

Table	Title	Description
1	Pathway analysis of CMRF-associated CpGs.	Enrichment analysis of genes mapped to CMRF-associated CpGs. Pathway enrichment was assessed using over-representation analysis based on Fisher's exact test with two-sided hypothesis testing. Multiple testing was controlled using the Benjamini-Hochberg false discovery rate. Columns include: CMRF(s) linked to CpGs, enriched pathway term, source database, raw and adjusted p-values, enrichment odds ratio, and contributing genes. Abbreviations: AGM, abnormal glucose metabolism; CMRF, cardiometabolic risk factor; HTG, hypertriglyceridemia.
2	Top EWAS Catalog traits linked to CMRF-associated CpGs	Top traits from the EWAS Catalog enriched among CMRF-associated CpGs. Columns include: CMRF, EWAS Catalog trait name, number of overlapping CpGs, total CMRF-associated CpGs, total CpGs for the catalog trait, and BH-adjusted p-value for one-sided hypergeometric test. Abbreviations: CMRF, cardiometabolic risk factor; COPD, chronic obstructive pulmonary disease.
3	Obesity-associated CpGs that were linked to obesity-related traits in the EWAS Catalog	Obesity-associated CpGs linked to obesity-related traits in the EWAS Catalog. Columns indicate EWAS Catalog trait names and the number of overlapping obesity-associated CpGs. Duplicates and case variations in trait names were retained to reflect Catalog entries.
4	CMRF-associated CpGs not found in the EWAS Catalog	CpGs associated with abnormal glucose that were not found in the EWAS Catalog. Columns include the cardiometabolic risk factor (CMRF) and corresponding CpG identifier.
5	Association of treatment exposures with primary cancer diagnosis.	P-values and BH-adjusted p-values are reported for logistic regression models testing assessing the association between primary cancer diagnosis and each treatment exposure. Statistical significance was evaluated using two-sided hypothesis testing. Abbreviations: BH, Benjamini-Hochberg
6	Mediator CpGs and associated traits in the EWAS Catalog	CpG mediators of treatment-CMRF associations. Mediation was assessed using regression-based causal mediation analysis, and statistical significance was evaluated using two-sided hypothesis testing of the average causal mediation effect (ACME). Includes CMRF, treatment, mediator CpG, mapped gene, associated traits from the EWAS Catalog, mediation p-value (ACME), and proportion of total effect mediated. Multiple testing was controlled using the Benjamini-Hochberg false discovery rate. Abbreviations: BMI, body mass index; COPD, Chronic obstructive pulmonary disease; CRP, C-reactive protein; RT, radiotherapy.

7	eQTMs and their associated EWAS Catalog Traits, CMRFs, and treatments	Associations between DNA methylation at CpG sites and gene expression were tested using linear regression with two-sided hypothesis testing, and multiple testing was controlled using the Benjamini–Hochberg false discovery rate. Columns include the eQTM CpG, target gene, beta coefficient, and BH-adjusted p-value, followed by annotations for associations with traits in the EWAS Catalog, CMRFs, and cancer treatments. Abbreviations: BMI, body mass index; eQTM, expression quantitative trait methylation.
8	Baseline exclusion model	Selection model for exclusion. Logistic regression exclusion (1 = no WGS for ancestry inference or missing radiotherapy details; 0 = included) on pre-exposure covariates: age at diagnosis, sex, and diagnosis group. Estimates are log-odds; positive values indicate higher odds of exclusion. Two-sided Wald p-values are shown. No covariate was associated with exclusion. For interpretability, we additionally report odds ratios and 95% CIs. Abbreviations: CI confidence interval; OR, odds ratio.
9	Secondary exclusion model	Logistic regression of exclusion (1 = no WGS for ancestry inference or missing radiotherapy details; 0 = included) on the baseline covariates from Table 8 (age at diagnosis, sex, diagnosis group) plus chemotherapy class indicators (alkylating agents, anthracyclines, antimetabolites, asparaginase, corticosteroids, epipodophyllotoxins, vinca alkaloids). Estimates are log-odds; two-sided Wald p-values are reported, with odds ratios and 95% CIs provided for interpretability. Treatment indicators were not associated with exclusion, and results were unchanged from the baseline model. Abbreviations: CI confidence interval; OR, odds ratio.