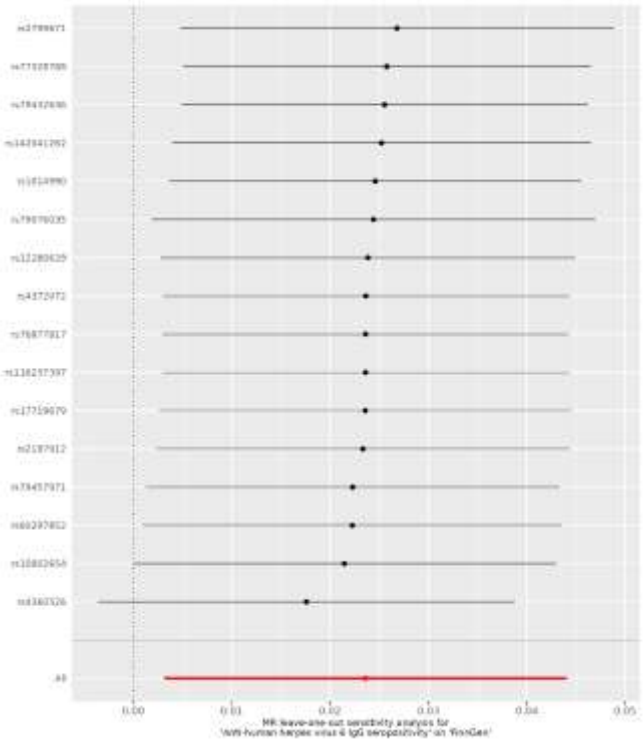
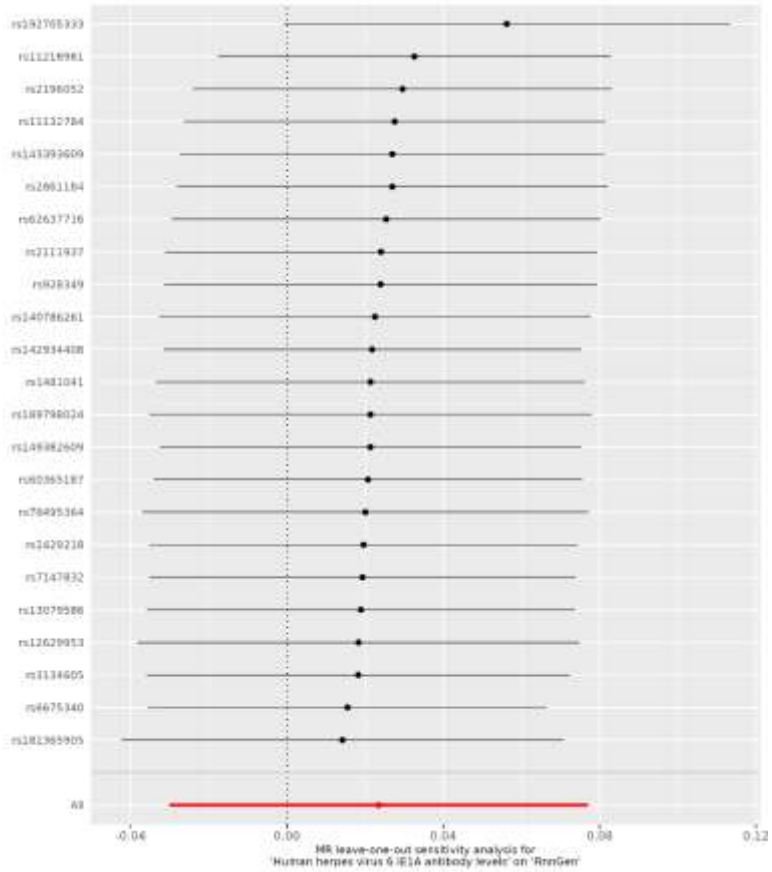
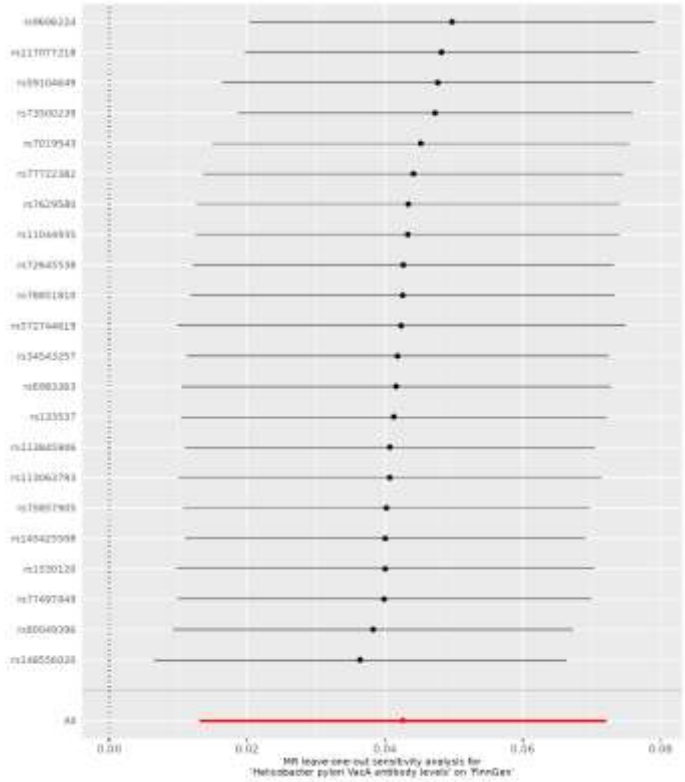


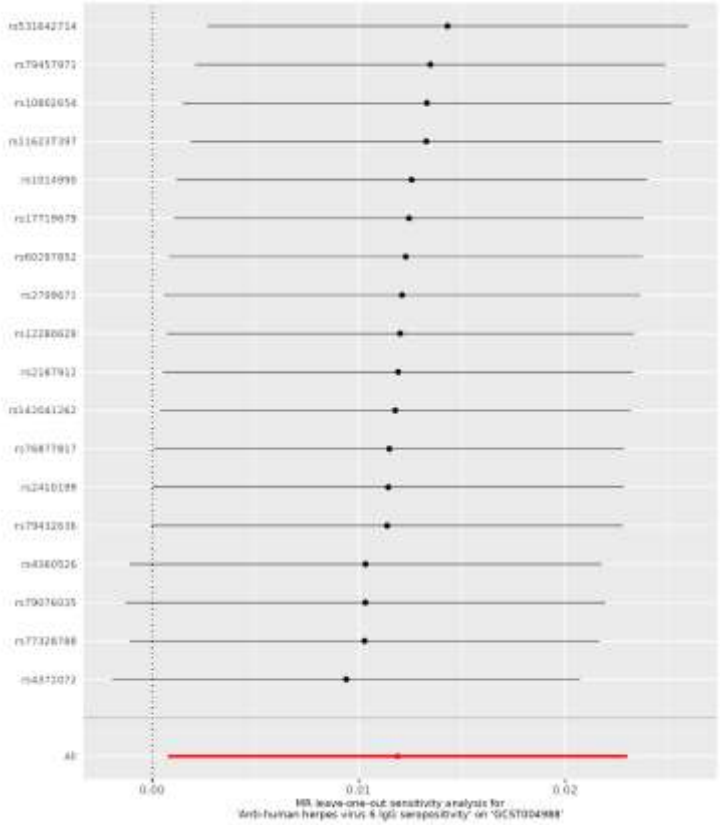
Supplementary Figure S1: The sensitivity analysis of leave-one-out (LOO) for IVs of Anti-human herpes virus 6 IgG seropositivity based on FinnGen.



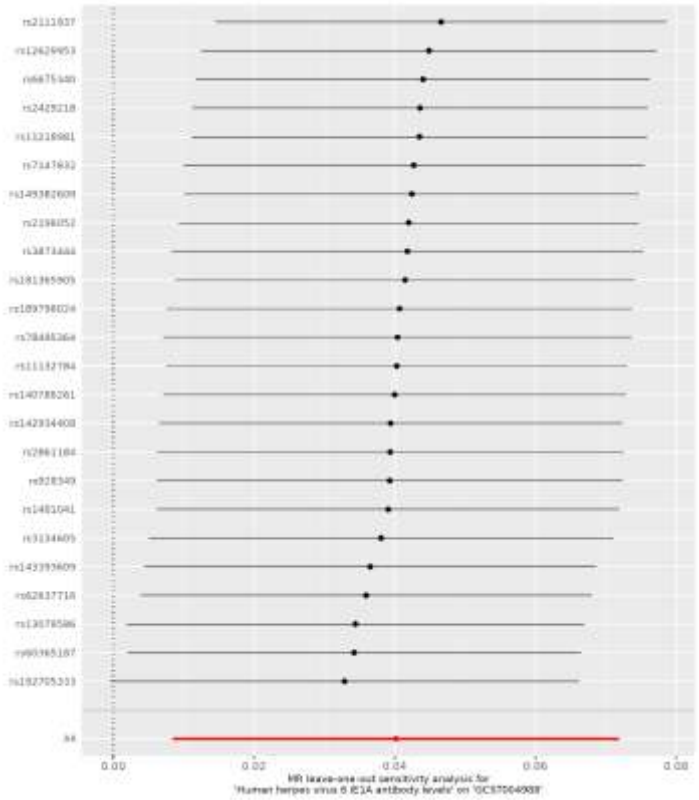
Supplementary Figure S2: The sensitivity analysis of leave-one-out (LOO) for IVs of Human herpes virus 6 IE1A antibody based on FinnGen.



