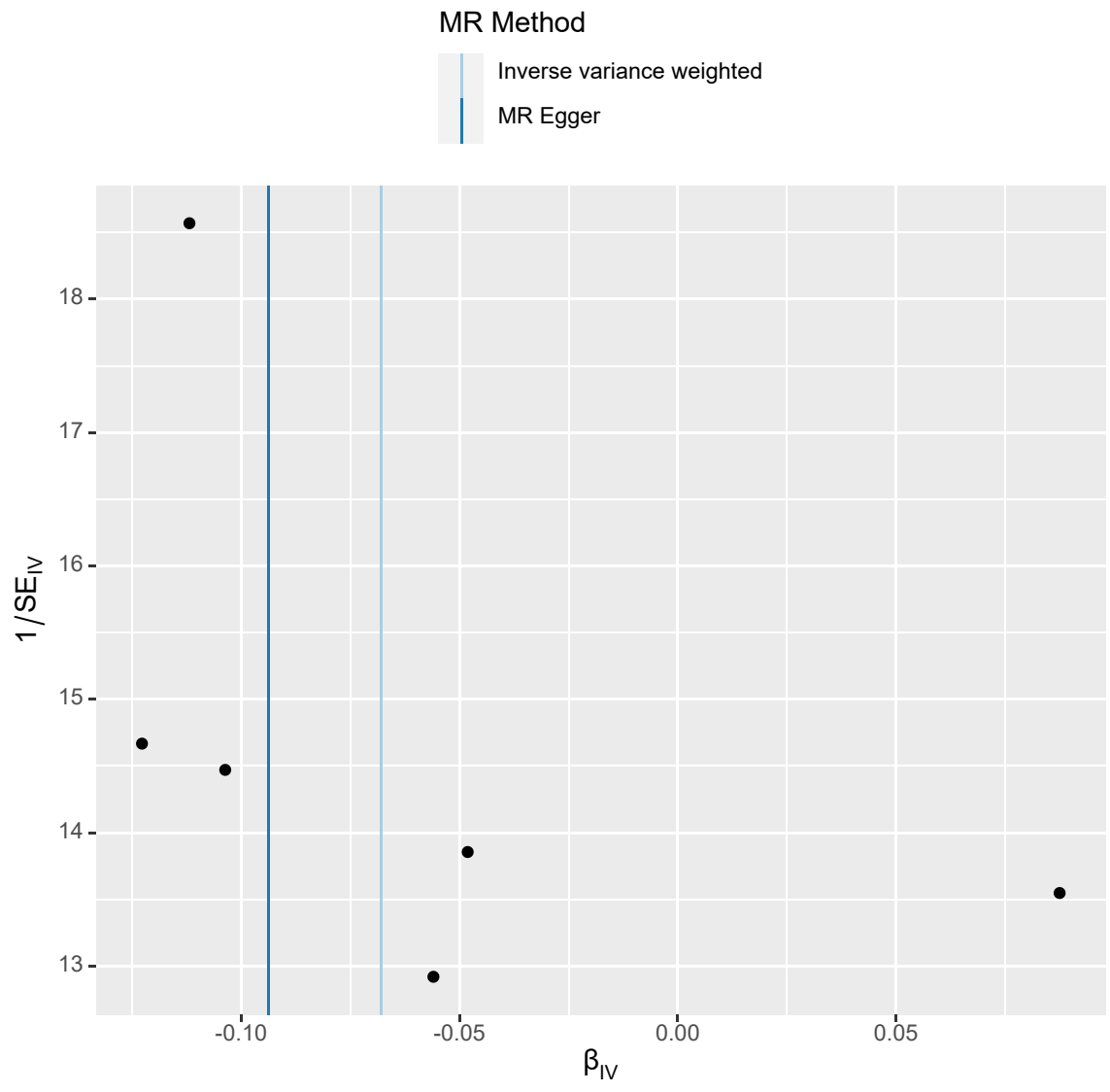


Figure S16. The funnel plot of genus Adlercreutzia on prostate cancer in the PRACTICAL consortium



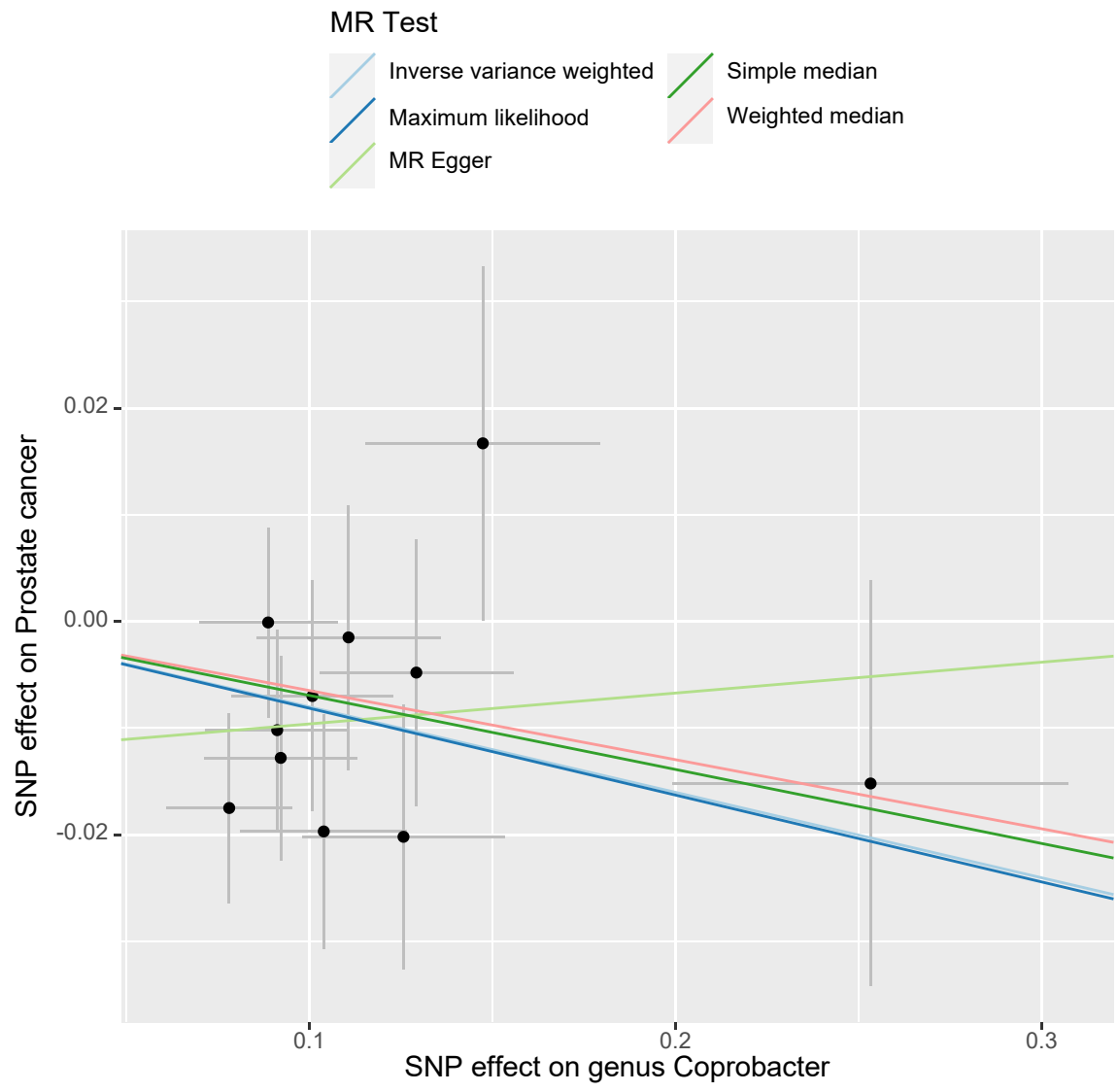


Figure S17. The scatter plot of genus Coprobacter on prostate cancer in the PRACTICAL consortium

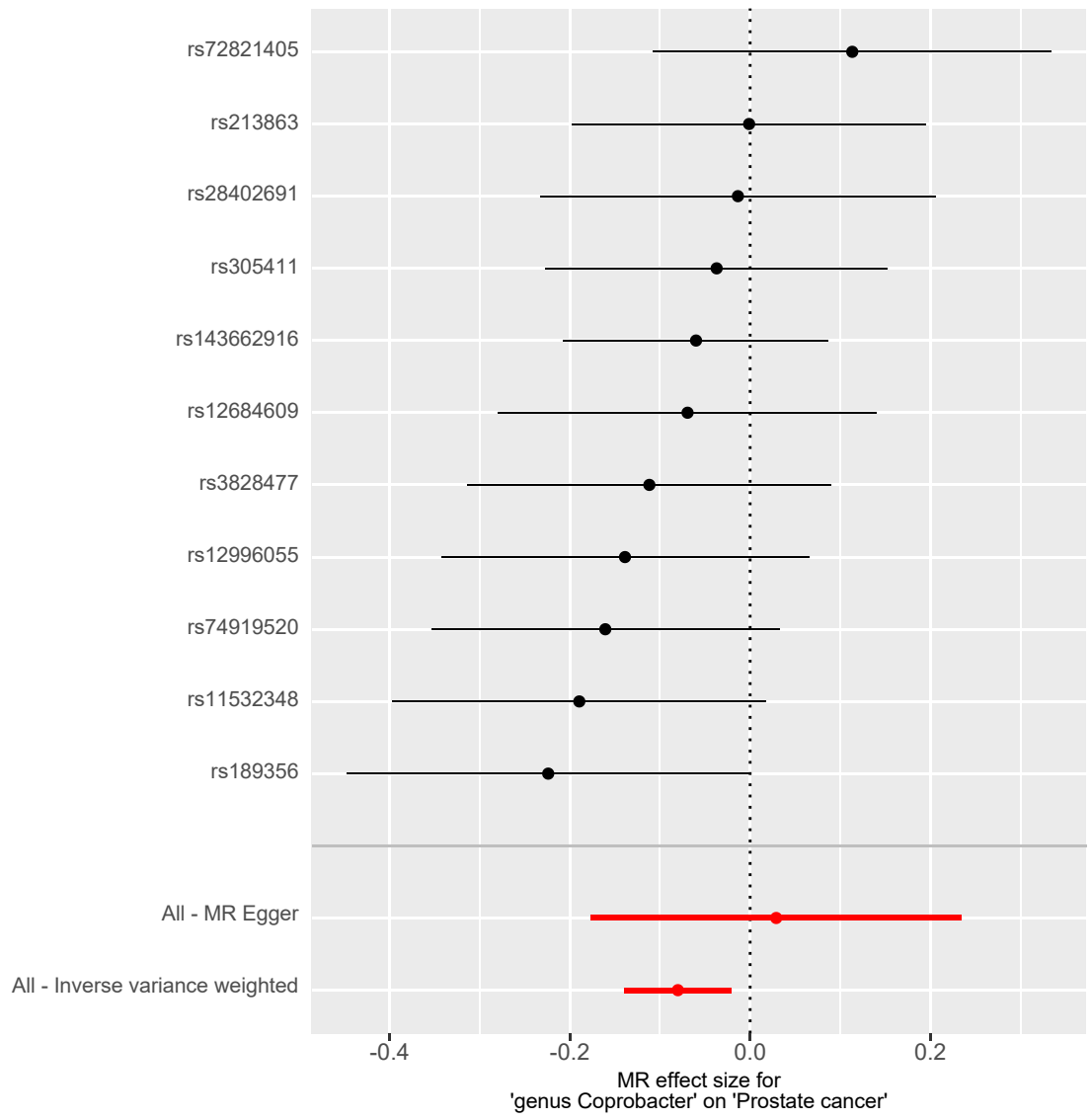


Figure S18. The forest plot of genus Coprobacter on prostate cancer in the PRACTICAL consortium

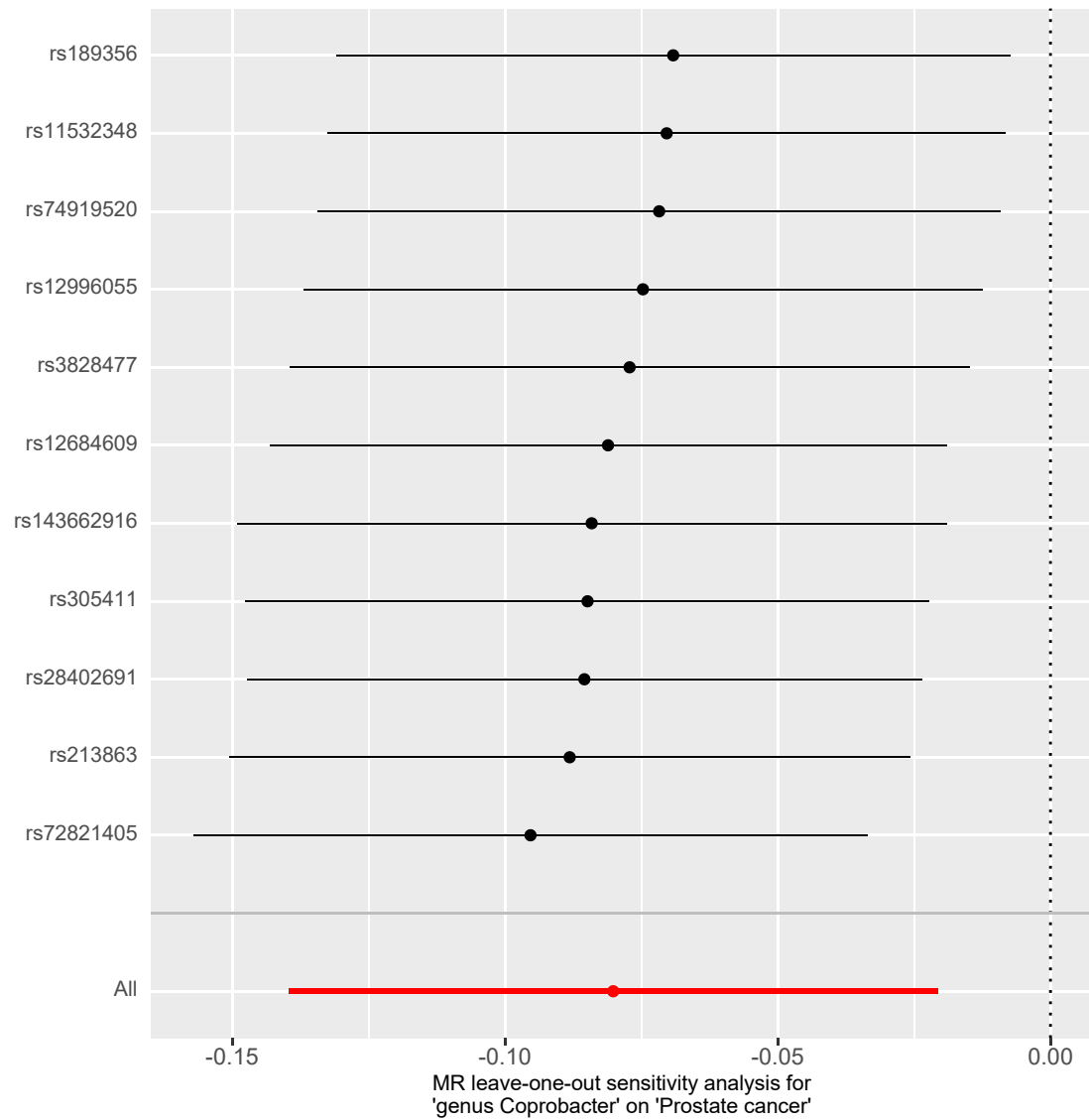


Figure S19. The leave-one-out test of genus Coprobacter on prostate cancer in the PRACTICAL consortium

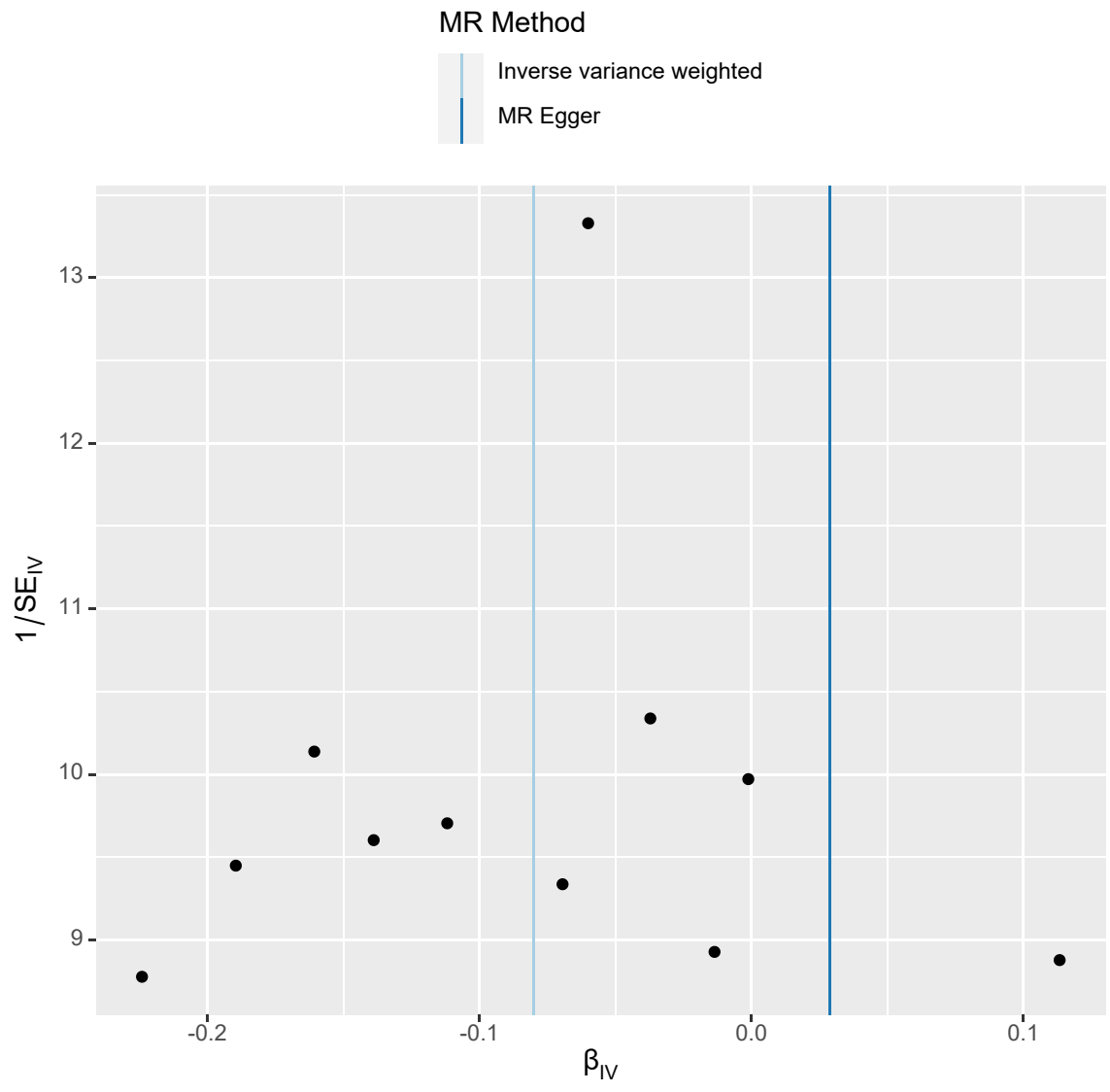


Figure S20. The funnel plot of genus Coprobacter on prostate cancer in the PRACTICAL consortium

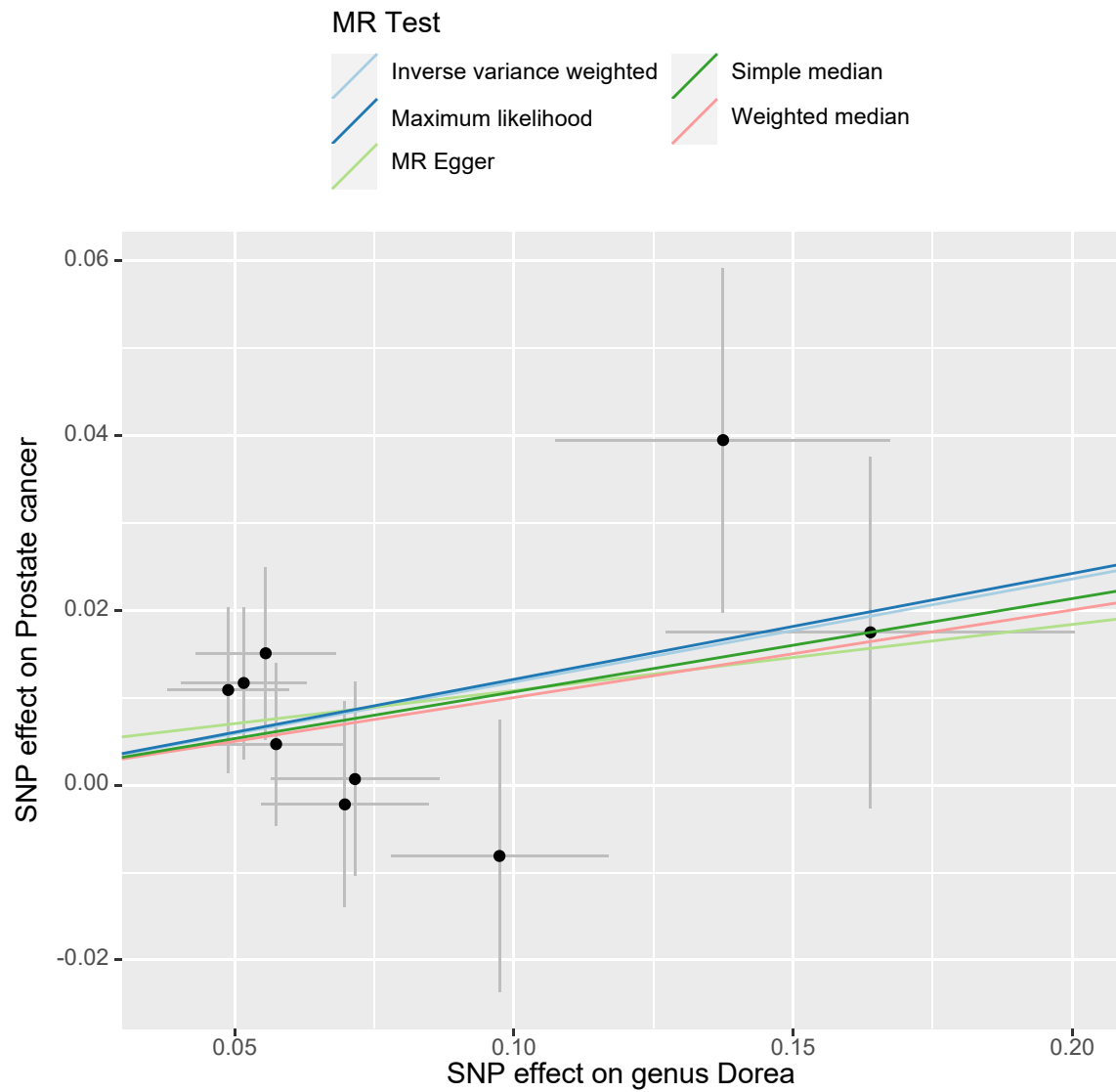


Figure S21. The scatter plot of genus Dorea on prostate cancer in the PRACTICAL consortium

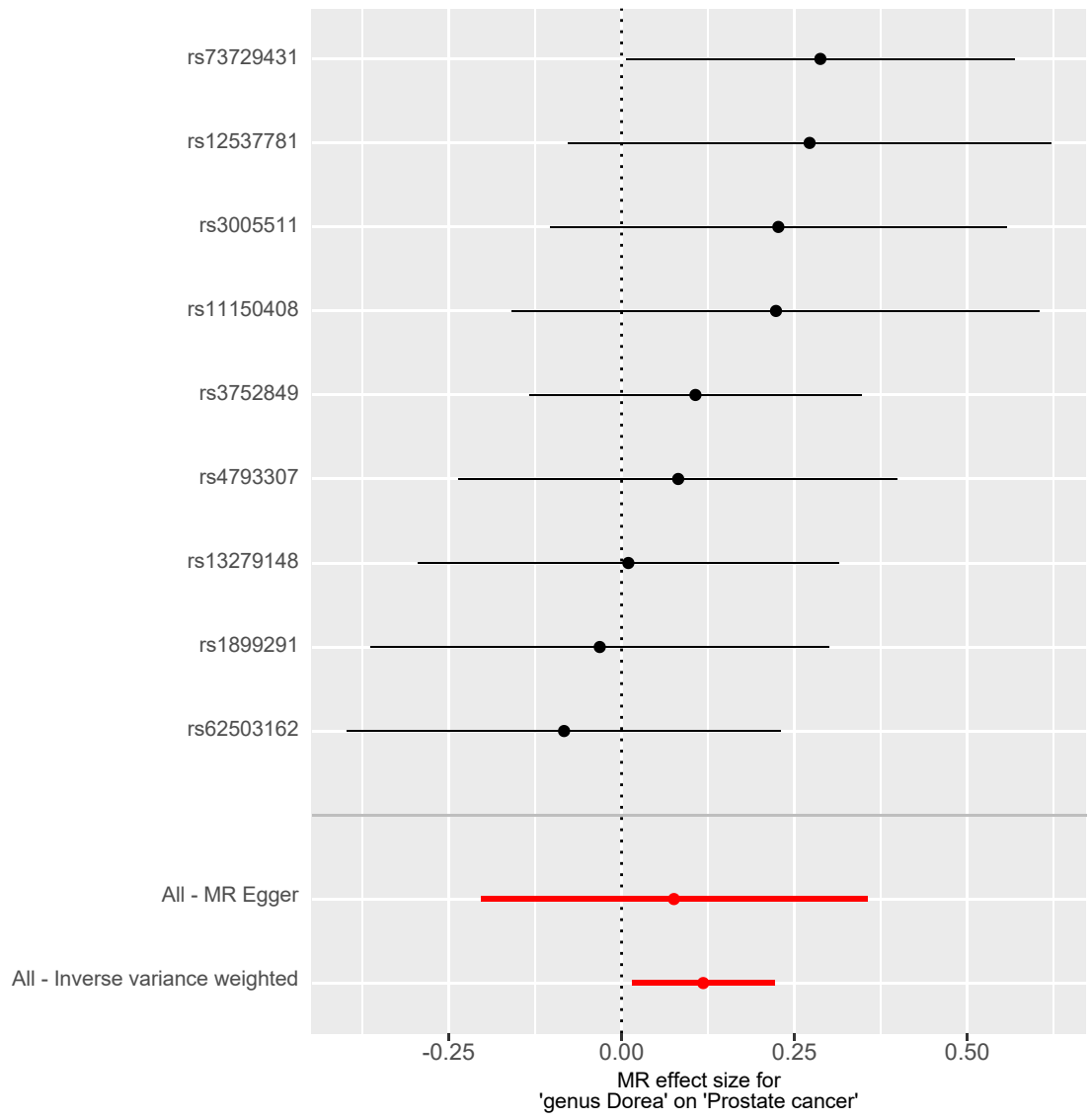


Figure S22. The forest plot of genus Dorea on prostate cancer in the PRACTICAL consortium

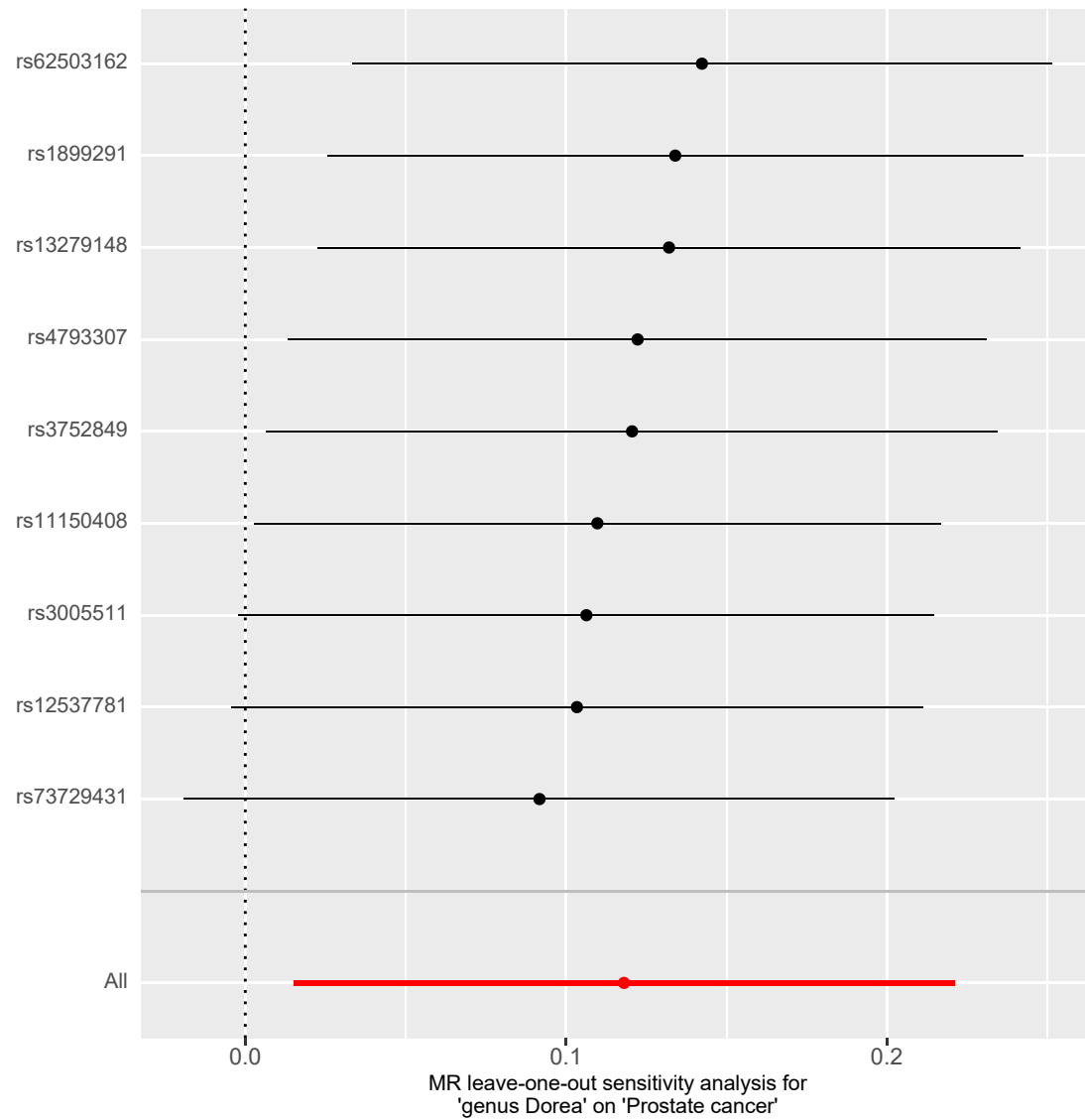


Figure S23. The leave-one-out test of genus Dorea on prostate cancer in the PRACTICAL consortium

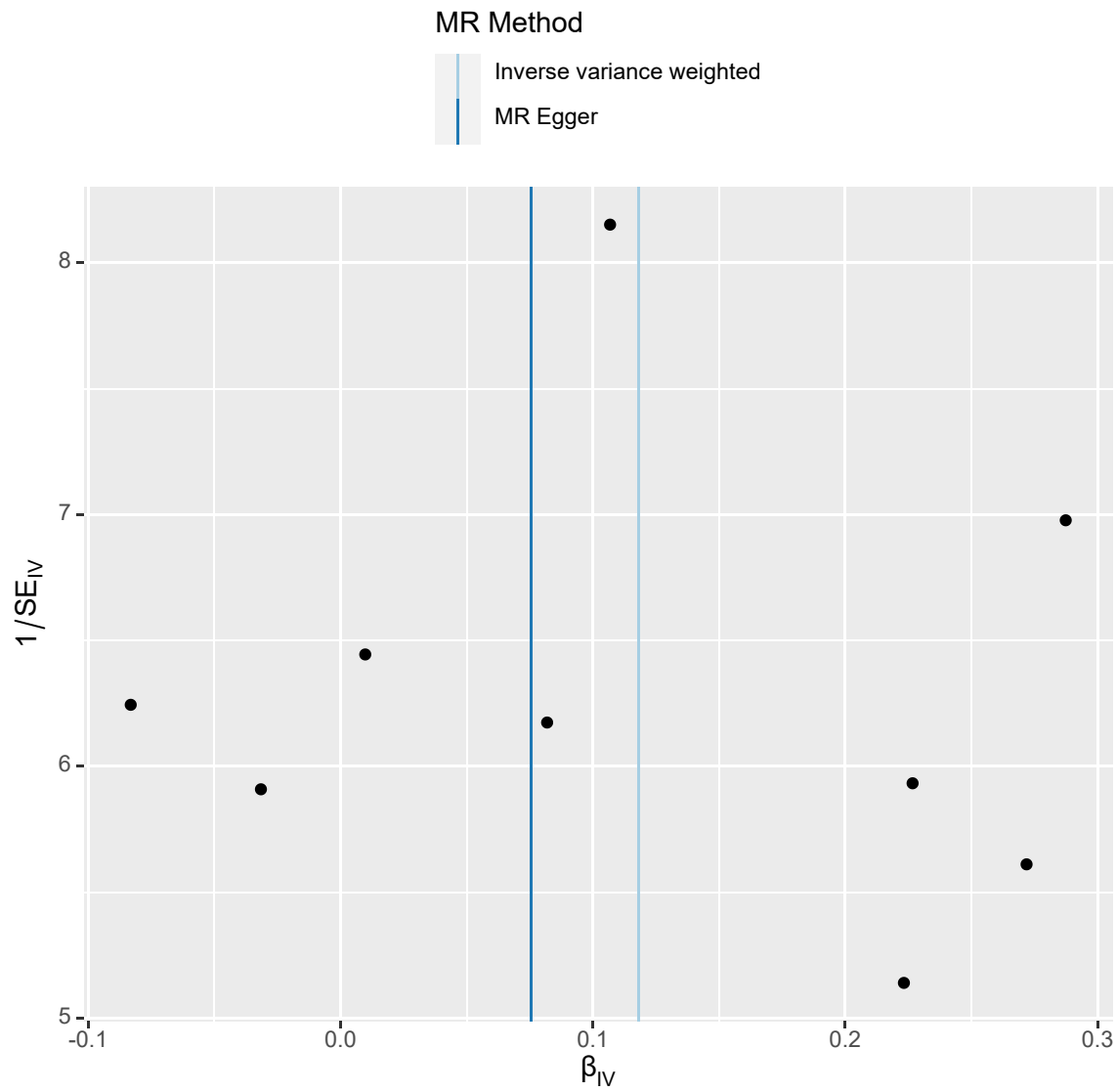


Figure S24. The funnel plot of genus Dorea on prostate cancer in the PRACTICAL consortium



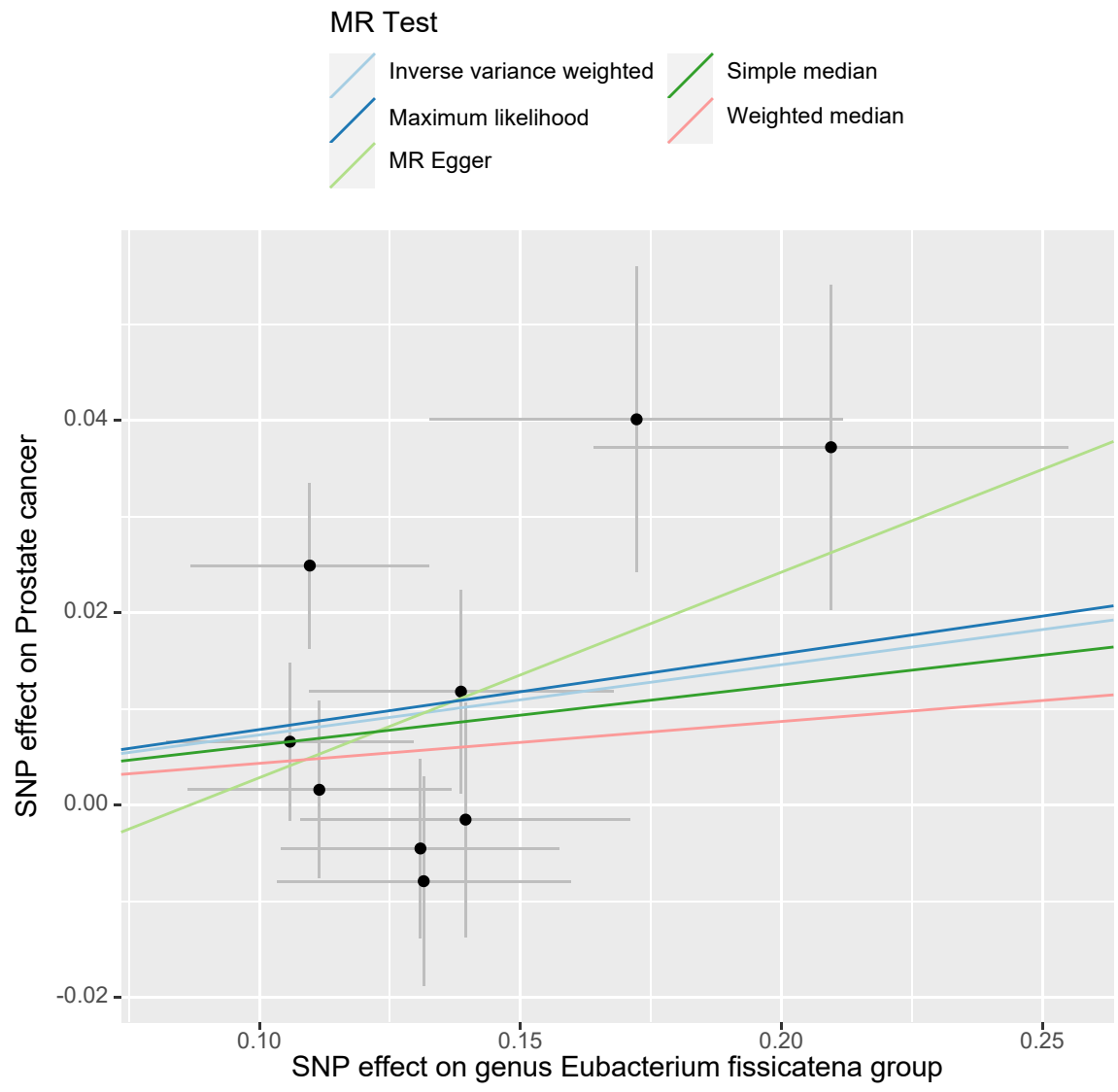


Figure S25. The scatter plot of genus *Eubacterium fissicatena* group on prostate cancer in the PRACTICAL consortium

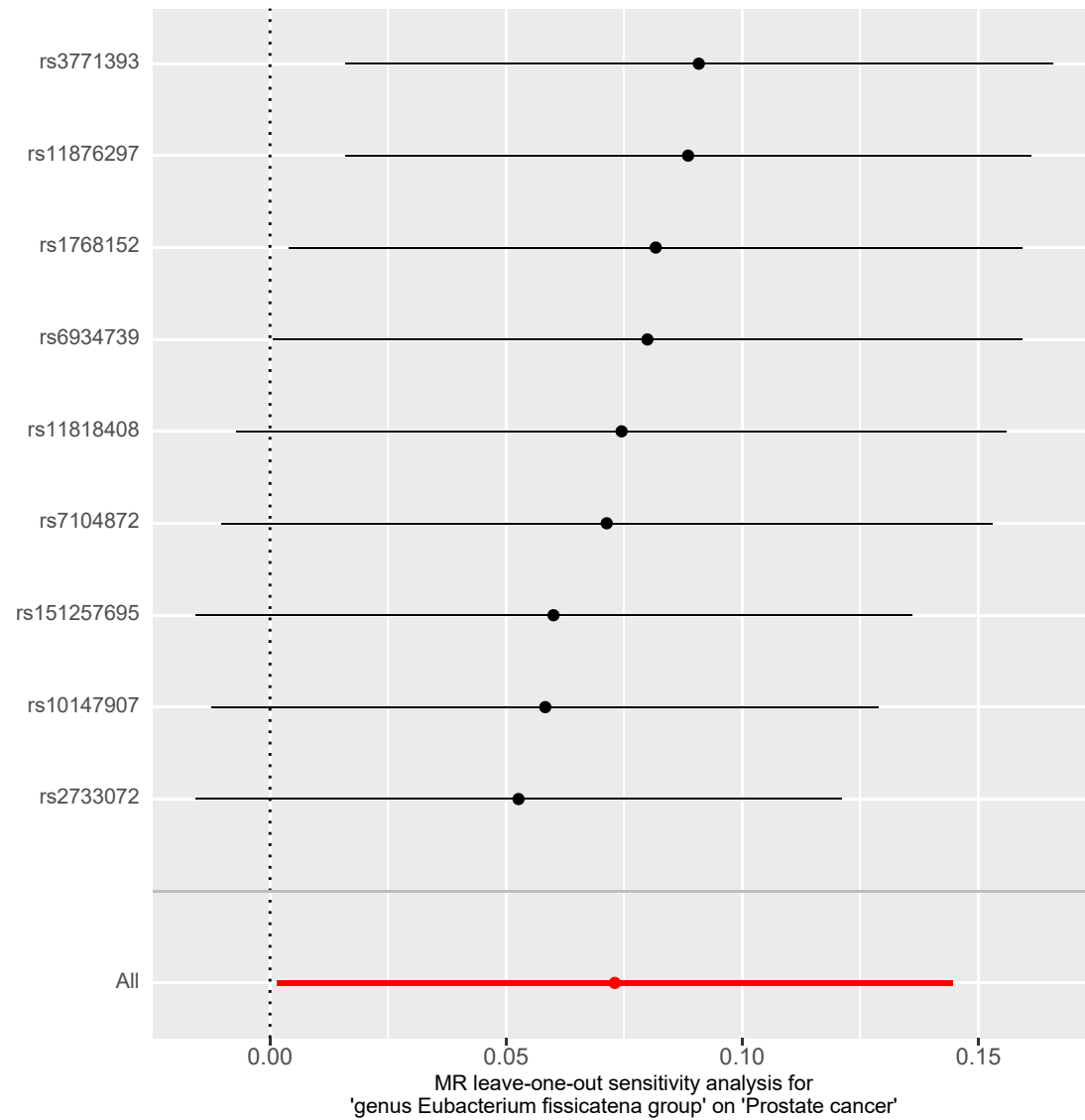


Figure S26. The forest plot of genus *Eubacterium fissicatena* group on prostate cancer in the PRACTICAL consortium

