

# Resource Summary Report

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## MR-PRESSO

RRID:SCR\_023697

Type: Tool

### Proper Citation

MR-PRESSO (RRID:SCR\_023697)

### Resource Information

**URL:** <https://github.com/rondolab/MR-PRESSO>

**Proper Citation:** MR-PRESSO (RRID:SCR\_023697)

**Description:** Software R package for performing Mendelian randomization pleiotropy residual sum and outlier method.Used to identify horizontal pleiotropic outliers in multi instrument summary level MR testing.

**Synonyms:** Mendelian Randomization Pleiotropy RESidual Sum and Outlier

**Resource Type:** software resource, software toolkit

**Defining Citation:** [PMID:29686387](#)

**Keywords:** Mendelian randomization, identify horizontal pleiotropic outliers, multi instrument summary level MR testing,

**Funding:** NIGMS R35 GM124836;  
NHLBI R01 HL139865;  
AstraZeneca ;  
Goldfinch Bio ;  
American Heart Association Cardiovascular Genome Phenome Discovery ;  
NIMH 1R01 MH094469;  
NIMH 1R01 MH107649;  
NHGRI 5U01 HG009088

**Availability:** Free, Available for download, Freely available

**Resource Name:** MR-PRESSO

**Resource ID:** SCR\_023697

**Record Creation Time:** 20230617T050225+0000

**Record Last Update:** 20250429T060250+0000

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## Ratings and Alerts

No rating or validation information has been found for MR-PRESSO.

No alerts have been found for MR-PRESSO.

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## Data and Source Information

**Source:** [SciCrunch Registry](#)

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## Usage and Citation Metrics

We found 37 mentions in open access literature.

**Listed below are recent publications.** The full list is available at [FDI Lab - SciCrunch.org](#).

Yu S, et al. (2025) Serum Urate and Atrial Fibrillation: A Bidirectional Mendelian Randomization Study. Clinical cardiology, 48(1), e70089.

Xiang R, et al. (2024) Genome-wide analyses of variance in blood cell phenotypes provide new insights into complex trait biology and prediction. medRxiv : the preprint server for health sciences.

Ruan W, et al. (2024) Assessing the causal relationship between circulating immune cells and abdominal aortic aneurysm by bi-directional Mendelian randomization analysis. Scientific reports, 14(1), 13733.

Sun J, et al. (2024) Causal relationships of grey matter structures in multiple sclerosis and neuromyelitis optica spectrum disorder: insights from Mendelian randomization. Brain communications, 6(5), fcae308.

Chen L, et al. (2024) Venous thromboembolism and severe COVID-19: a Mendelian randomization trial and transcriptomic analysis. Frontiers in immunology, 15, 1363598.

Qiu S, et al. (2024) The potential protective effect of 3-Hydroxybutyrate against aortic dissection: a mendelian randomization analysis. Nutrition & metabolism, 21(1), 75.

Nagayoshi M, et al. (2024) BMI and Cardiometabolic Traits in Japanese: A Mendelian Randomization Study. Journal of epidemiology, 34(2), 51.

Ding Y, et al. (2024) Inflammatory bowel disease activity threatens ankylosing spondylitis: implications from Mendelian randomization combined with transcriptome analysis. *Frontiers in immunology*, 15, 1289049.

Xue A, et al. (2024) Unravelling the complex causal effects of substance use behaviours on common diseases. *Communications medicine*, 4(1), 43.

Yamazaki H, et al. (2024) Evidence for a causal link between intra-pancreatic fat deposition and pancreatic cancer: A prospective cohort and Mendelian randomization study. *Cell reports. Medicine*, 5(2), 101391.

Ying Q, et al. (2024) White Matter Imaging Phenotypes Mediate the Negative Causality of Mitochondrial DNA Copy Number on Sleep Apnea: A Bidirectional Mendelian Randomization Study and Mediation Analysis. *Nature and science of sleep*, 16, 2045.

Zhou BG, et al. (2024) Non-alcoholic fatty liver disease and gestational diabetes mellitus: a bidirectional two-sample mendelian randomization study. *BMC endocrine disorders*, 24(1), 40.

Zhang X, et al. (2024) Evaluation of the Observational Associations and Shared Genetics Between Glaucoma With Depression and Anxiety. *Investigative ophthalmology & visual science*, 65(3), 12.

Gu Y, et al. (2024) Polygenic scores for autism are associated with neurite density in adults and children from the general population. *medRxiv : the preprint server for health sciences*.

Meena D, et al. (2024) Body Mass Index and Hypertension as Mediators of the Association Between Age at Menarche and Subclinical Atherosclerosis: A Sex-Specific Mendelian Randomization Analysis. *Journal of the American Heart Association*, 13(14), e032192.

Wang Z, et al. (2024) The impact of telomere length on the risk of idiopathic normal pressure hydrocephalus: a bidirectional Mendelian randomization study. *Scientific reports*, 14(1), 14713.

Wei Y, et al. (2024) Genome-wide association studies of thyroid-related hormones, dysfunction, and autoimmunity among 85,421 Chinese pregnancies. *Nature communications*, 15(1), 8004.

Chen A, et al. (2024) Exploring Causal Relationships Between Gut Microbiota and Alzheimer's Disease: A Bidirectional Mendelian Randomization Study. *Journal of Alzheimer's disease reports*, 8(1), 1031.

Ma H, et al. (2024) Phenotypic insights into genetic risk factors for immune-related adverse events in cancer immunotherapy. *Cancer immunology, immunotherapy : CII*, 74(1), 1.

Hu T, et al. (2024) Circulating Cytokines and Venous Thromboembolism: A Bidirectional Two-Sample Mendelian Randomization Study. *Thrombosis and haemostasis*, 124(5), 471.