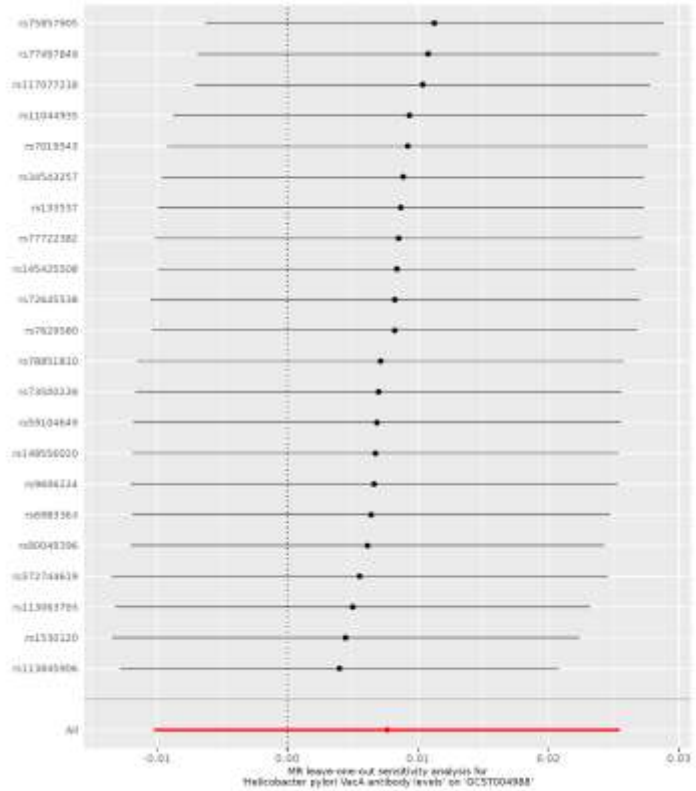
Supplementary Figure S3: The sensitivity analysis of leave-one-out (LOO) for IVs of Helicobacter pylori VacA antibody based on FinnGen.



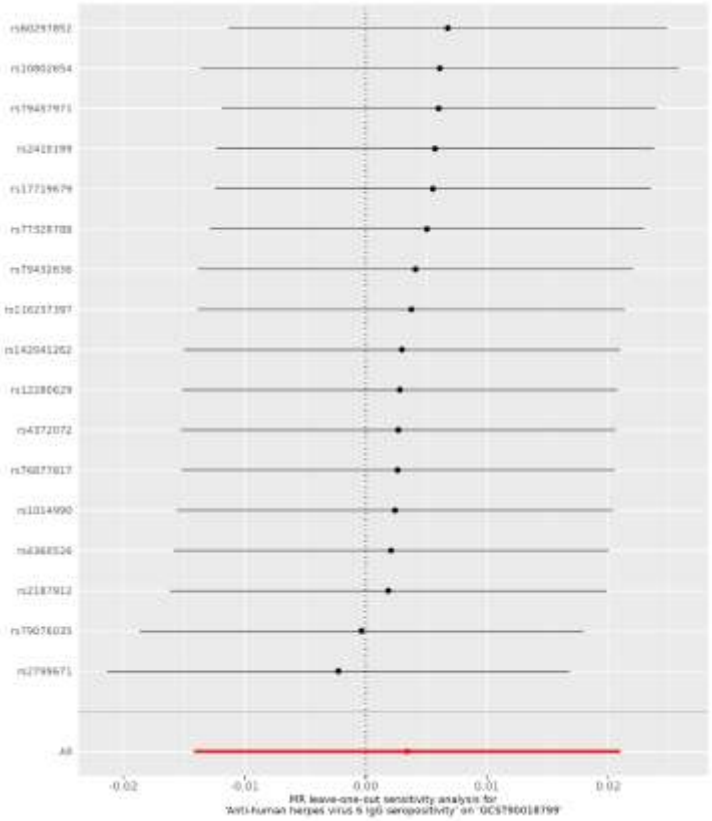
Supplementary Figure S4: The sensitivity analysis of leave-one-out (LOO) for IVs of Anti-human herpes virus 6 IgG seropositivity based on GCST004988.



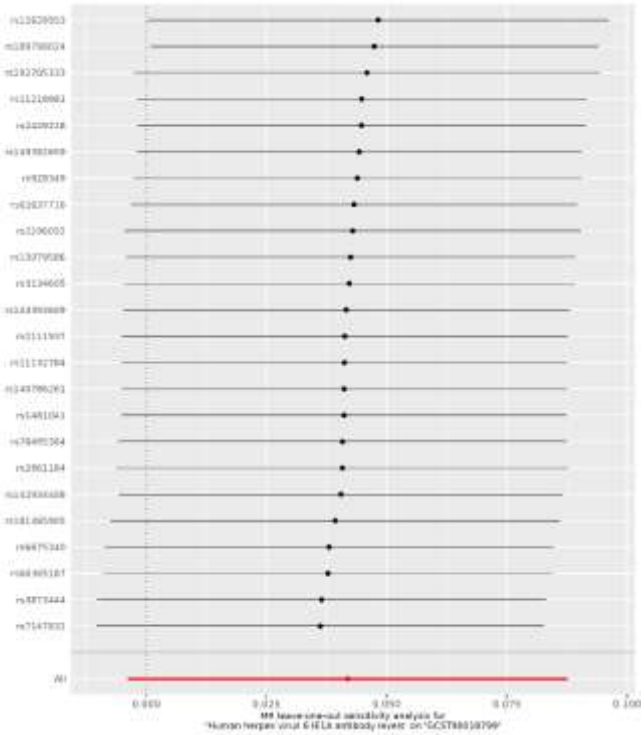
Supplementary Figure S5: The sensitivity analysis of leave-one-out (LOO) for IVs of Human herpes virus 6 IE1A antibody based on GCST004988.



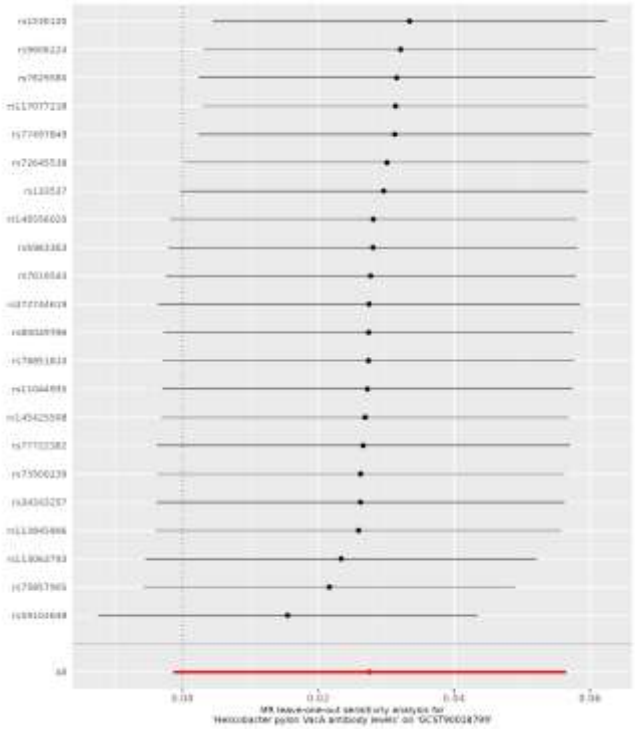
Supplementary Figure S6: The sensitivity analysis of leave-one-out (LOO) for IVs of Helicobacter pylori VacA antibody based on GCST004988.



