

Supplementary Table 3. Post-scan extension summary and active covariate set

Context for the clinical event extension and the final flagship model specification.

A. Final flagship active covariates

Item	Value
Final flagship active covariates	cov_sex; cov_age; cov_date_num; cov_ethnicity; cov_bmi; cov_smoking; cov_alcohol; cov_diabetes; cov_hypertension; cov_sbp; cov_dbp; covses_townsend; covses_qualifications; covses_income; covses_age_edu; covses_med_count; covses_other_rx; covses_cardiomet_med

B. Post-scan dementia extension

Item	Value
Participants with imaging date	102,730
All-cause dementia events after imaging	234
Vascular dementia events after imaging	39
Strict haemodynamic-complete branch	0 analysable events

The post-scan extension was retained as a clinical context layer. The final flagship model used the 18 active covariates listed above.