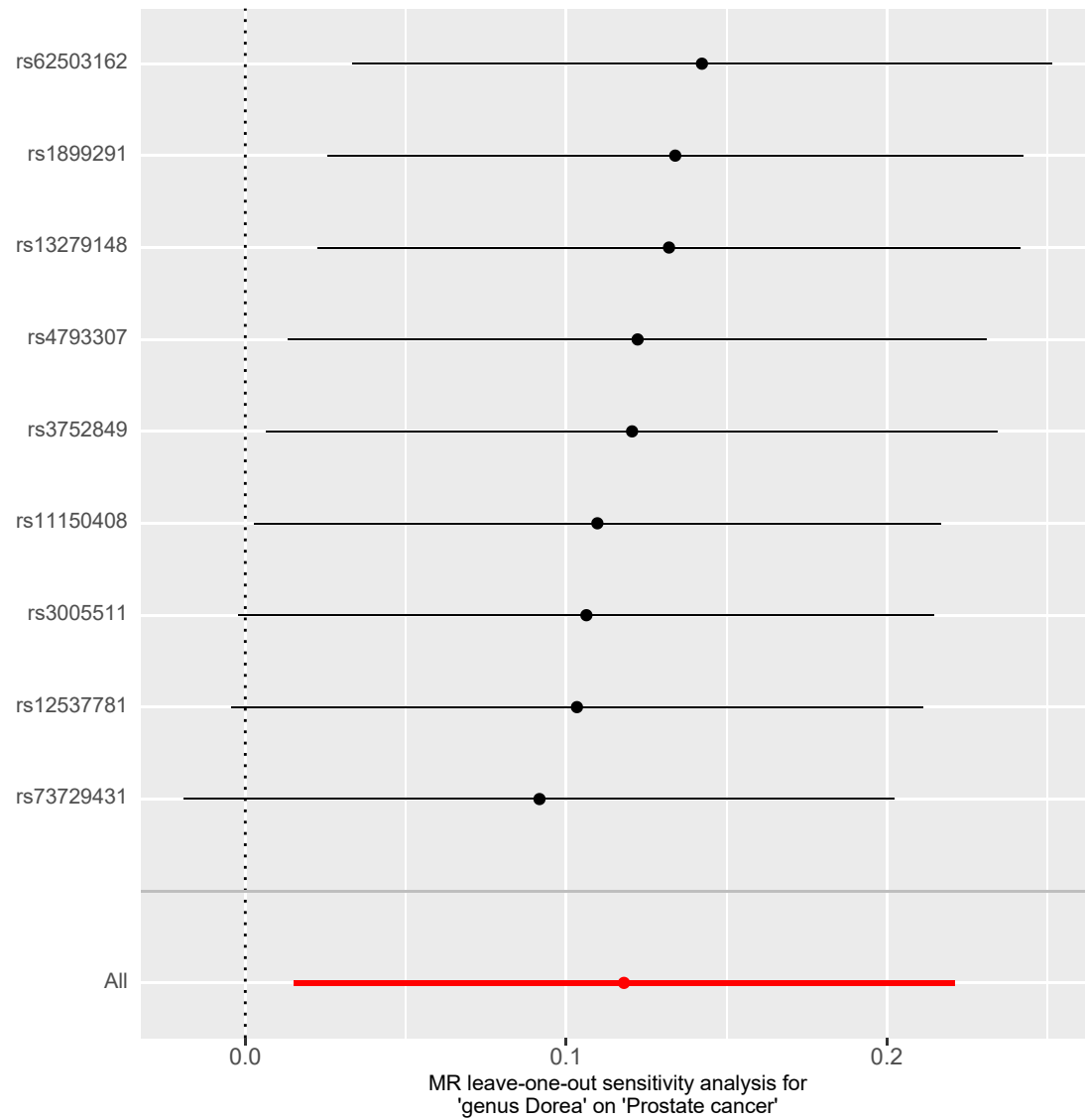


Figure S27. The leave-one-out test of genus *Eubacterium fissicatena* group on prostate cancer in the PRACTICAL consortium

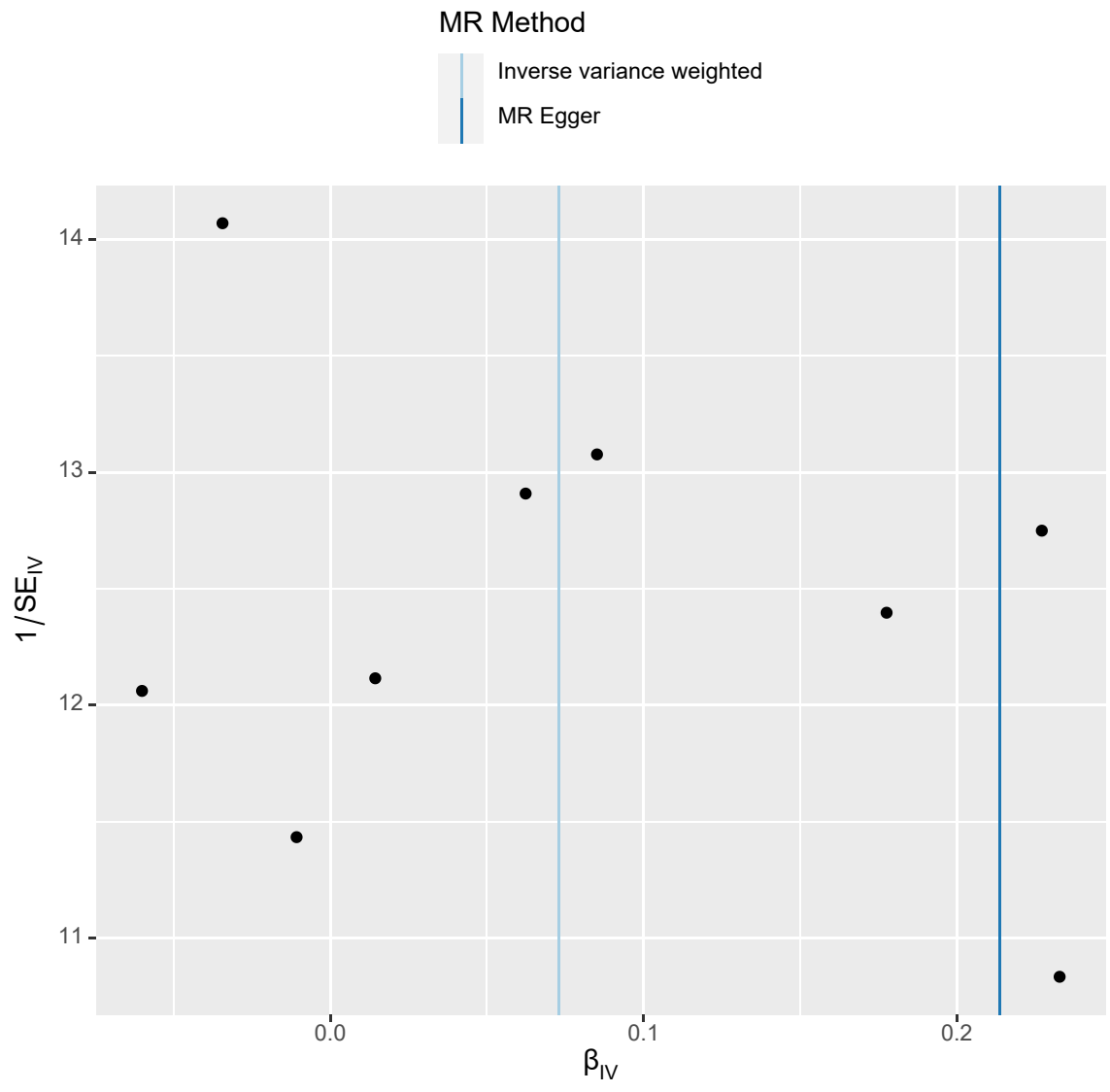


Figure S28. The funnel plot of genus *Eubacterium fissicatena* group on prostate cancer in the PRACTICAL consortium

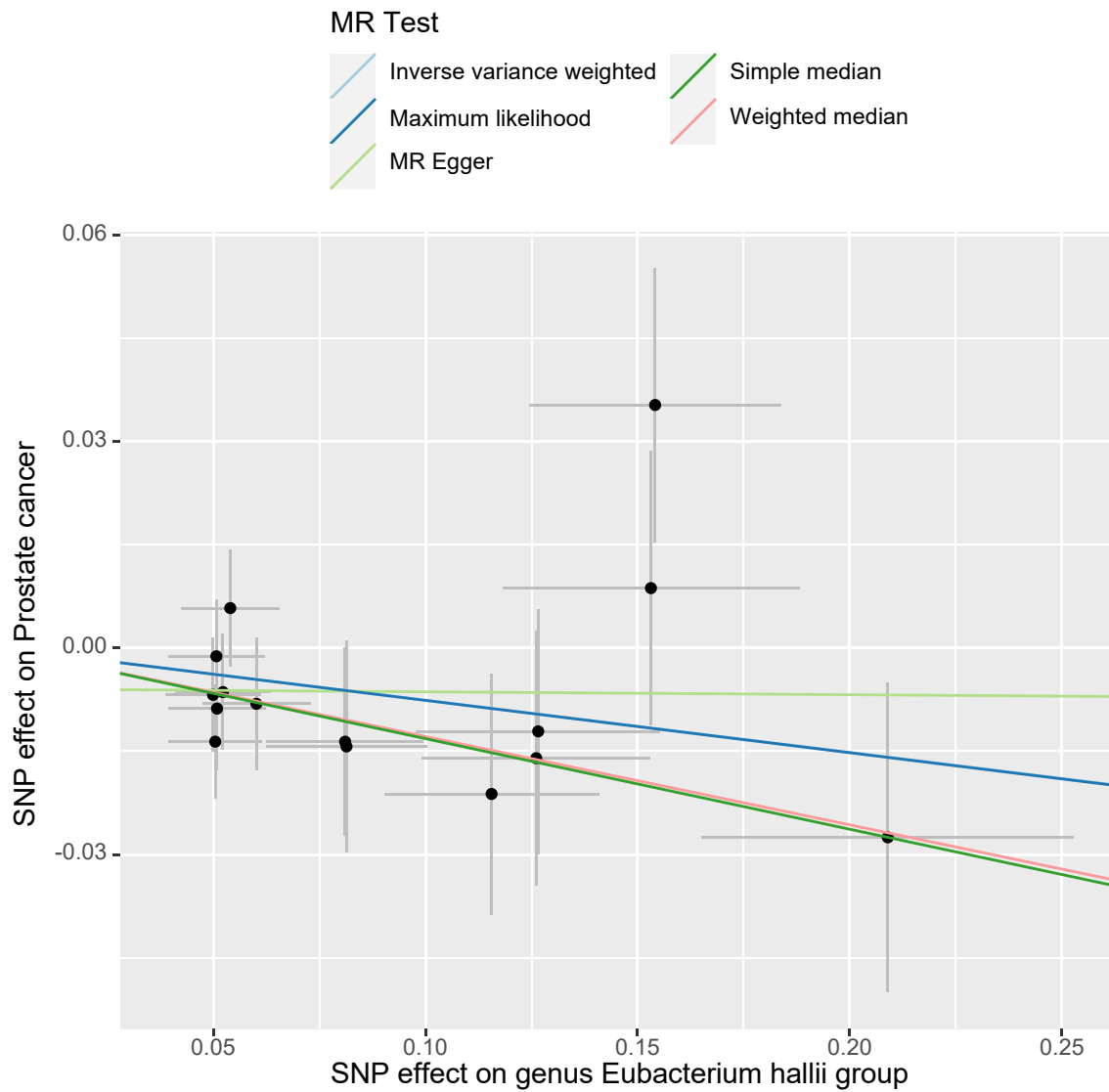


Figure S29. The scatter plot of genus *Eubacterium hallii* group on prostate cancer in the PRACTICAL consortium

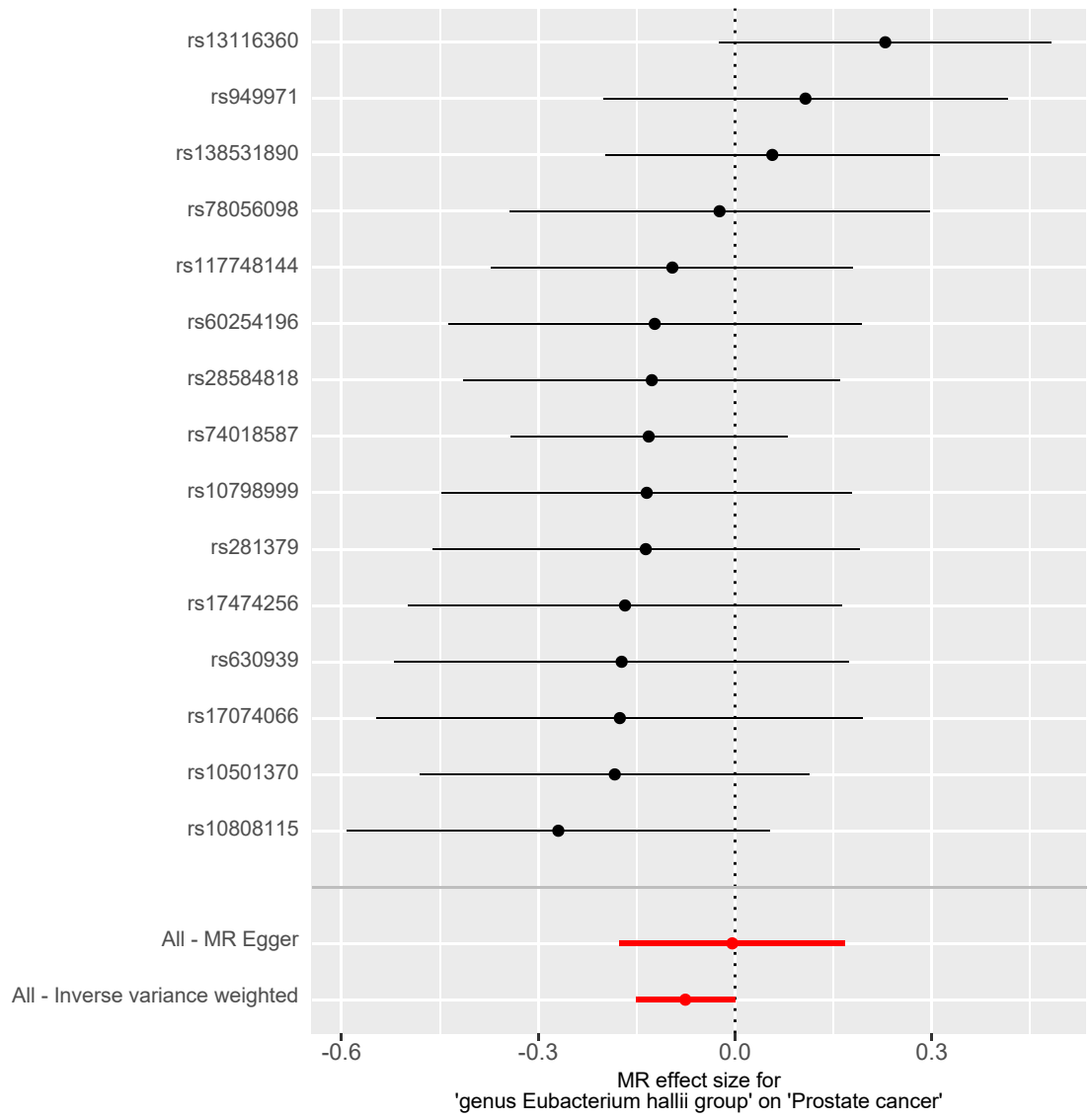


Figure S30. The forest plot of genus *Eubacterium hallii* group on prostate cancer in the PRACTICAL consortium

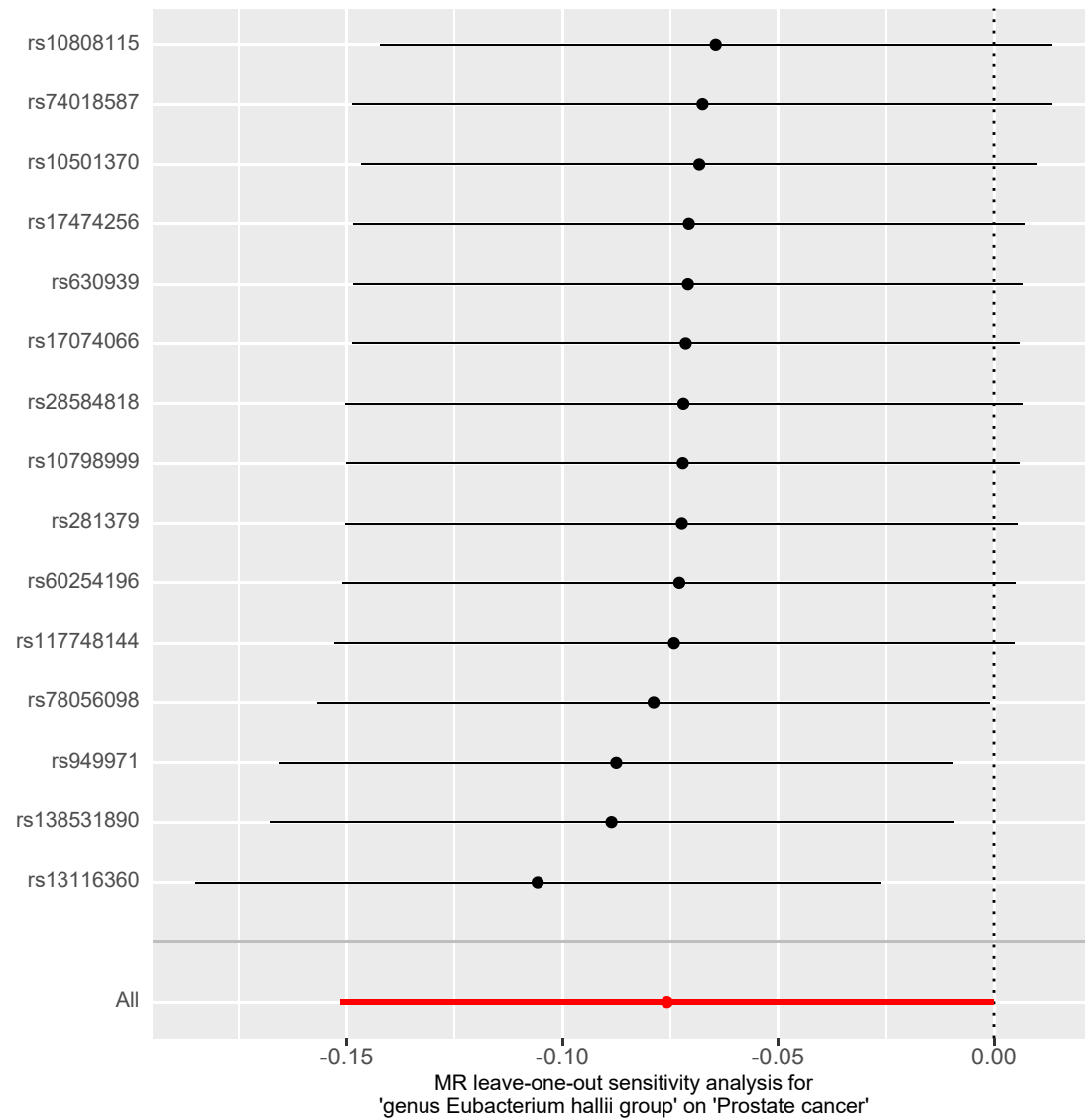


Figure S31. The leave-one-out test of genus *Eubacterium hallii* group on prostate cancer in the PRACTICAL consortium

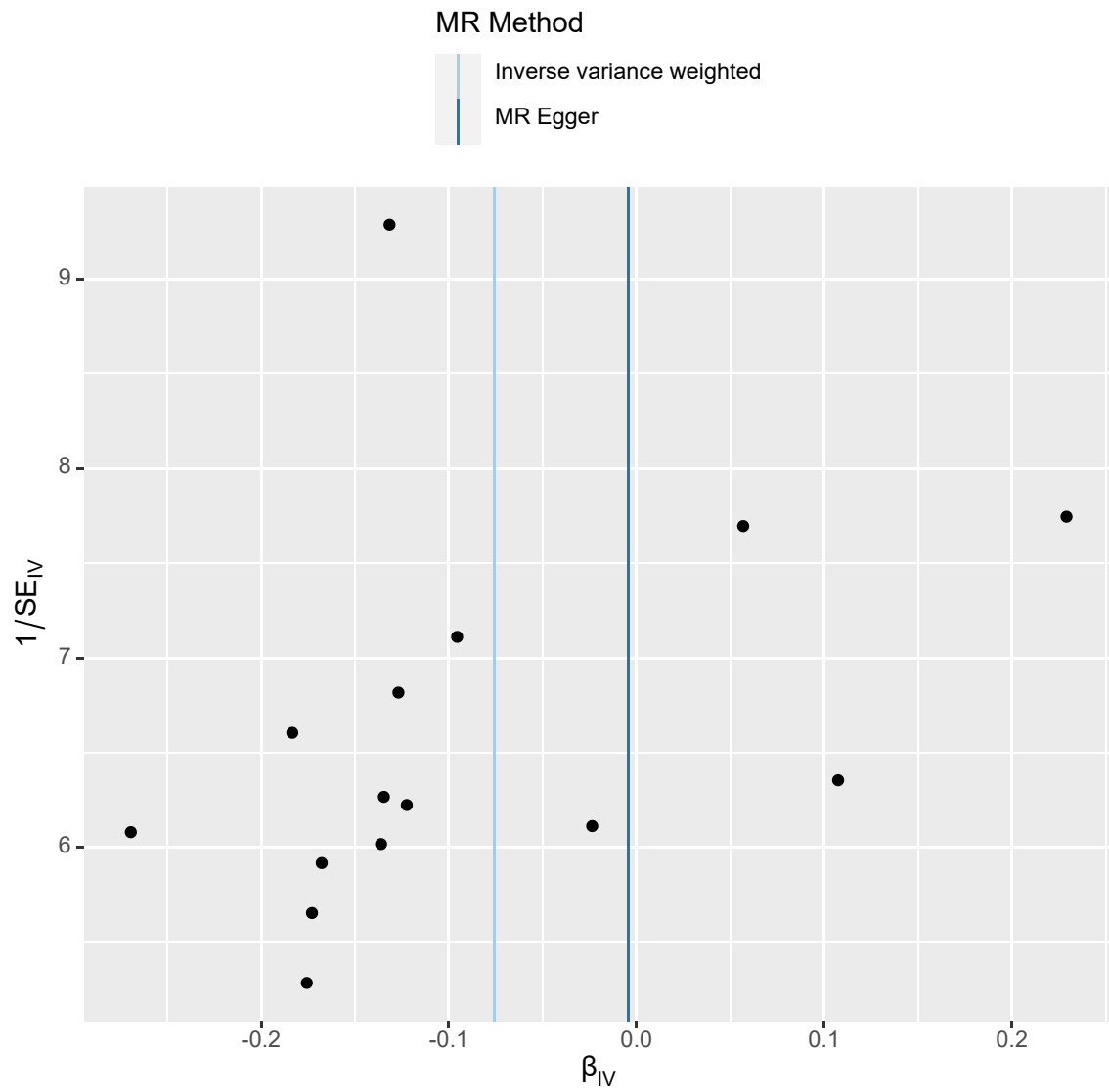


Figure S32. The funnel plot of genus *Eubacterium hallii* group on prostate cancer in the PRACTICAL consortium



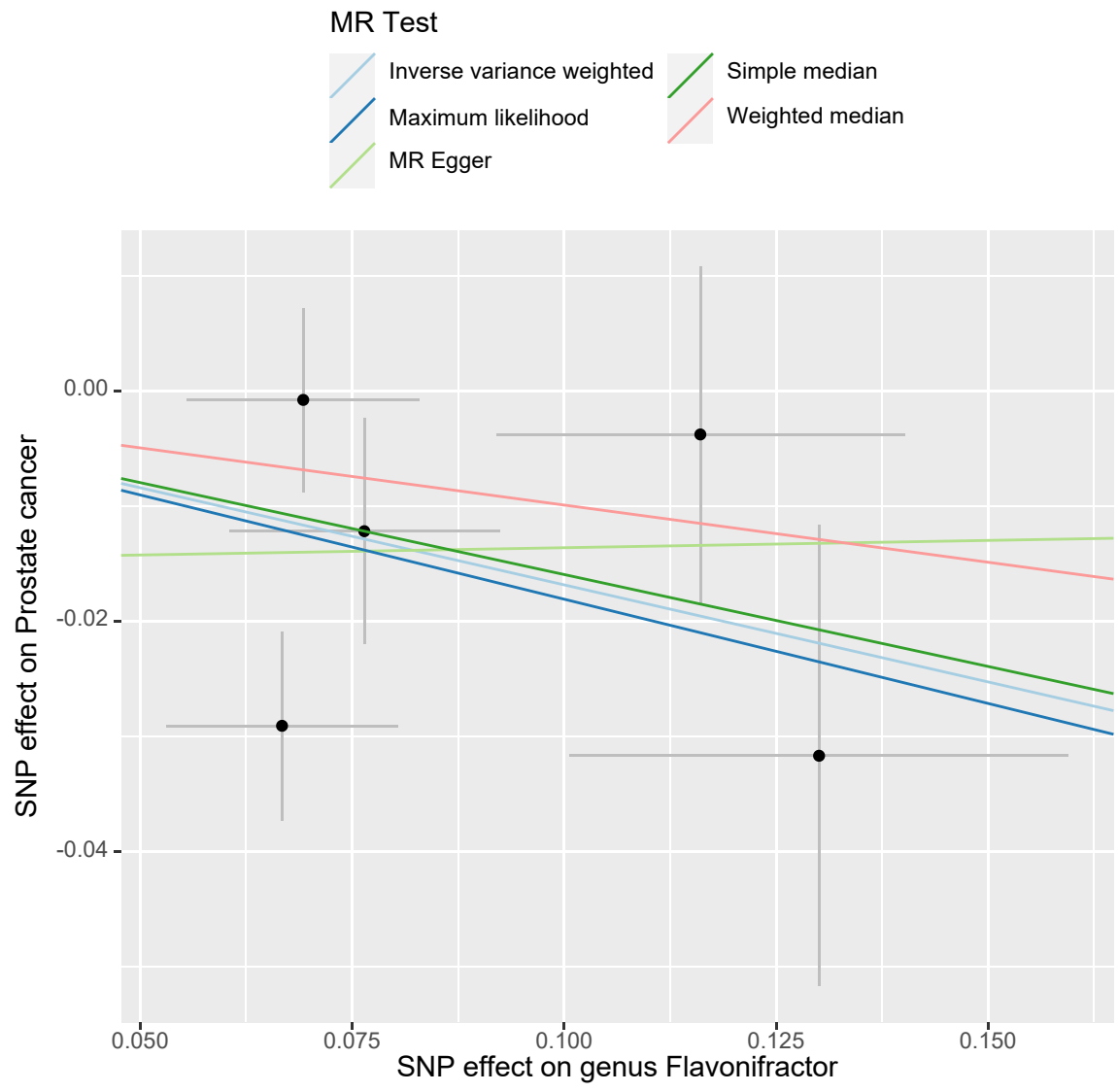


Figure S33. The scatter plot of genus Flavonifractor on prostate cancer in the PRACTICAL consortium

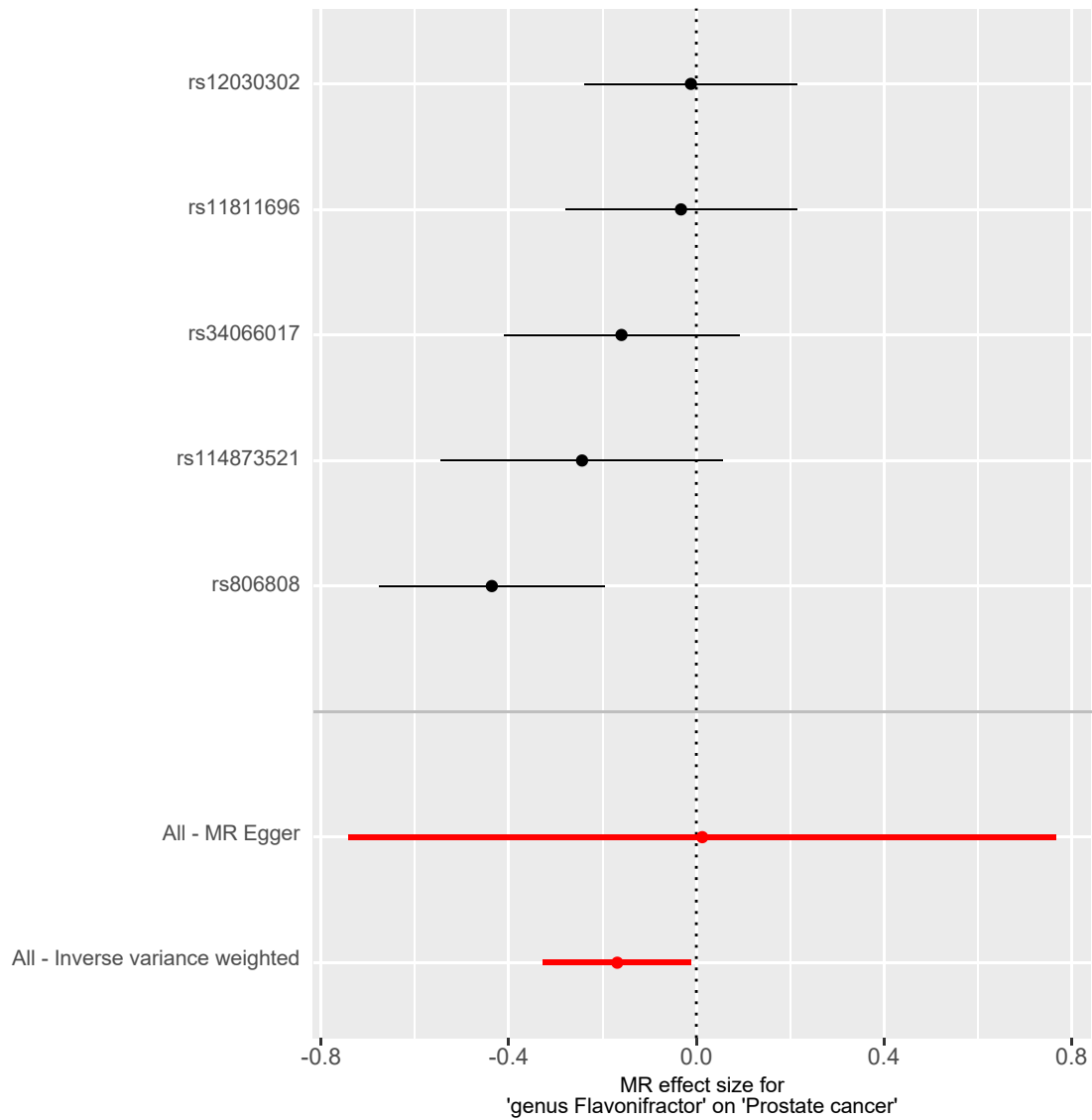


Figure S34. The forest plot of genus Flavonifactor on prostate cancer in the PRACTICAL consortium

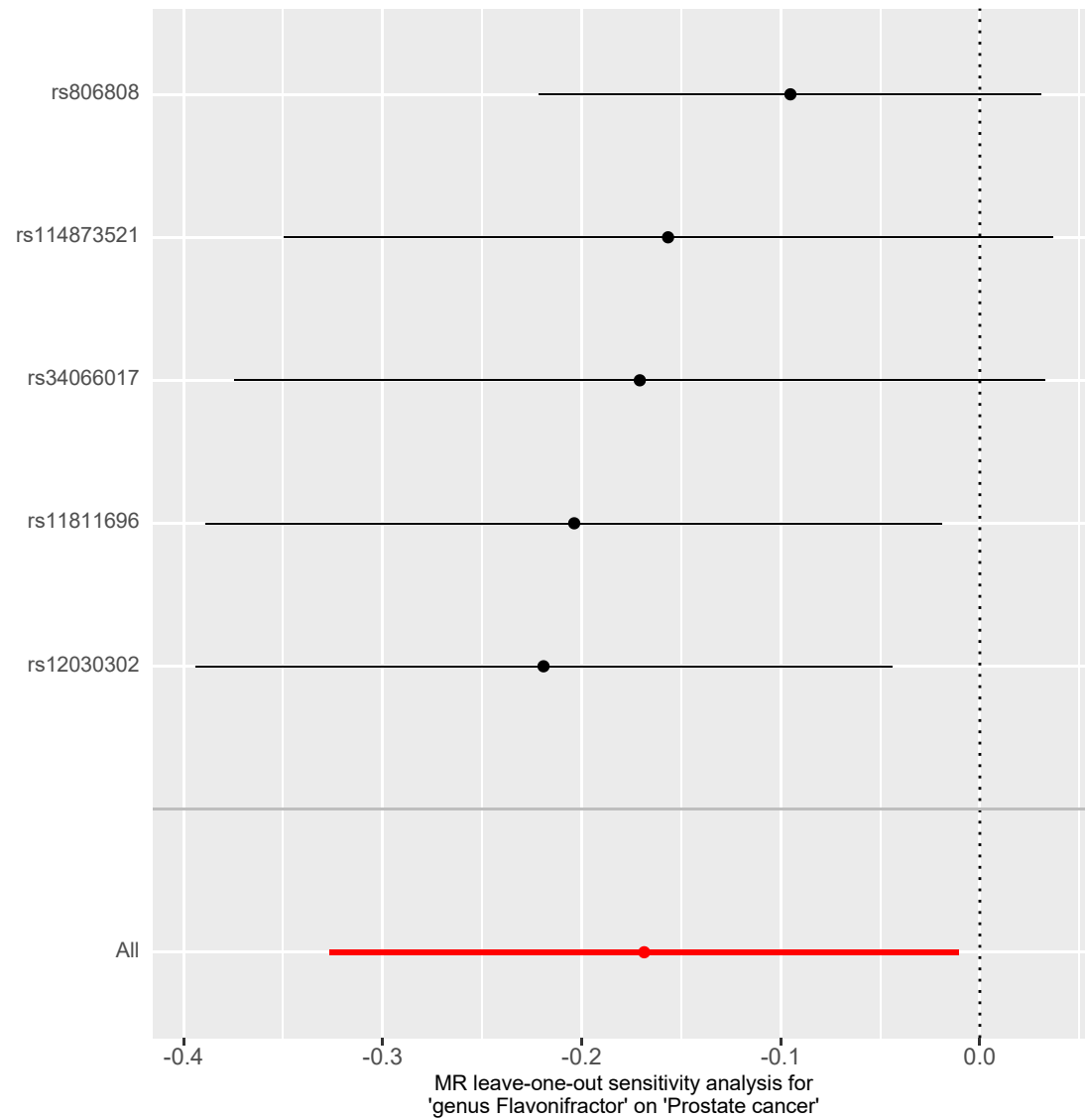


Figure S35. The leave-one-out test of genus Flavonifactor on prostate cancer in the PRACTICAL consortium

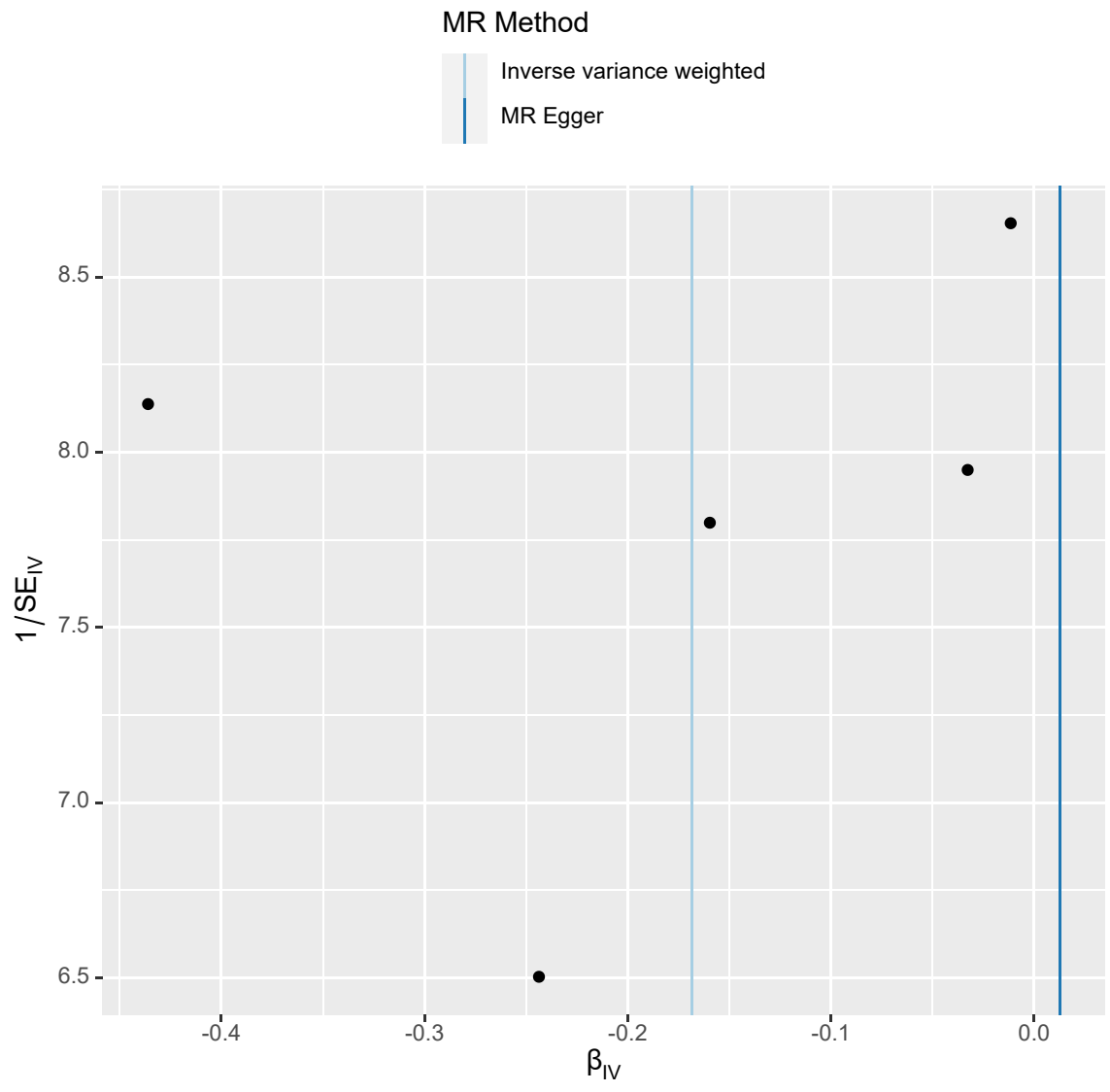


Figure S36. The funnel plot of genus Flavonifractor on prostate cancer in the PRACTICAL consortium

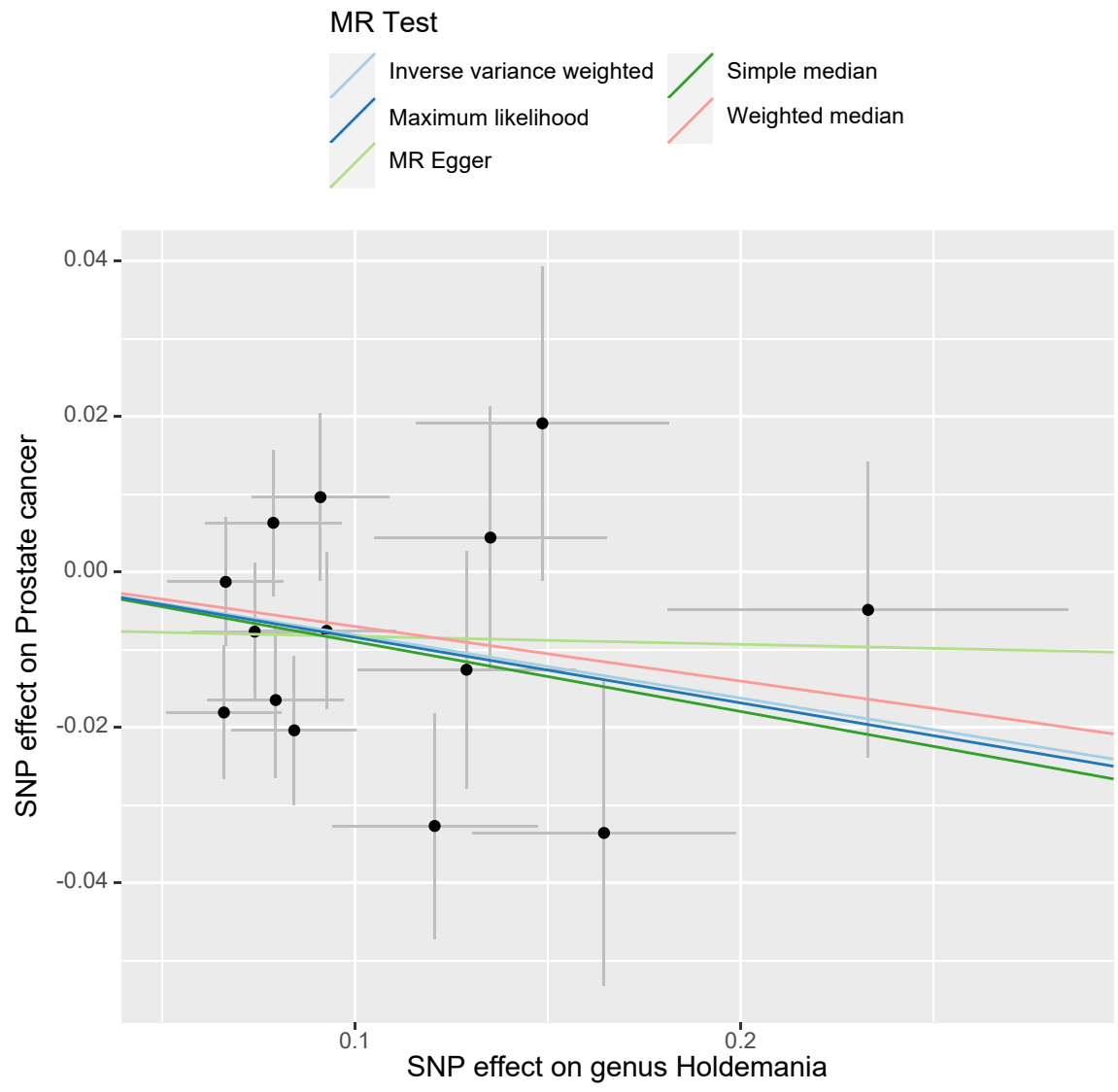


Figure S37. The scatter plot of genus Holdemania on prostate cancer in the PRACTICAL consortium