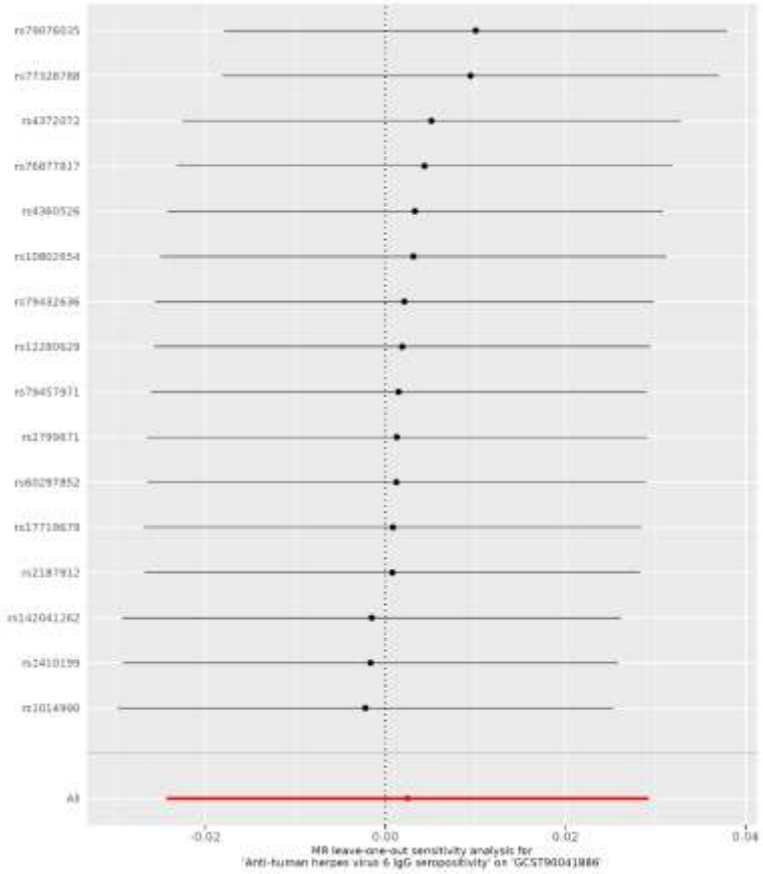
Supplementary Figure S7: The sensitivity analysis of leave-one-out (LOO) for IVs of Anti-human herpes virus 6 IgG seropositivity based on GCST90018799.



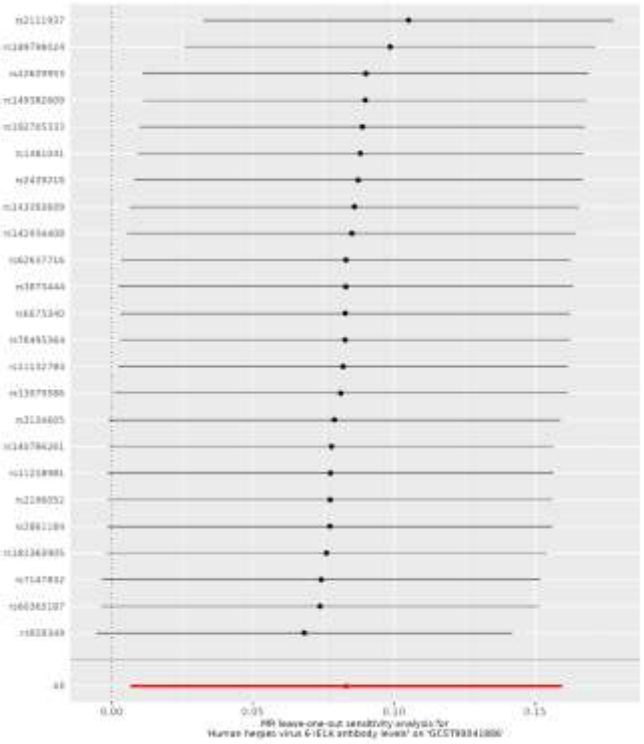
Supplementary Figure S8: The sensitivity analysis of leave-one-out (LOO) for IVs of Human herpes virus 6 IE1A antibody based on GCST90018799.



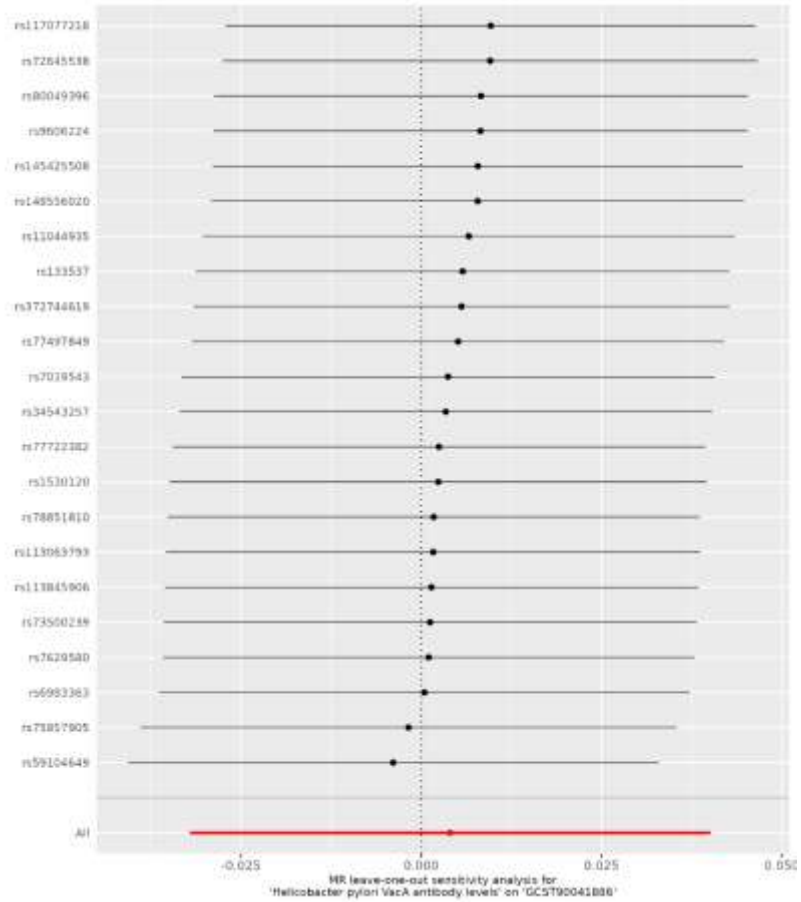
Supplementary Figure S9: The sensitivity analysis of leave-one-out (LOO) for IVs of Helicobacter pylori VacA antibody based on GCST90018799.



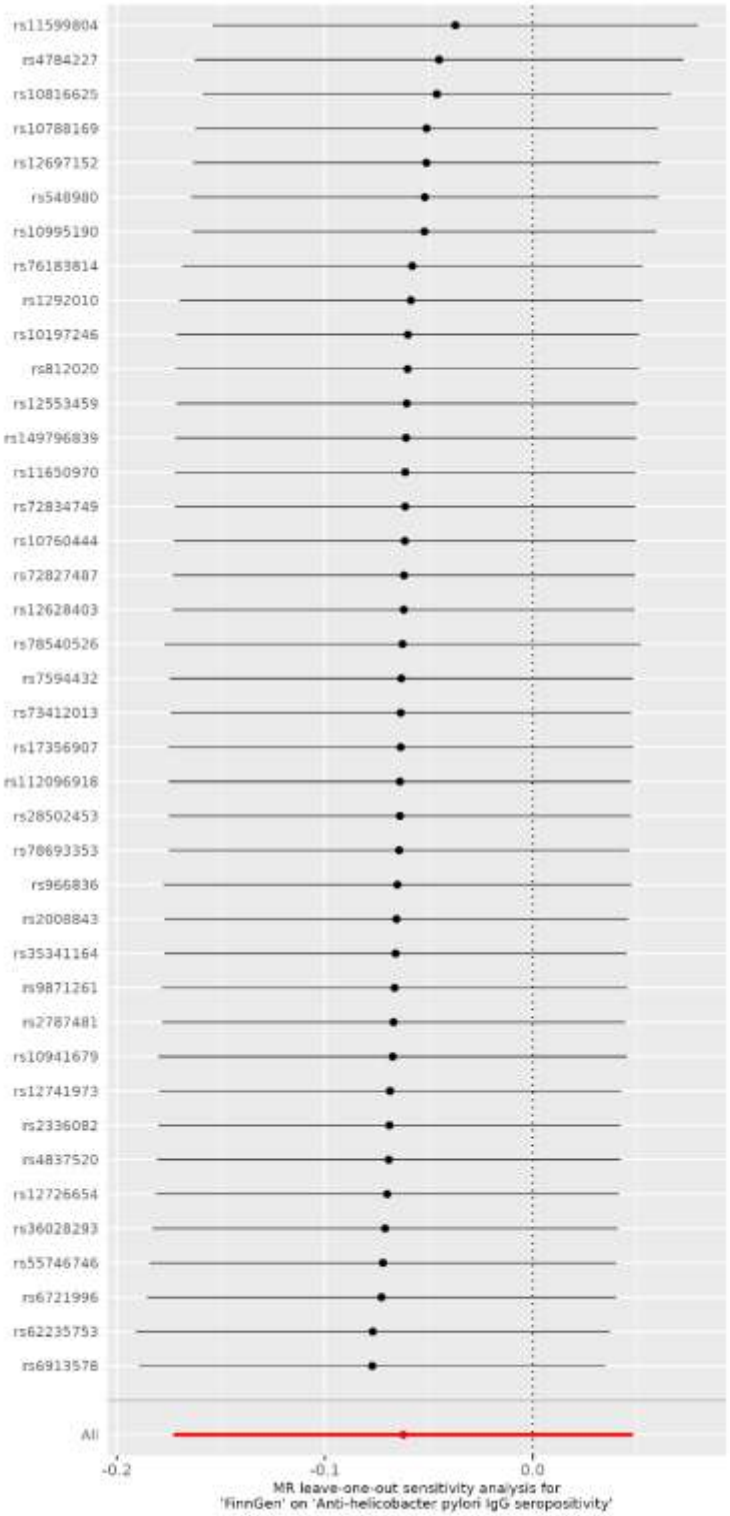
Supplementary Figure S10: The sensitivity analysis of leave-one-out (LOO) for IVs of Anti-human herpes virus 6 IgG seropositivity based on GCST90041886.



