

Supplemental Material

Supplemental Table 1. Sensitivity analyses using varying definitions of the outcome (1-5), specific exclusion criteria (6-12), and multiple imputation (13-16) from the fully adjusted model^a

	Psoriasis, Hazard Ratio (95%CI)			
	n	≤2% BSA	3-10% BSA	>10% BSA
Varying definitions of T2DM ^b :				
(1) Two Diagnostic Codes	75421	1.25 (1.05-1.48)	1.02 (0.81-1.27)	1.60 (1.19-2.15)
(2) One Diagnostic Code + One Diabetic Drug Code	75421	1.32 (0.93-1.89)	1.208 (0.79-1.86)	2.21 (1.31-3.70)
(3) One Diagnostic Code + One Laboratory Value	75421	1.22 (1.00-1.48)	0.99 (0.77-1.27)	1.64 (1.19-2.26)
(4) One Diagnostic Code	75421	1.18 (1.02-1.37)	0.98 (0.81-1.19)	1.53 (1.18-1.98)
(5) Any One of: Diagnostic Code, Diabetic Drug Code, or Laboratory Value	75421	1.14 (0.98-1.31)	1.06 (0.89-1.26)	1.61 (1.27-2.05)
Excluding patients:				
(6) With any history of psoriatic arthritis	74743	1.22 (1.02-1.47)	0.94 (0.74-1.20)	1.42 (1.00-2.23)
(7) With any history of Systemic Corticosteroids	68243	1.22 (1.01-1.48)	0.99 (0.78-1.26)	1.57 (1.15-2.16)
(8) With any history or use during observation period of Biologic, Systemic or Phototherapy	74433	1.19 (1.00-1.43)	0.99 (0.79-1.26)	1.42 (0.98-2.04)
(9) Registered within 9 months prior to index date	73084	1.20 (1.01-1.44)	1.03 (0.83-1.29)	1.61 (1.20-2.15)
(10) With T2DM diagnosed within 1 year after index date	70456	1.21 (1.01-1.44)	1.01 (0.81-1.26)	1.64 (1.23-2.18)
(11) With less than 1 GP visit per year, on average	73595	1.20 (1.01-1.43)	1.01 (0.81-1.26)	1.63 (1.22-2.17)
(12) With any history or use during observation period of Biologic or Systemic therapies	74786	1.19 (1.00-1.43)	1.00 (0.79-1.25)	1.47 (1.06-2.04)
BMI Missing Data Handling:				
(13) Exclude missing BMI data	75421	1.21 (1.01-1.44)	1.01 (0.81-1.26)	1.64 (1.23-2.18)
(14) Multiple Imputation of missing BMI	84723	1.21 (1.018-1.44)	1.10 (0.89-1.36)	1.67 (1.26-2.22)
(15) Missing BMI Data as separate category	84723	1.18 (1.00-1.41)	1.08 (0.87-1.33)	1.60 (1.20-2.12)
(16) BMI as a Continuous measure (vs. categorical)	75421	1.21 (1.02-1.44)	1.00 (0.80-1.25)	1.65 (1.24-2.20)

^a Fully Adjusted Model was adjusted for age, sex, and body mass index.

^b Type 2 Diabetes Mellitus defined by: (1) Two Diagnostic READ codes; (2) One Diagnostic READ code and 1 Diabetic Drug code; (3) One Diagnostic READ code and 1 Laboratory value of HbA1c ≥6.5% or ≥48mmol/mol.