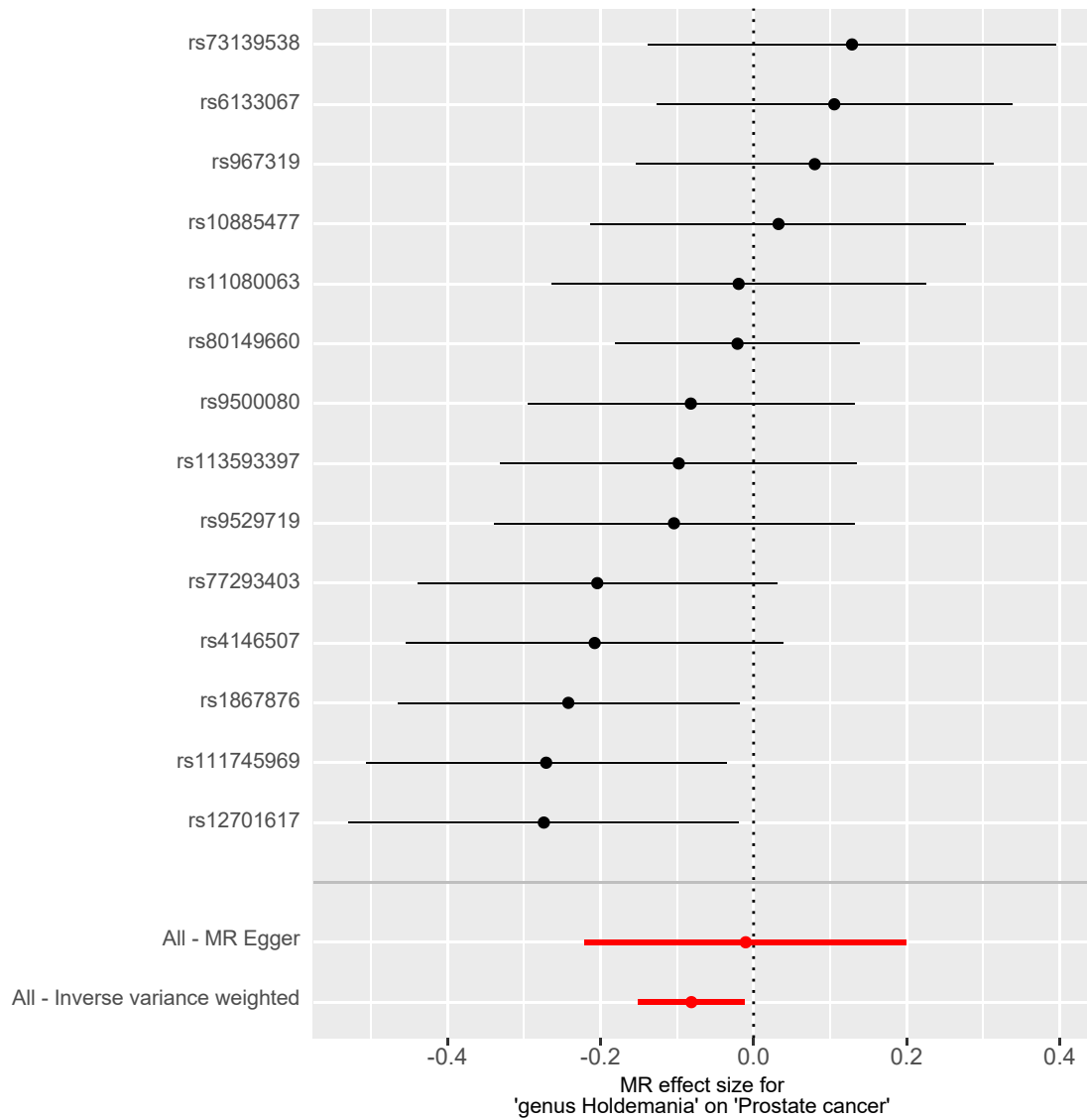


Figure S38. The forest plot of genus Holdemania on prostate cancer in the PRACTICAL consortium

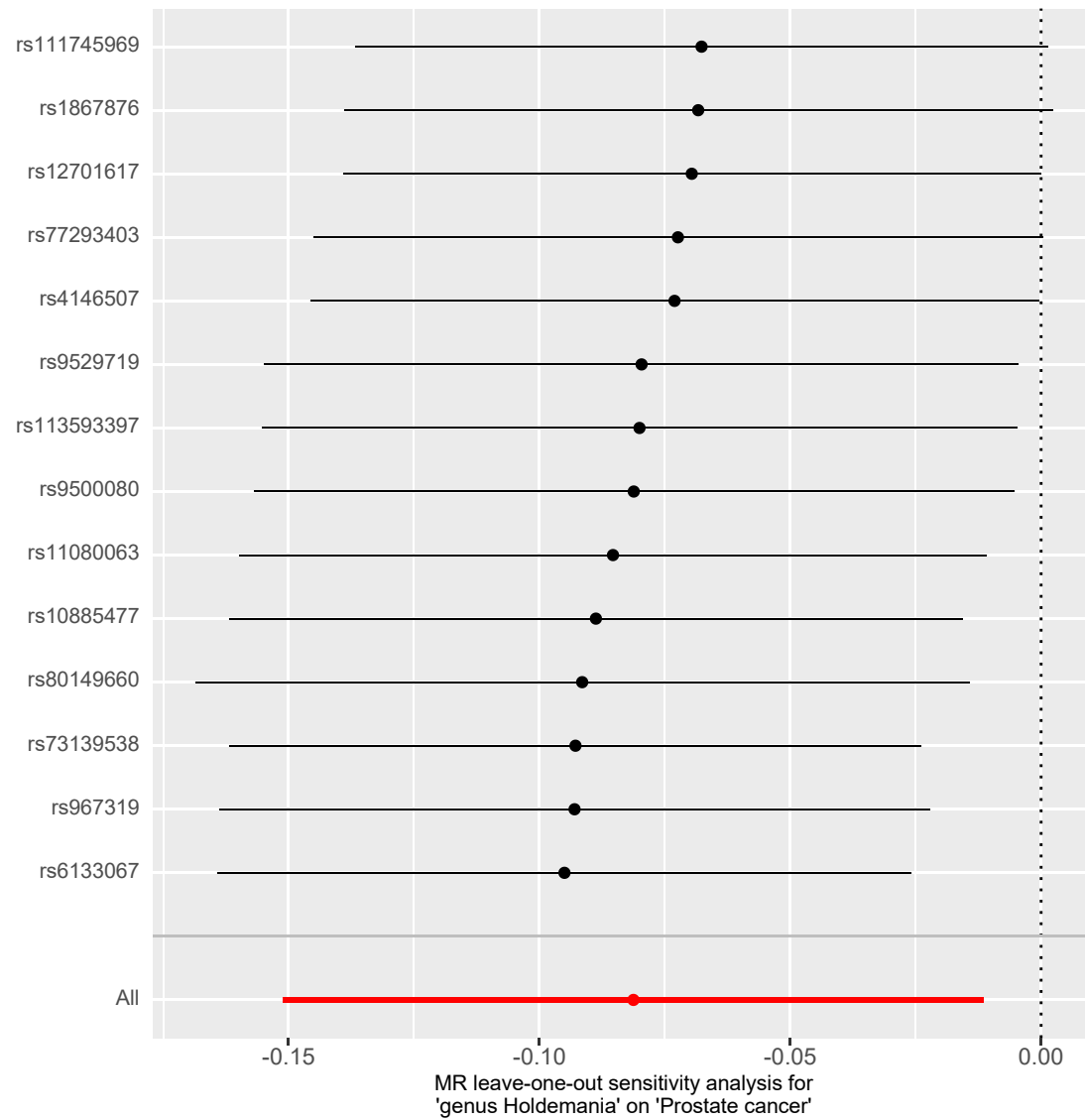


Figure S39. The leave-one-out test of genus Holdemania on prostate cancer in the PRACTICAL consortium

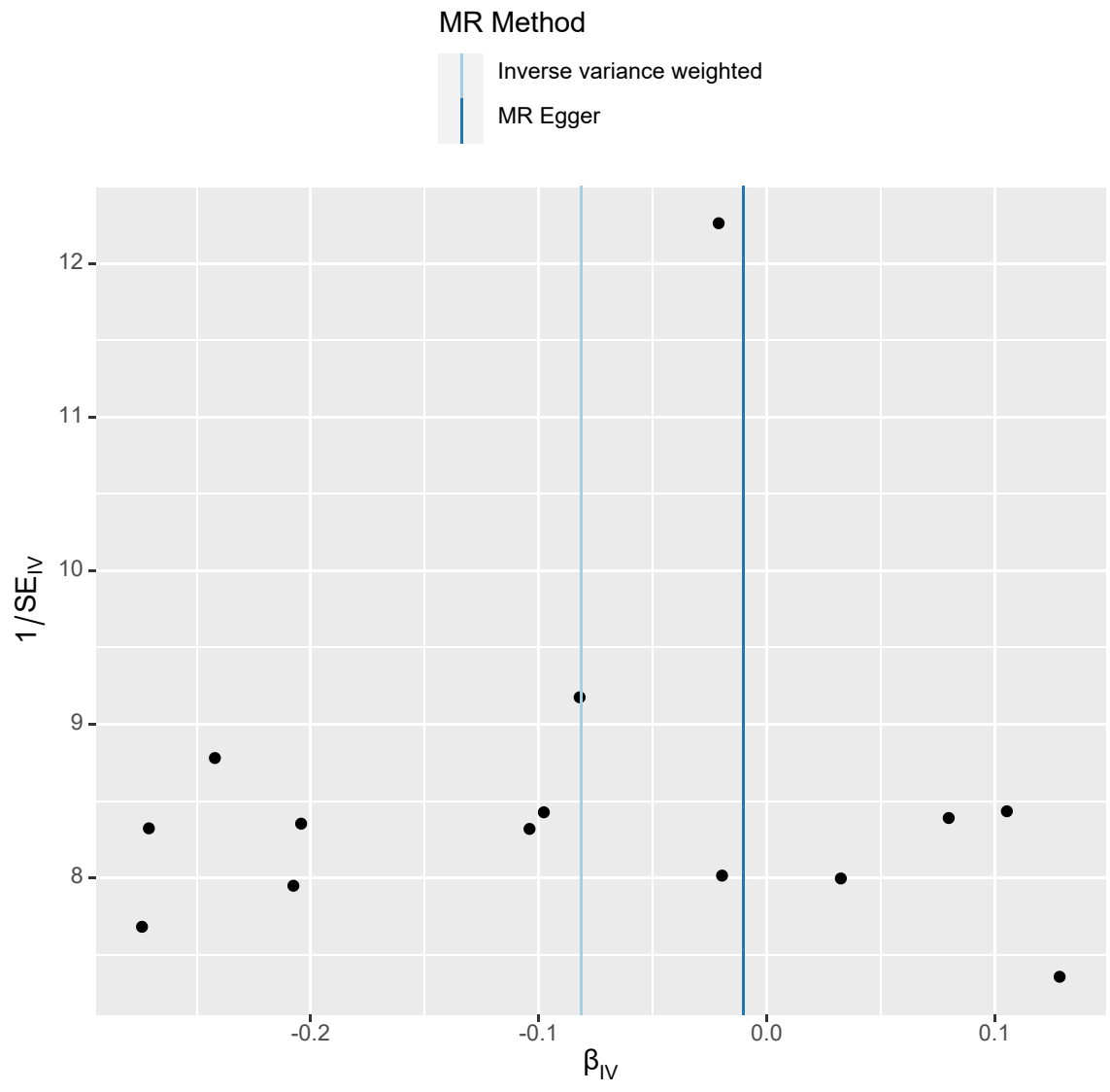


Figure S40. The funnel plot of genus *Holdemania* on prostate cancer in the PRACTICAL consortium



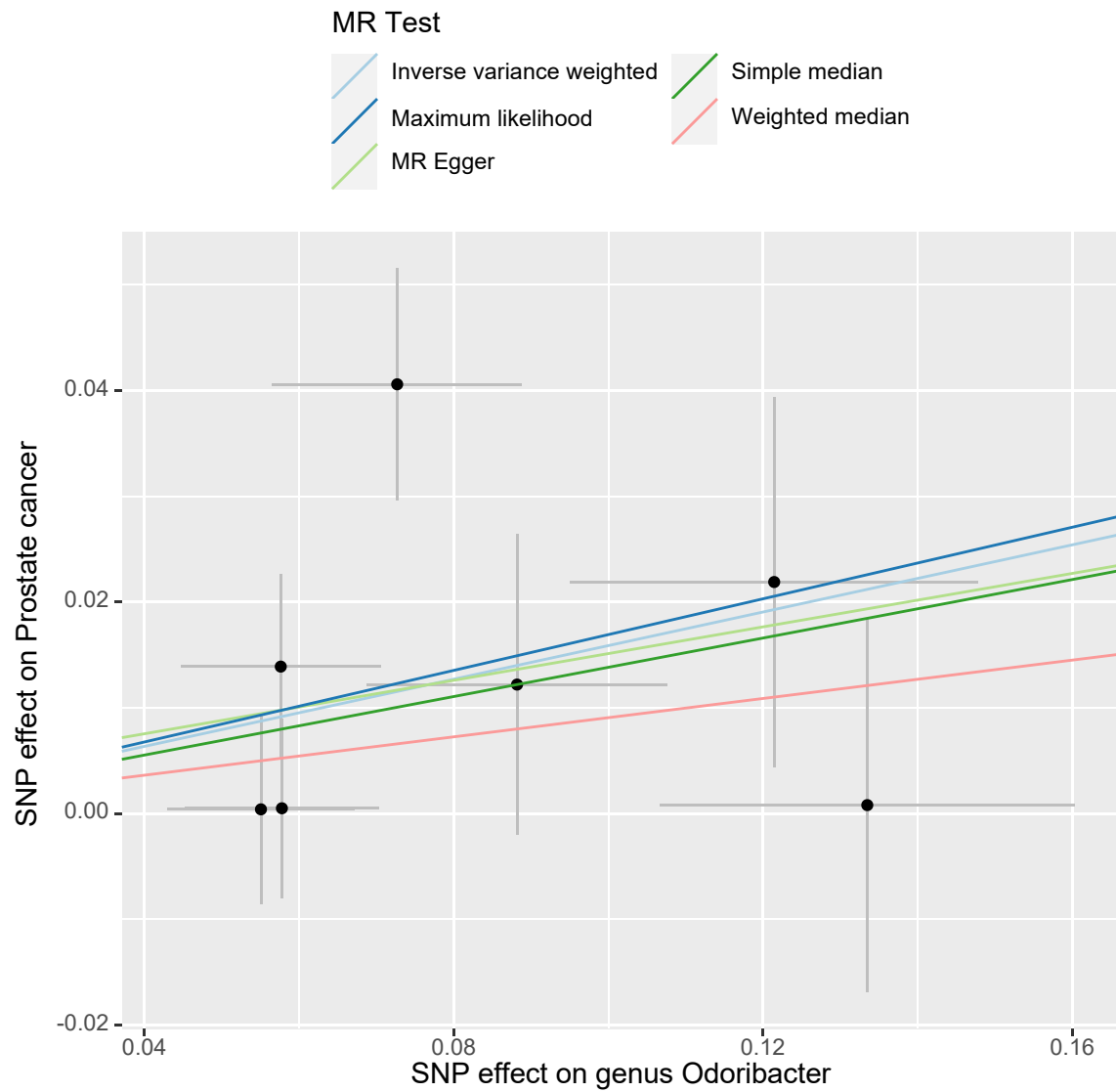


Figure S41. The scatter plot of genus *Odoribacter* on prostate cancer in the PRACTICAL consortium

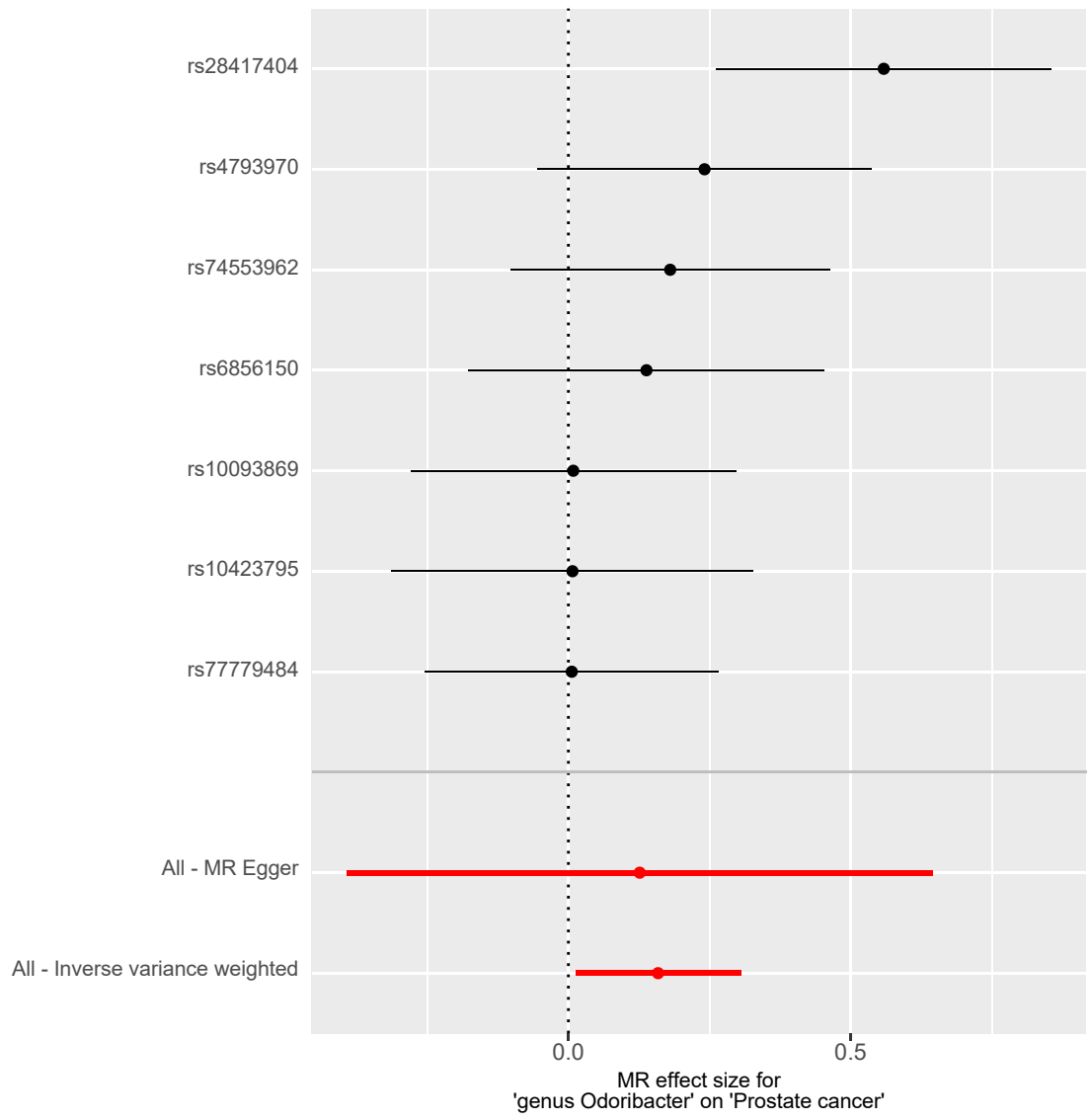


Figure S42. The forest plot of genus *Odoribacter* on prostate cancer in the PRACTICAL consortium

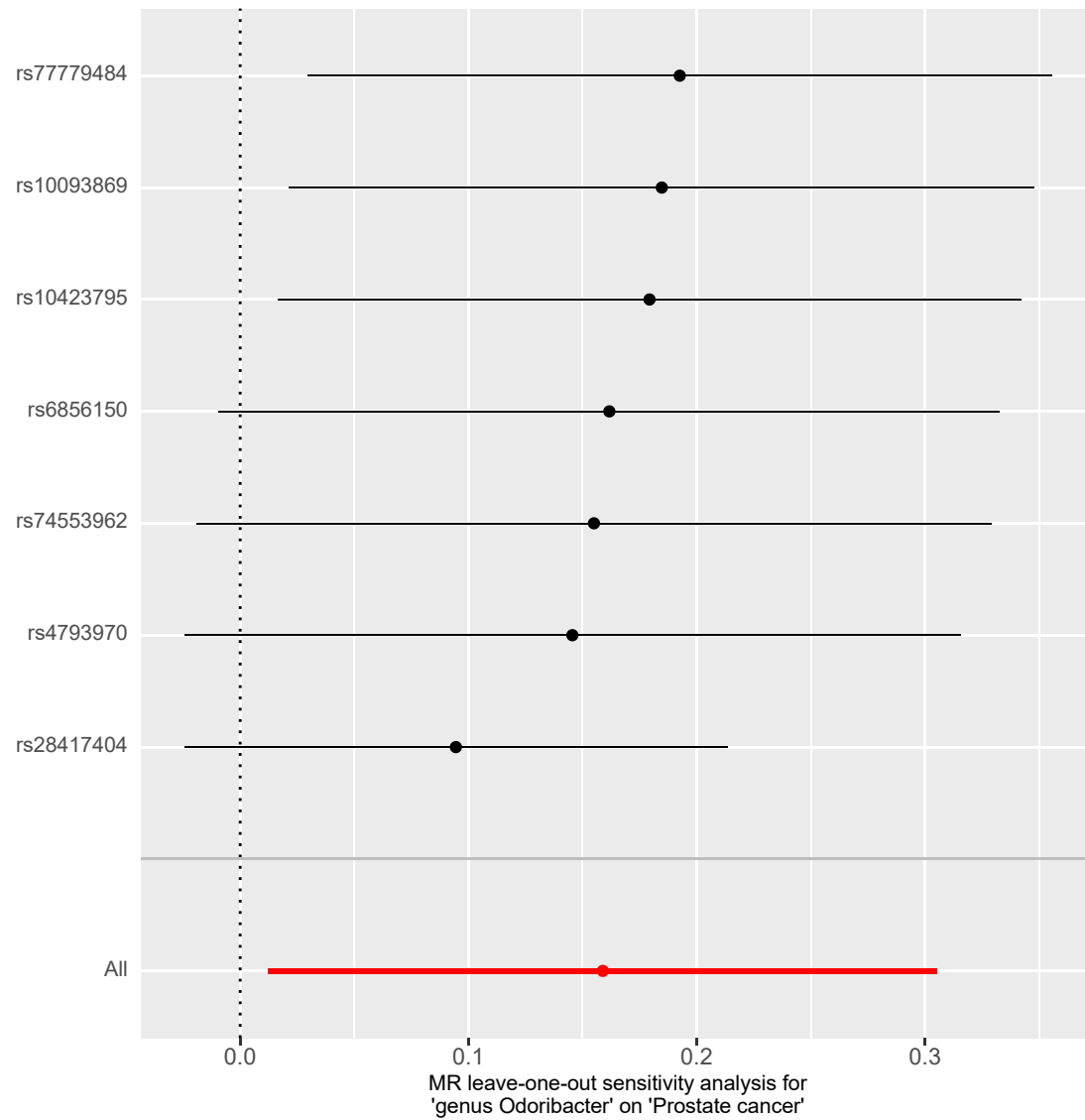


Figure S43. The leave-one-out test of genus *Odoribacter* on prostate cancer in the PRACTICAL consortium

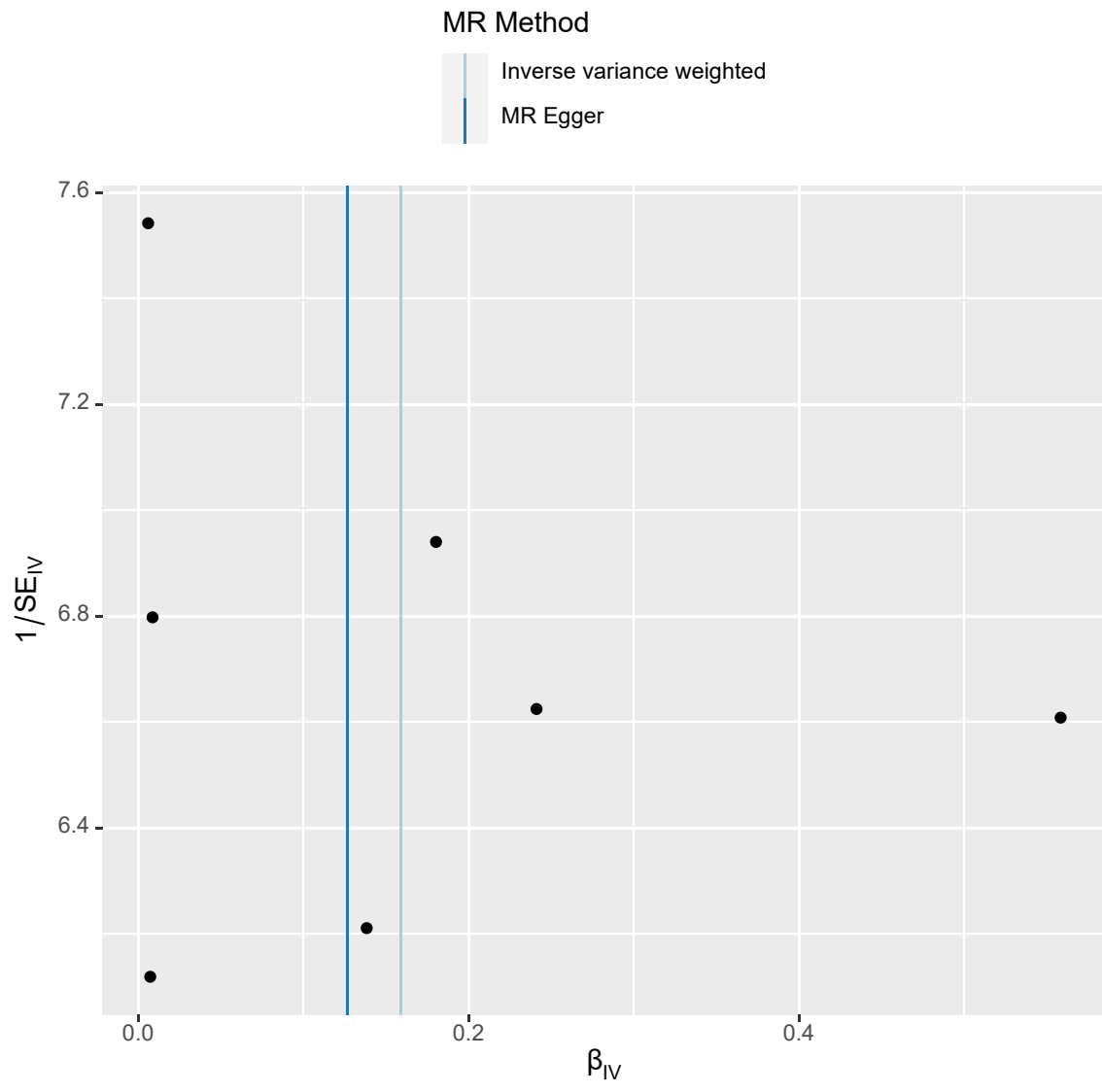


Figure S44. The funnel plot of genus *Odoribacter* on prostate cancer in the PRACTICAL consortium

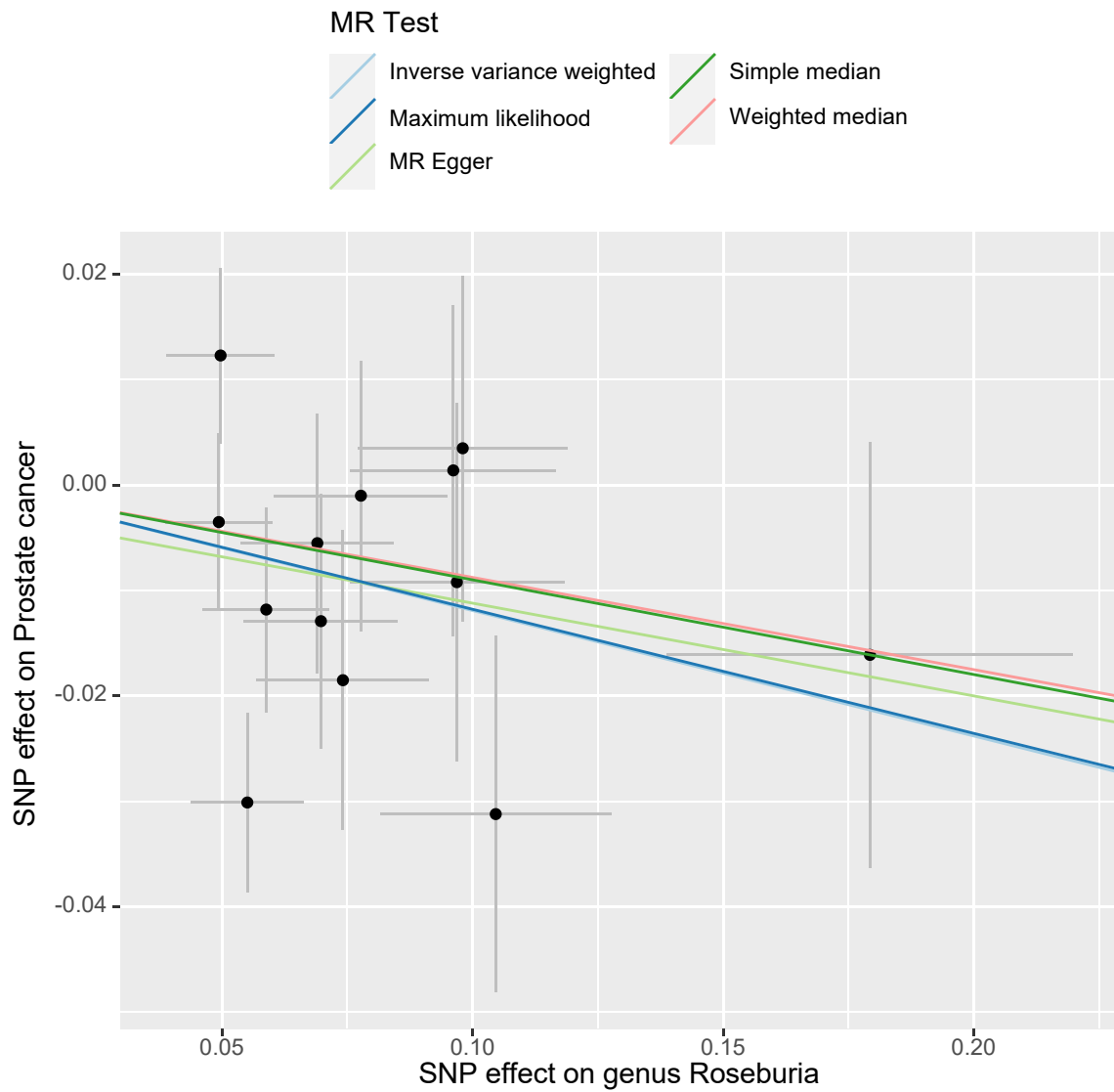


Figure S45. The scatter plot of genus Roseburia on prostate cancer in the PRACTICAL consortium

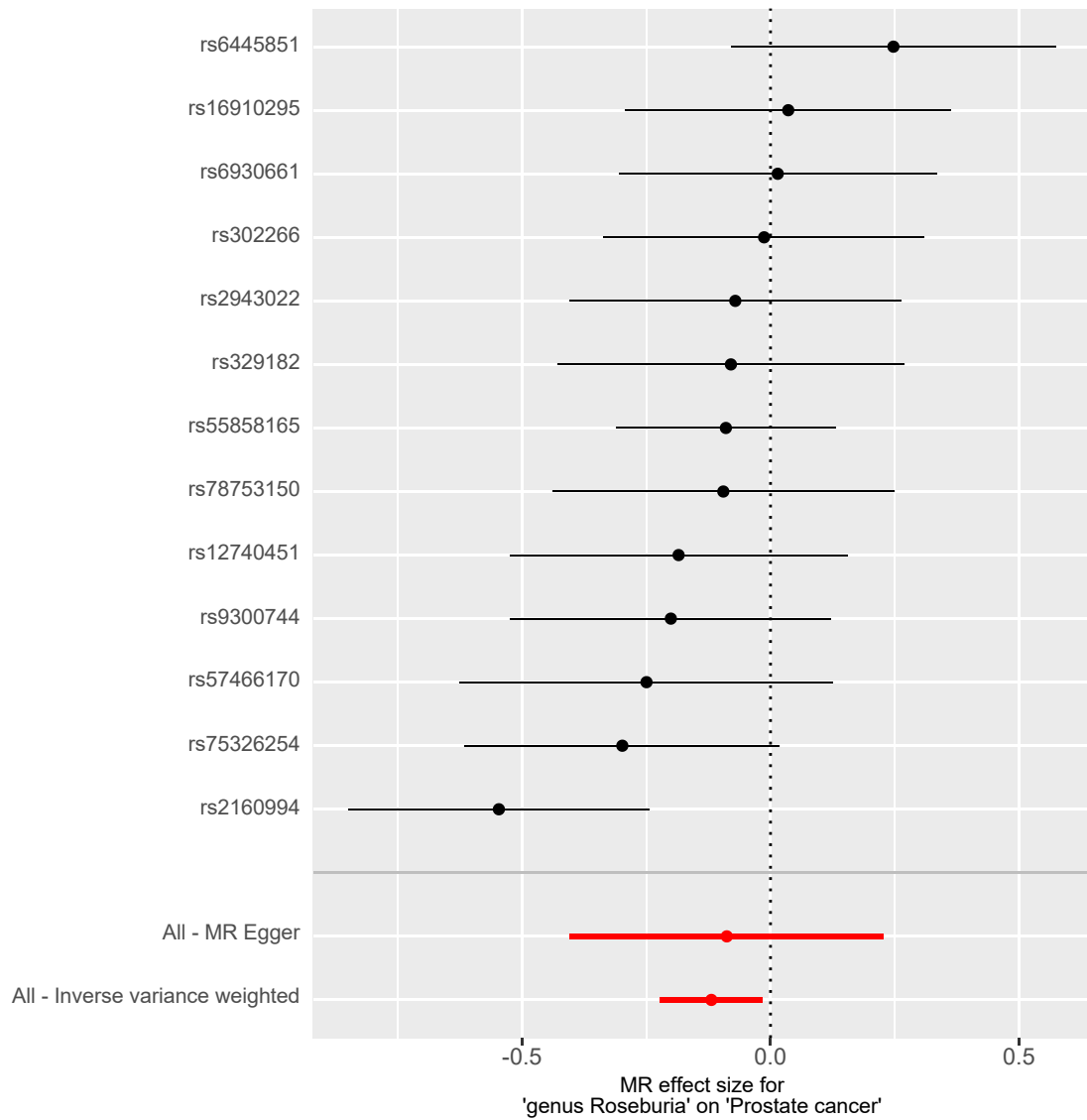


Figure S46. The forest plot of genus Roseburia on prostate cancer in the PRACTICAL consortium

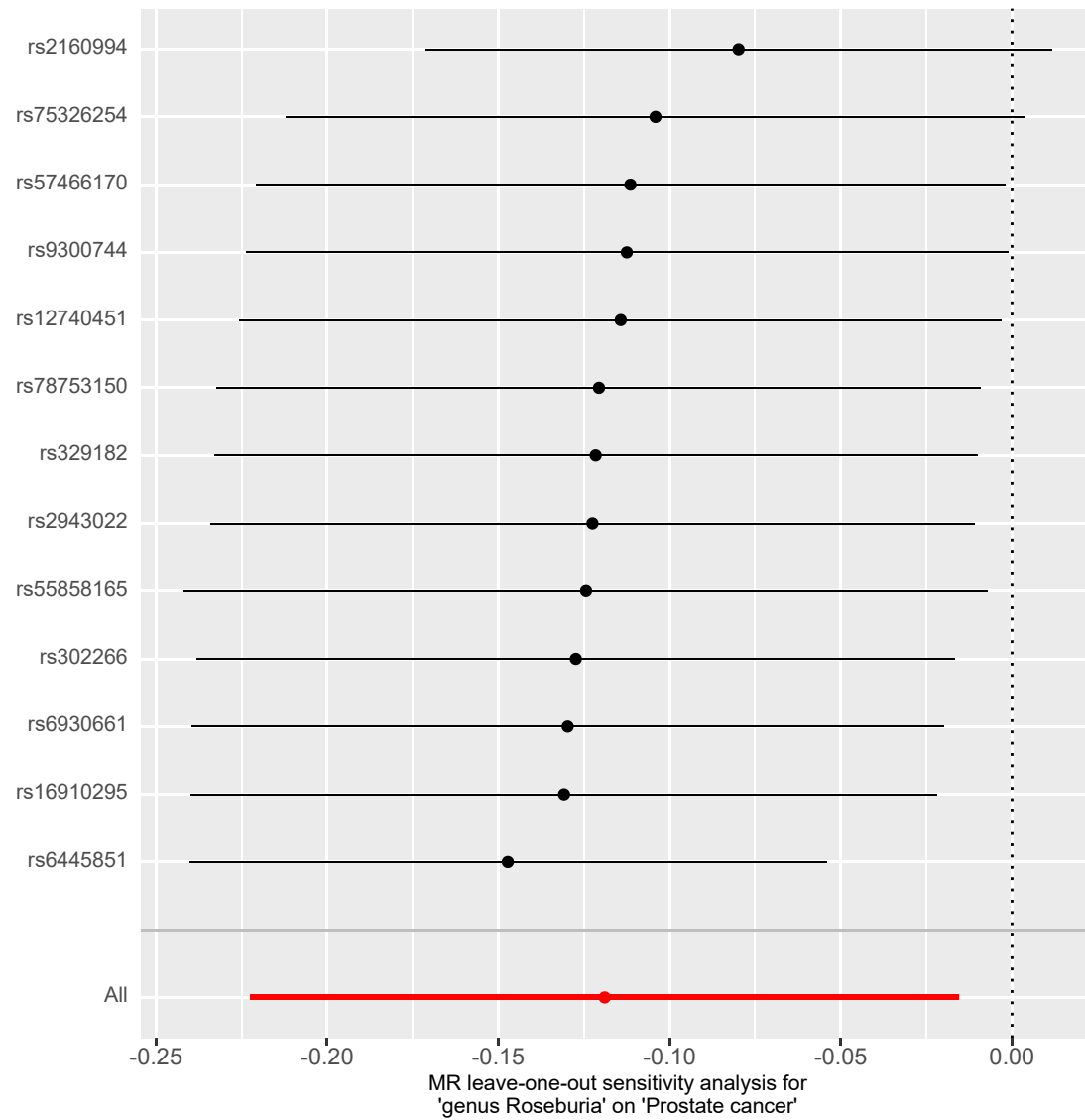


Figure S47. The leave-one-out test of genus Roseburia on prostate cancer in the PRACTICAL consortium

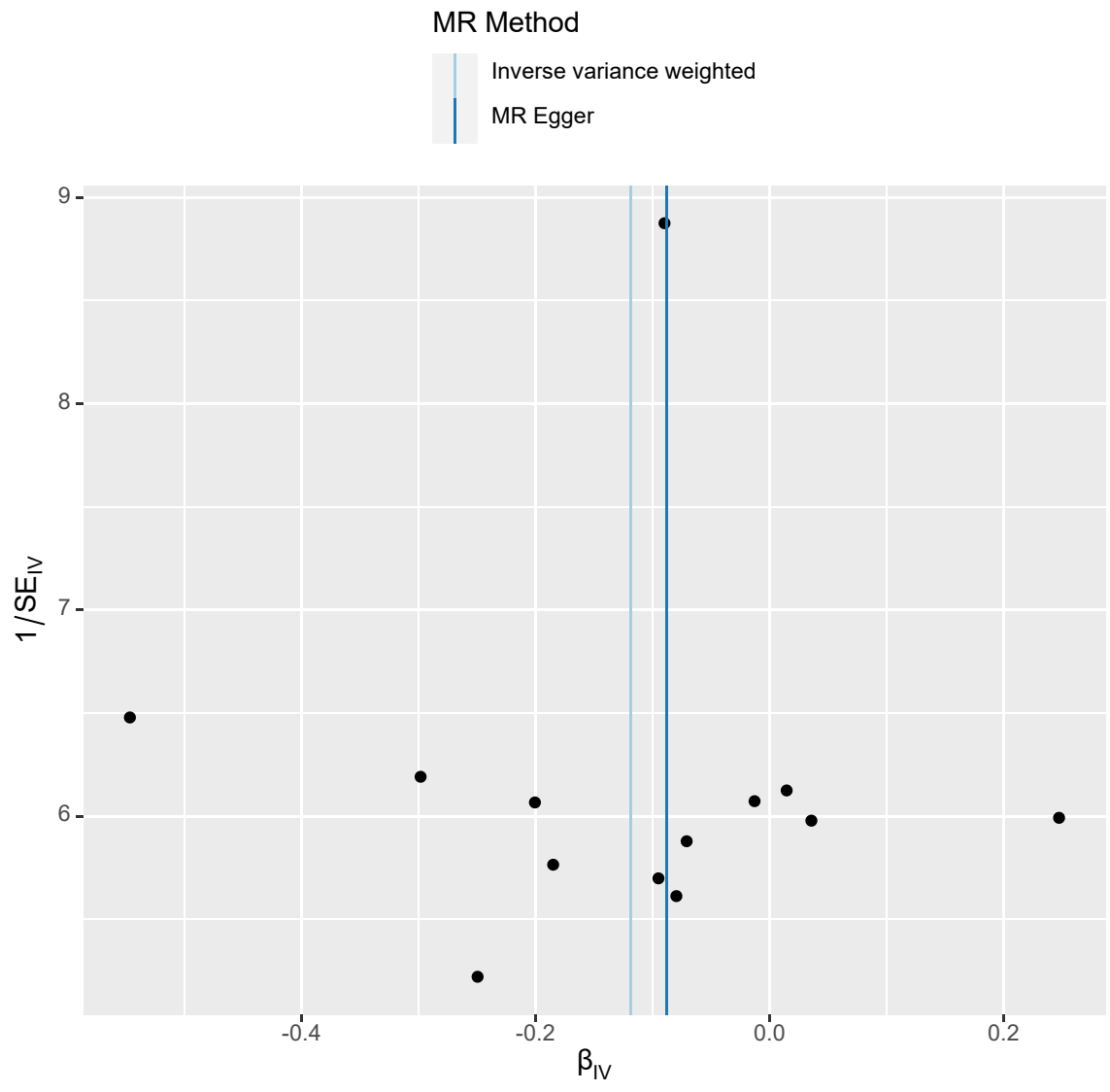


Figure S48. The funnel plot of genus Roseburia on prostate cancer in the PRACTICAL consortium