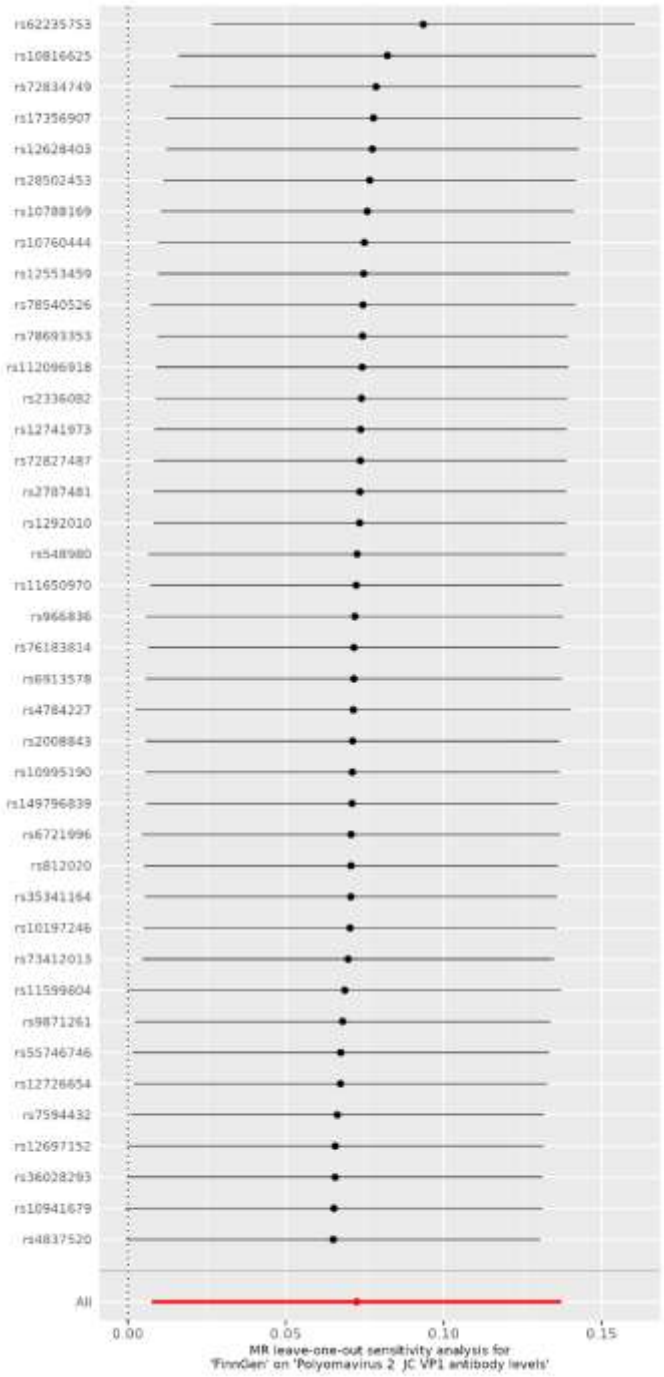
Supplementary Figure S11: The sensitivity analysis of leave-one-out (LOO) for IVs of Human herpes virus 6 IE1A antibody based on GCST90041886.



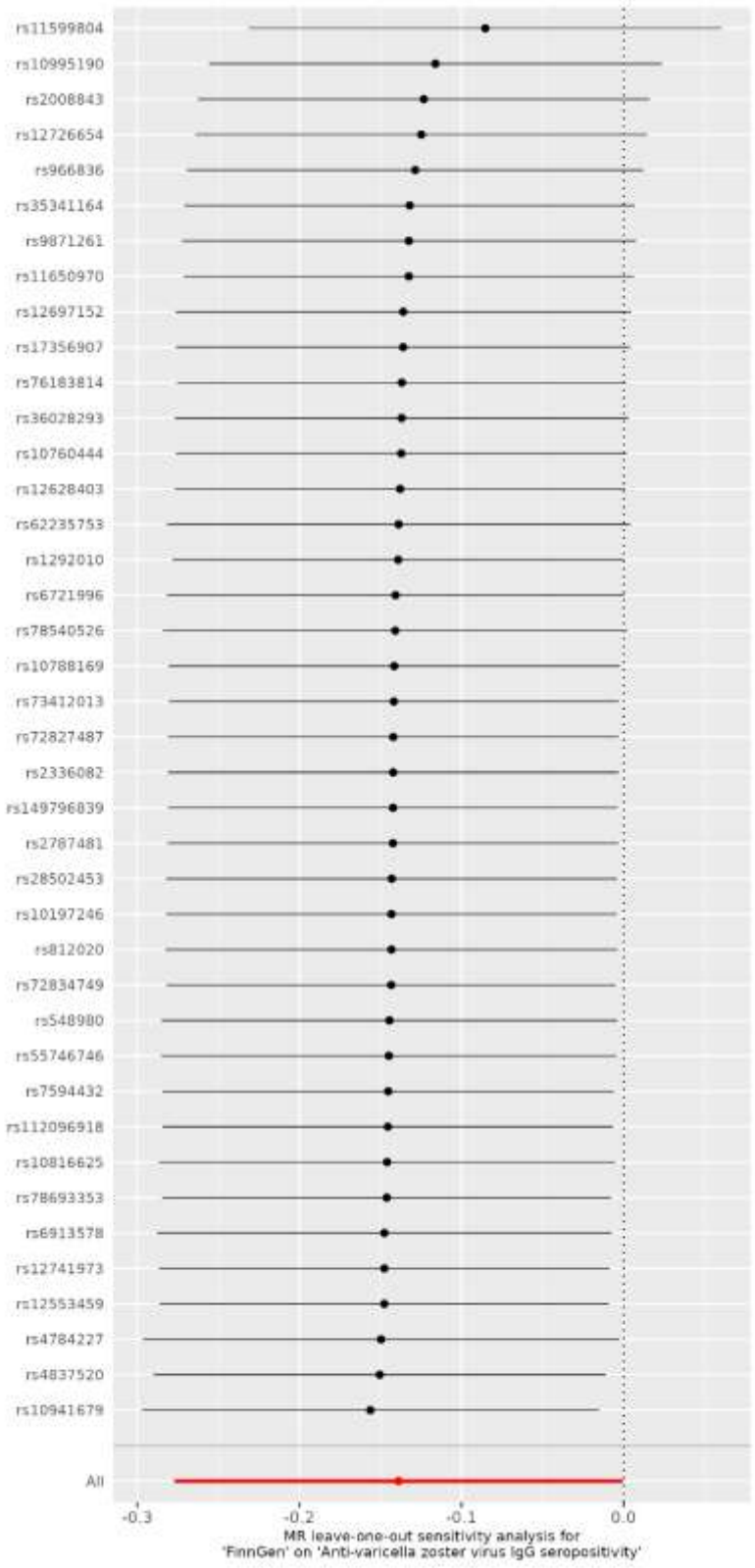
Supplementary Figure S12: The sensitivity analysis of leave-one-out (LOO) for IVs of Helicobacter pylori VacA antibody based on GCST90041886.



