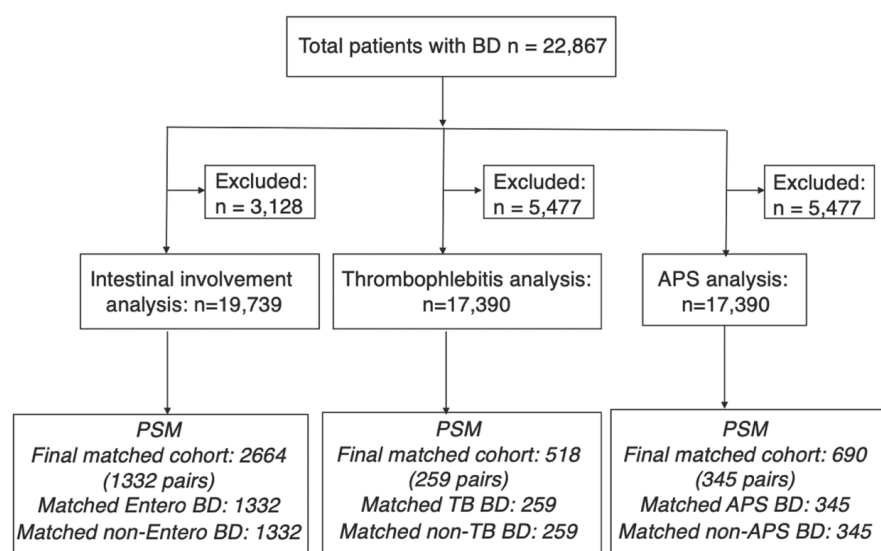




Supplementary Fig. S1. Flowchart of patient selection and cohort matching. The step-by-step attrition process for identifying the study population from the TriNetX database is illustrated. Separate analyses were conducted for three clinical phenotypes of BD: intestinal involvement, thrombophlebitis, and antiphospholipid syndrome. For each phenotype, control cohorts were established using 1:1 propensity score matching.

APS: antiphospholipid syndrome; BD: Behçet's disease; PSM: propensity score matching; TB: thrombophlebitis.

Supplementary Table S1. Code lists.

Category	Characteristic	ICD-10-CM/Medication Classification Code
Study Population	Behçet's disease (BD)	M35.2
Outcome	Deep vein thrombosis (DVT)	I82
Key Risk Factors	Intestinal involvement	K52.8, K52.9, K63.3
	Thrombophlebitis	I80
	Antiphospholipid syndrome	D68.61
Comorbidities	Overweight and obesity	E66
	Type 2 diabetes mellitus	E11
	Essential hypertension	I10
	Nicotine dependence	F17
Medication	Glucocorticoids	HS051 (VA Class)
Exclusion Criteria	Crohn's disease	K50
	Ulcerative colitis	K51

Note on intestinal involvement: although intestinal involvement was defined using ICD-10 codes K52.8, K52.9, and K63.3 for baseline cohort identification, multivariable Cox regression analysis showed that only noninfective gastroenteritis and colitis, unspecified (K52.9) was an independent risk factor for deep vein thrombosis.

BD: Behçet's disease; DVT: deep vein thrombosis; ICD-10-CM: International Classification of Diseases, Tenth Revision, Clinical Modification.

Supplementary Table S2. Baseline characteristics of propensity score-matched cohorts of patients with Behçet's disease.