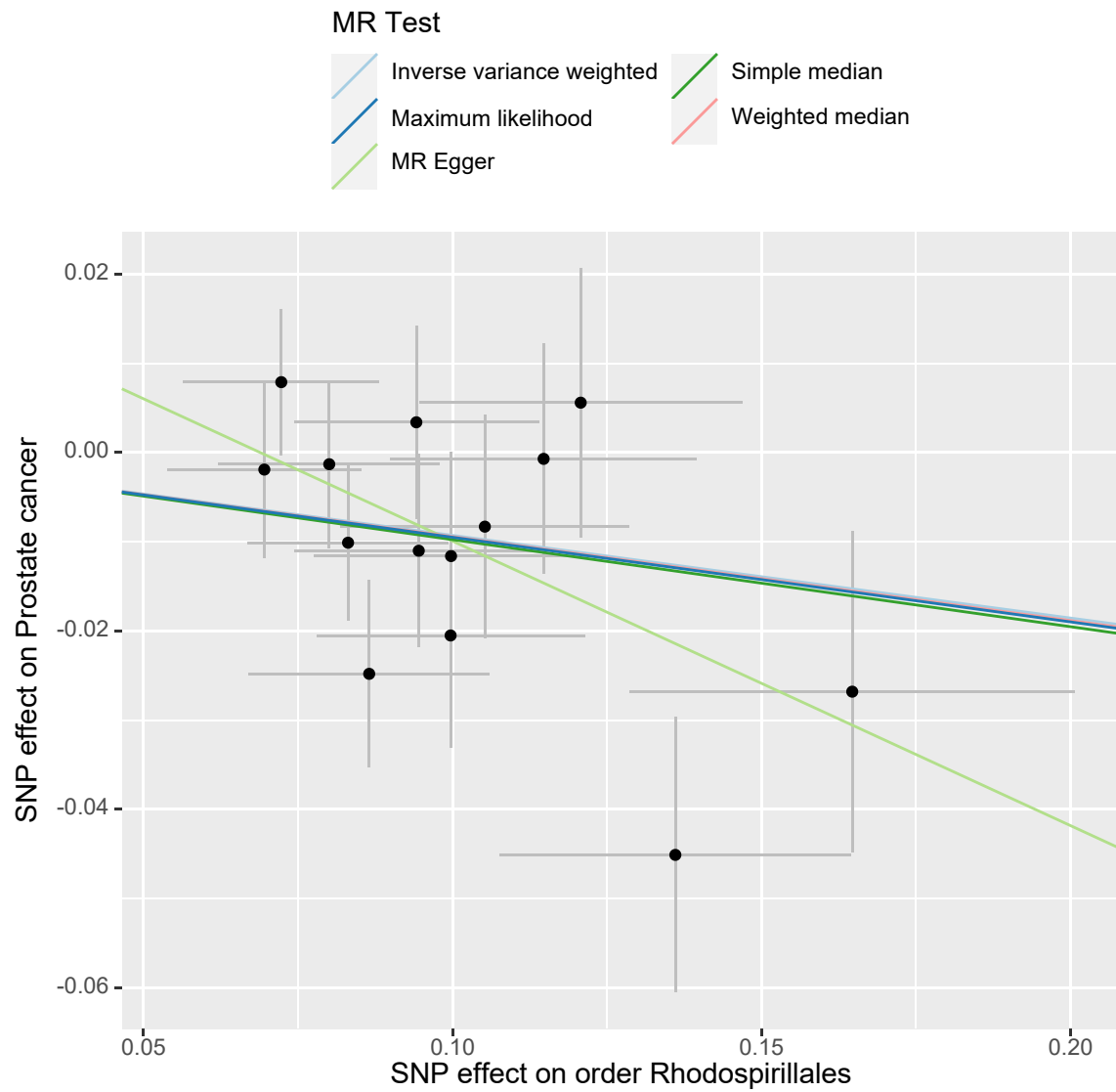


Figure S49. The scatter plot of order Rhodospirillales on prostate cancer in the PRACTICAL consortium

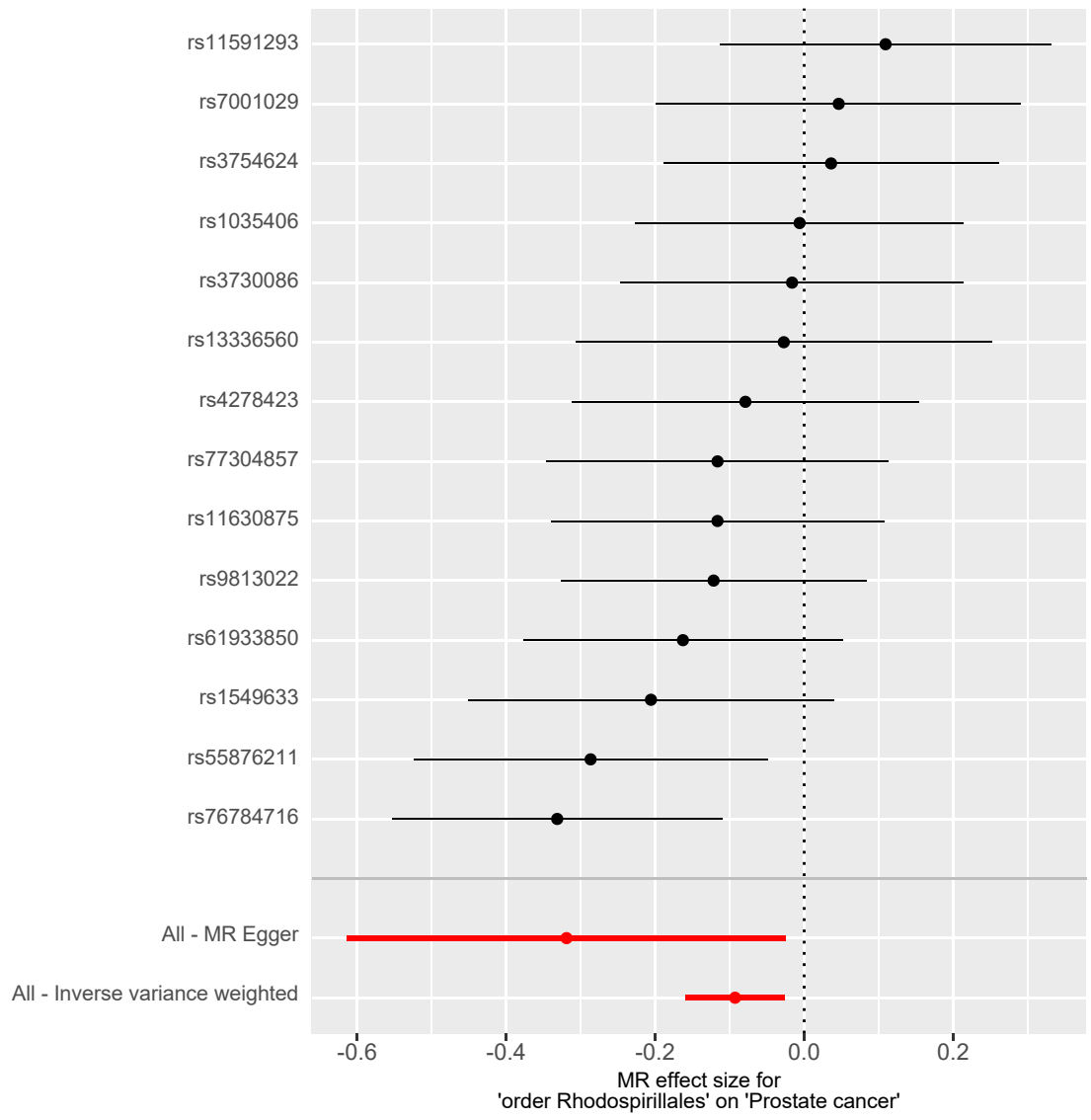


Figure S50. The forest plot of order Rhodospirillales on prostate cancer in the PRACTICAL consortium

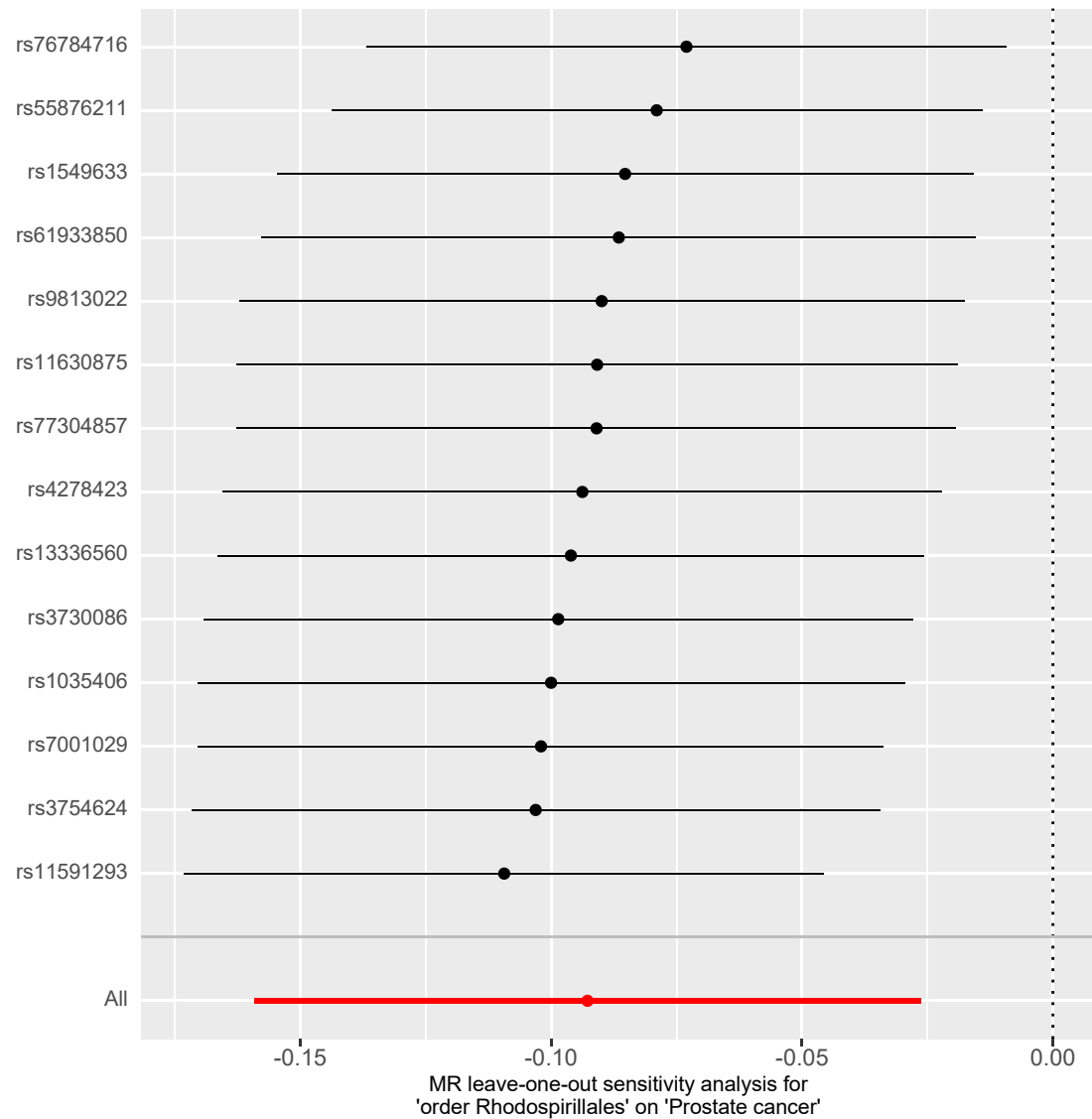


Figure S51. The leave-one-out test of order Rhodospirillales on prostate cancer in the PRACTICAL consortium

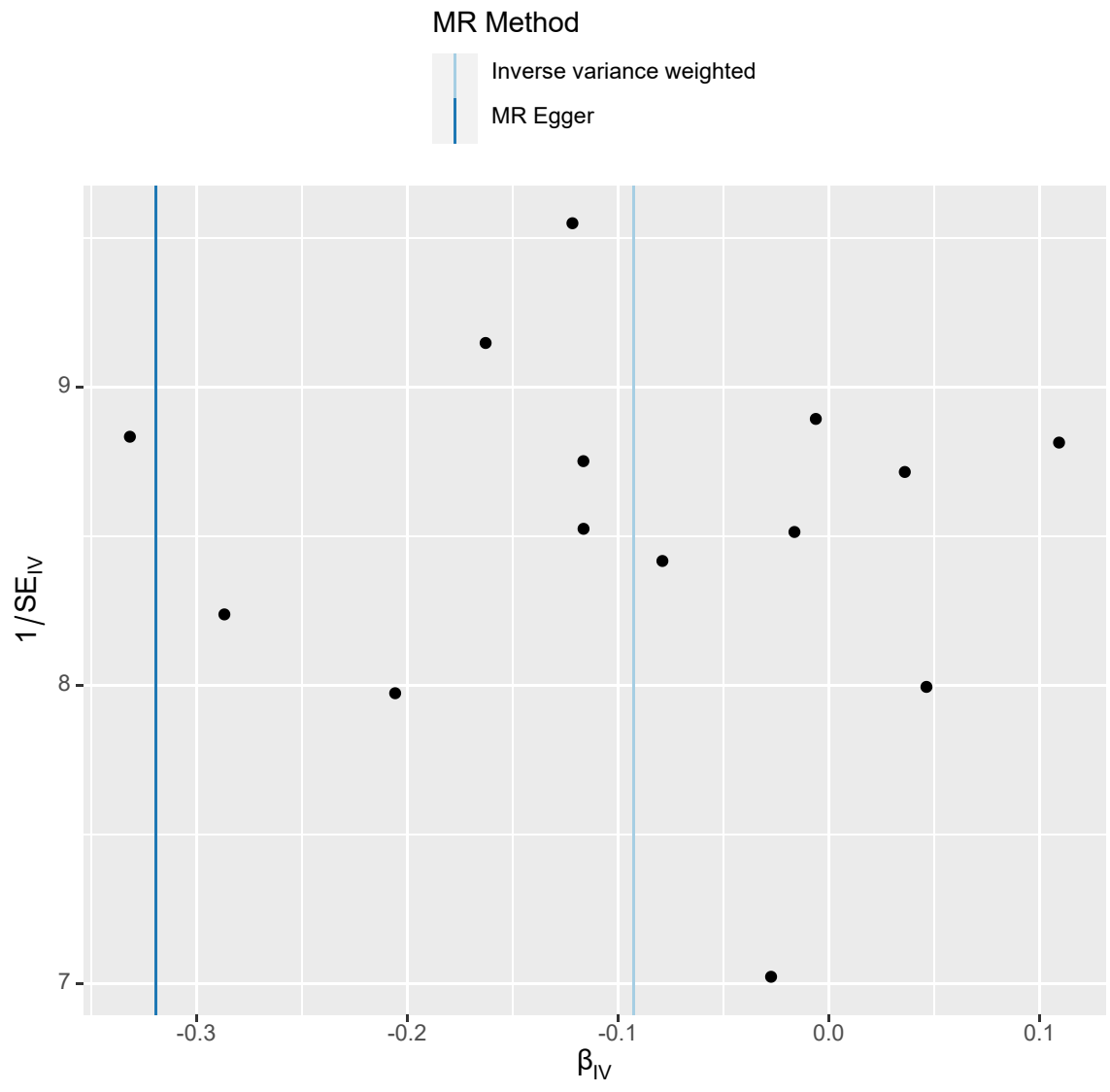


Figure S52. The funnel plot of order Rhodospirillales on prostate cancer in the PRACTICAL consortium

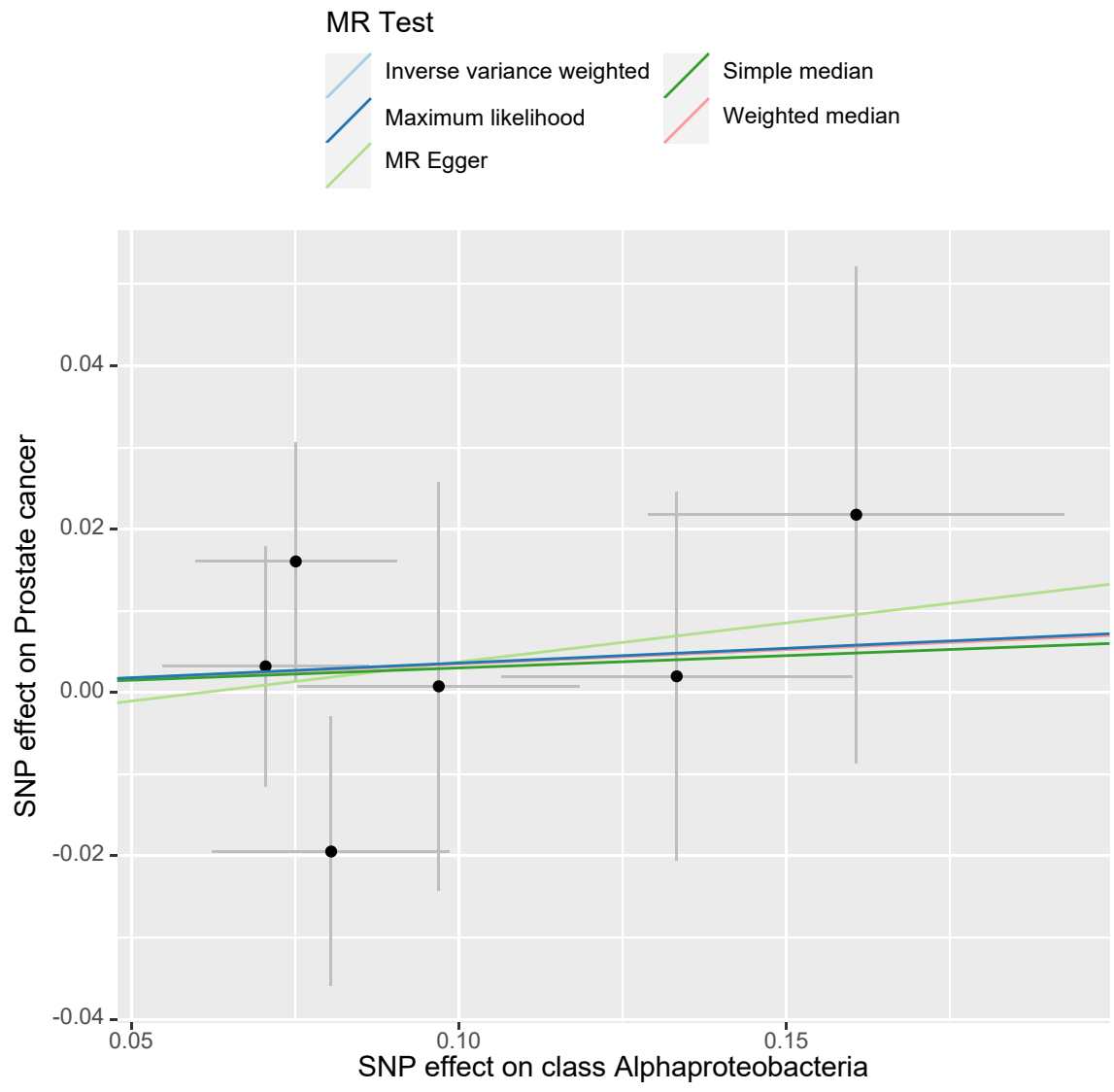


Figure S53. The scatter plot of class Alphaproteobacteria on prostate cancer in the FinnGen consortium

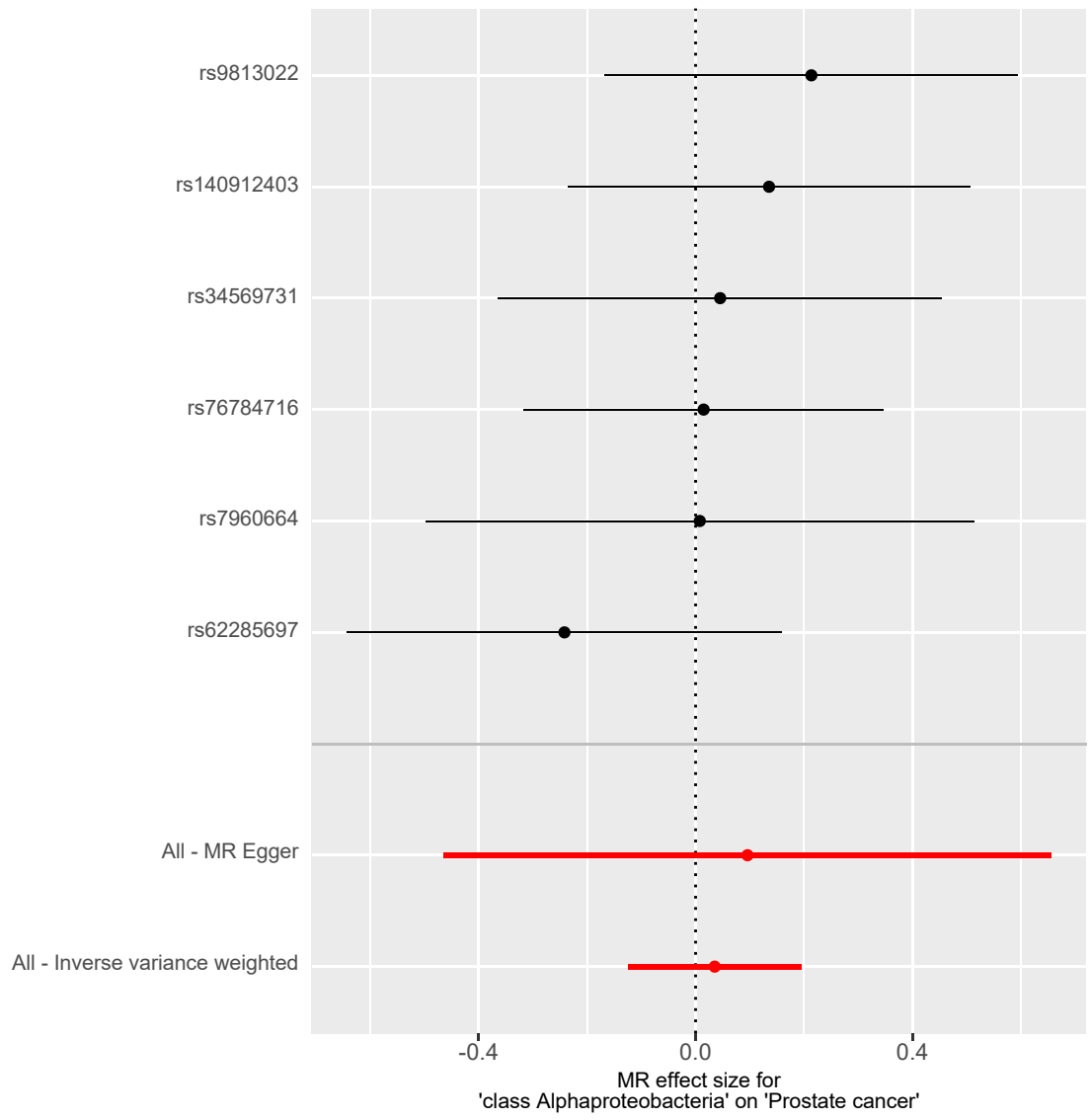


Figure S54. The forest plot of class Alphaproteobacteria on prostate cancer in the FinnGen consortium

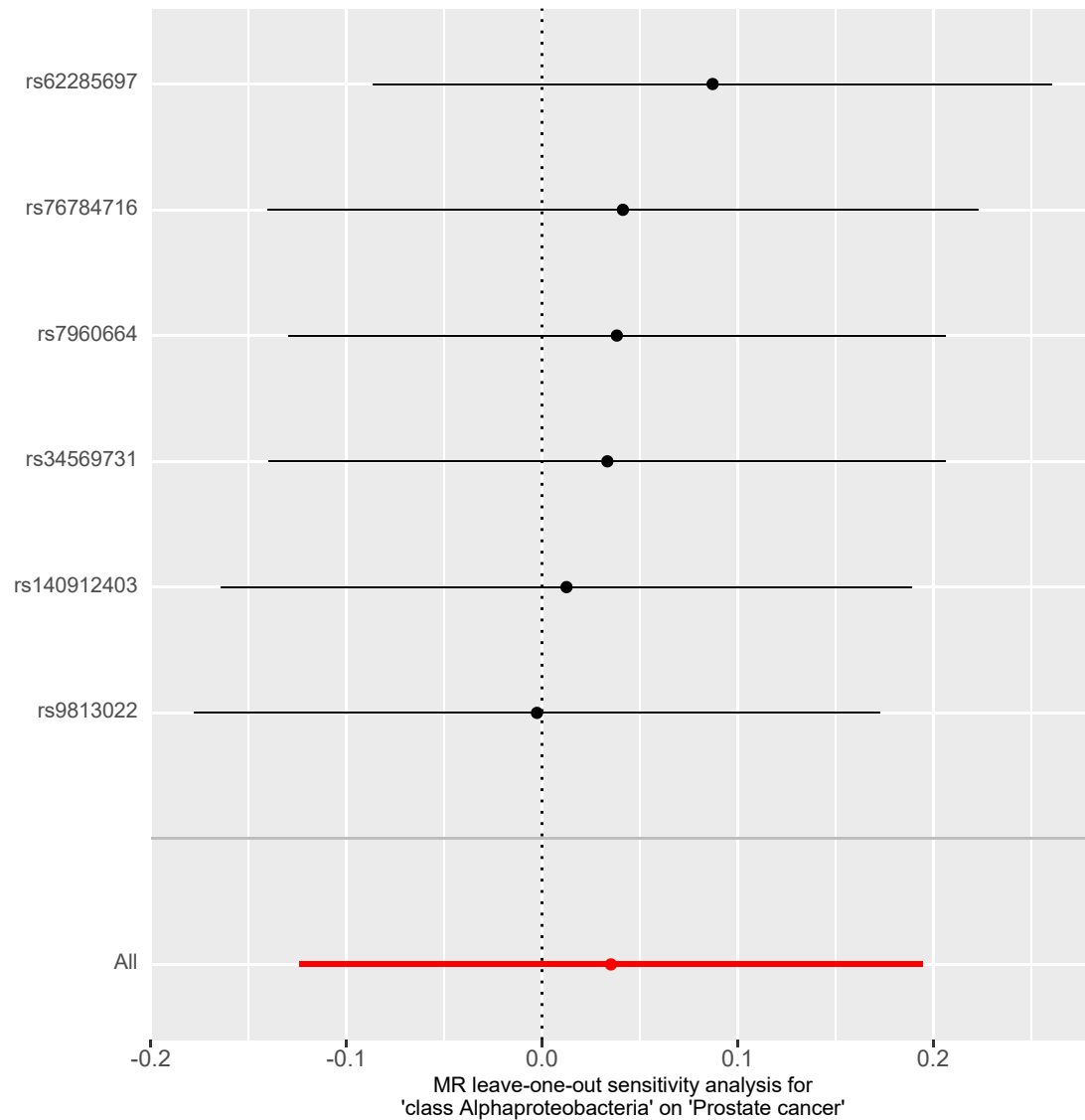


Figure S55. The leave-one-out test of class Alphaproteobacteria on prostate cancer in the FinnGen consortium

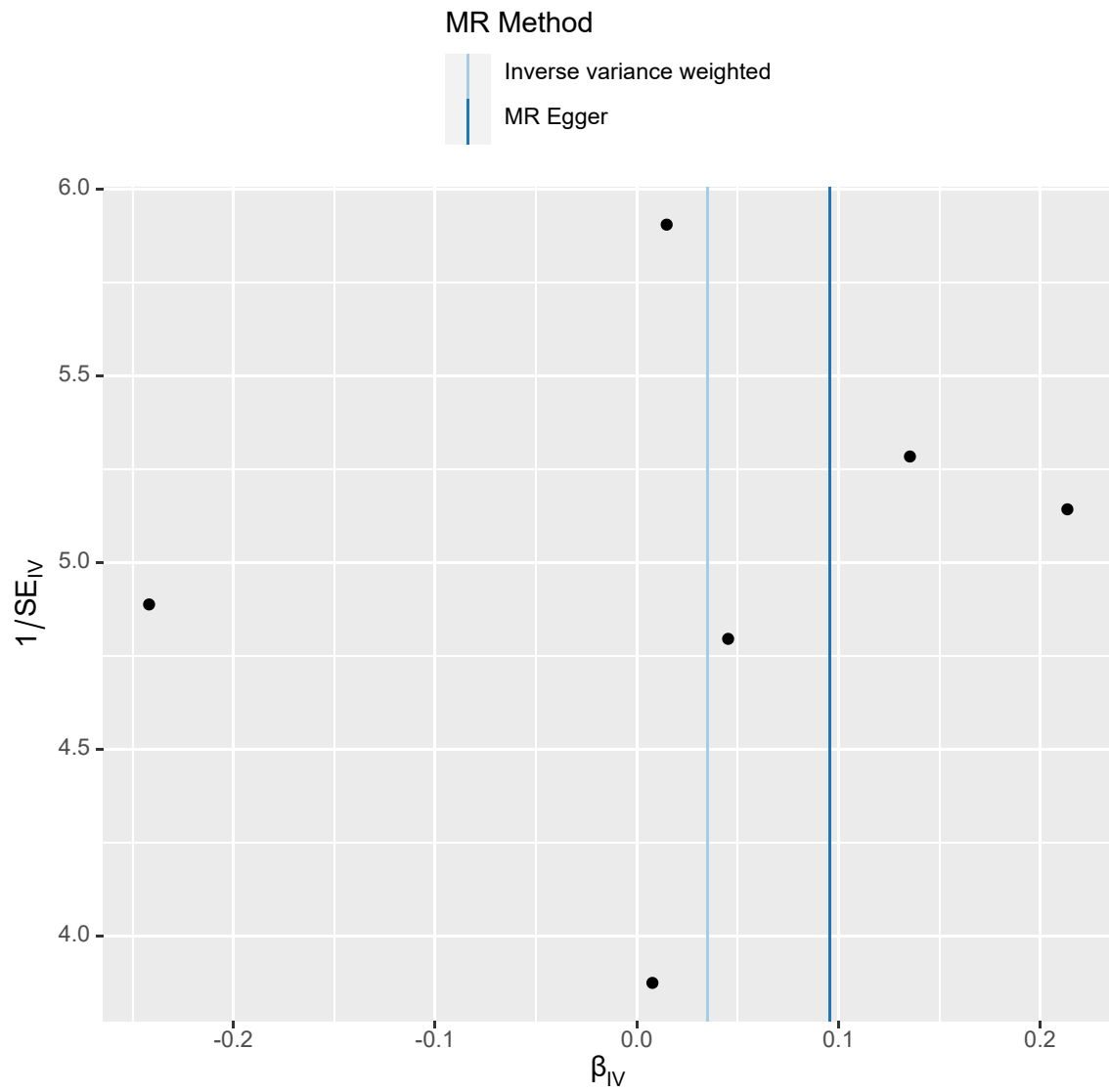


Figure S56. The funnel plot of class Alphaproteobacteria on prostate cancer in the FinnGen consortium



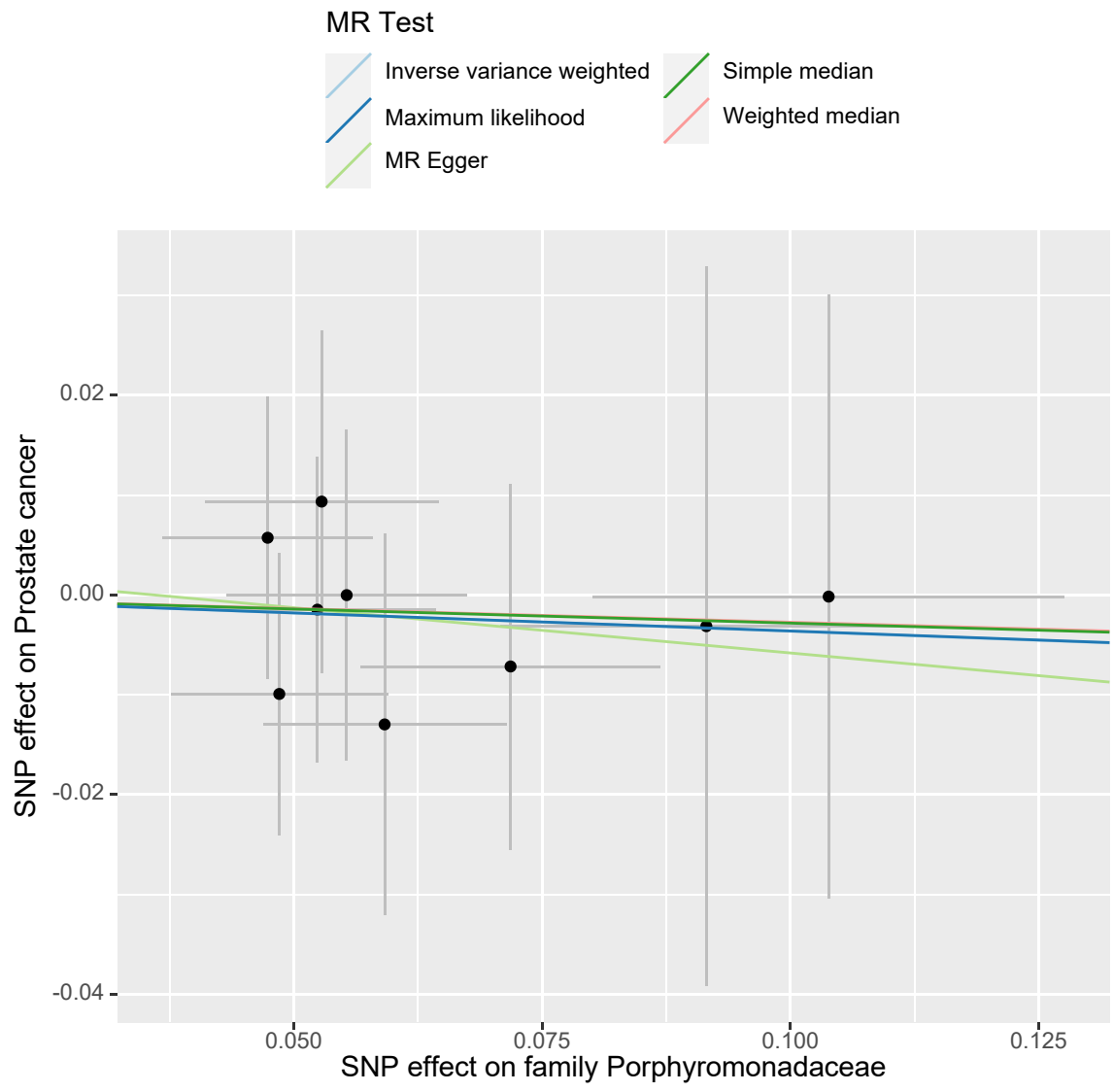


Figure S57. The scatter plot of family Porphyromonadaceae on prostate cancer in the FinnGen consortium

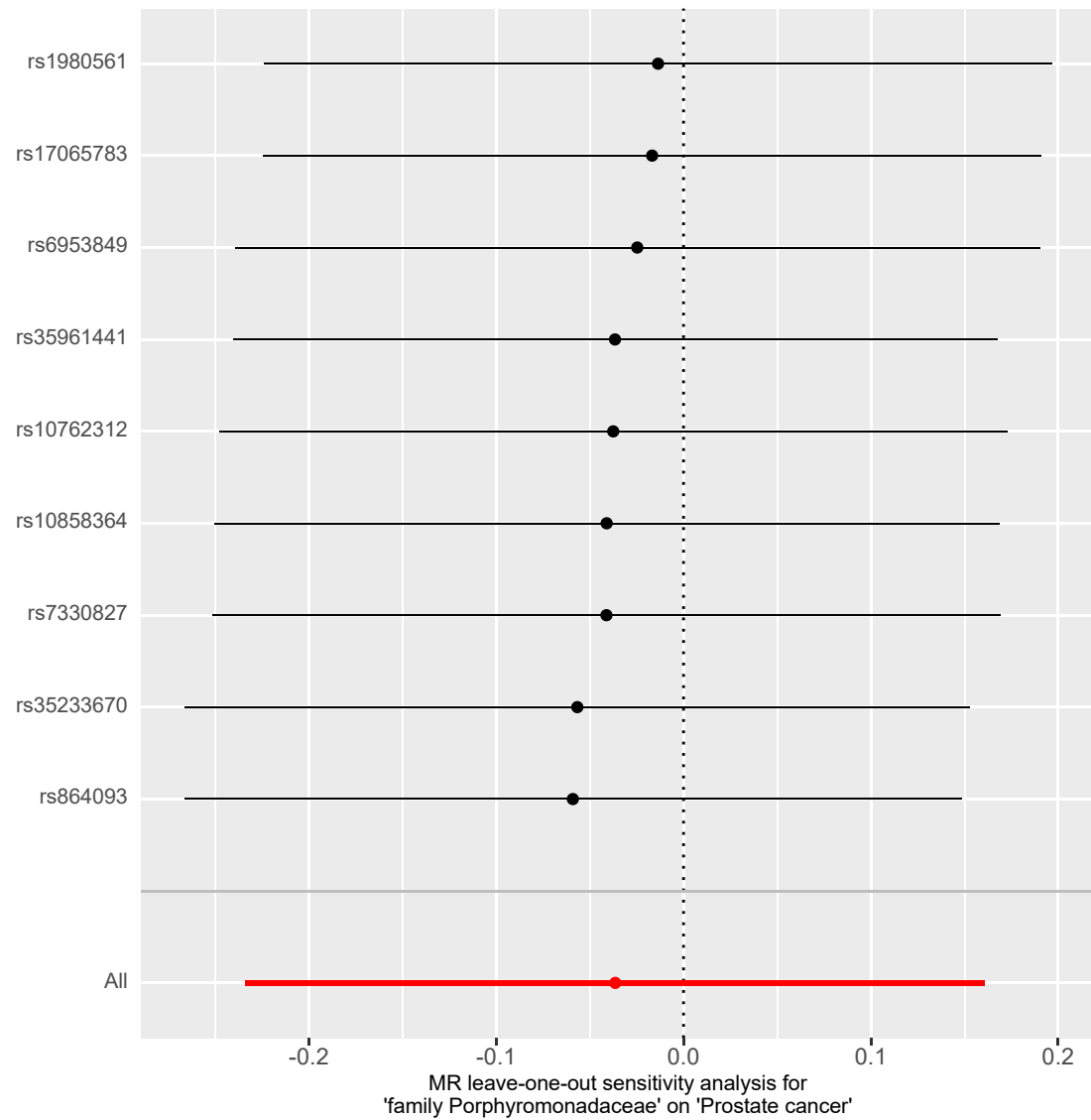


Figure S58. The forest plot of family Porphyromonadaceae on prostate cancer in the FinnGen consortium

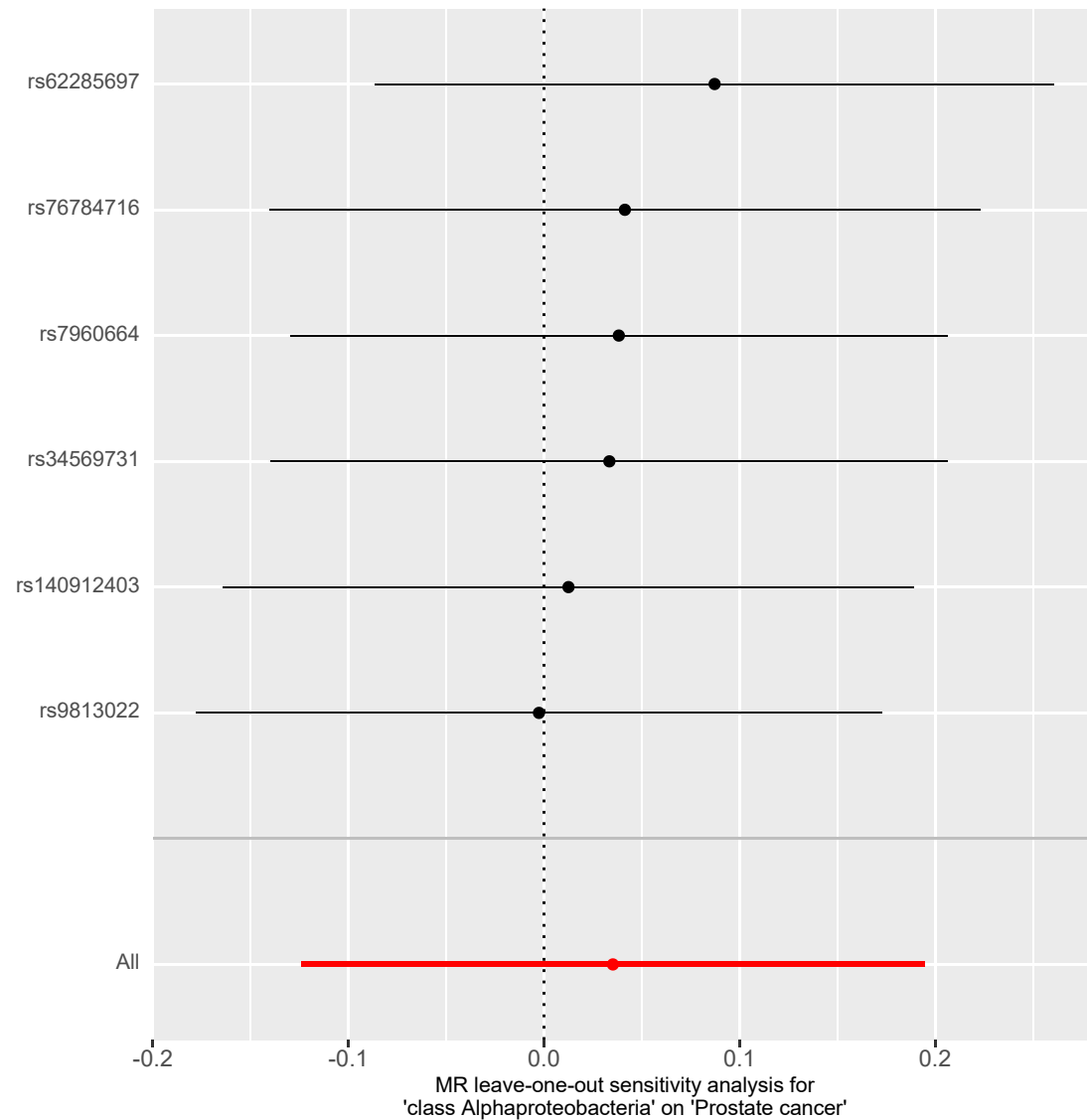


Figure S59. The leave-one-out test of family Porphyromonadaceae on prostate cancer in the FinnGen consortium