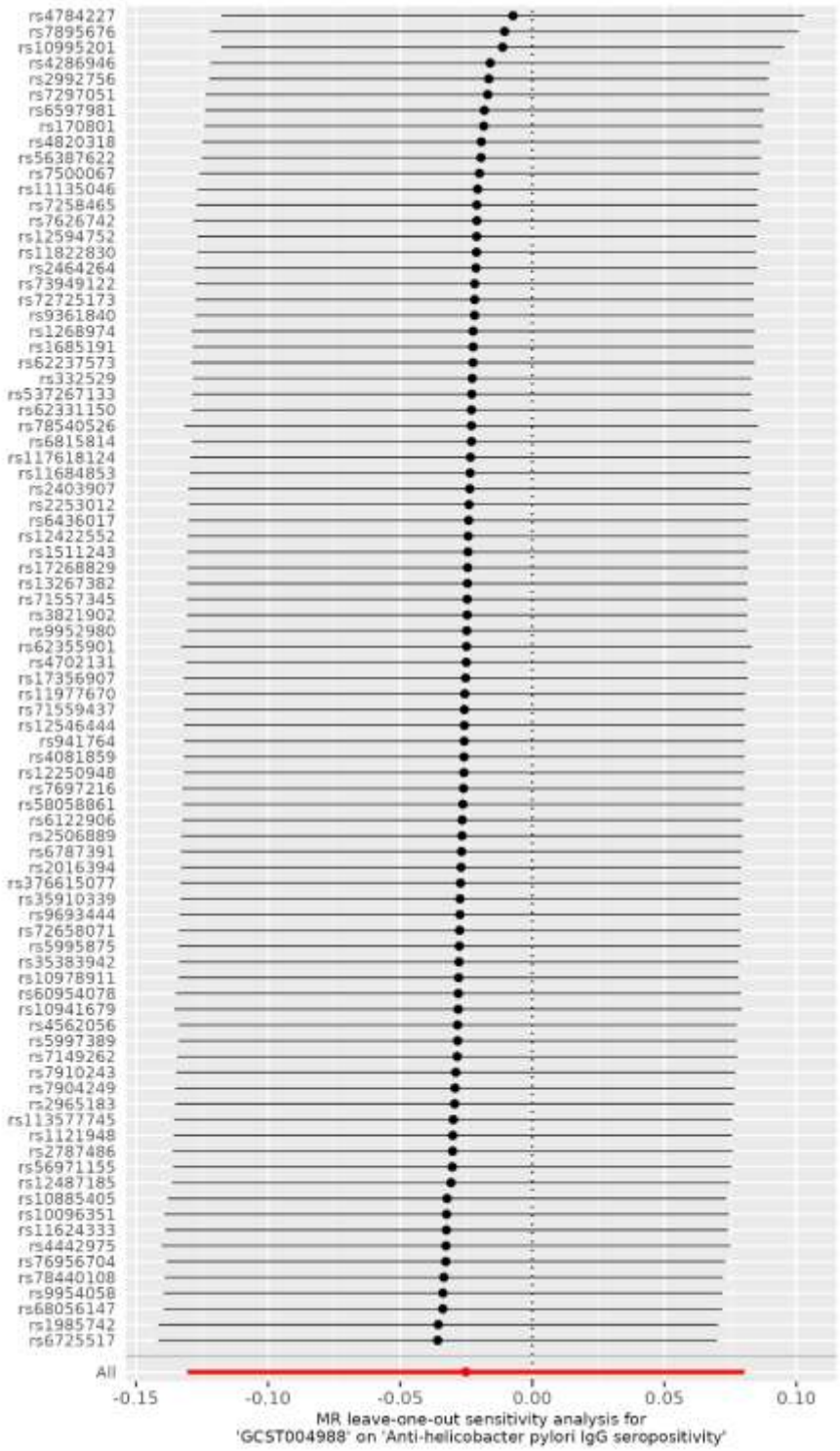
Supplementary Figure S13: The sensitivity analysis of leave-one-out (LOO) for IVs of FinnGen based on Anti-helicobacter pylori IgG seropositivity.



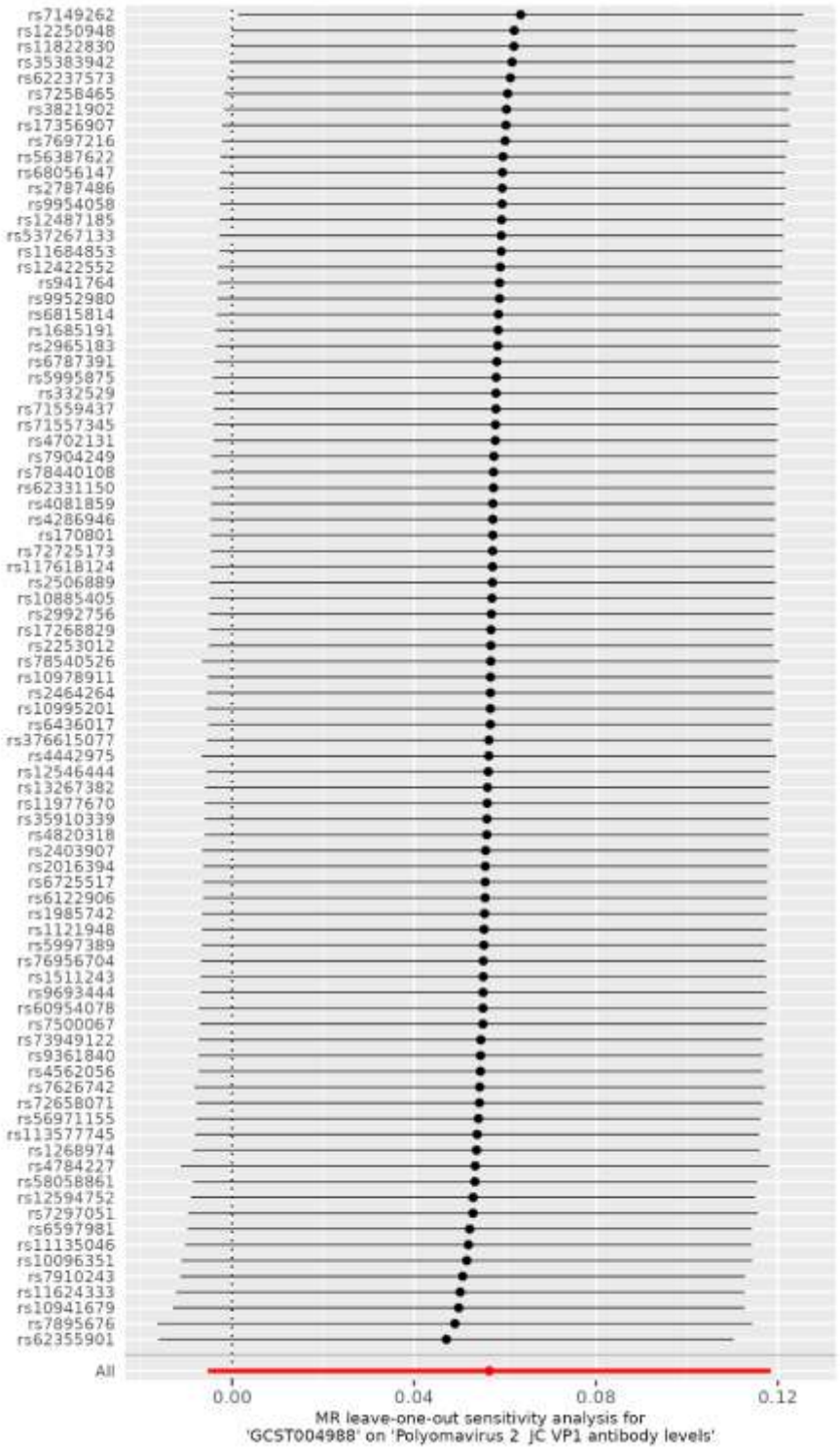
Supplementary Figure S14: The sensitivity analysis of leave-one-out (LOO) for IVs of FinnGen based on Polyomavirus 2 JC VP1 antibody levels.



