

Table 1. Characteristics of incident gout patients and controls. Values are numbers (percentages) unless stated otherwise.

Characteristics	Men			Women		
	Gout (n= 33012)	Controls (n=33012)	P value	Gout (n=12366)	Controls (n=12366)	P value
Mean age (SD)	59.9 (14.7)	59.8 (14.8)	0.49	69.4 (13.8)	69.3 (13.9)	0.66
BMI (kg/m²)			<0.001			<0.001
<18.5	176 (0.55)	676 (2.18)		214 (1.78)	543 (4.64)	
18.5 – 24.9	6858 (21.33)	11831 (38.10)		3117 (25.94)	5021 (42.94)	
25.0 – 29.9	14585 (45.36)	13091 (42.16)		4111 (34.22)	3863 (33.03)	
≥30	10533 (32.76)	5453 (17.56)		4572 (38.06)	2267 (19.39)	
Smoking			<0.001			<0.001
Non-smoker	8867 (26.86)	8040 (24.35)		4336 (35.06)	4389 (35.49)	
Current smoker	5737 (17.38)	4915 (14.89)		1925 (15.57)	1546 (12.50)	
Ex-smoker	18408 (55.76)	20057 (60.76)		6105 (49.37)	6431 (52.01)	
Alcohol consumption (units/week)			<0.001			<0.001
Never/ Ex-drinker	2361 (7.15)	3359 (10.18)		3185 (25.76)	3333 (26.95)	
Current 1– 9	16526 (50.06)	19526 (59.15)		7863 (63.59)	8068 (65.24)	
Current ≥10	14125 (42.79)	10127 (30.68)		1318 (10.66)	965 (7.80)	
Mean Charlson score (SD)	2.65 (1.22)	1.99 (1.39)	<0.001	2.31 (1.26)	2.98 (1.39)	<0.001
Median No. of visits to GP (IQR)	14 (5–25)	6 (1–17)	<0.001	24 (15–35)	14 (5–25)	<0.001
Comorbidities^a						
Hypertension	10401 (31.51)	5266 (15.95)	<0.001	5591 (45.21)	3312 (26.78)	<0.001
Ischaemic heart disease	4582 (13.88)	2606 (7.89)	<0.001	1926 (15.57)	919 (7.43)	<0.001
Cerebrovascular disease	1759 (5.33)	1263 (3.83)	<0.001	997 (8.06)	639 (5.17)	<0.001
Heart failure	2456 (7.44)	660 (2.00)	<0.001	1520 (12.29)	481 (3.89)	<0.001
Vulvular heart disease	644 (1.95)	283 (0.86)	<0.001	436 (3.53)	158 (1.28)	<0.001
Hyperthyroidism	116 (0.35)	71 (0.22)	0.001	151 (1.22)	130 (1.03)	0.21
Medications^b						
Aspirin	6380 (19.33)	4029 (12.20)	<0.001	3125 (25.27)	1820 (14.72)	<0.001
Anticoagulant	1896 (5.74)	6.47 (1.96)	<0.001	930 (7.52)	259 (2.09)	<0.001
Statin	5049 (15.29)	2776 (8.41)	<0.001	2189 (17.70)	1066 (8.62)	<0.001
Diuretics	9761 (29.57)	3706 (11.23)	<0.001	7443 (60.19)	3307 (26.74)	<0.001
Beta antagonist	3877 (11.74)	1851 (5.61)	<0.001	2062 (16.67)	1019 (8.24)	<0.001
Calcium channel antagonist	4518 (13.69)	2634 (7.98)	<0.001	2374 (19.20)	1443 (11.67)	<0.001
ACEi/ ARB	7088 (21.47)	3055 (9.25)	<0.001	3774 (30.52)	10605 (12.98)	<0.001
Glucocorticoid	1404 (4.25)	937 (2.84)	<0.001	993 (8.03)	559 (4.52)	<0.001

Footnote: a. selected comorbidities b. selected medications

Abbreviation: ACEi, angiotensin converting enzyme antagonist; ARB, Angiotensin receptor antagonist; IQR, interquartile range; SD, standard deviation.

Table 2. Prevalence and odds ratios for atrial fibrillation by gout status, stratified by sex

	Gout	AF prevalence (%; 95% CI)	Matched OR (95% CI) ^a	Adjusted OR (95% CI) ^b
Overall	Yes	7.42 (7.18–7.66)	2.82 (2.63–3.04)	1.44 (1.28–1.63)
	No	2.83 (2.67–2.98)	Reference	Reference
Men	Yes	6.69 (6.42–6.70)	2.85 (2.61–3.11)	1.43 (1.23–1.67)
	No	2.49 (2.33–2.67)	Reference	Reference
Women	Yes	9.36 (8.85–9.88)	2.79 (2.47–3.16)	1.41 (1.13–1.78)
	No	3.71 (3.39–4.06)	Reference	Reference

Footnote: a. Matched for age, sex, general practice, index year and registration year. b. additionally adjusted for body mass index, smoking, alcohol consumption, ischaemic heart disease, heart failure, heart valve disease, hyperthyroidism and other comorbidities and medications.

Table 3. Incidence of and hazard ratios for atrial fibrillation by gout status, stratified by sex.

	Gout	AF incidence (per 1000 person years ; 95% CI)	Matched HR (95% CI) ^a	Adjusted HR (95% CI) ^b
Overall	Yes	9.68 (9.36–10.00)	1.61 (1.53–1.70)	1.09 (1.03–1.16)
	No	6.11 (5.86–6.36)	Reference	Reference
Men	Yes	8.85 (8.50–9.20)	1.60 (1.51–1.70)	1.09 (1.01–1.16)
	No	5.60 (5.33–5.89)	Reference	Reference
Women	Yes	12.19 (11.48–12.92)	1.61 (1.53–1.70)	1.12 (1.02–1.24)
	No	7.53 (7.00–8.08)	Reference	Reference

Footnote: a. Matched for age, sex, general practice, index year and registration year. b. additionally adjusted for body mass index, smoking, alcohol consumption, ischaemic heart disease, heart failure, heart valve disease, hyperthyroidism and other comorbidities and medications.

Table 4. Sensitivity analysis with missing value replaced by a new category.

	Gout	Matched OR (95% CI) ^a	Adjusted OR (95% CI) ^b	Matched HR (95% CI) ^a	Adjusted HR (95% CI) ^b
Overall	Yes	2.89 (2.70–3.09)	1.45 (1.29–1.62)	1.66 (1.59–1.74)	1.09 (1.03–1.16)
	No	Reference	Reference	Reference	Reference
Men	Yes	2.94 (2.70–3.20)	1.47 (1.27–1.69)	1.60 (1.51–1.70)	1.09 (1.01–1.16)
	No	Reference	Reference	Reference	Reference
Women	Yes	2.79 (2.49–3.14)	1.34 (1.08–1.65)	1.66 (1.52–1.81)	1.12 (1.01–1.23)
	No	Reference	Reference	Reference	Reference

Footnote: a. Matched for age, sex, general practice, index year and registration year. b. additionally adjusted for body mass index, smoking, alcohol consumption, ischaemic heart disease, heart failure, heart valve disease, hyperthyroidism and other comorbidities and medications.

Figure legends

Figure 1. Cumulative probability for AF in gout patients (red line) and matched controls (blue line).