(a)							
Variable class	Characteristic	Before matching			After matching		
		Without intestinal involvement (n=15,227)	With intestinal involvement (n=1,339)	SMD	Without intestinal involvement (n=1,332)	With intestinal involvement (n=1,332)	SMD
Demographics	Age: mean (SD), years	40.2 (17.4)	43.5 (18.1)	0.186	43.9 (18.3)	43.4 (18.0)	0.029
	Sex: male, n (%)	4,744 (31.2)	297 (22.2)	0.204	300 (22.5)	296 (22.2)	0.007
Ethnicity, n (%)	Not Hispanic or Latino	8,763 (57.5)	928 (69.3)	0.246	937 (70.3)	923 (69.3)	0.023
	Hispanic or Latino	624 (4.1)	75 (5.6)	0.070	62 (4.7)	74 (5.6)	0.041
	Unknown ethnicity	5,840 (38.4)	336 (25.1)	0.288	333 (25.0)	335 (25.2)	0.003
Comorbidities, n (%)	Overweight and obesity	748 (5.1)	238 (17.8)	0.404	245 (18.4)	233 (17.5)	0.023
	Type 2 diabetes mellitus	689 (4.5)	178 (13.3)	0.312	164 (12.3)	172 (12.9)	0.018
	Essential hypertension	1,635 (10.7)	405 (30.2)	0.498	422 (31.7)	398 (29.9)	0.039
	Nicotine dependence	615 (4.0)	148 (11.1)	0.268	117 (8.8)	146 (11.0)	0.073
	Thrombophlebitis	114 (0.7)	33 (2.5)	0.137	29 (2.2)	30 (2.3)	0.005
	Antiphospholipid syndrome	90 (0.6)	36 (2.7)	0.186	25 (1.9)	32 (2.4)	0.036
	Glucocorticoids	4,952 (32.5)	923 (68.9)	0.782	918 (68.9)	916 (68.8)	0.003
(b)							
Variable class	Characteristic	Before matching			After matching		
		Without thrombophlebitis (n=17,131)	With thrombophlebitis (n=259)	SMD	Without thrombophlebitis (n=257)	With thrombophlebitis (n=257)	SMD
Demographics	Age: mean (SD), years	40.2 (17.4)	47.1 (17.4)	0.395	47.4 (17.6)	47.0 (17.4)	0.025
	Sex: male, n (%)	5,164 (30.1)	104 (40.2)	0.211	99 (38.5)	102 (39.7)	0.024
Ethnicity, n (%)	Not Hispanic or Latino	10,095 (58.9)	148 (57.1)	0.036	157 (61.1)	147 (57.2)	0.079
	Hispanic or Latino	733 (4.3)	10 (3.9)	0.021	10 (3.9)	10 (3.9)	0.000
	Unknown ethnicity	6,303 (36.8)	102 (39.4)	0.053	90 (35.0)	102 (39.7)	0.097
Comorbidities, n (%)	Overweight and obesity	958 (5.6)	40 (15.4)	0.325	39 (15.2)	38 (14.8)	0.011
	Type 2 diabetes mellitus	824 (4.8)	43 (16.6)	0.389	38 (14.8)	41 (16.0)	0.032
	Essential hypertension	1,935 (11.3)	93 (35.9)	0.606	93 (36.2)	91 (36.4)	0.016
	Nicotine dependence	714 (4.5)	30 (11.6)	0.262	28 (10.9)	30 (11.7)	0.025
	Antiphospholipid syndrome	112 (0.7)	13 (5.0)	0.265	10 (3.9)	11 (4.3)	0.020
	Intestinal involvement	1,592 (9.3)	67 (25.9)	0.461	67 (26.1)	65 (25.3)	0.017
	Glucocorticoids	5,829 (34.0)	172 (66.4)	0.685	181 (70.4)	170 (66.1)	0.092
(c)							
Variable class	Characteristic	Before matching			After matching		
		Without APS (n=17,045)	With APS (n=345)	SMD	Without APS (n=341)	With APS (n=341)	SMD
Demographics	Age: mean (SD), years	40.2 (17.5)	43.4 (15.4)	0.194	44.2 (17.0)	43.3 (15.4)	0.052
	Sex: male, n (%)	5,162 (30.3)	106 (30.7)	0.010	104 (30.5)	103 (30.2)	0.006
Ethnicity, n (%)	Not Hispanic or Latino	10,043 (58.9)	201 (58.3)	0.013	200 (58.7)	200 (58.7)	0.000
	Hispanic or Latino	728 (4.3)	15 (4.3)	0.004	10 (2.9)	15 (4.4)	0.078
	Unknown ethnicity	6,274 (36.8)	129 (37.4)	0.012	132 (38.7)	126 (37.0)	0.036
Comorbidities, n (%)	Overweight and obesity	958 (5.6)	40 (15.4)	0.325	39 (15.2)	38 (14.8)	0.011
	Type 2 diabetes mellitus	819 (4.8)	45 (13.0)	0.292	37 (10.9)	44 (12.9)	0.063
	Essential hypertension	1,927 (11.3)	86 (24.9)	0.359	88 (25.8)	83 (24.3)	0.034
	Nicotine dependence	762 (4.5)	40 (11.6)	0.264	33 (9.7)	39 (11.4)	0.057
	Thrombophlebitis	118 (0.7)	30 (8.7)	0.385	23 (6.7)	26 (7.6)	0.034
	Intestinal involvement	1,977 (11.6)	94 (27.2)	0.407	91 (26.7)	94 (27.6)	0.020
	Glucocorticoids	5,798 (34.0)	199 (57.7)	0.489	209 (61.3)	195 (57.2)	0.084

Baseline clinical and demographic characteristics are compared between pairs of propensity score-matched cohorts based on clinical phenotypes: (a) patients with versus without intestinal involvement, (b) patients with versus without a history of thrombophlebitis, and (c) patients with versus without comorbid APS. Data are presented as counts (percentages) or means (standard deviations).

All standardised mean differences were <0.1, indicating excellent covariate balance after matching.

APS: antiphospholipid syndrome; SD: standard deviation; SMD: standardised mean difference.

Supplementary Table S3. Sex-stratified subgroup analyses for DVT development in patients with Behçet's disease.

Phenotype/predictor	Sex	Cohort size (n)	DVT events, n (%)	Log-Rank p-value	Hazard Ratio (95% CI)
APS (Unadjusted)	Female	non-APS: 15,445 APS: 259	380 (2.5%) 46 (17.8%)	< 0.0001	7.81 (5.78–10.64)
	Male	non-APS: 7,213 APS: 111	252 (3.5%) 44 (39.6%)	< 0.0001	14.08 (10.20–19.23)
Thrombophlebitis (PSM)	Female	non-phlebitis: 220 phlebitis: 220	14 (6.4%) 59 (26.8%)	< 0.0001	4.29 (2.40–7.69)
	Male	non-phlebitis: 133 phlebitis: 133	16 (12.0%) 42 (31.6%)	0.0002	2.80 (1.57–4.98)
Intestinal BD (PSM)	Female	non-intestinal: 1,143 intestinal: 1,143	52 (4.6%) 84 (7.4%)	0.008	1.59 (1.13–2.25)
	Male	non-intestinal: 345 intestinal: 345	17 (4.9%) 25 (7.3%)	0.244	1.44 (0.78–2.67)

DVT incidence was evaluated over a 10-year follow-up period. For APS, unadjusted hazard ratios were calculated owing to cohort size constraints after sex stratification. For Thrombophlebitis and Intestinal BD, 1:1 PSM was performed separately for each sex, adjusting for age, ethnicity, body mass index, hypertension, diabetes mellitus, tobacco use, and glucocorticoid use.

Subgroup analyses were conducted during the revision process (October 1, 2026) on the TriNetX platform; minor variations in total baseline cohort numbers reflect the dynamic, real-time updates of the database.

APS: antiphospholipid syndrome; BD: Behçet's disease; CI: confidence interval; DVT: deep vein thrombosis; PSM: propensity score matching.