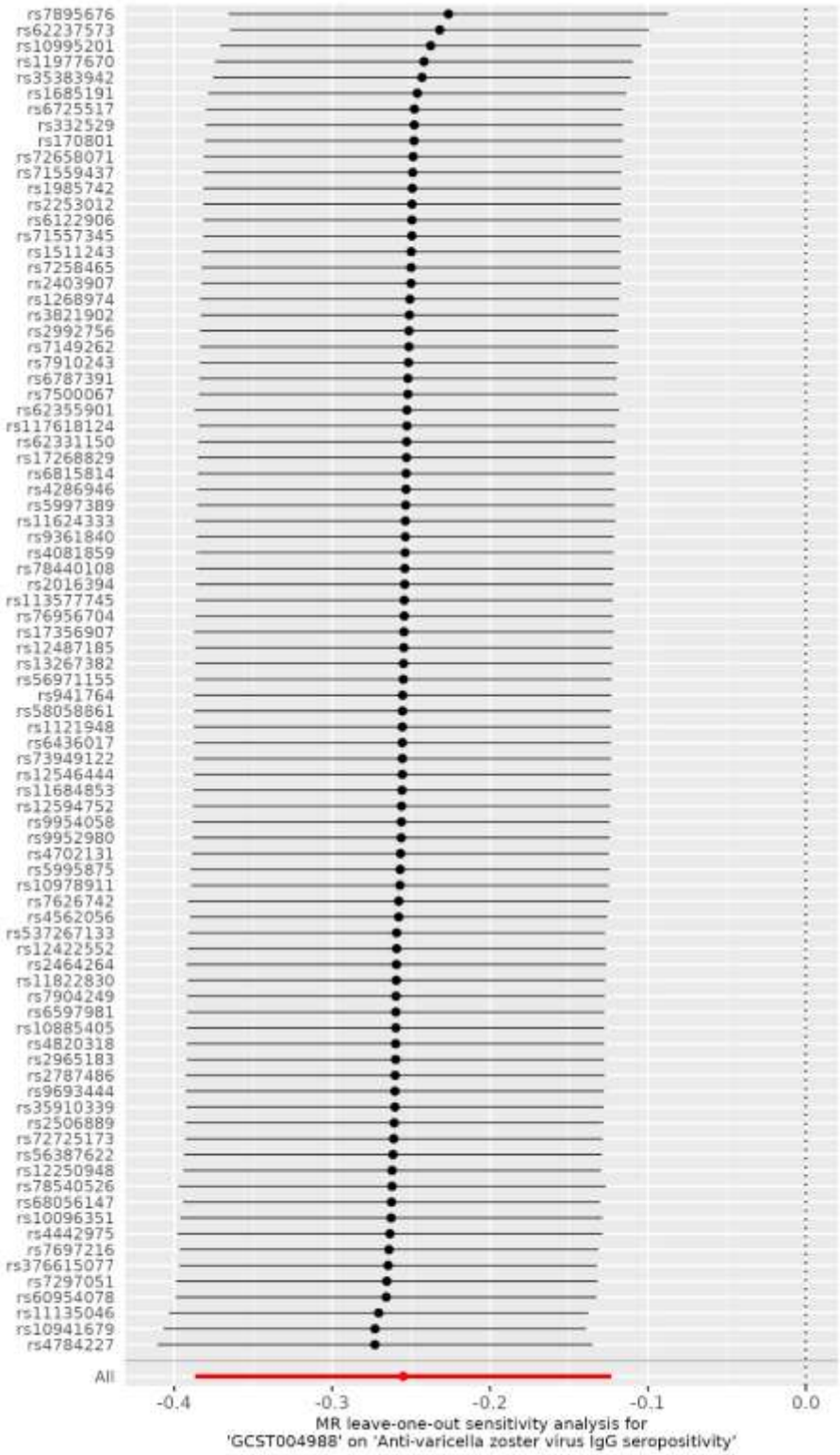
Supplementary Figure S15: The sensitivity analysis of leave-one-out (LOO) for IVs of FinnGen based on Anti-varicella zoster virus IgG seropositivity.



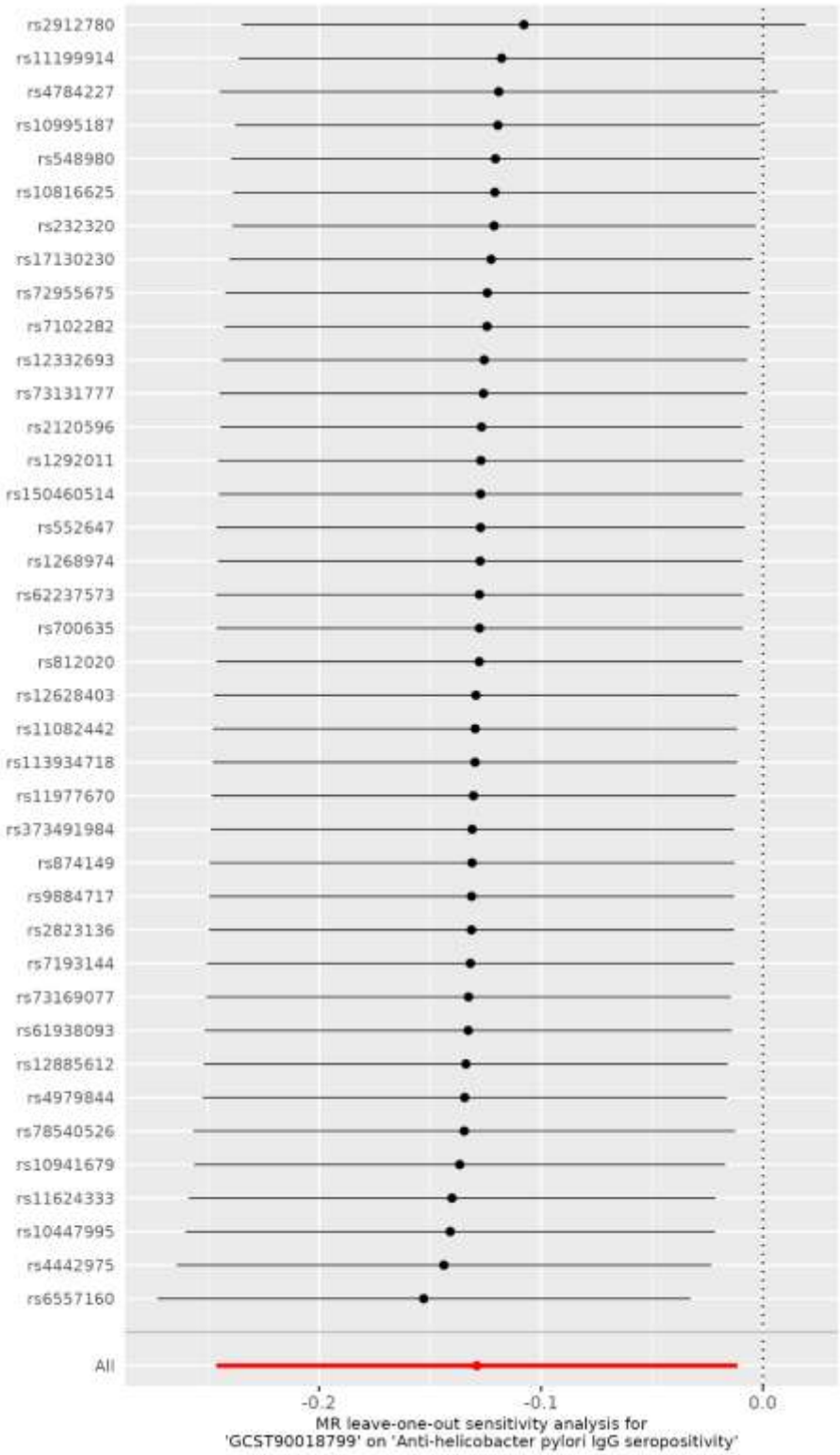
Supplementary Figure S16: The sensitivity analysis of leave-one-out (LOO) for IVs of GCST004988 based on Anti-helicobacter pylori IgG seropositivity.