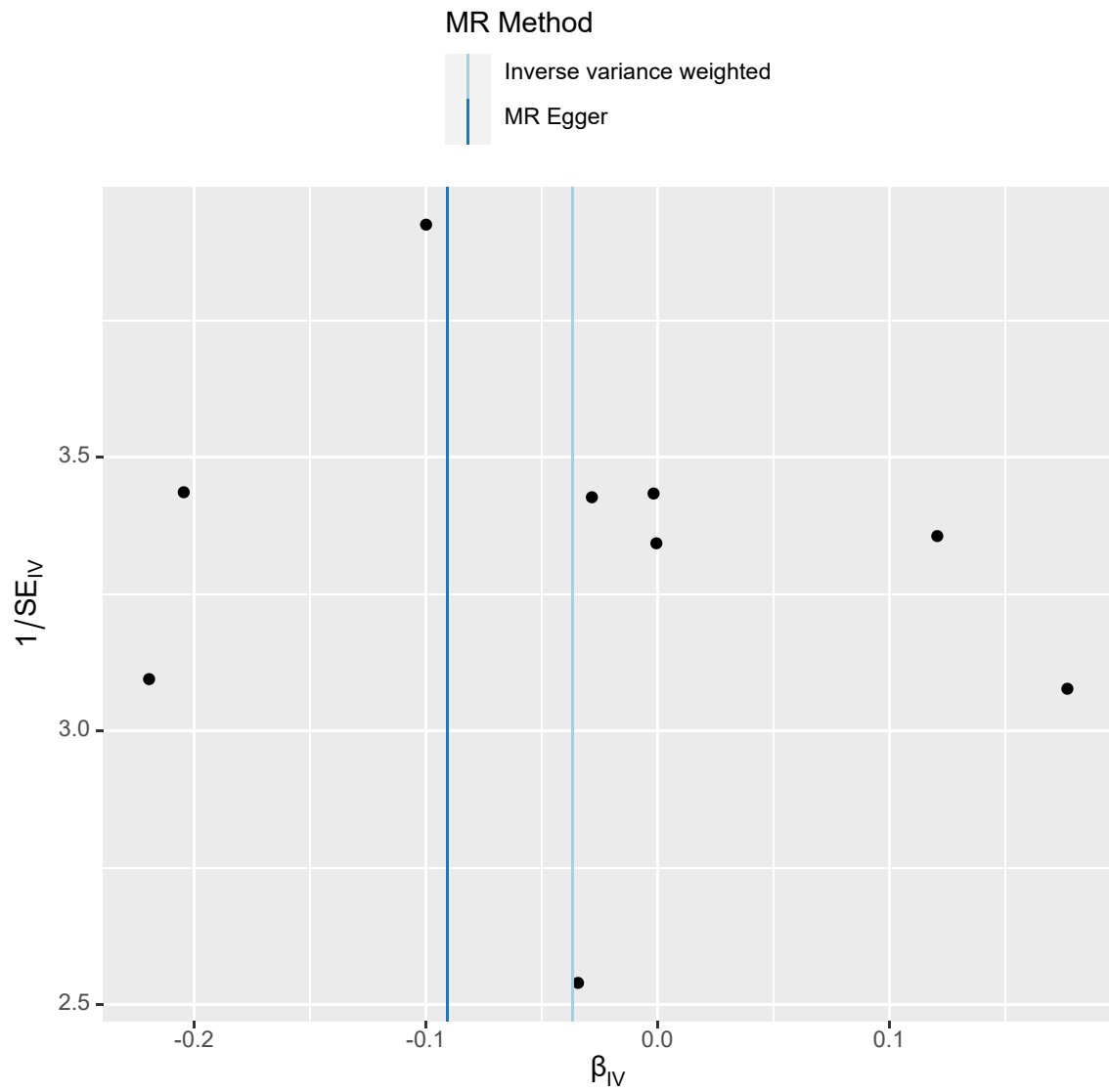


Figure S60. The funnel plot of family Porphyromonadaceae on prostate cancer in the FinnGen consortium

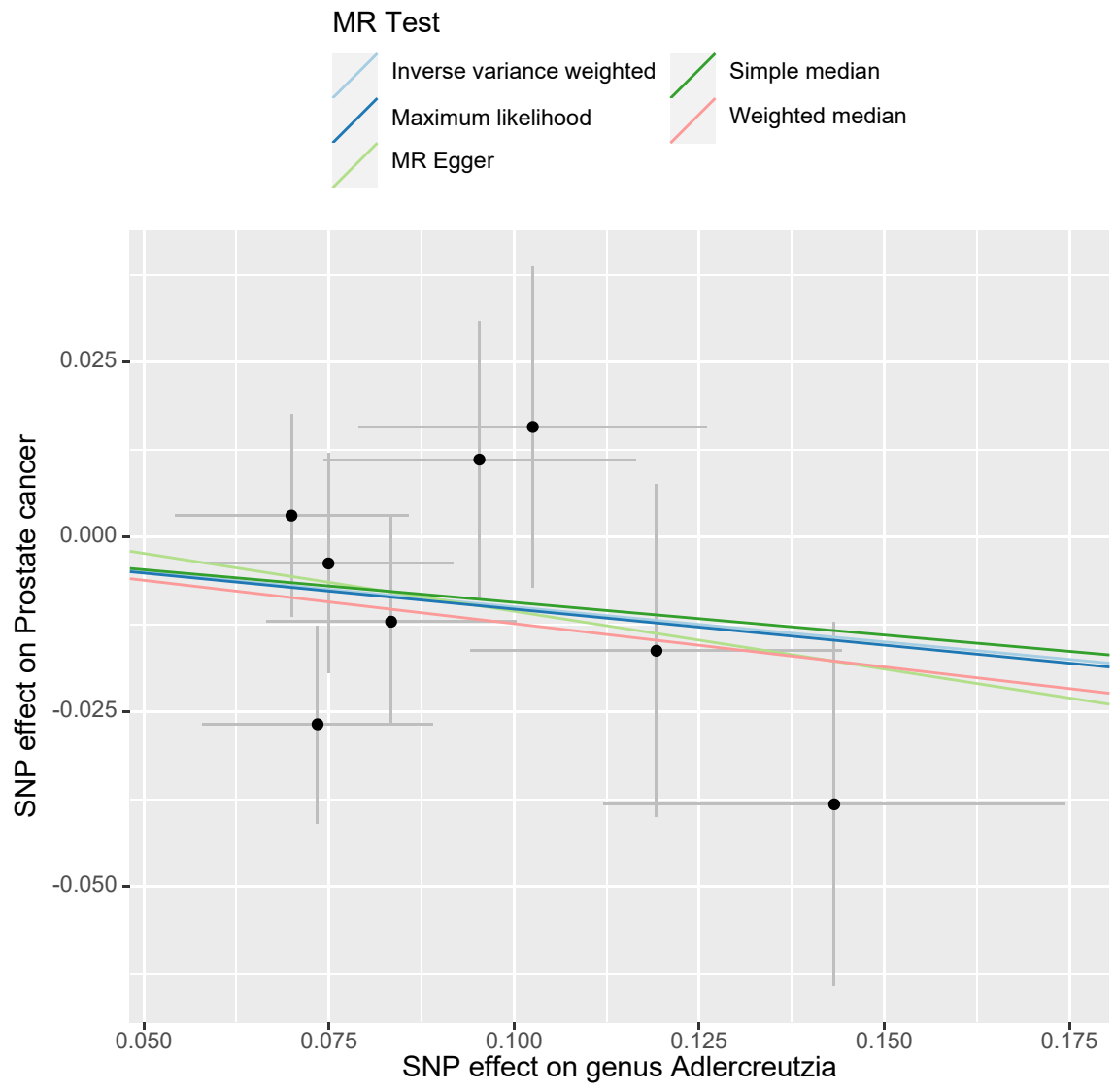


Figure S61. The scatter plot of genus Adlercreutzia on prostate cancer in the FinnGen consortium

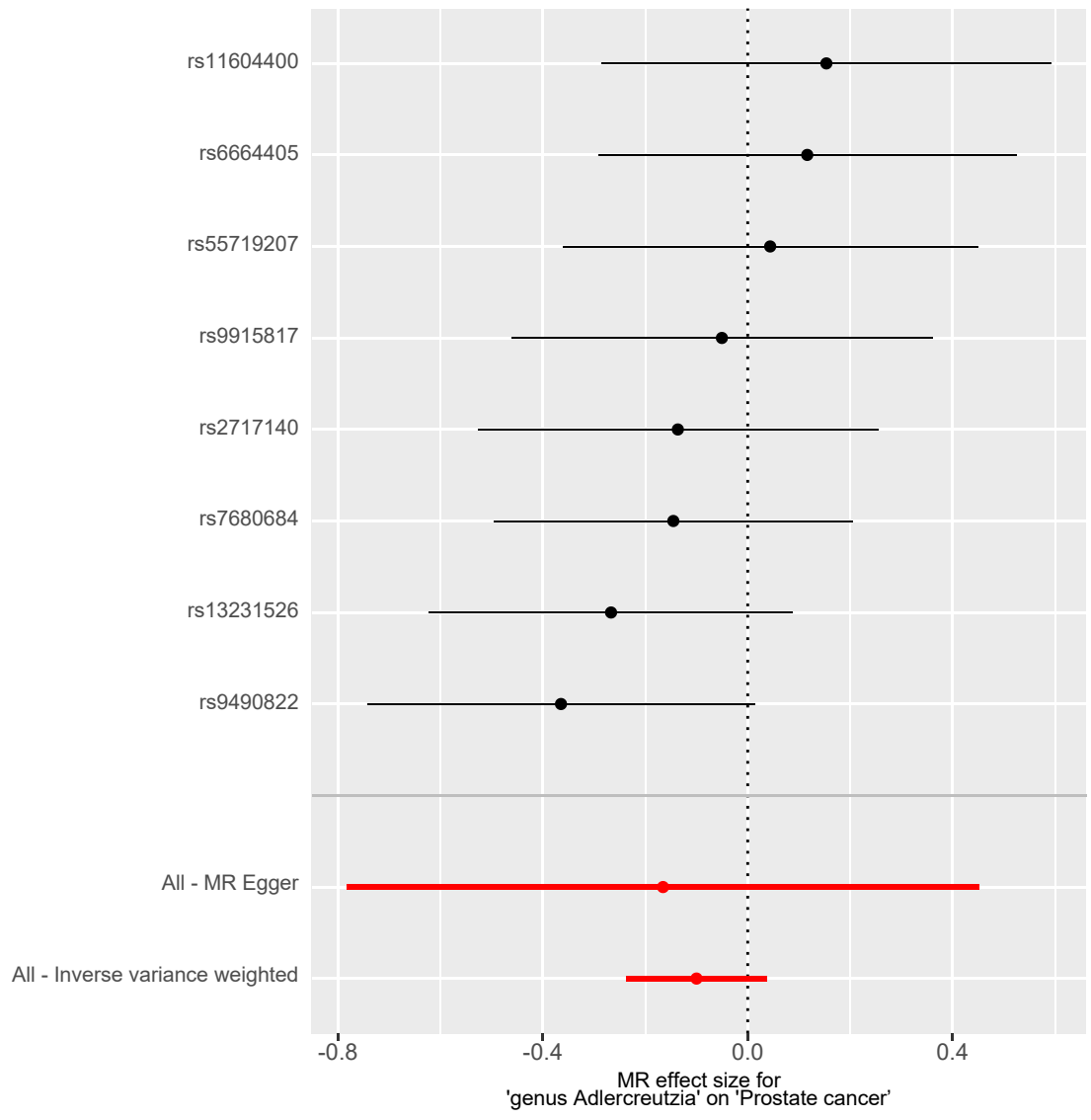


Figure S62. The forest plot of genus Adlercreutzia on prostate cancer in the FinnGen consortium

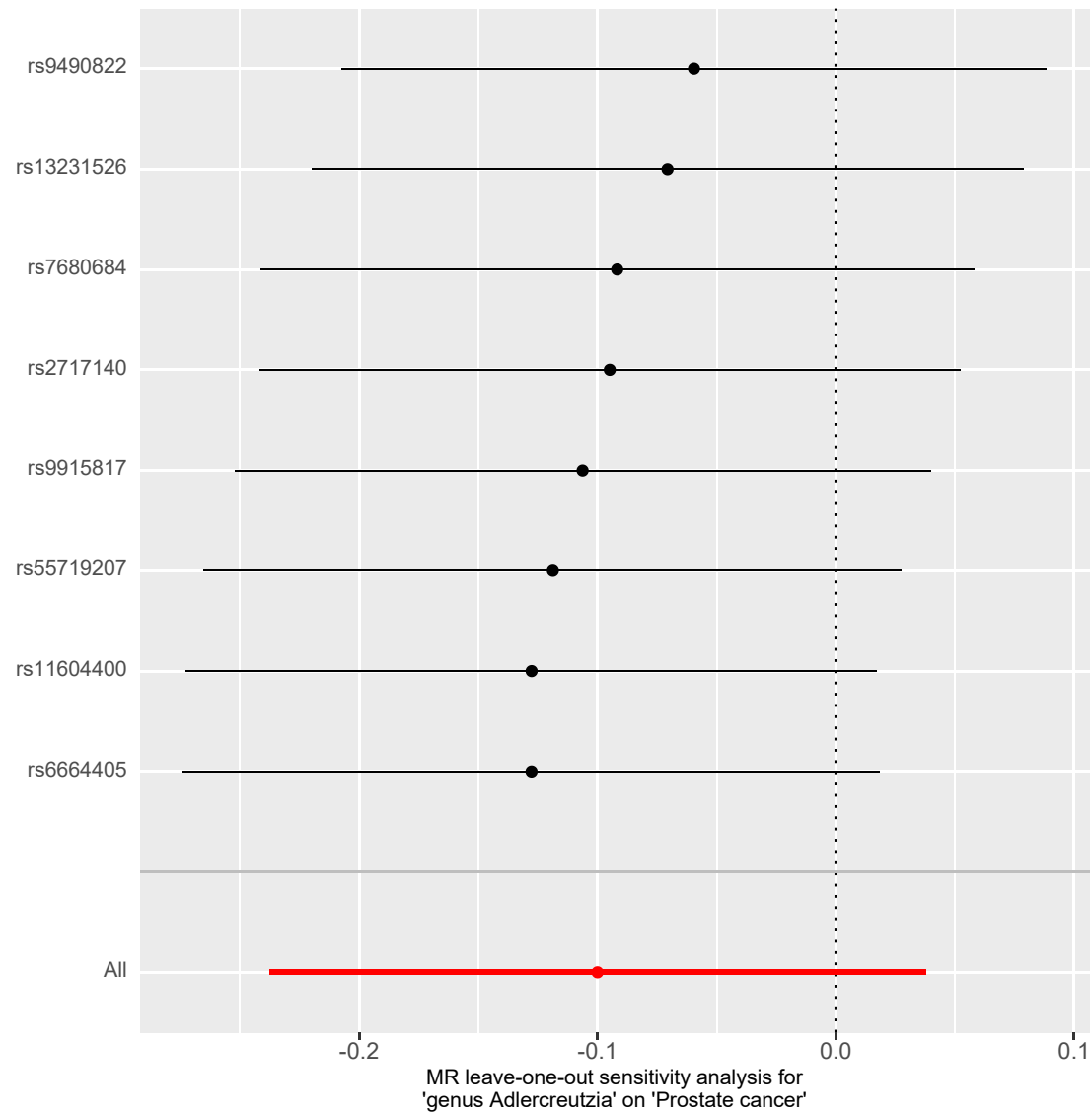


Figure S63. The leave-one-out test of genus Adlercreutzia on prostate cancer in the FinnGen consortium

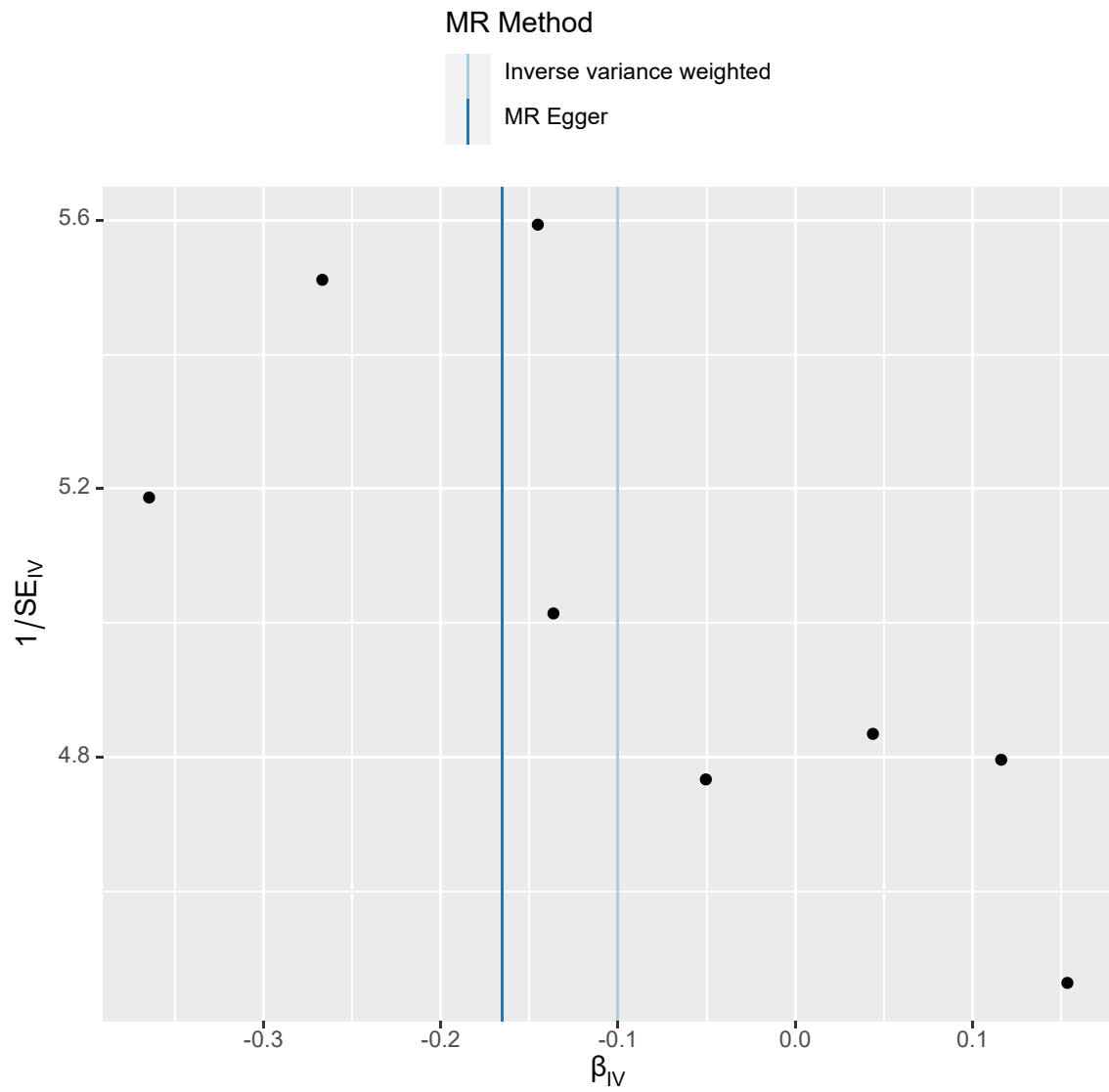


Figure S64. The funnel plot of genus Adlercreutzia on prostate cancer in the FinnGen consortium



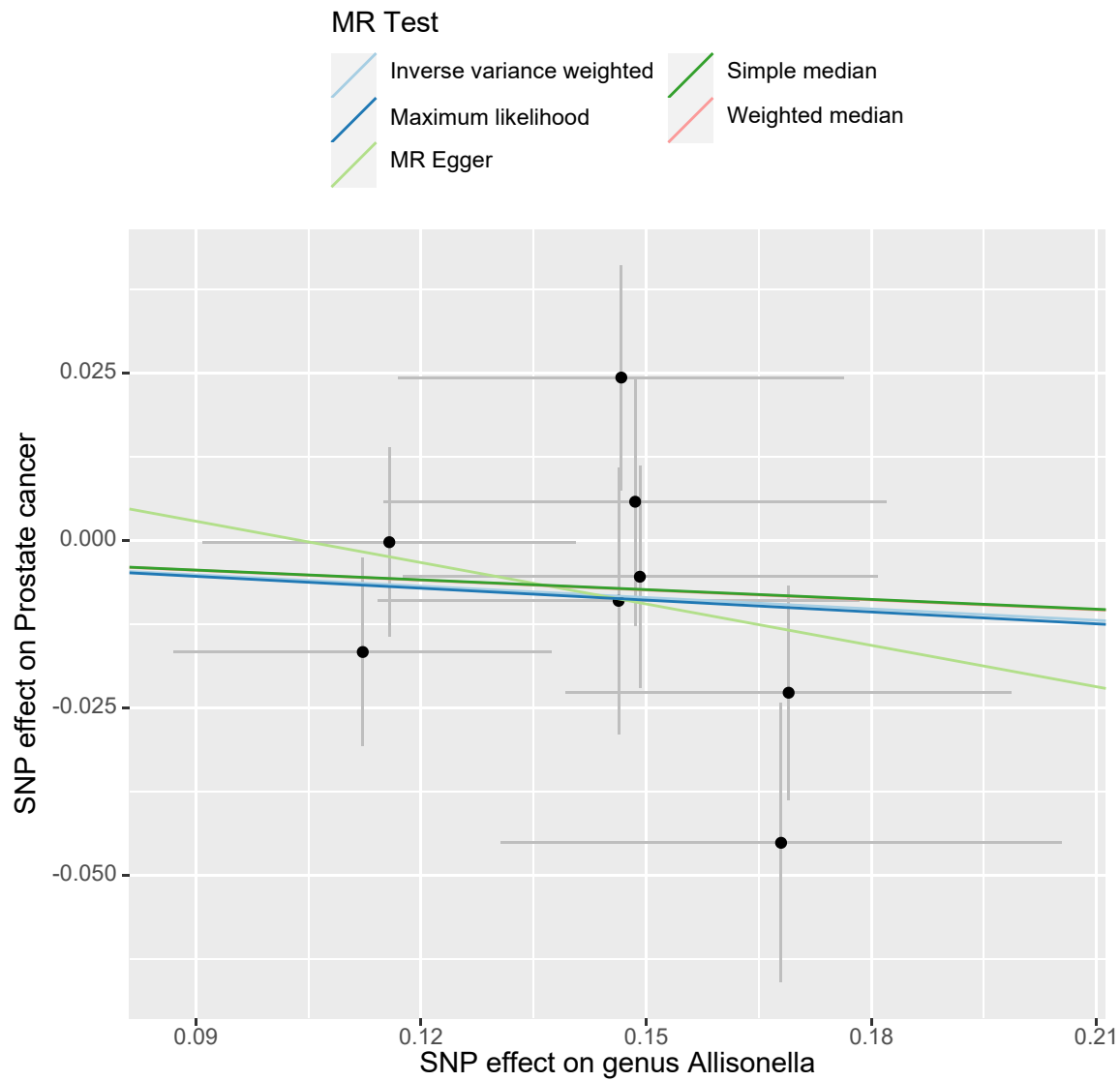


Figure S65. The scatter plot of genus Allisonella on prostate cancer in the FinnGen consortium

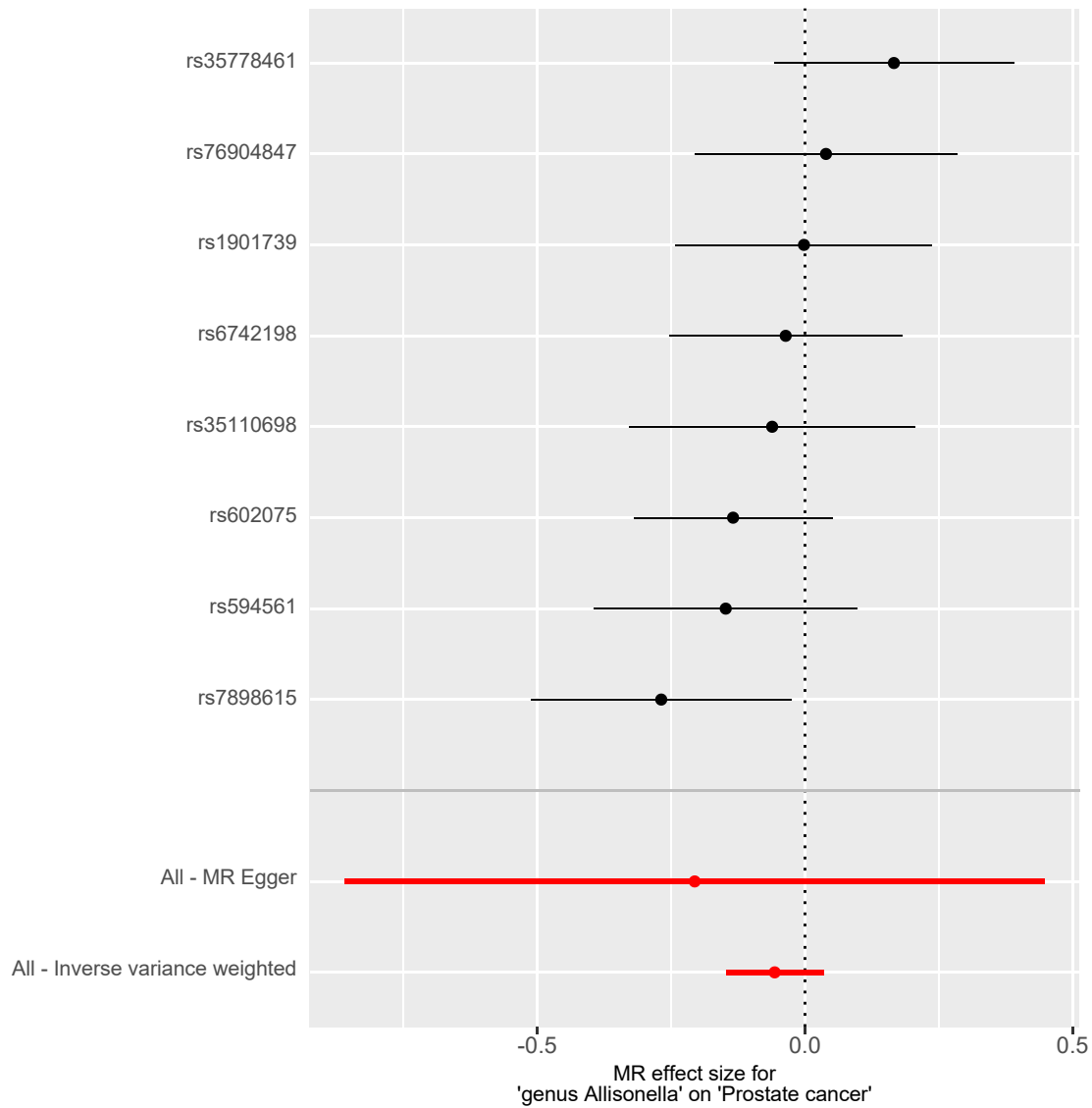


Figure S66. The forest plot of genus Allisonella on prostate cancer in the FinnGen consortium

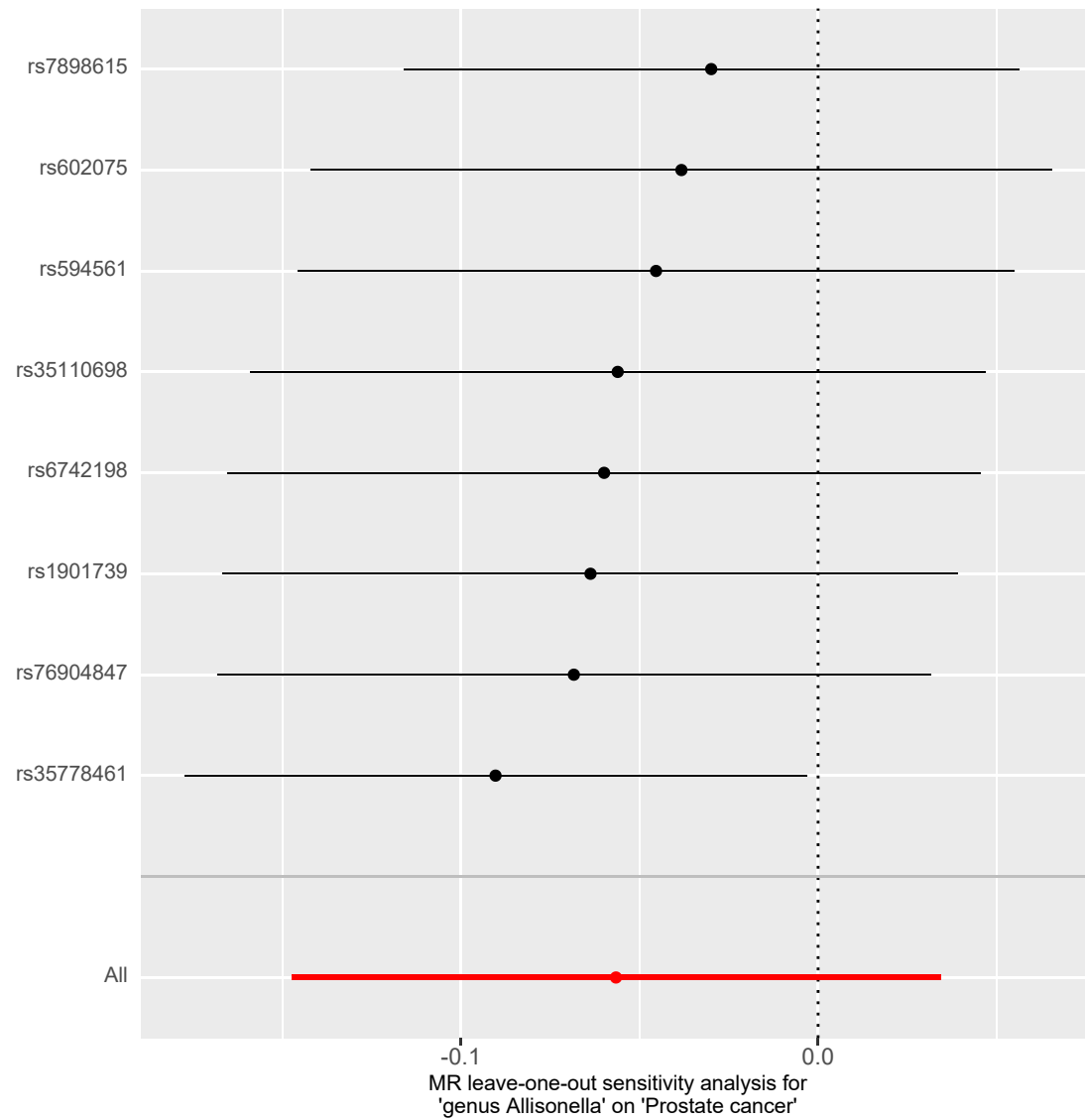


Figure S67. The leave-one-out test of genus Allisonella on prostate cancer in the FinnGen consortium

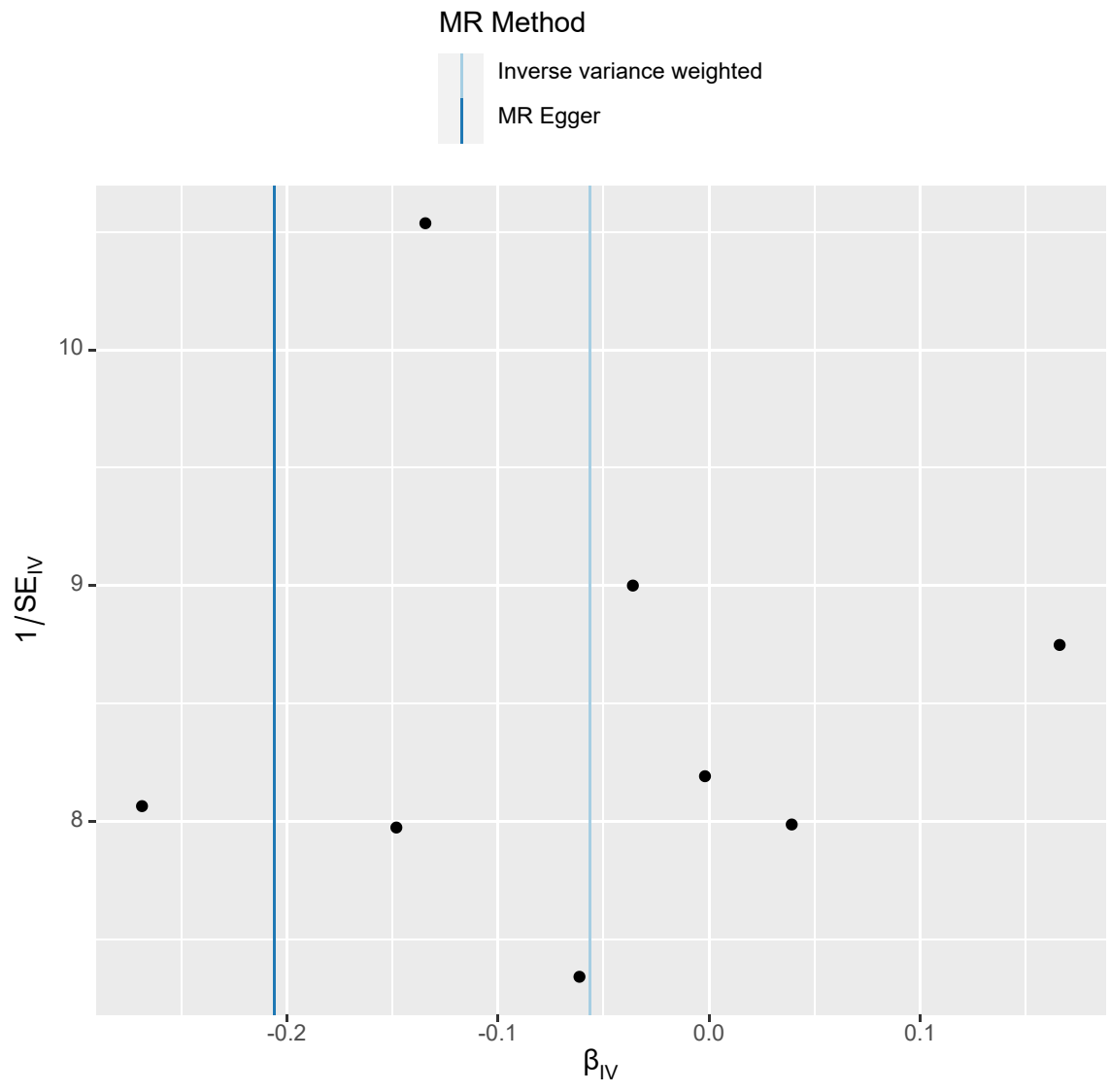


Figure S68. The funnel plot of genus Allisonella on prostate cancer in the FinnGen consortium

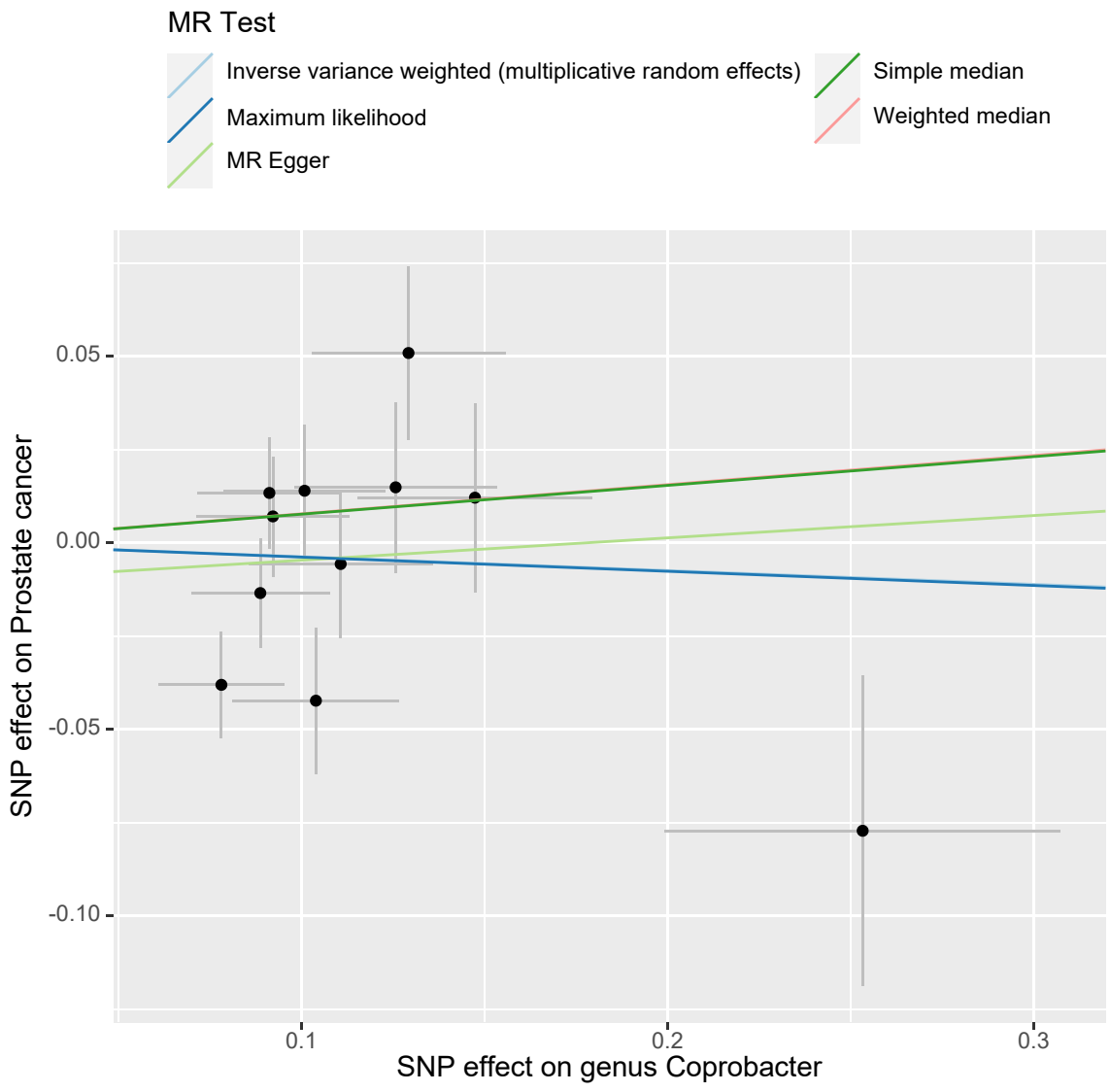


Figure S69. The scatter plot of genus Coprobacter on prostate cancer in the FinnGen consortium

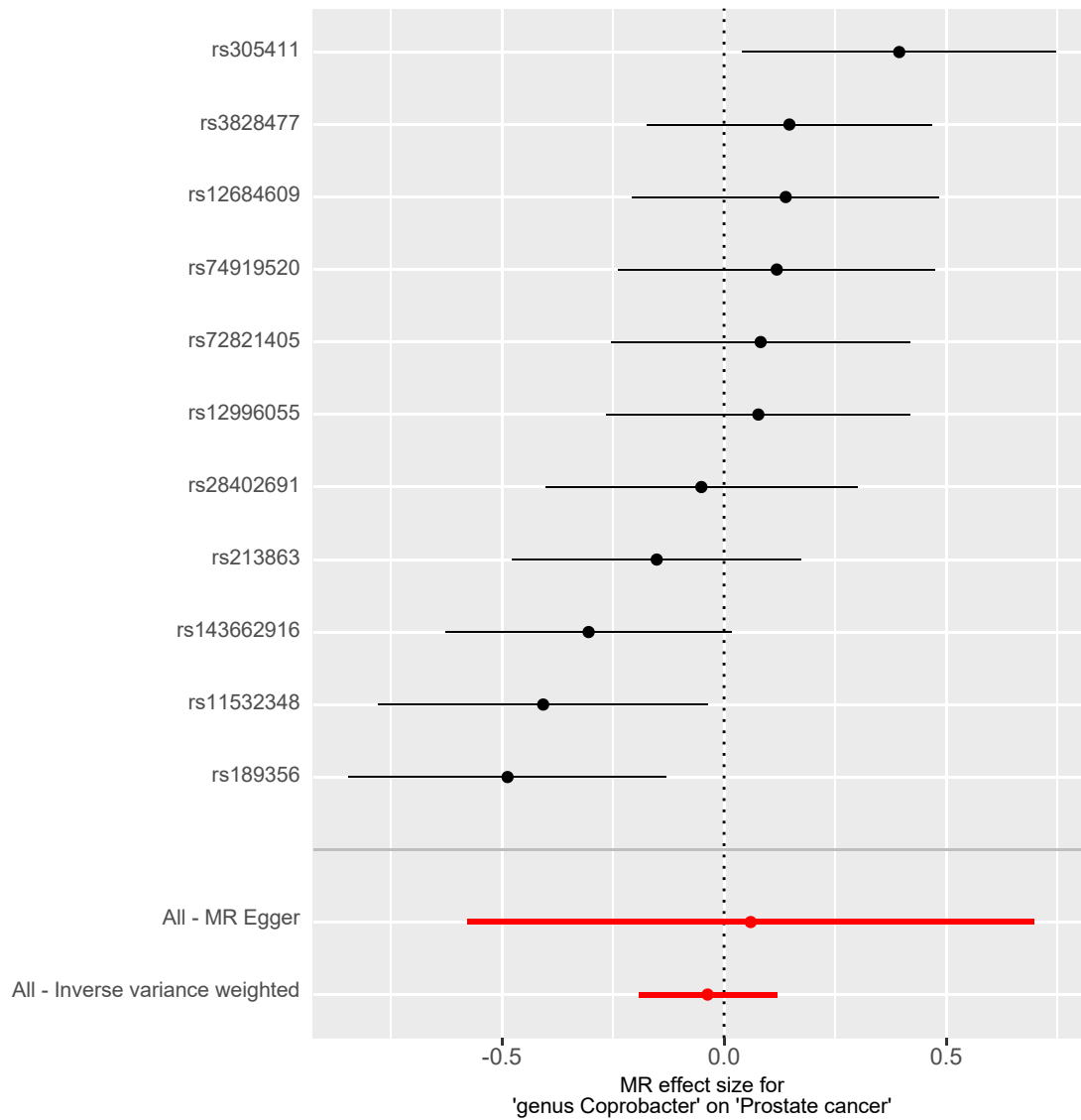


Figure S70. The forest plot of genus Coprobacter on prostate cancer in the FinnGen consortium

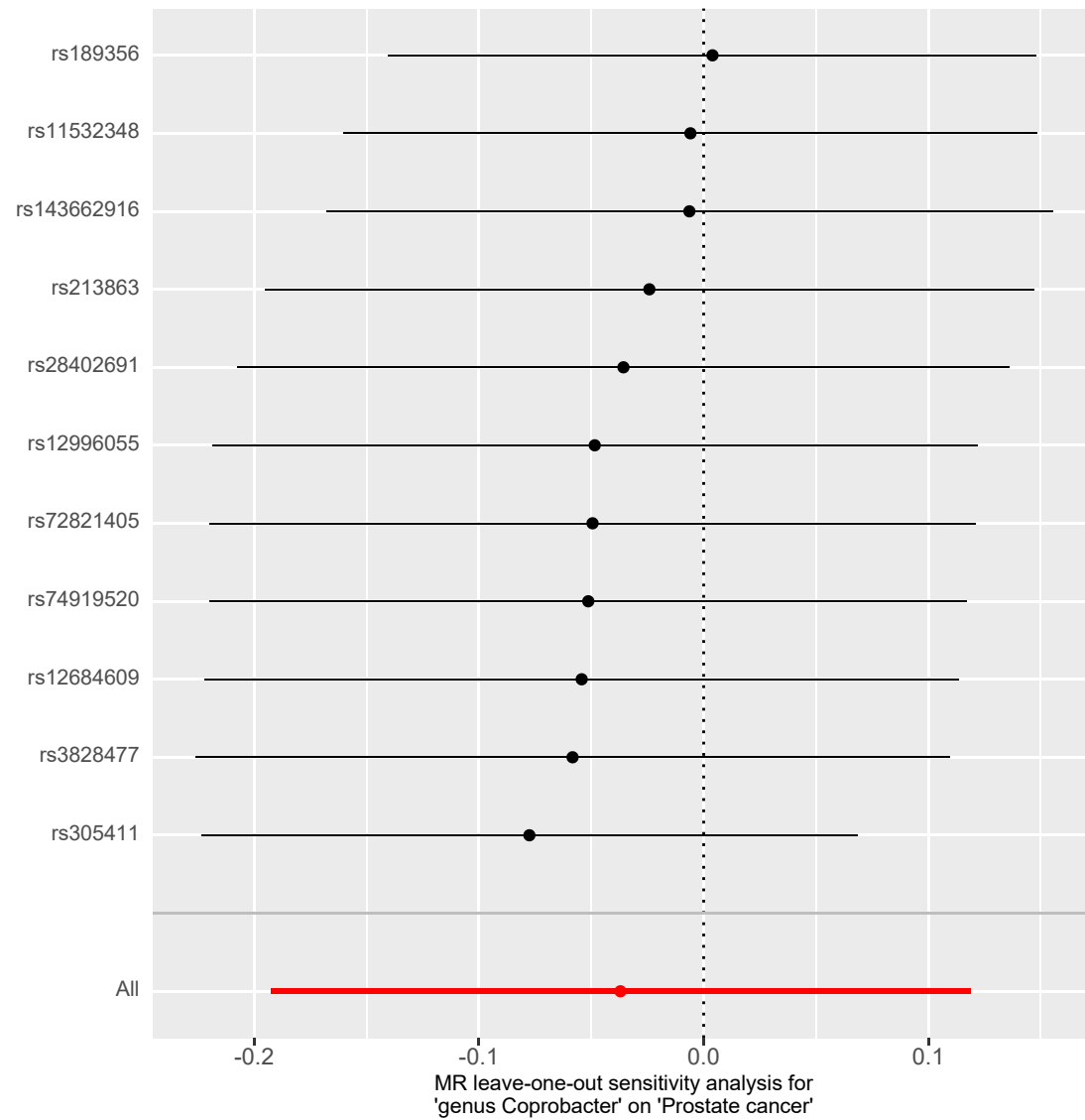


Figure S71. The leave-one-out test of genus Coprobacter on prostate cancer in the FinnGen consortium