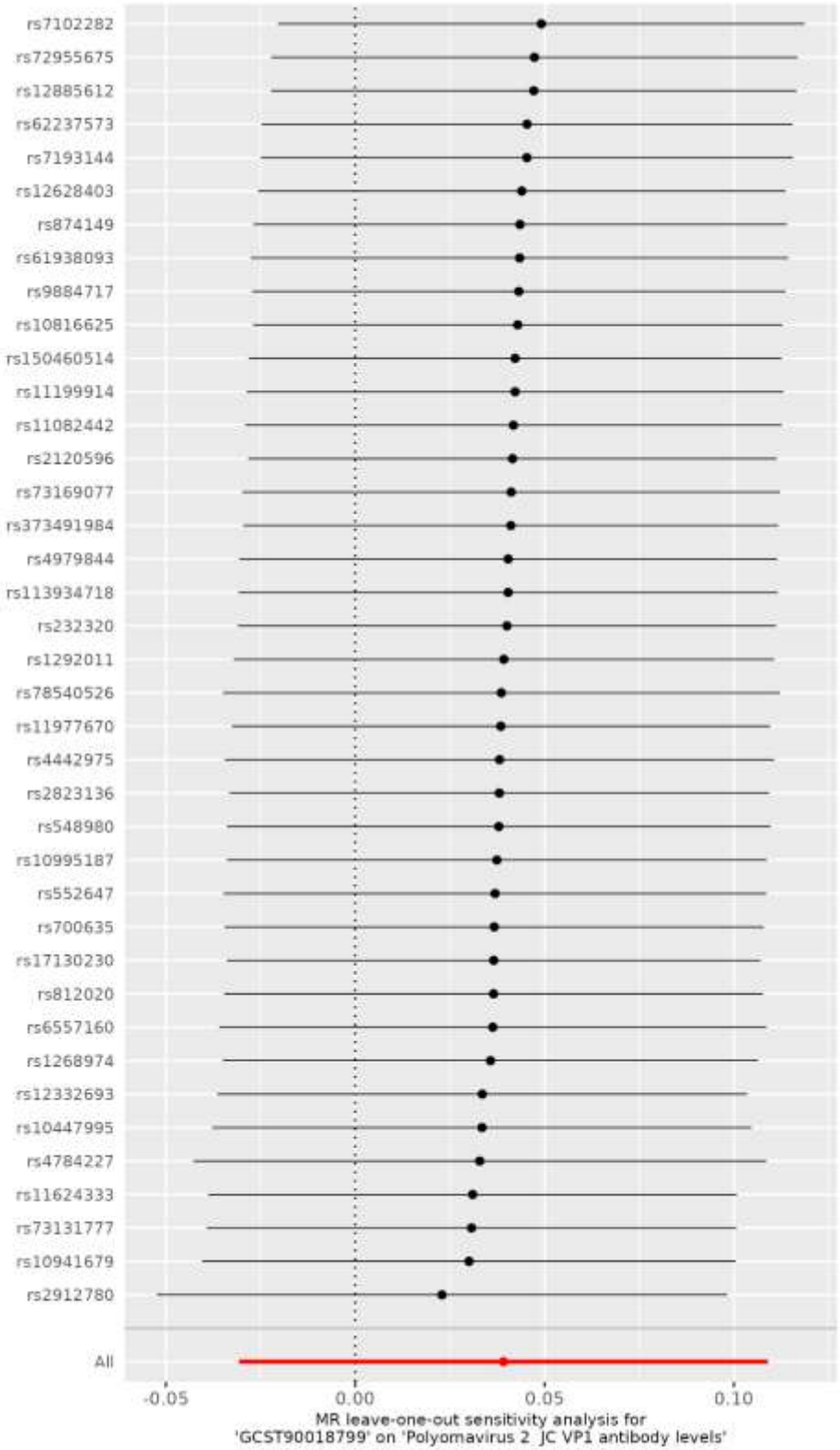
Supplementary Figure S17: The sensitivity analysis of leave-one-out (LOO) for IVs of GCST004988 based on Polyomavirus 2 JC VP1 antibody levels.



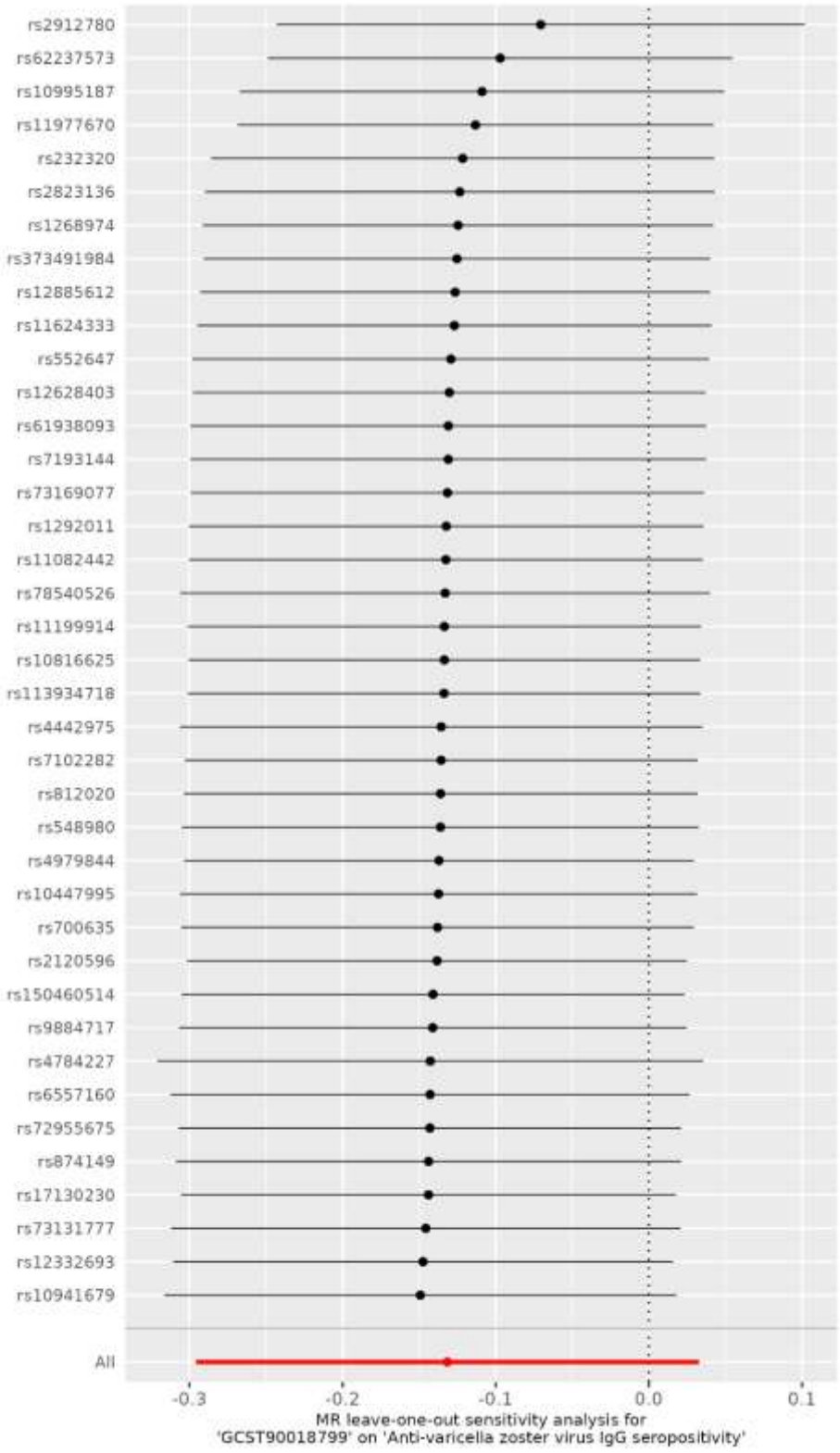
Supplementary Figure S18: The sensitivity analysis of leave-one-out (LOO) for IVs of GCST004988 based on Anti-varicella zoster virus IgG seropositivity.



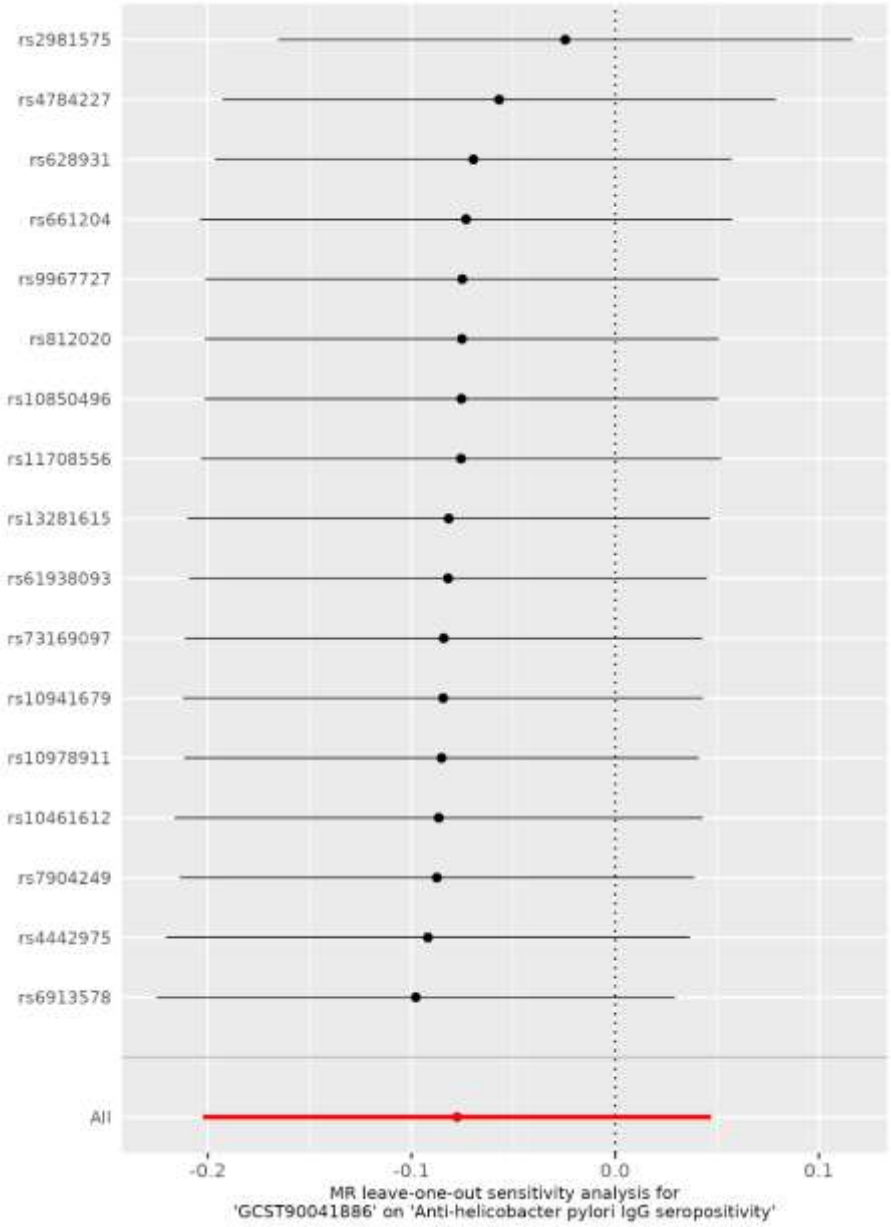
Supplementary Figure S19: The sensitivity analysis of leave-one-out (LOO) for IVs of GCST90018799 based on Anti-helicobacter pylori IgG seropositivity.