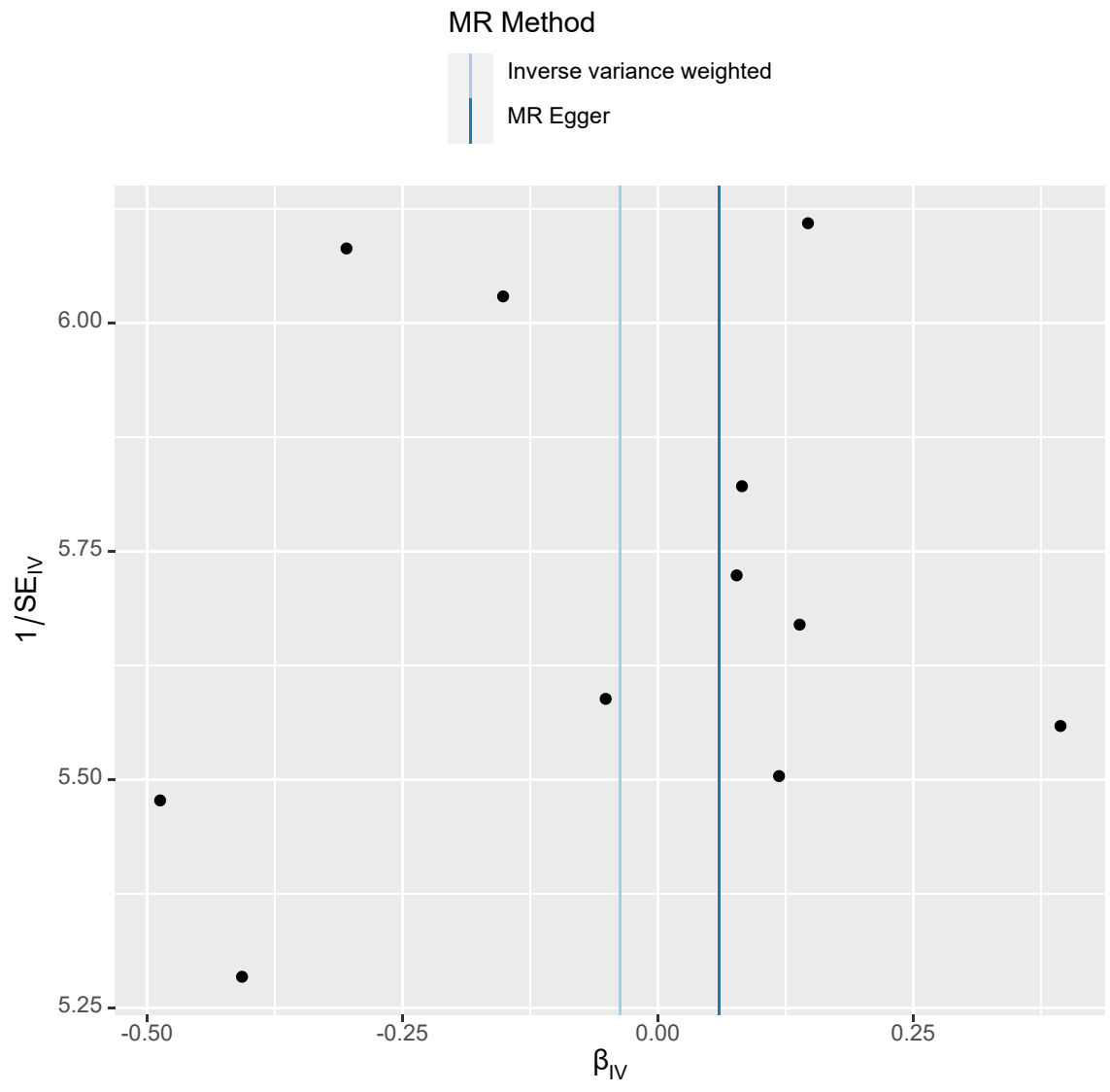


Figure S72. The funnel plot of genus Coprobacter on prostate cancer in the FinnGen consortium



### MR Test

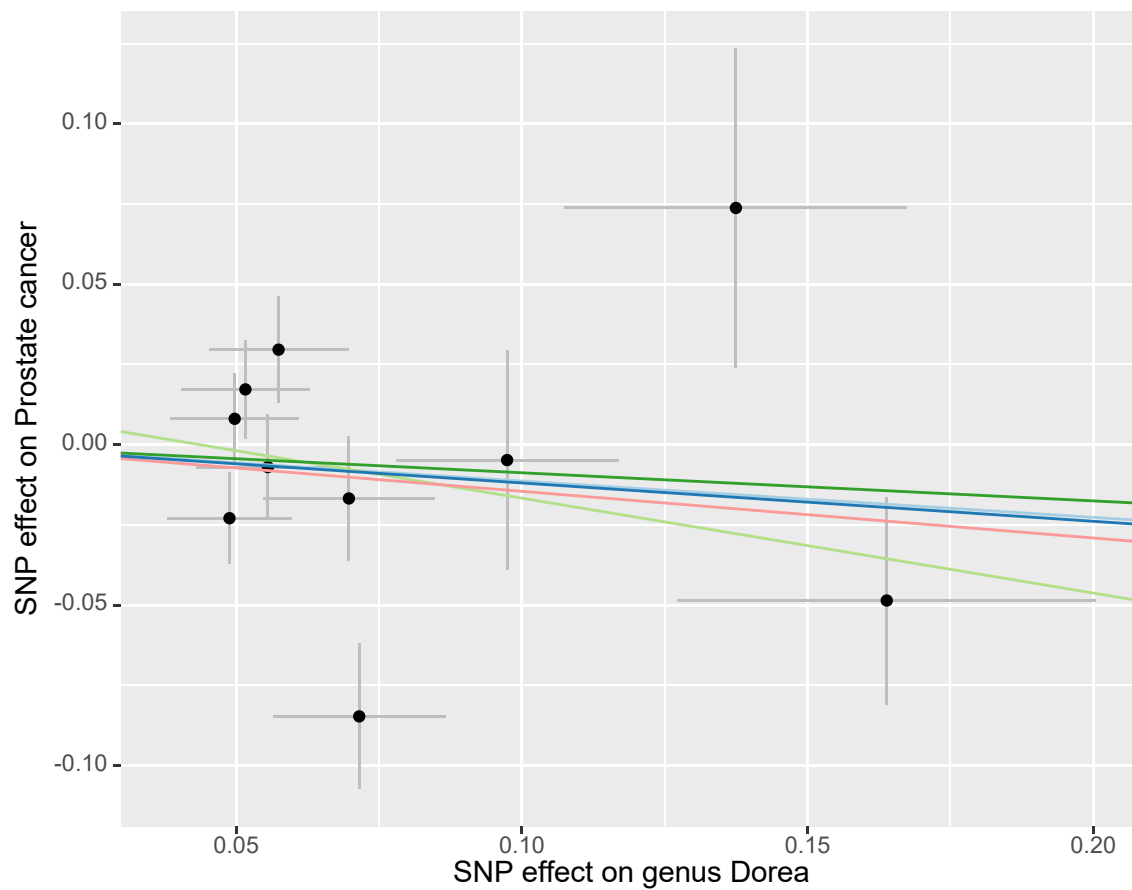
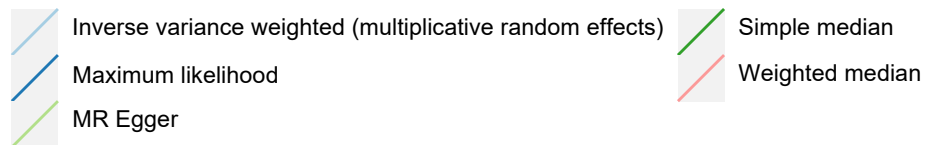


Figure S73. The scatter plot of genus Dorea on prostate cancer in the FinnGen consortium

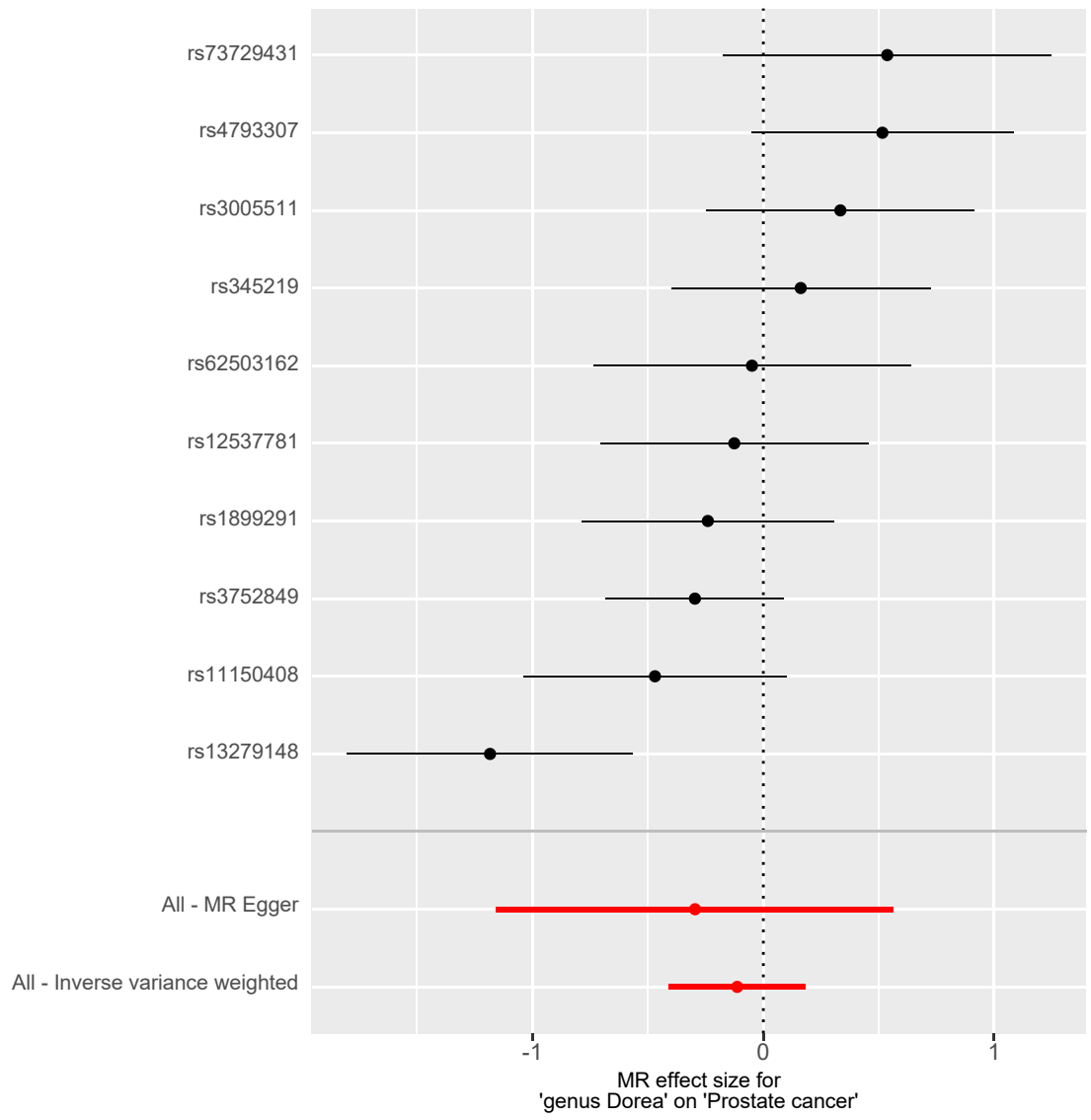


Figure S74. The forest plot of genus Dorea on prostate cancer in the FinnGen consortium

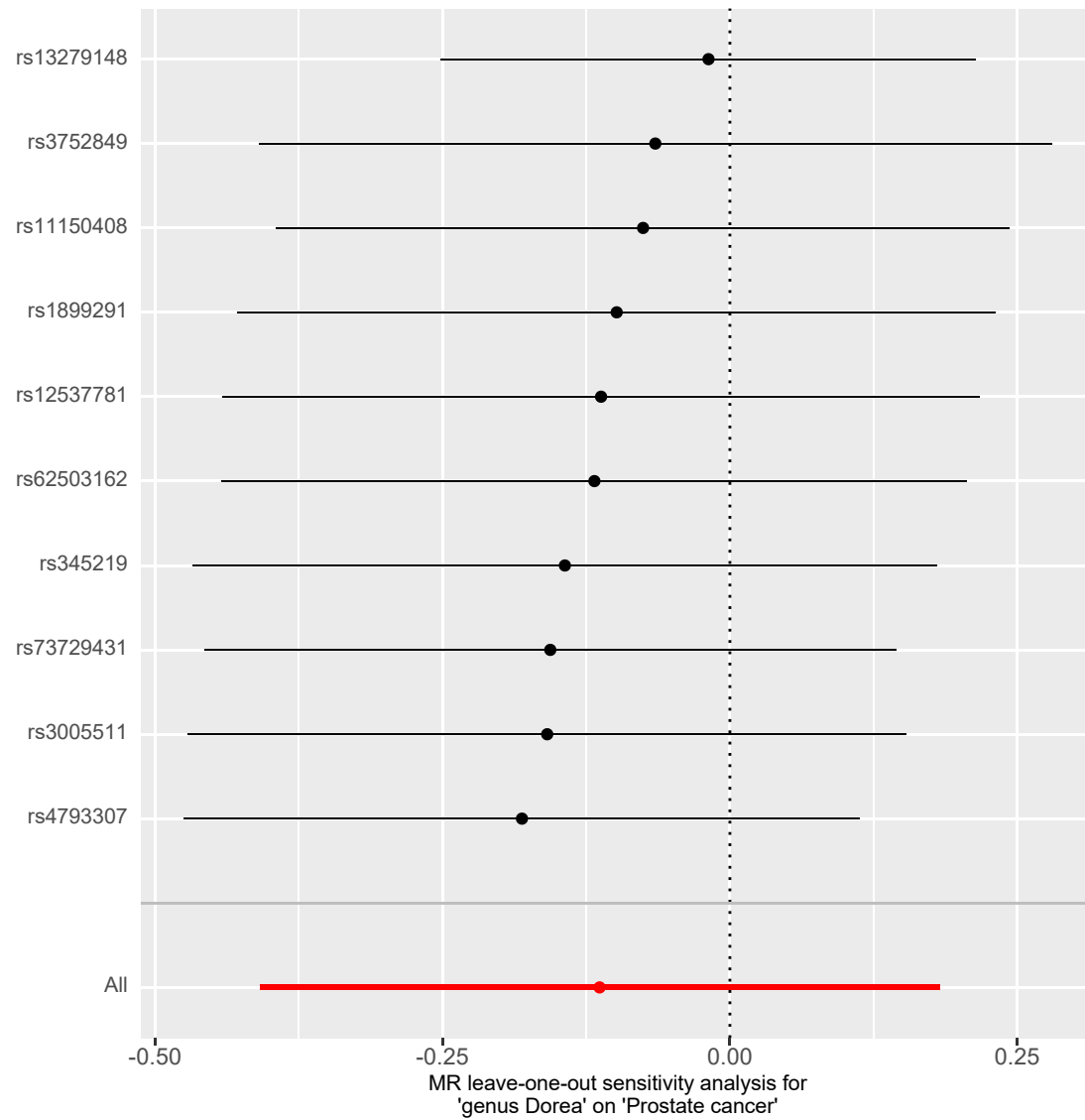


Figure S75. The leave-one-out test of genus Dorea on prostate cancer in the FinnGen consortium

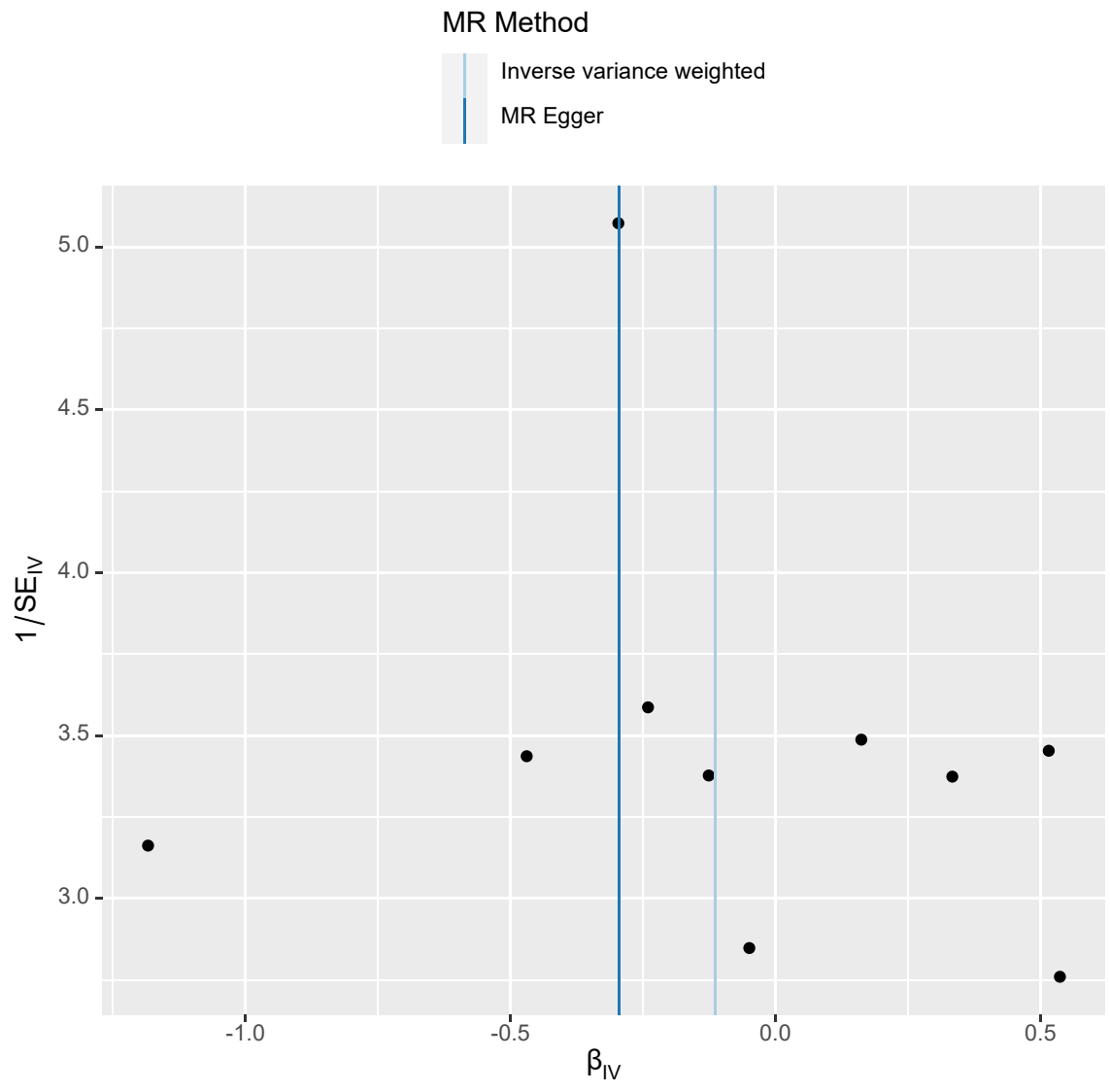


Figure S76. The funnel plot of genus Dorea on prostate cancer in the FinnGen consortium

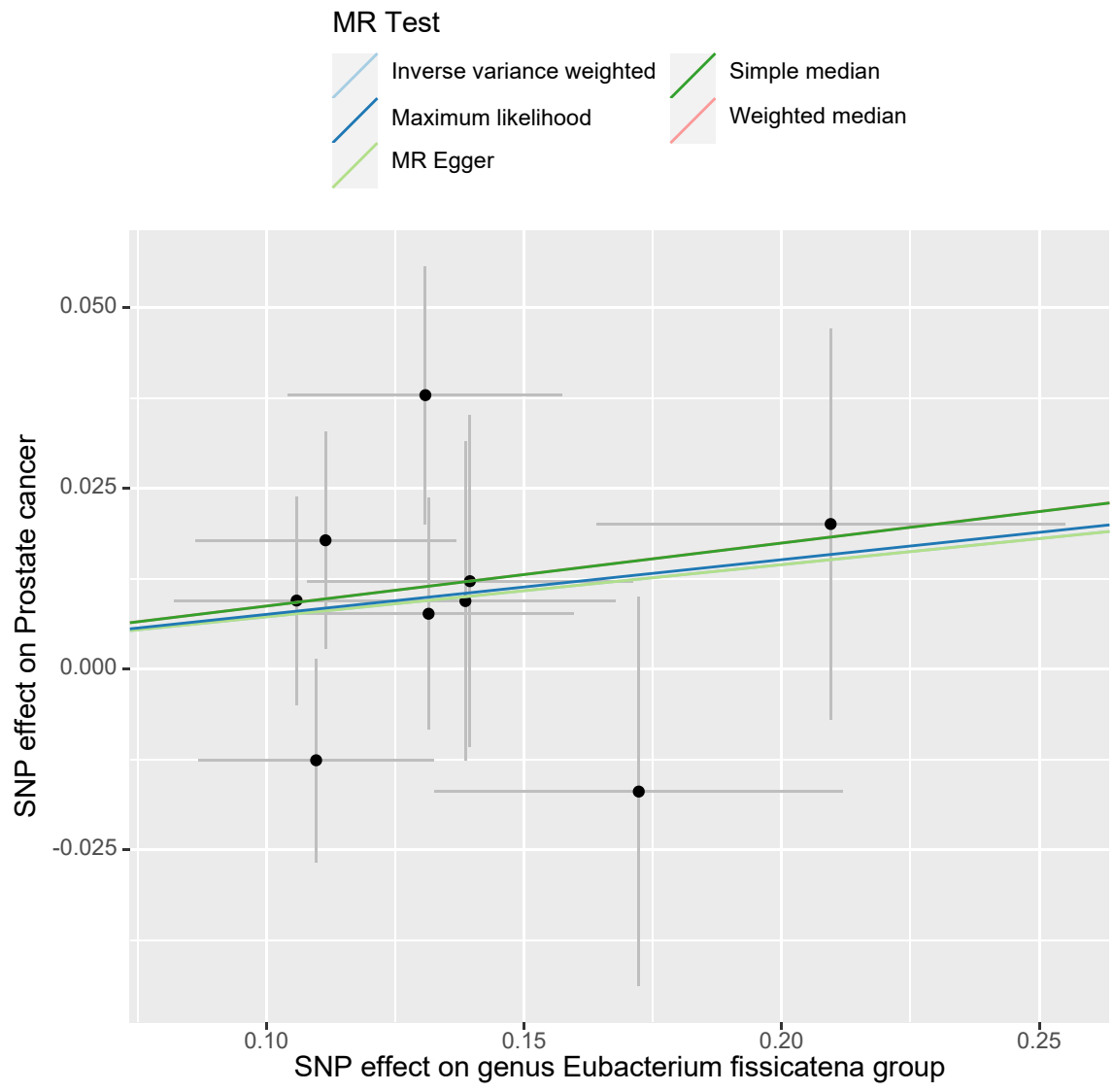


Figure S77. The scatter plot of genus Eubacterium fissicatena group on prostate cancer in the FinnGen consortium

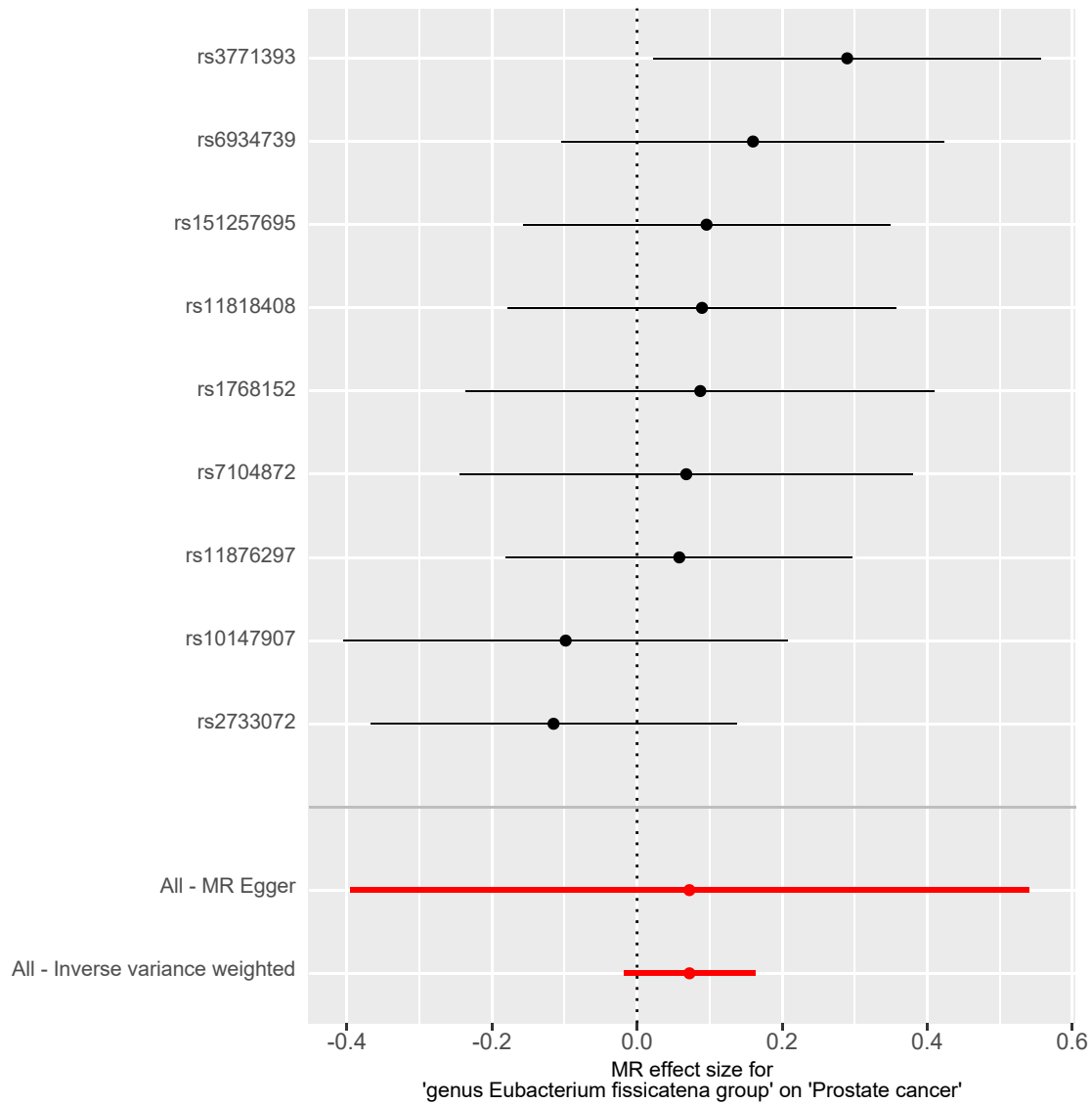


Figure S78. The forest plot of genus *Eubacterium fissicatena* group on prostate cancer in the FinnGen consortium

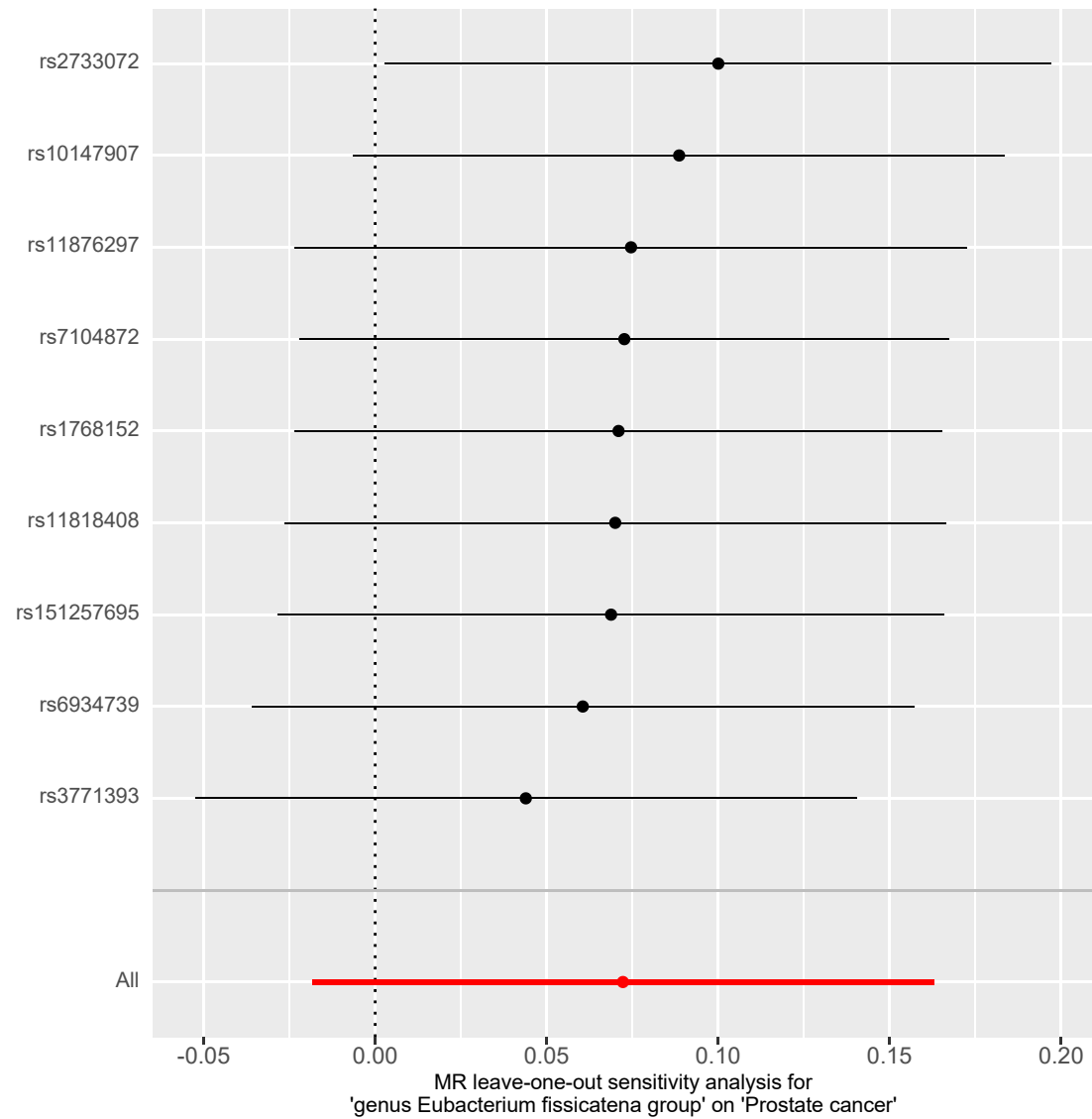


Figure S79. The leave-one-out test of genus *Eubacterium fissicatena* group on prostate cancer in the FinnGen consortium

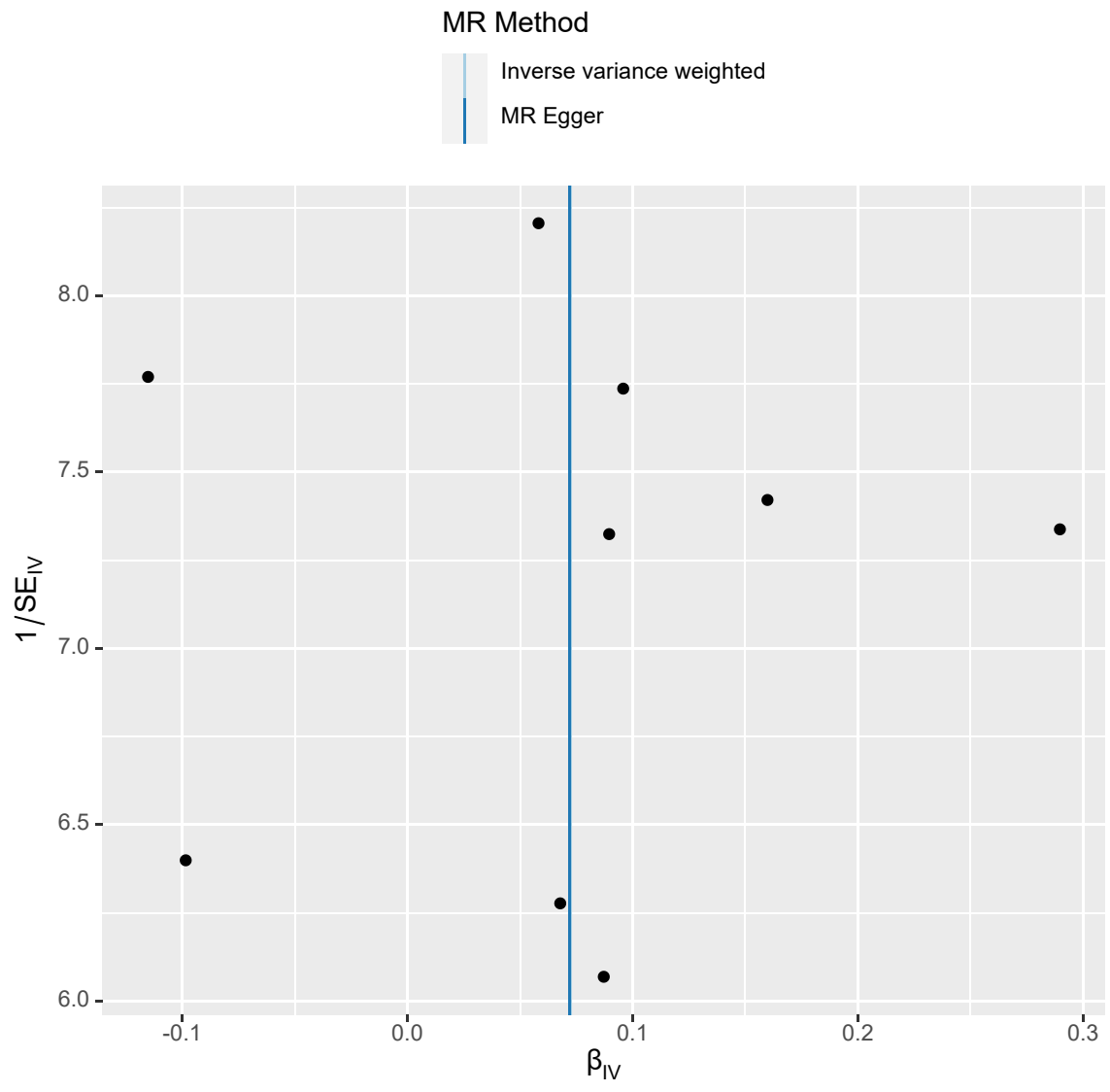


Figure S80. The funnel plot of genus *Eubacterium fissicatena* group on prostate cancer in the FinnGen consortium



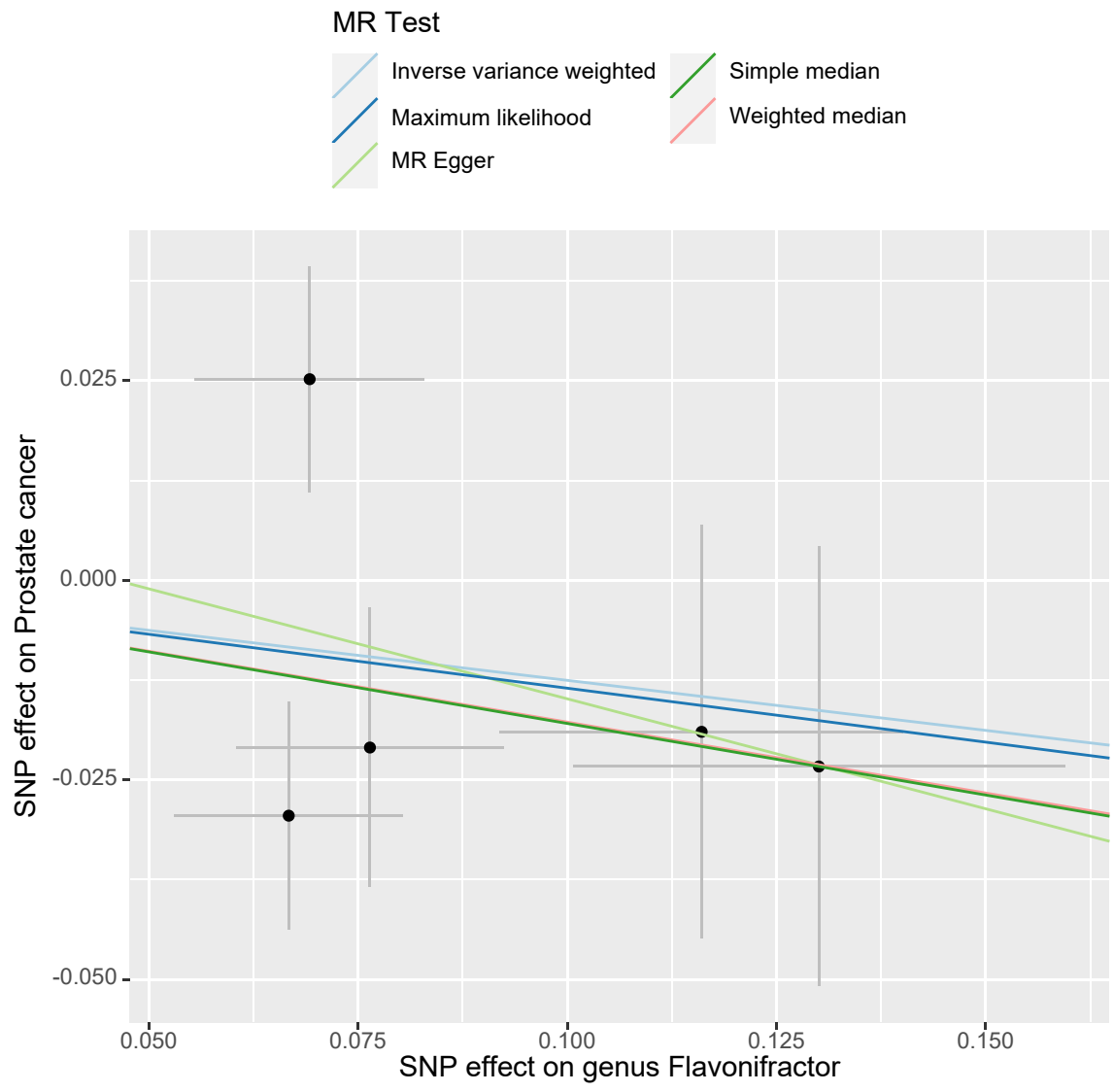


Figure S81. The scatter plot of genus Flavonifactor on prostate cancer in the FinnGen consortium

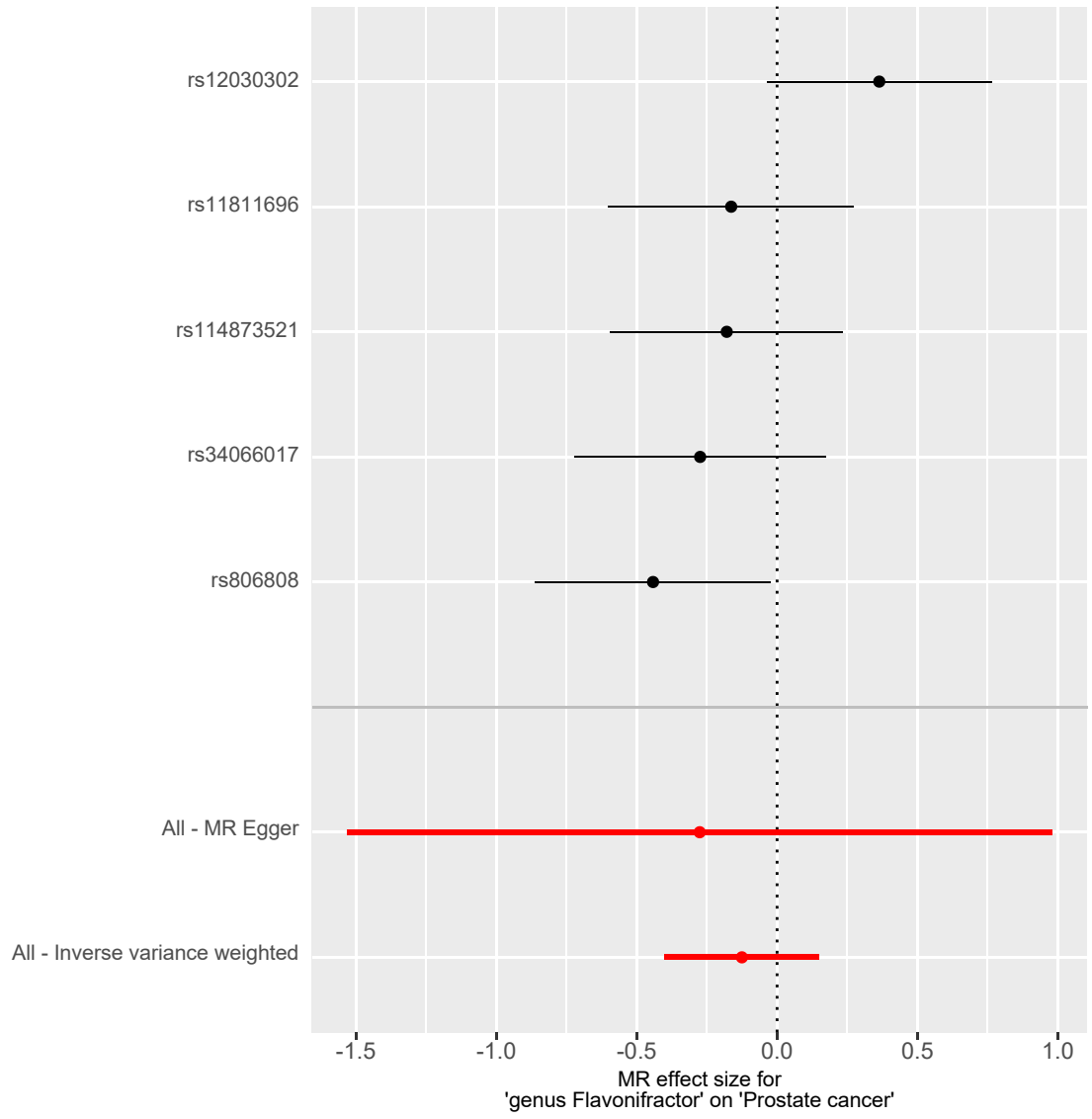


Figure S82. The forest plot of genus Flavonifractor on prostate cancer in the FinnGen consortium