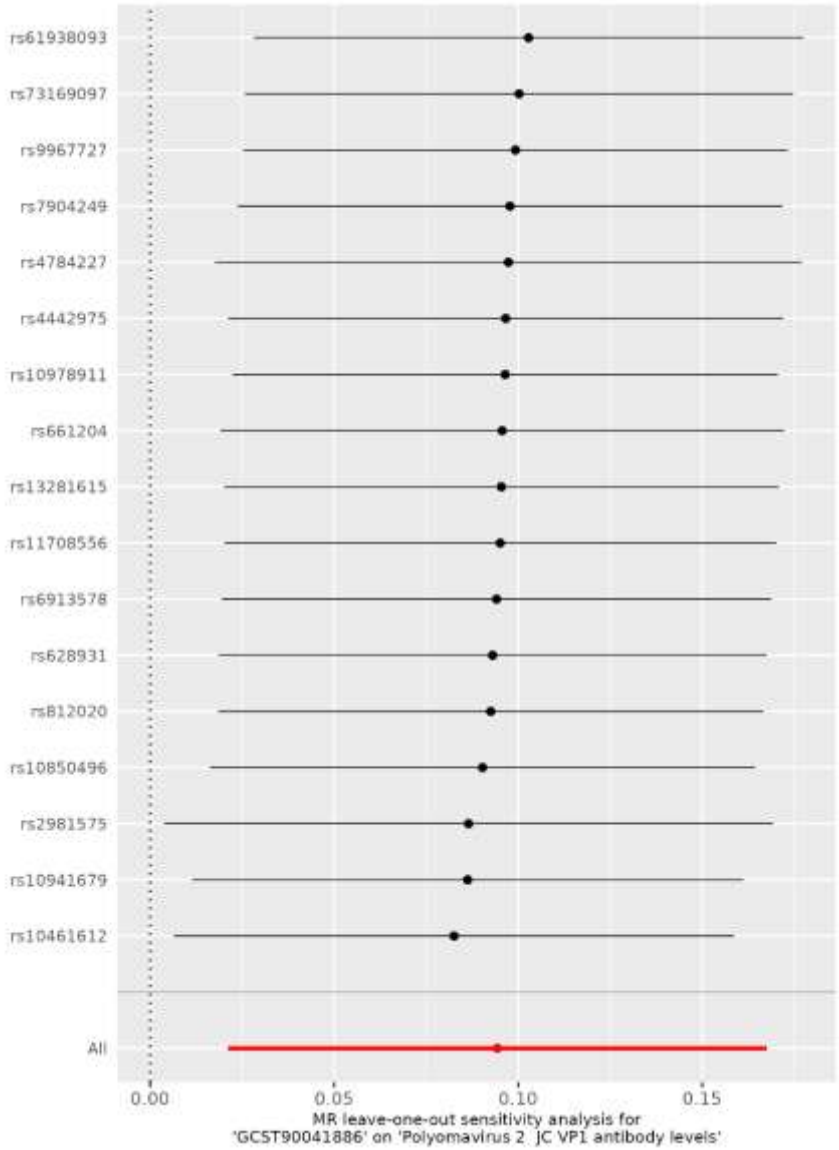
Supplementary Figure S20: The sensitivity analysis of leave-one-out (LOO) for IVs of GCST90018799 based on Polyomavirus 2 JC VP1 antibody levels.



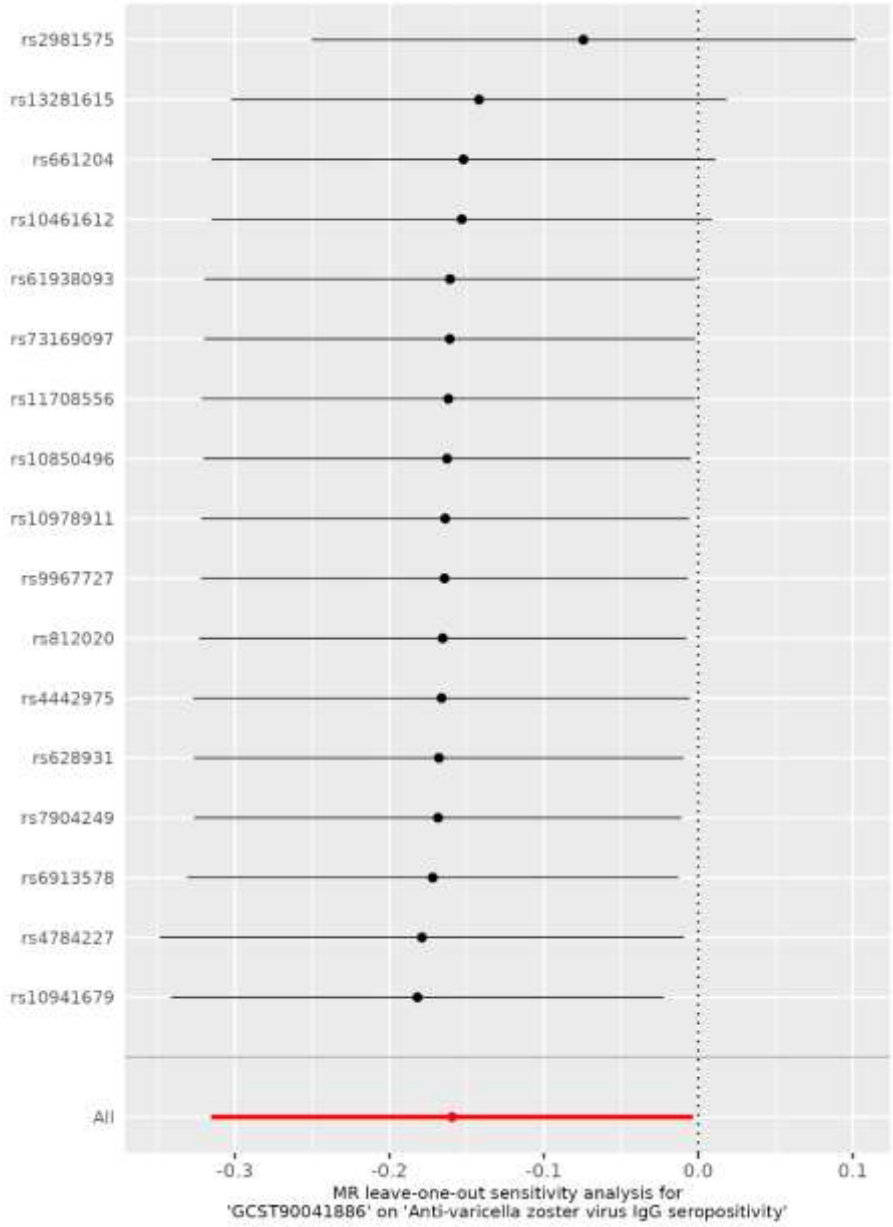
Supplementary Figure S21: The sensitivity analysis of leave-one-out (LOO) for IVs of GCST90018799 based on Anti-varicella zoster virus IgG seropositivity.



Supplementary Figure S22: The sensitivity analysis of leave-one-out (LOO) for IVs of GCST90041886 based on Anti-helicobacter pylori IgG seropositivity.



Supplementary Figure S23: The sensitivity analysis of leave-one-out (LOO) for IVs of GCST90041886 based on Polyomavirus 2 JC VP1 antibody levels.



Supplementary Figure S24: The sensitivity analysis of leave-one-out (LOO) for IVs of GCST90041886 based on Anti-varicella zoster virus IgG seropositivity.