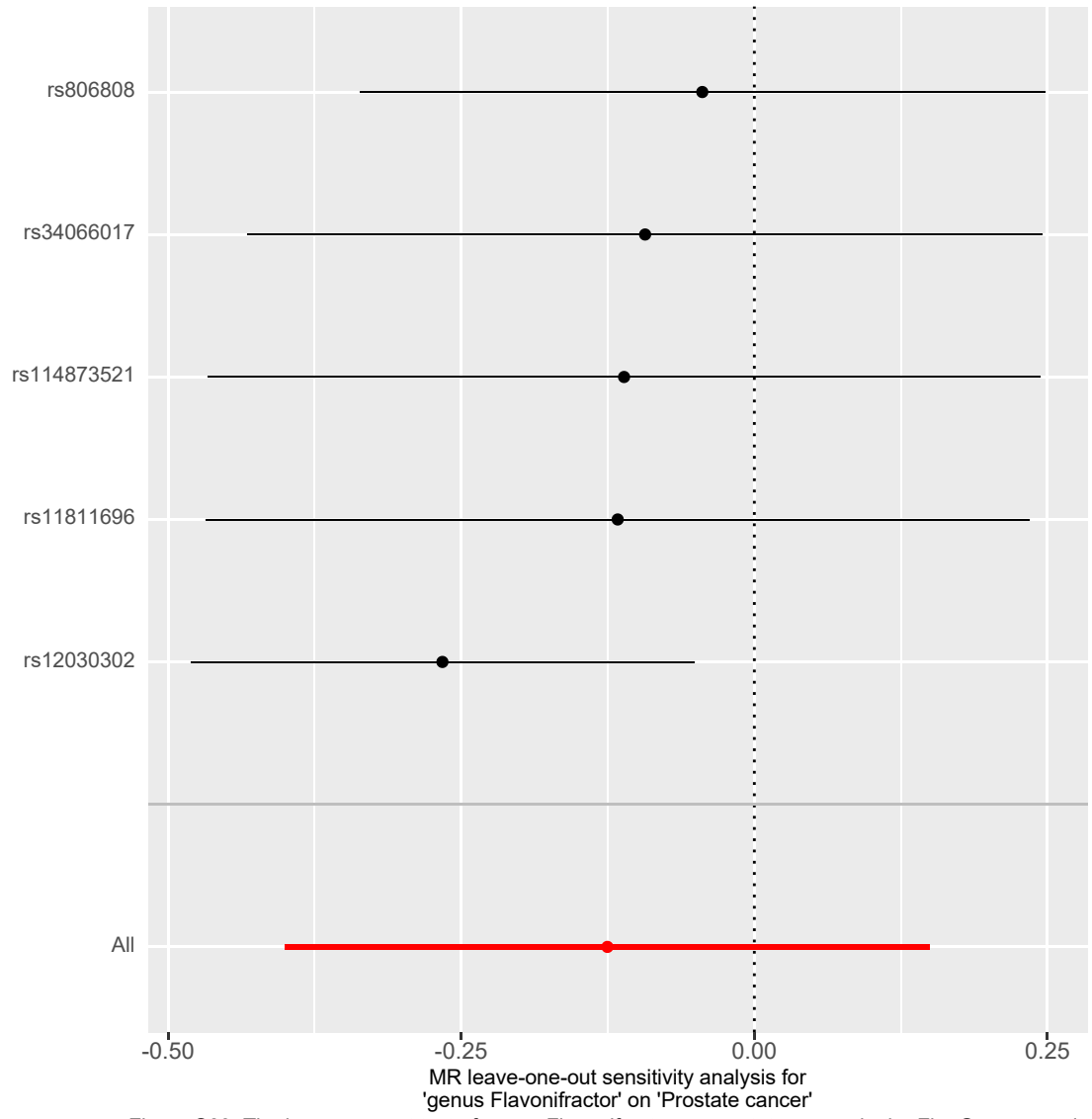


Figure S83. The leave-one-out test of genus Flavonifactor on prostate cancer in the FinnGen consortium

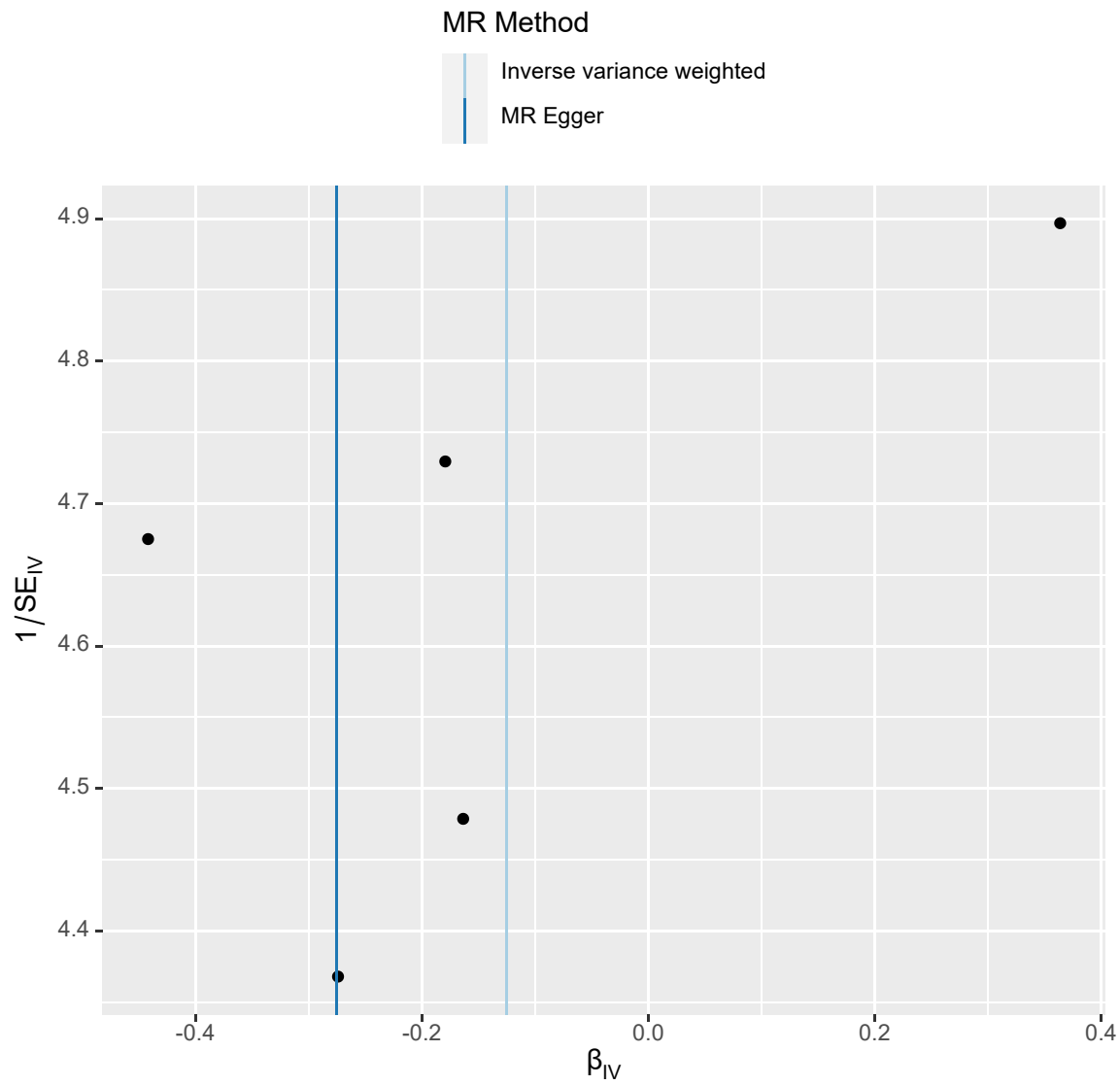


Figure S84. The funnel plot of genus Flavonifractor on prostate cancer in the FinnGen consortium

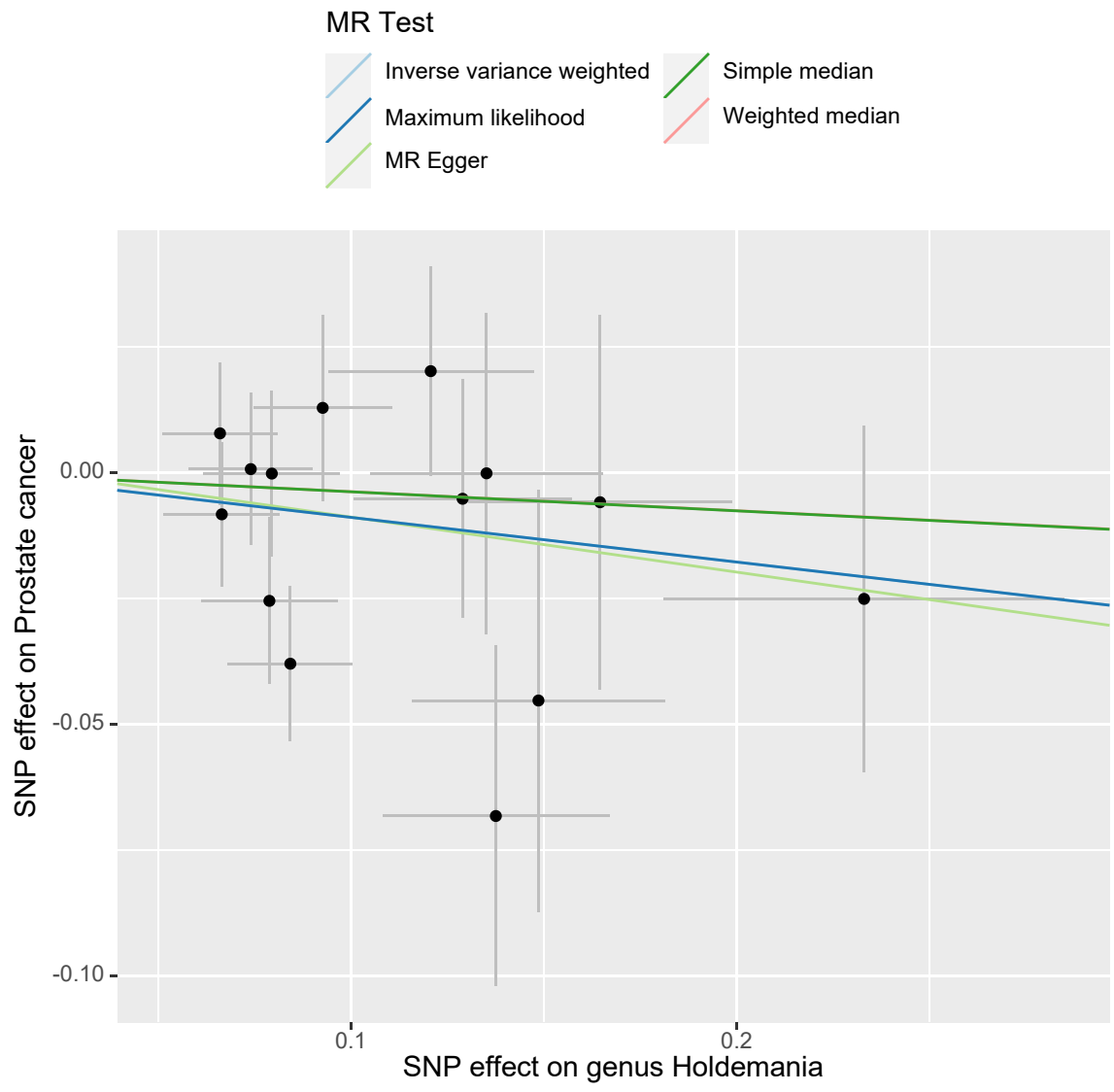


Figure S85. The scatter plot of genus Holdemania on prostate cancer in the FinnGen consortium

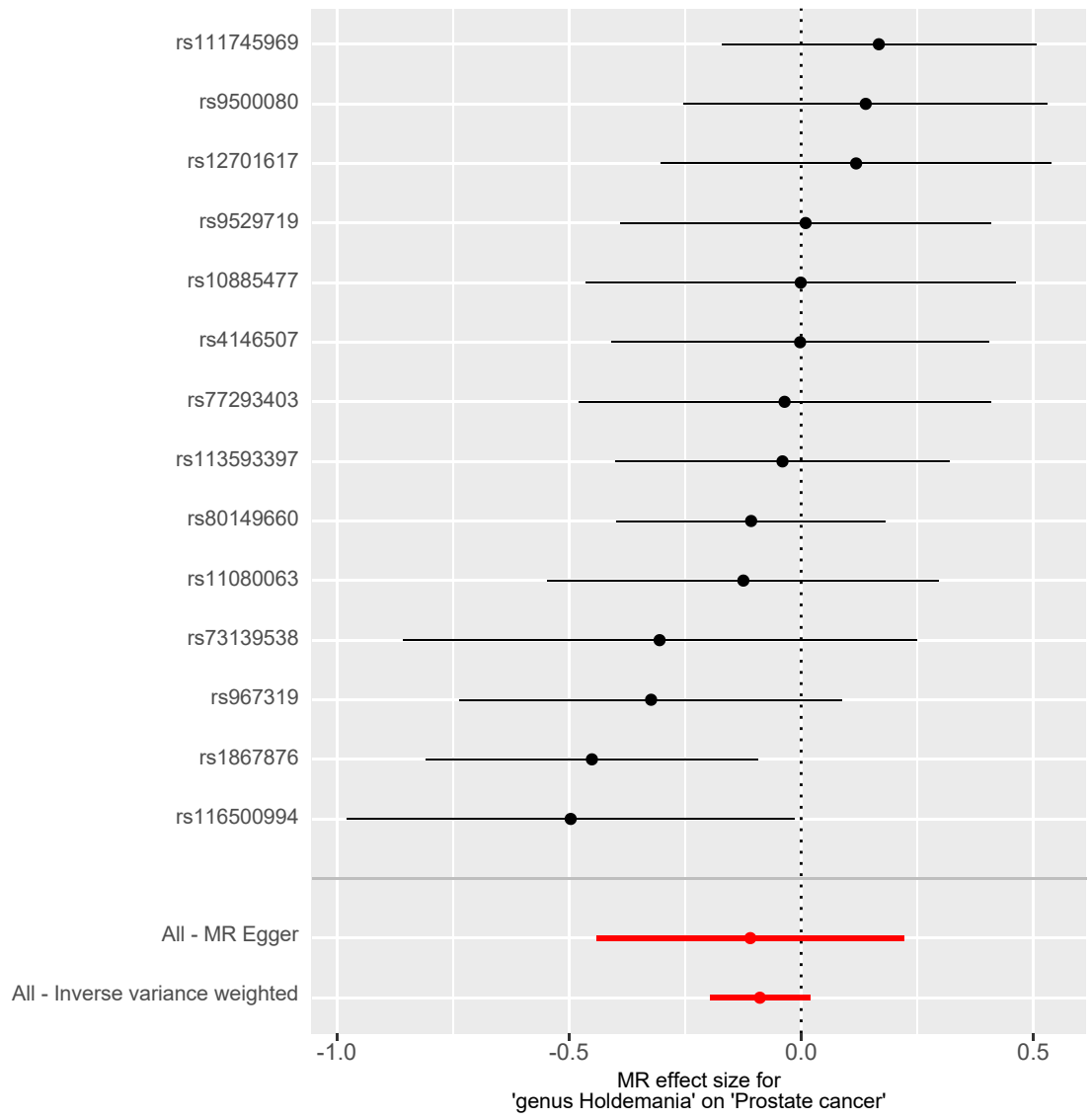


Figure S86. The forest plot of genus Holdemania on prostate cancer in the FinnGen consortium

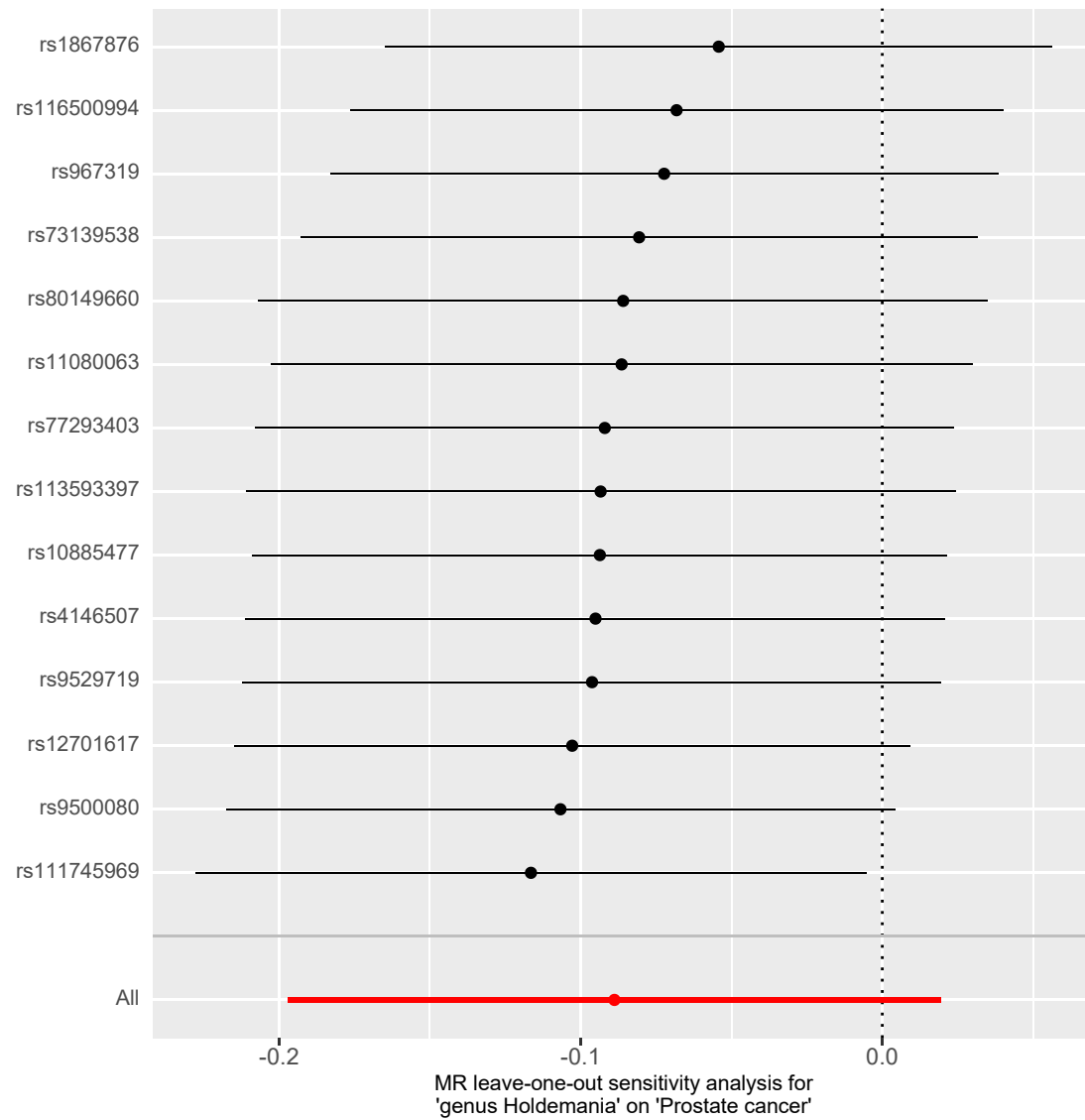


Figure S87. The leave-one-out test of genus Holdemania on prostate cancer in the FinnGen consortium

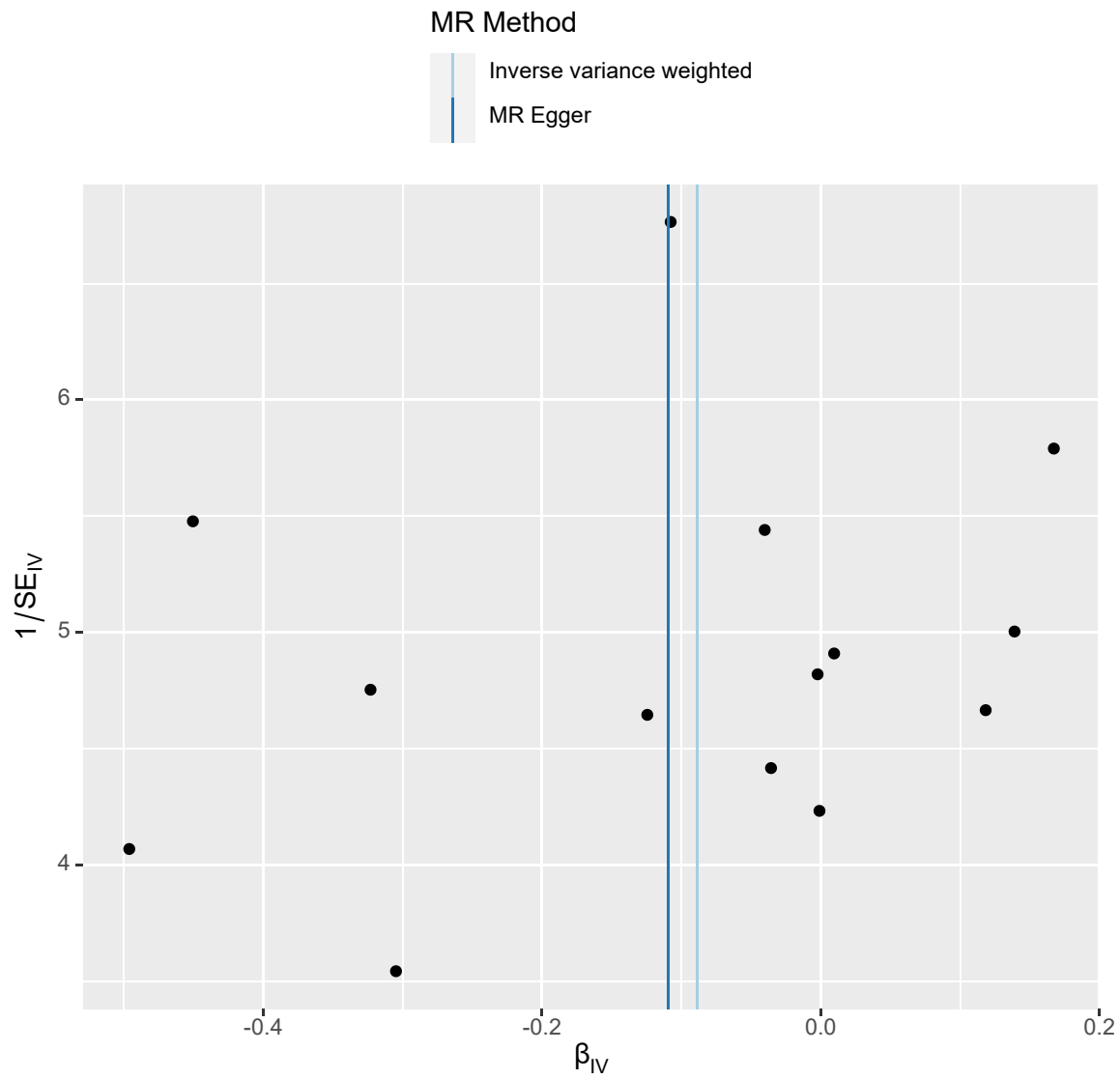


Figure S88. The funnel plot of genus Holdemania on prostate cancer in the FinnGen consortium



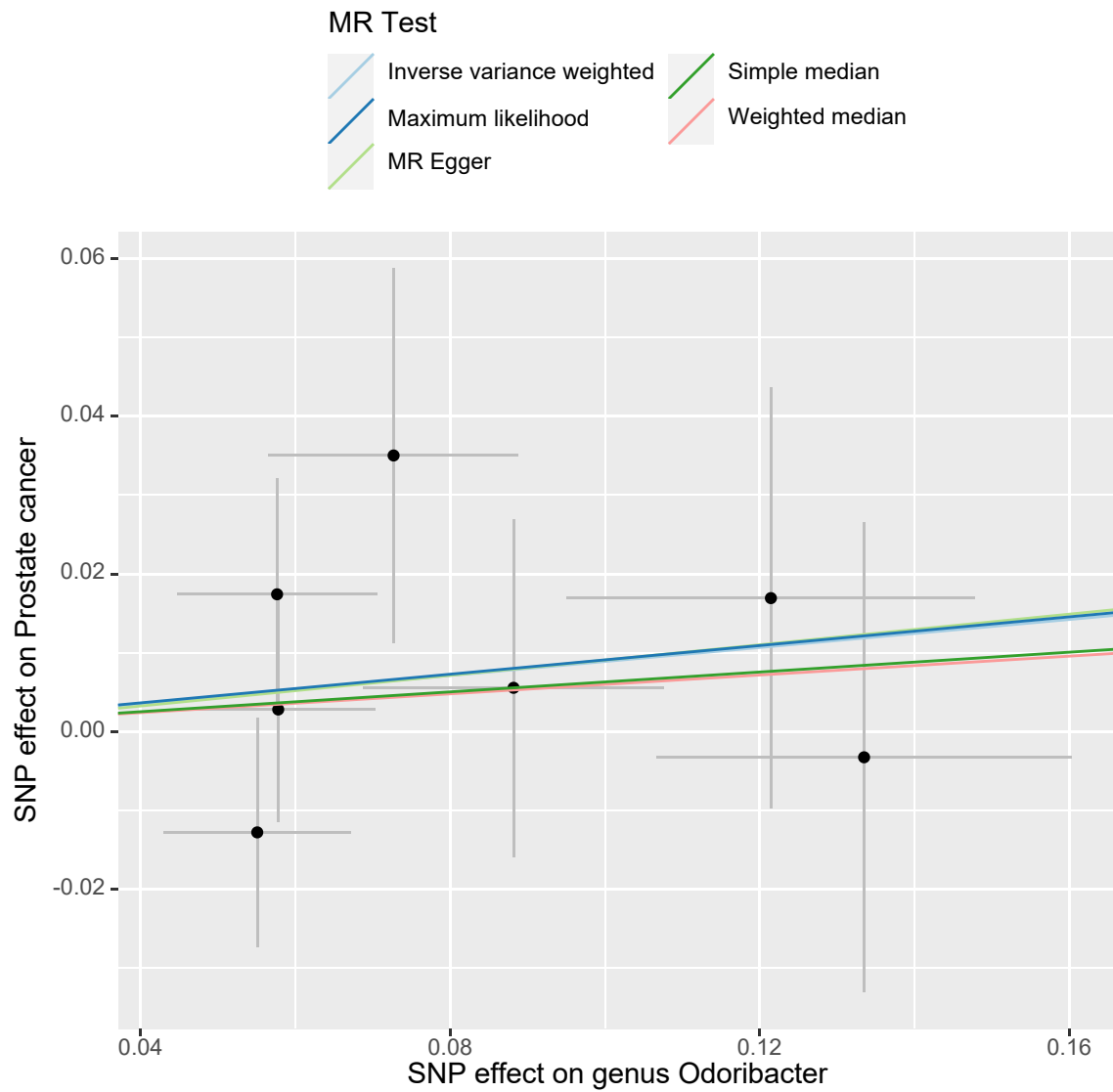


Figure S89. The scatter plot of genus Odoribacter on prostate cancer in the FinnGen consortium

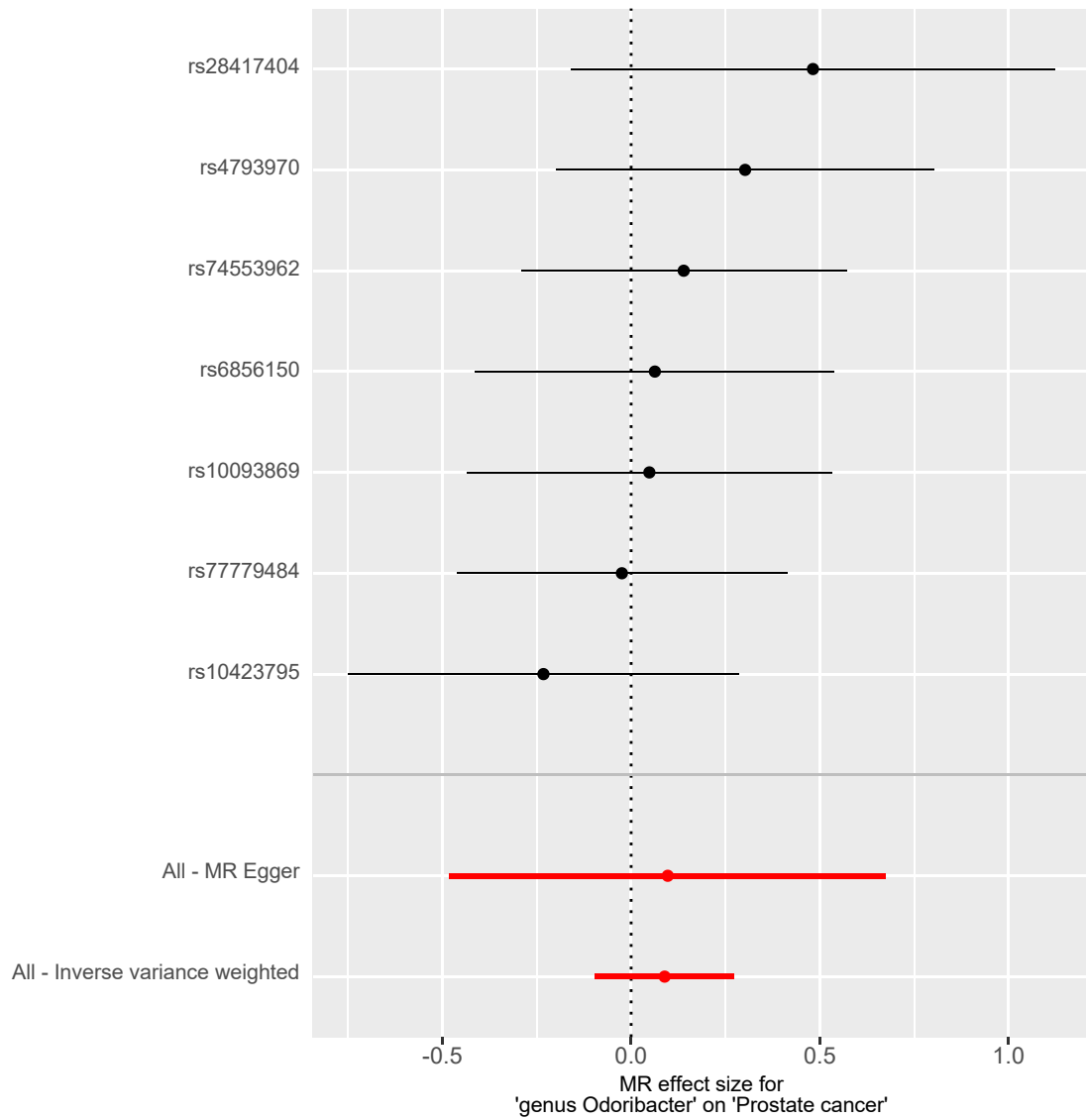


Figure S90. The forest plot of genus *Odoribacter* on prostate cancer in the FinnGen consortium

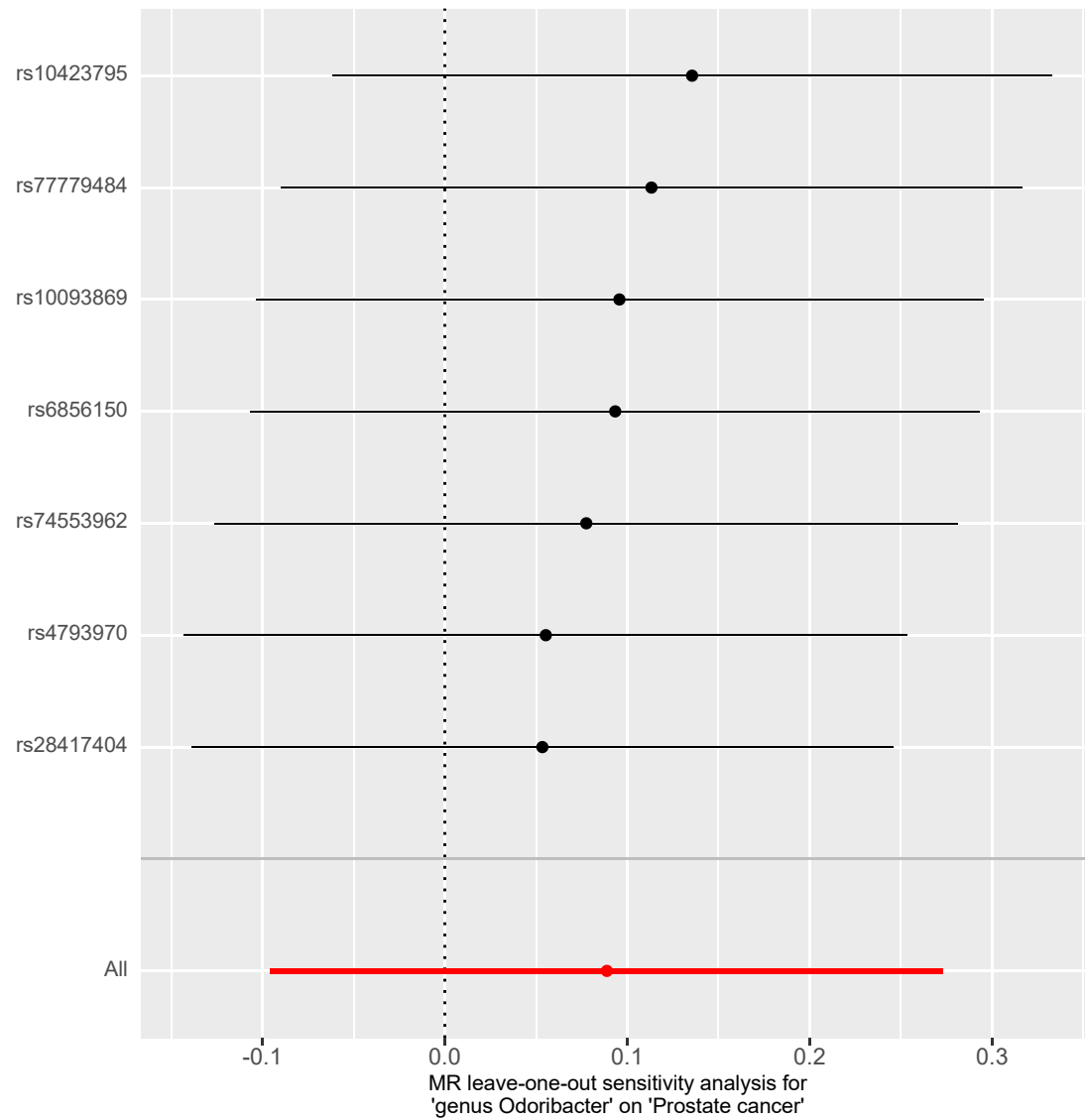


Figure S91. The leave-one-out test of genus *Odoribacter* on prostate cancer in the FinnGen consortium

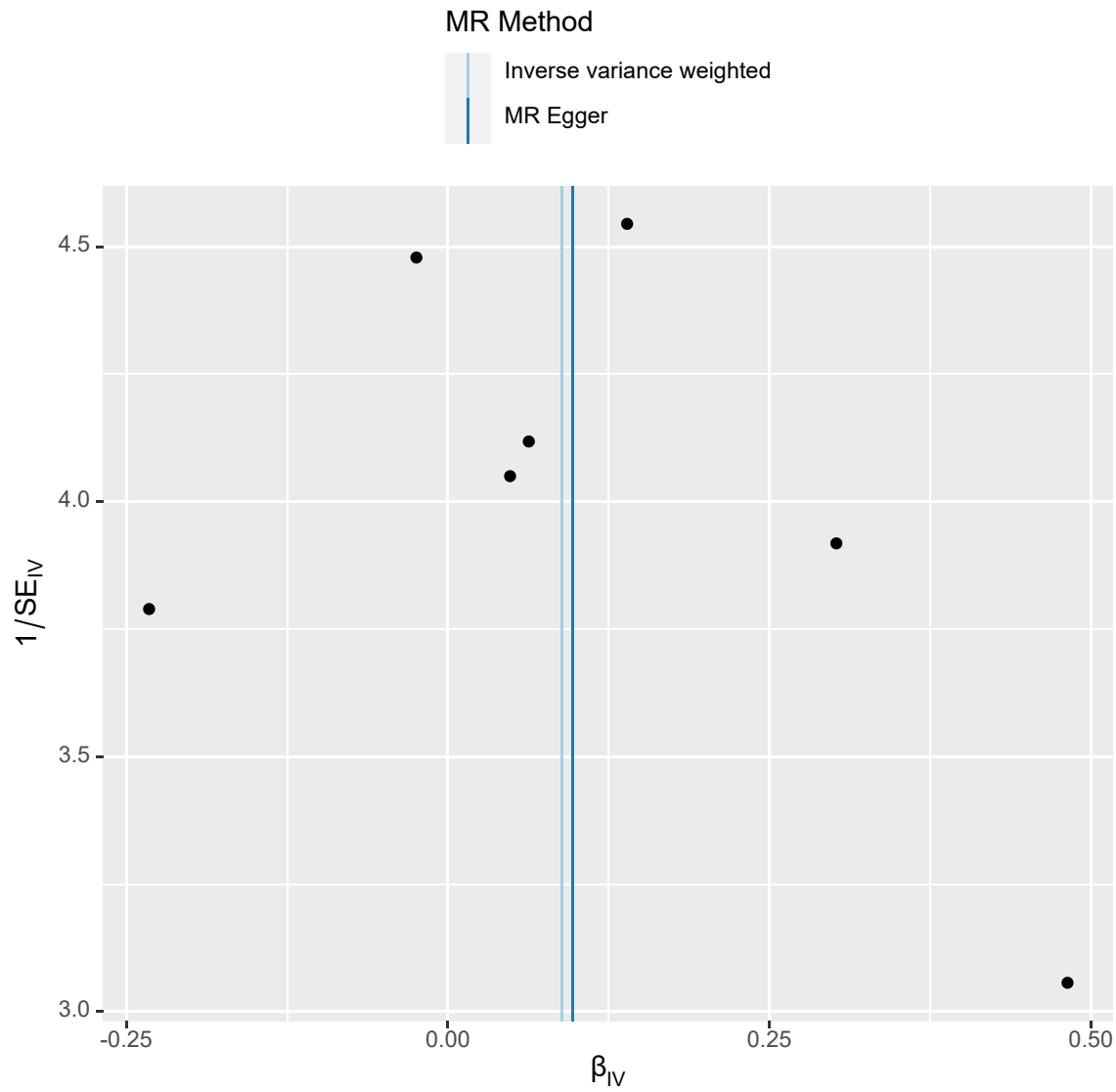


Figure S92. The funnel plot of genus *Odoribacter* on prostate cancer in the FinnGen consortium

MR Test

- Inverse variance weighted (multiplicative random effects)
- Maximum likelihood
- MR Egger
- Simple median
- Weighted median

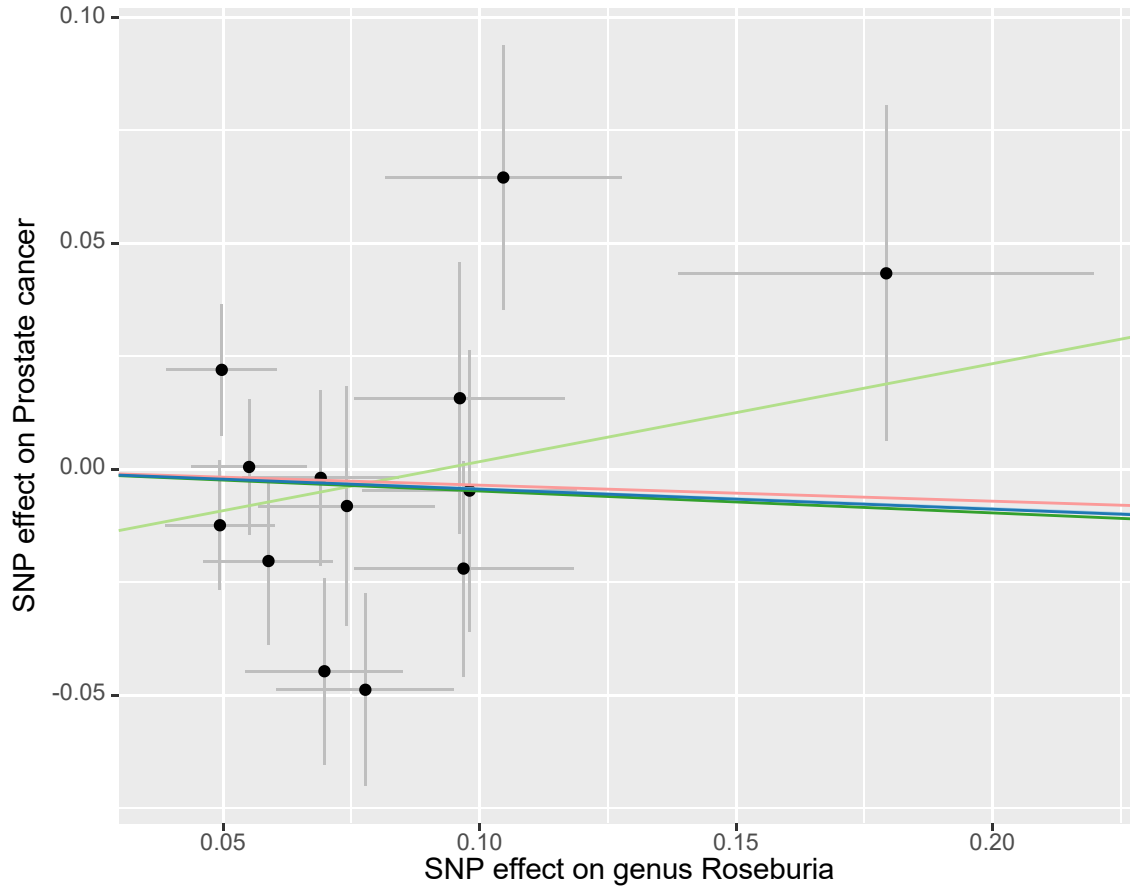


Figure S93. The scatter plot of genus Roseburia on prostate cancer in the FinnGen consortium

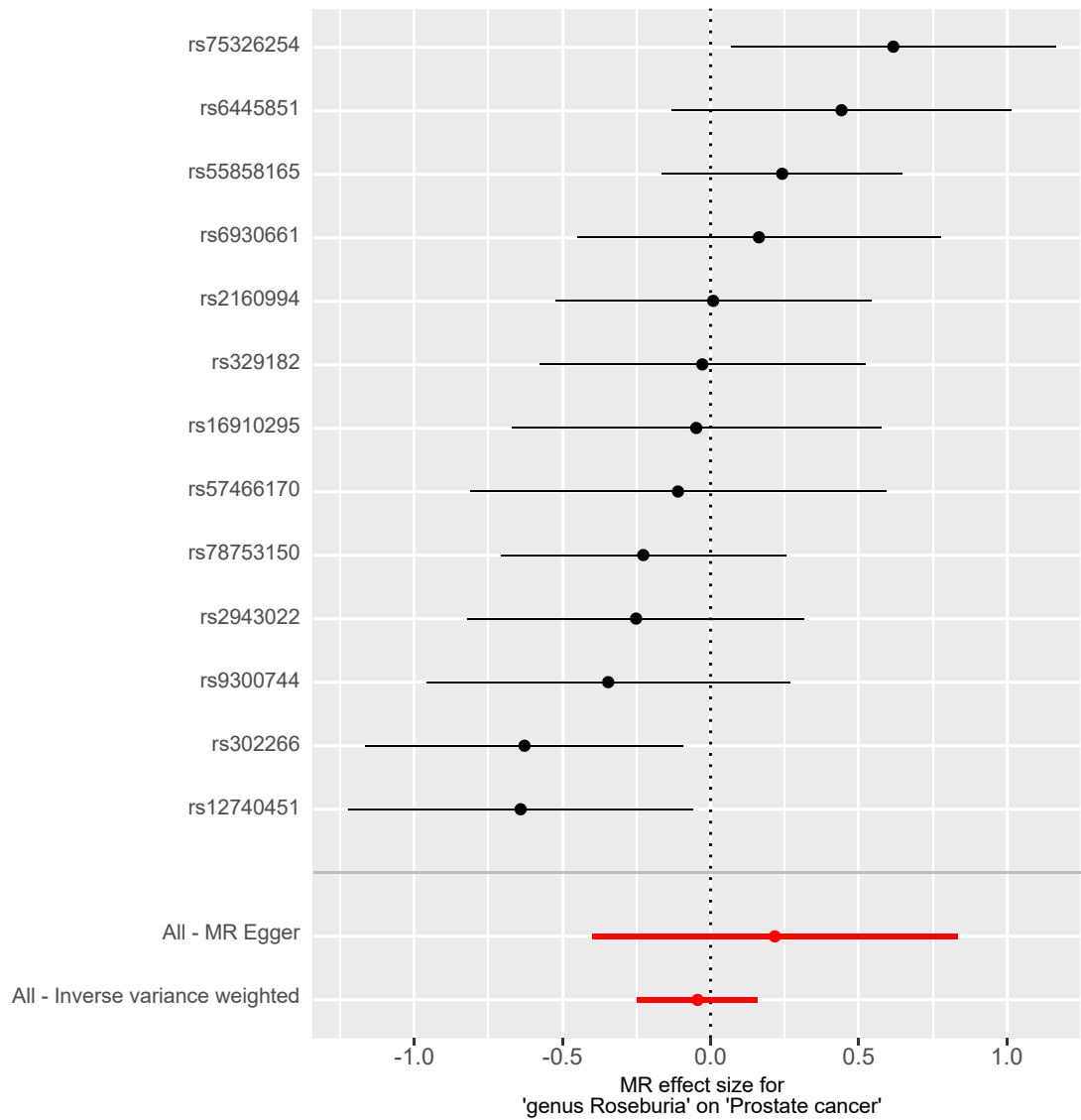


Figure S94. The forest plot of genus Roseburia on prostate cancer in the FinnGen consortium

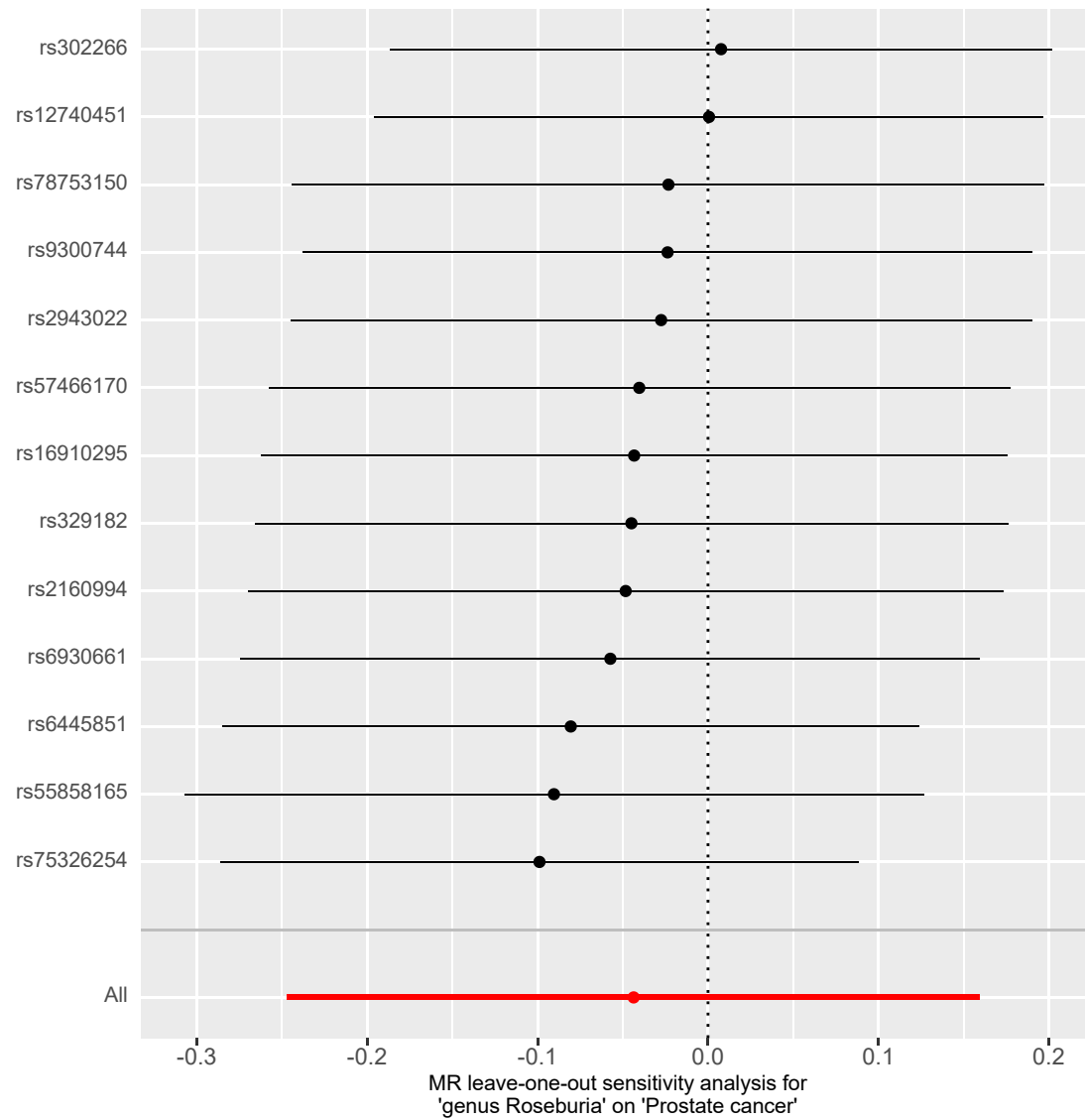


Figure S95. The leave-one-out test of genus Roseburia on prostate cancer in the FinnGen consortium

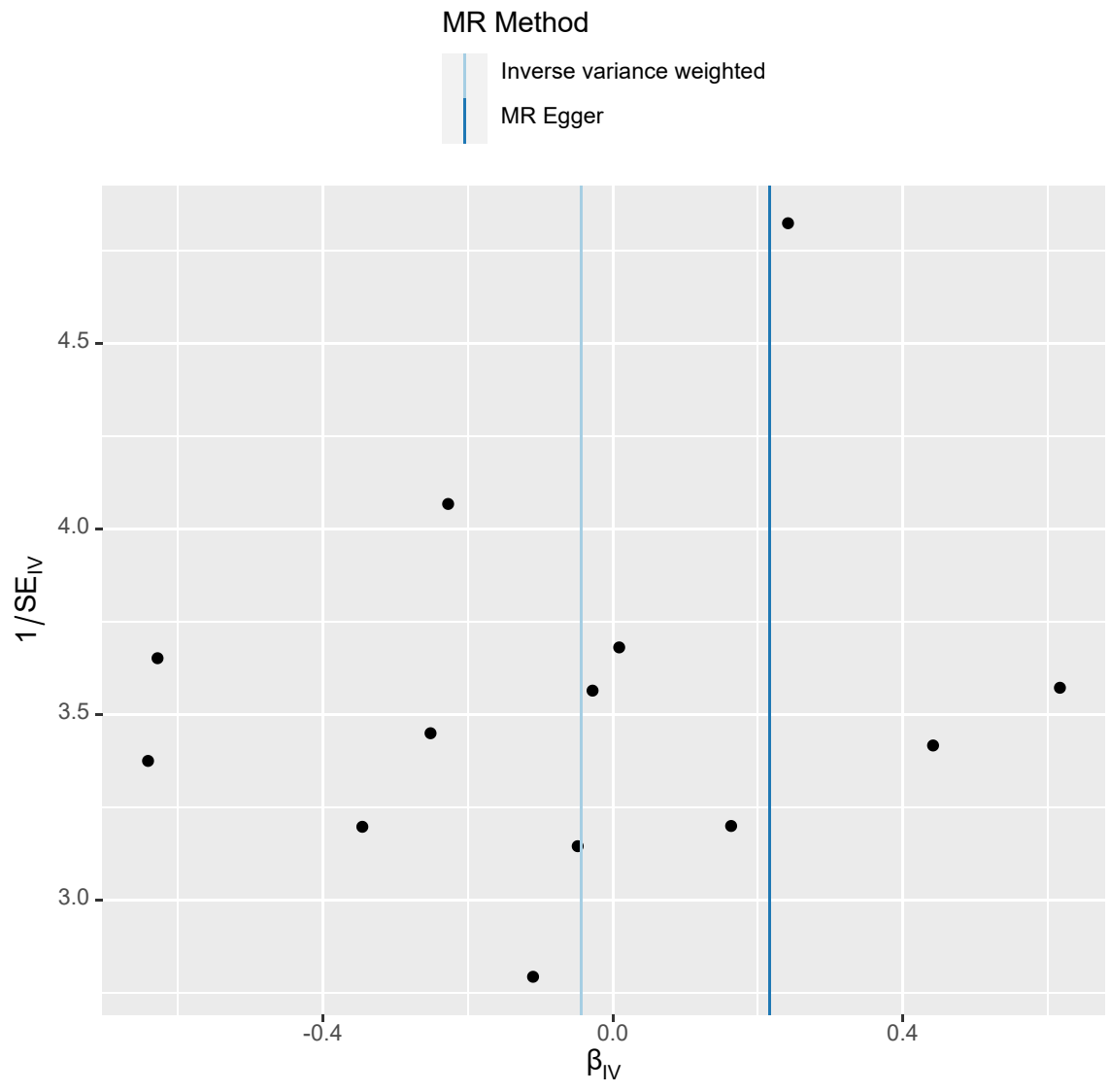


Figure S96. The funnel plot of genus Roseburia on prostate cancer in the FinnGen consortium



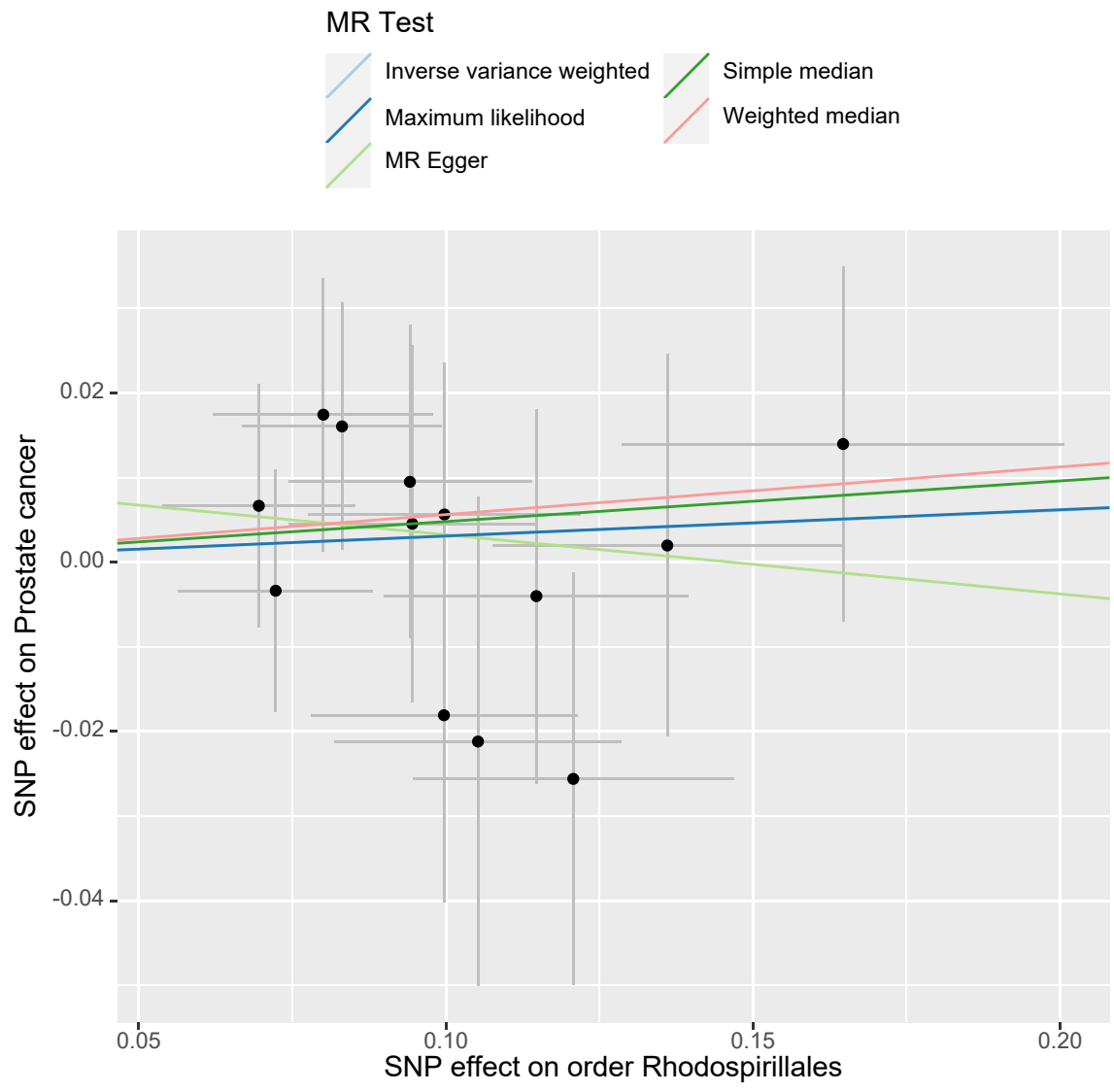


Figure S97. The scatter plot of order Rhodospirillales on prostate cancer in the FinnGen consortium

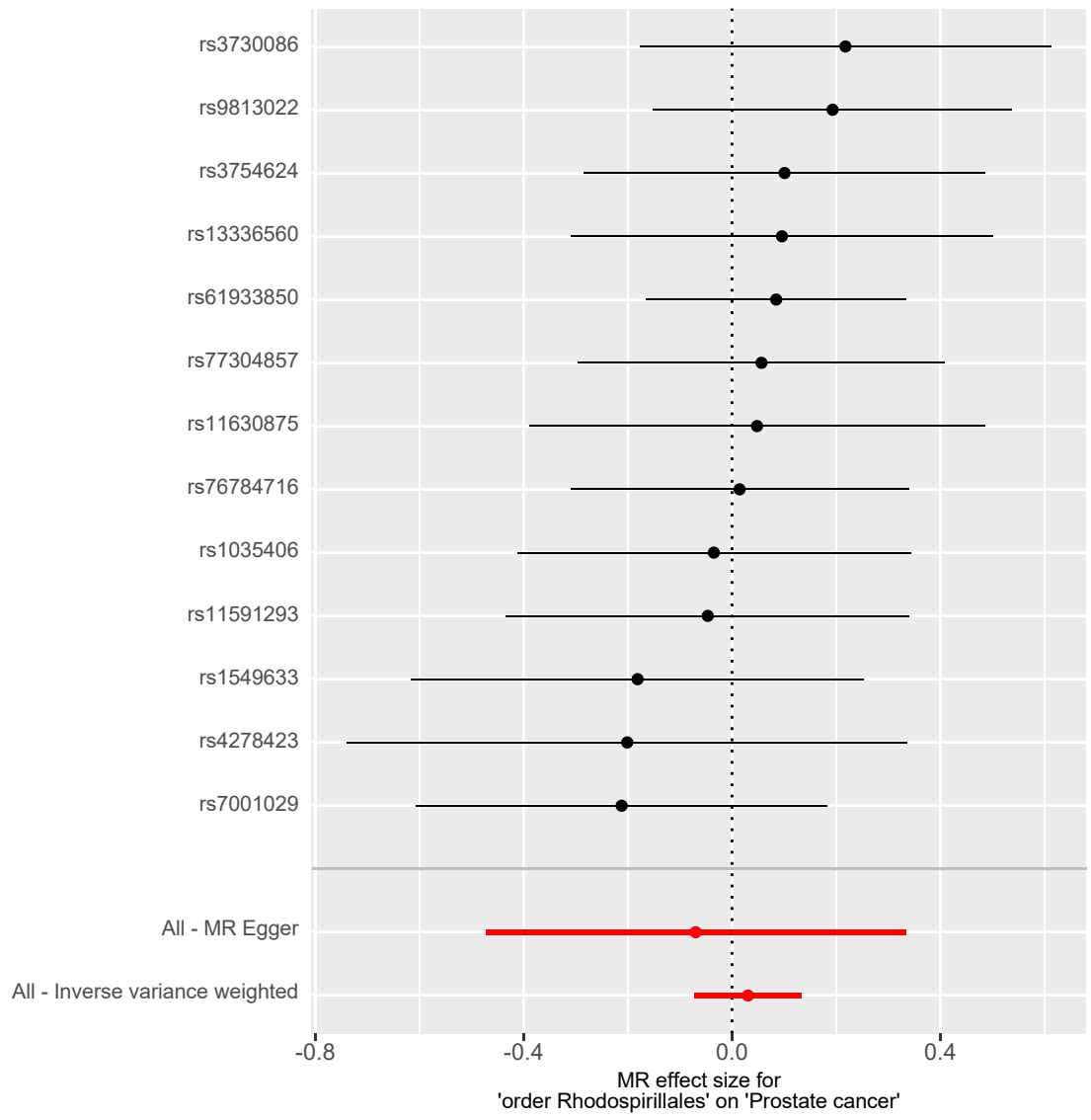


Figure S98. The forest plot of order Rhodospirillales on prostate cancer in the FinnGen consortium

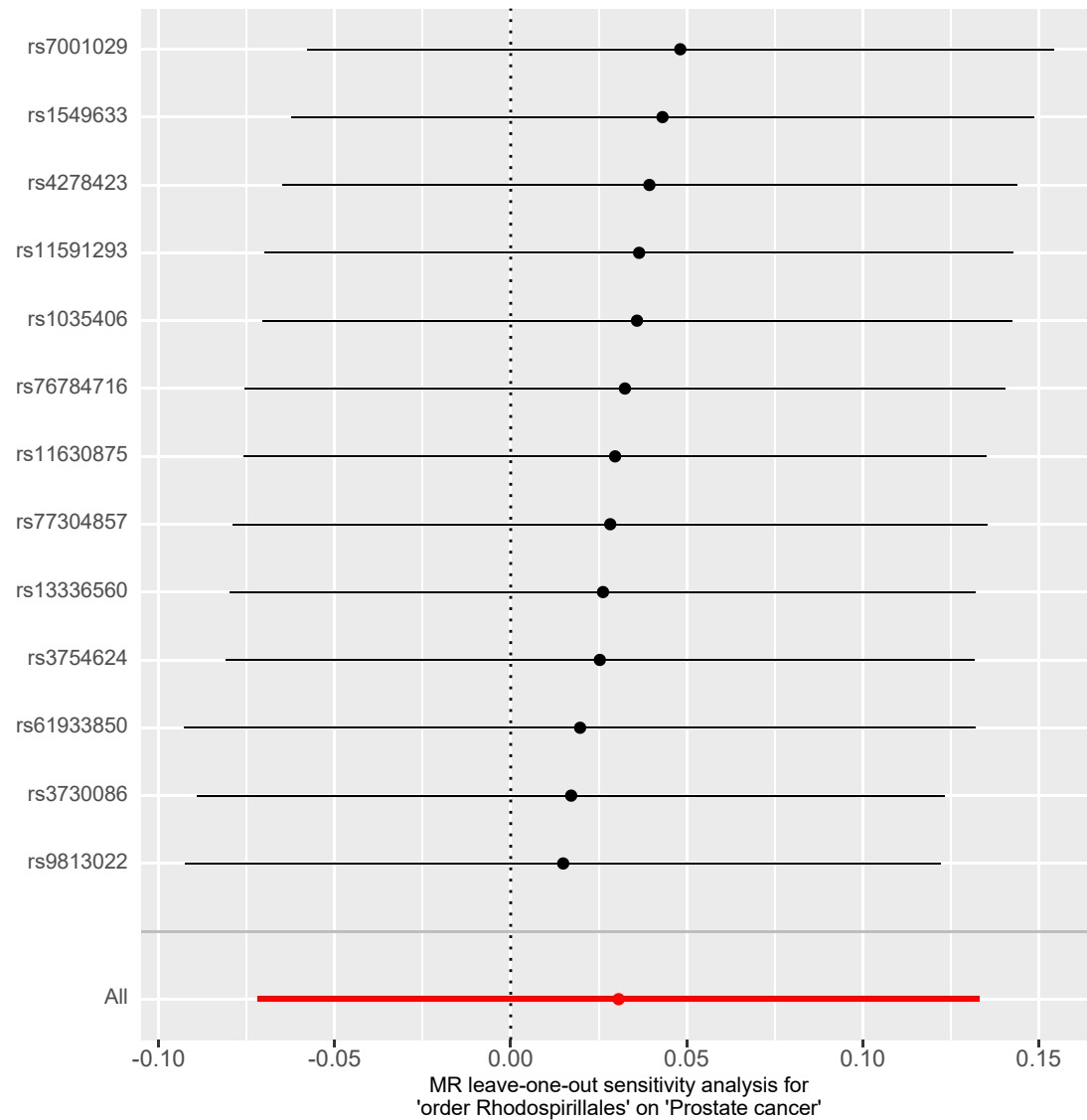


Figure S99. The leave-one-out test of order Rhodospirillales on prostate cancer in the FinnGen consortium

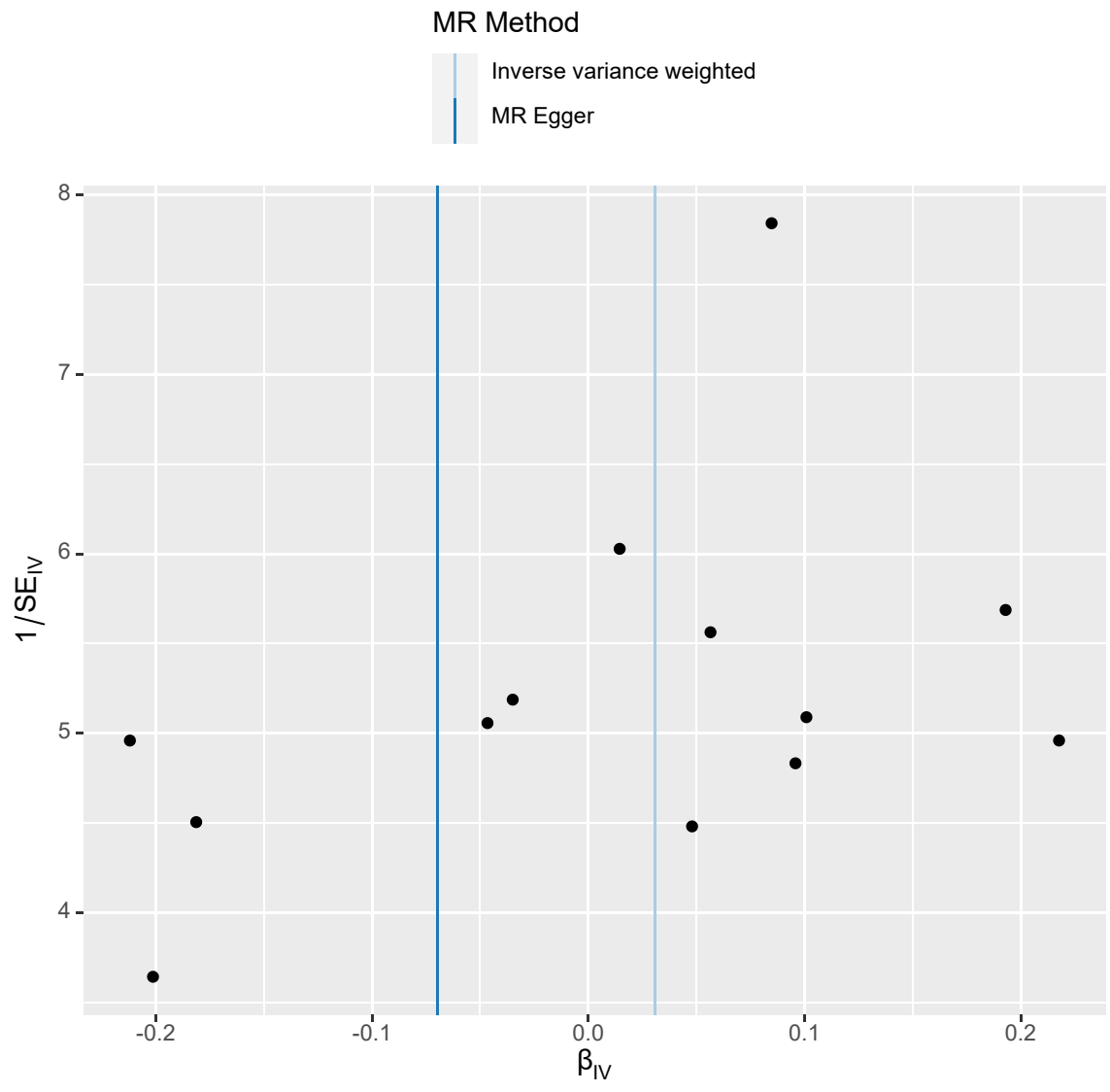


Figure S100. The funnel plot of order Rhodospirillales on prostate cancer in the FinnGen consortium

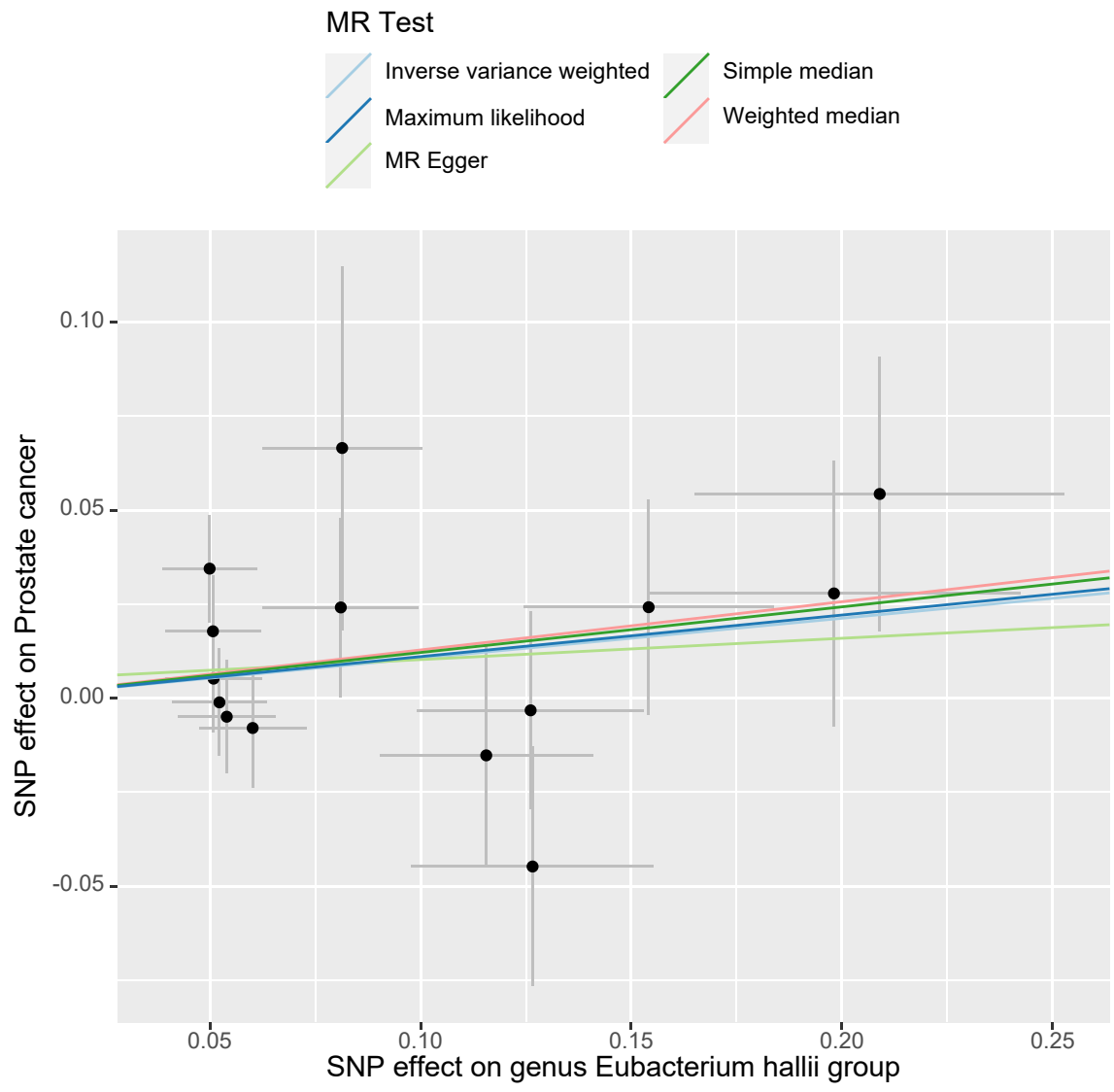


Figure S101. The scatter plot of genus *Eubacterium hallii* group on prostate cancer in the FinnGen consortium

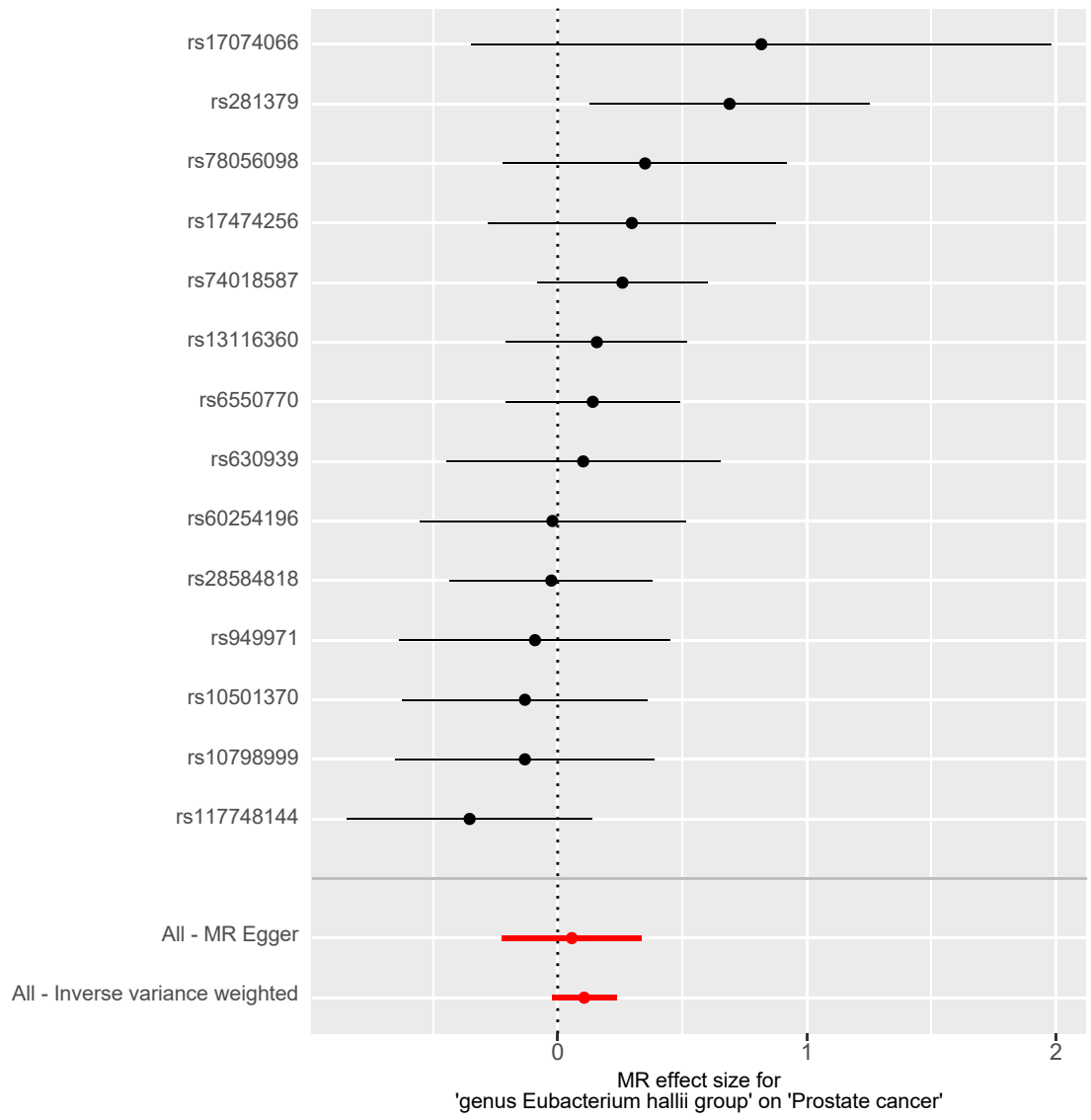


Figure S102. The forest plot of genus *Eubacterium hallii* group on prostate cancer in the FinnGen consortium

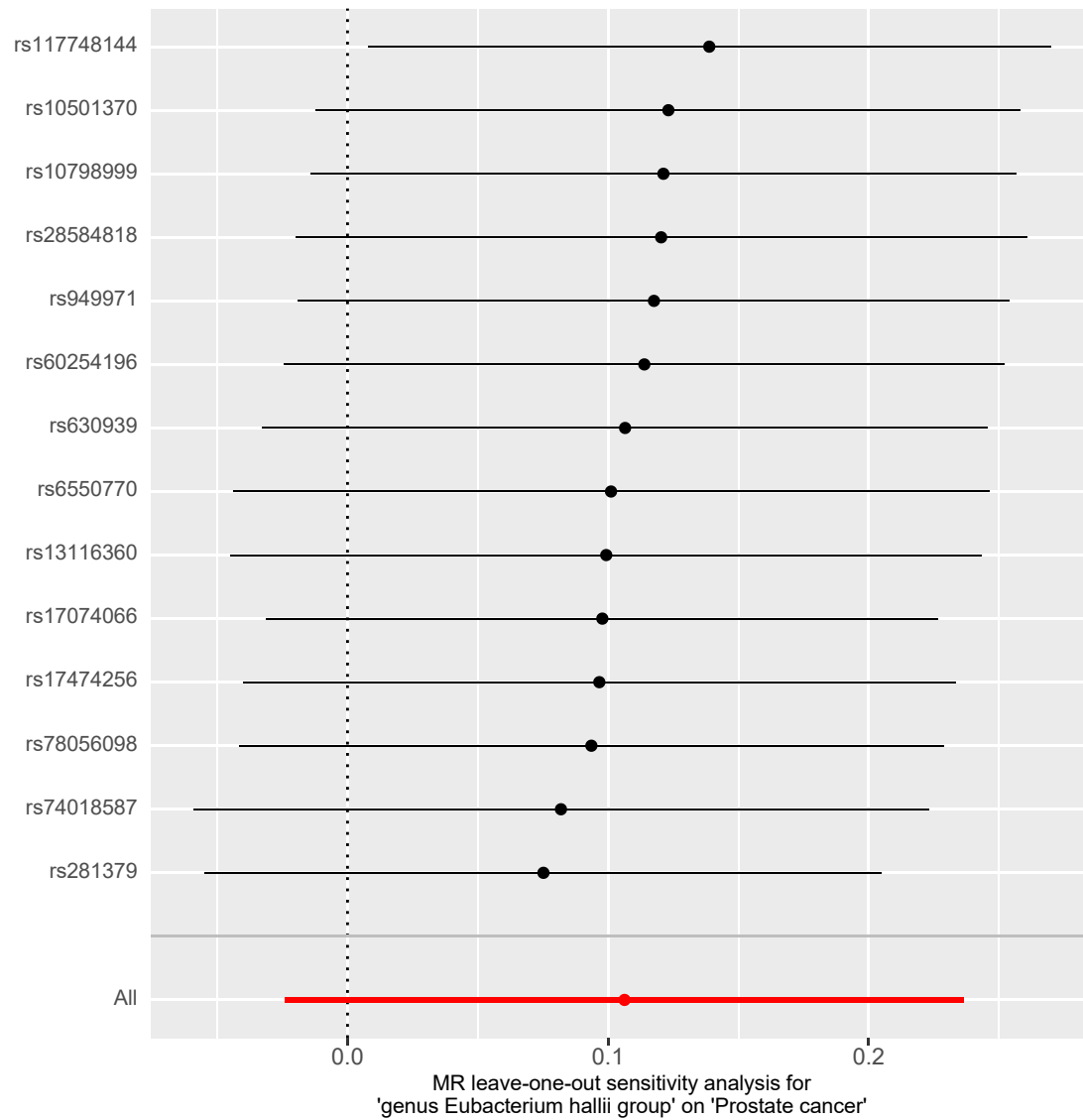


Figure S103. The leave-one-out test of genus *Eubacterium hallii* group on prostate cancer in the FinnGen consortium

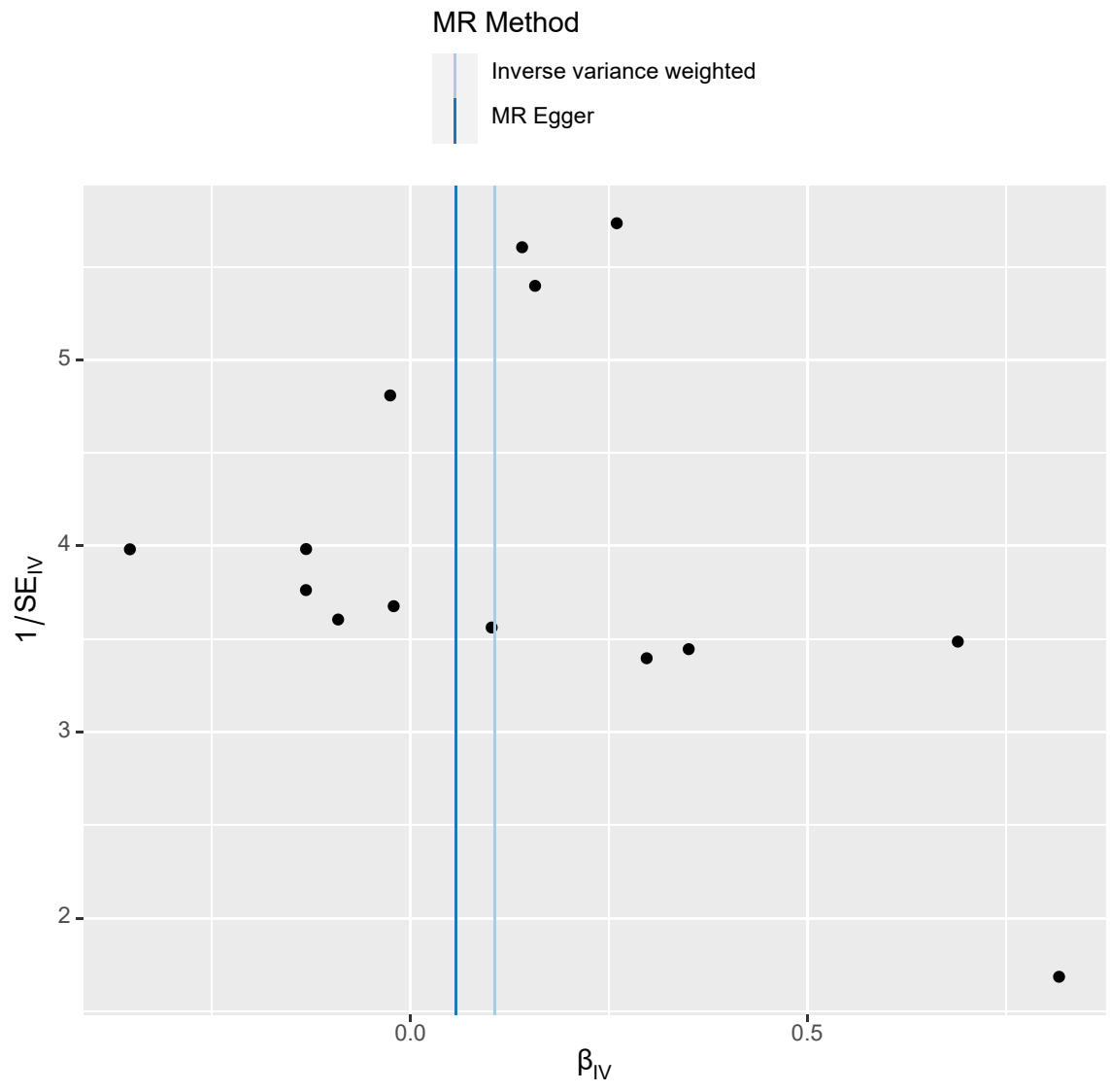


Figure S104. The funnel plot of genus *Eubacterium hallii* group on prostate cancer in the FinnGen consortium