Supplemental Online Content

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eMethods. Flow of information through the different phases of the review

eTable 1. Point prevalence rates of AA from 2016-2019

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This supplemental material has been provided by the authors to give readers additional information about their work.

eMethods.

Summary of point prevalence of AA and AT/AU during 2016-2019

In the overall weighted sample, the point prevalence rates of AA were 0.118% in 2016, 0.125% in 2017 ($p<0.001$), 0.130% in 2018 ($p<0.001$), and 0.132% in 2019 ($p<0.001$) (**eTable 1**). In the subgroup analysis, the point prevalence of AA was higher among females (0.148%-0.158%) vs males (0.086%-0.105%), and among adults (0.132%-0.146%) vs children/adolescents (0.065%-0.078%). In children, the point prevalence of AA was highest among adolescents aged 12-17 years (0.089% to 0.102% from 2016 to 2019) and lowest among those aged 0-5 years (0.031% to 0.034% from 2016 to 2019). Among adults, the highest point prevalence of AA was observed among individuals aged 18-44 years (0.150%-0.165%) and the lowest among those aged 65+ years (0.090%-0.104%).

The point prevalence of AT/AU was 0.008% in 2016 and increased to 0.010% in 2017 ($p<0.001$), 0.011% in 2018 ($p<0.001$), and 0.011% in 2019 ($p<0.001$) (e**Table 1**). Similar to AA, the point prevalence of AT/AU was higher among females (0.011%-0.015%) vs males (0.005%-0.008%), and among adults (0.009%-0.012%) vs children/adolescents (0.005%-0.007%). In children, the point prevalence of AT/AU was highest among adolescents aged 12-17 years (0.007% to 0.010% from 2016 to 2019) and lowest among those aged 0-5 years (0.002% to 0.003% from 2016 to 2019). Among adults, the highest point prevalence of AT/AU was observed among individuals aged 45-64 years (0.009%-0.014%), In addition, individuals aged 65+ years had similar point prevalence rates than individuals aged 18-44 years in 2016 (0.008% vs. 0.009%) and 2017 (0.011% vs. 0.011%) but higher point prevalence rates in 2018 (0.014% vs. 0.010%) and 2019 (0.012%-0.011%).

1   **eTable 1.** Point prevalence rates of AA from 2016-2019

	2016	2017	2018	2019
Point prevalence (%) (95% CI)				
AA	0.118% (0.117%, 0.118%)	0.125% (0.124%, 0.126%)	0.130% (0.129%, 0.130%)	0.132% (0.131%, 0.132%)
Female	0.148% (0.148%, 0.149%)	0.155% (0.154%, 0.156%)	0.158% (0.157%, 0.159%)	0.158% (0.157%, 0.159%)
Male	0.086% (0.086%, 0.087%)	0.094% (0.093%, 0.095%)	0.101% (0.100%, 0.102%)	0.105% (0.104%, 0.106%)
< 18	0.065% (0.064%, 0.066%)	0.072% (0.071%, 0.073%)	0.078% (0.077%, 0.079%)	0.077% (0.076%, 0.078%)
0 - 5	0.031% (0.030%, 0.032%)	0.034% (0.032%, 0.035%)	0.033% (0.032%, 0.034%)	0.032% (0.031%, 0.034%)
6 - 11	0.066% (0.064%, 0.067%)	0.074% (0.072%, 0.075%)	0.088% (0.086%, 0.090%)	0.082% (0.081%, 0.084%)
12 - 17	0.089% (0.087%, 0.090%)	0.097% (0.095%, 0.099%)	0.100% (0.098%, 0.102%)	0.102% (0.101%, 0.104%)
18 +	0.132% (0.131%, 0.132%)	0.139% (0.139%, 0.140%)	0.144% (0.143%, 0.144%)	0.146% (0.146%, 0.147%)
18 - 44	0.150% (0.149%, 0.151%)	0.158% (0.157%, 0.159%)	0.160% (0.159%, 0.161%)	0.165% (0.164%, 0.166%)
45 - 64	0.126% (0.125%, 0.127%)	0.134% (0.133%, 0.135%)	0.137% (0.136%, 0.138%)	0.141% (0.140%, 0.142%)
65 +	0.090% (0.089%, 0.092%)	0.093% (0.092%, 0.095%)	0.104% (0.102%, 0.106%)	0.097% (0.096%, 0.099%)
AT/AU	0.008% (0.008%, 0.008%)	0.010% (0.010%, 0.010%)	0.011% (0.011%, 0.011%)	0.011% (0.011%, 0.011%)
Female	0.011% (0.011%, 0.011%)	0.014% (0.014%, 0.015%)	0.015% (0.015%, 0.015%)	0.014% (0.014%, 0.015%)
Male	0.005% (0.005%, 0.005%)	0.006% (0.006%, 0.006%)	0.007% (0.006%, 0.007%)	0.008% (0.007%, 0.008%)
< 18	0.005% (0.004%, 0.005%)	0.006% (0.006%, 0.006%)	0.007% (0.006%, 0.007%)	0.007% (0.006%, 0.007%)
0 - 5	0.002% (0.002%, 0.002%)	0.002% (0.002%, 0.002%)	0.002% (0.002%, 0.002%)	0.003% (0.002%, 0.003%)
6 - 11	0.004% (0.004%, 0.005%)	0.006% (0.005%, 0.006%)	0.007% (0.006%, 0.007%)	0.006% (0.005%, 0.006%)
12 - 17	0.007% (0.006%, 0.007%)	0.009% (0.008%, 0.010%)	0.010% (0.009%, 0.010%)	0.010% (0.009%, 0.011%)
18 +	0.009% (0.009%, 0.009%)	0.011% (0.011%, 0.012%)	0.012% (0.012%, 0.012%)	0.012% (0.012%, 0.012%)
18 - 44	0.009% (0.009%, 0.009%)	0.011% (0.010%, 0.011%)	0.010% (0.010%, 0.010%)	0.011% (0.011%, 0.011%)
45 - 64	0.009% (0.009%, 0.010%)	0.012% (0.012%, 0.013%)	0.013% (0.013%, 0.014%)	0.014% (0.013%, 0.014%)
65 +	0.008% (0.007%, 0.008%)	0.011% (0.011%, 0.012%)	0.014% (0.014%, 0.015%)	0.012% (0.011%, 0.012%)

2   ***eTable 2.*** *Summary of prevalence and incidence rates of AA and AT/AU during 2016-2019 ─Sensitivity Analysis[1,2,3]*

	2016	2017	2018	2019
Annual prevalence rate (%) (95% CI)				
AA	0.083% (0.082%, 0.083%)	0.089% (0.089%, 0.090%)	0.095% (0.094%, 0.095%)	0.097% (0.096%, 0.097%)
Female	0.102% (0.101%, 0.102%)	0.108% (0.107%, 0.108%)	0.112% (0.111%, 0.113%)	0.115% (0.114%, 0.116%)
Male	0.063% (0.063%, 0.064%)	0.070% (0.070%, 0.071%)	0.077% (0.076%, 0.078%)	0.078% (0.078%, 0.079%)
< 18	0.051% (0.050%, 0.052%)	0.056% (0.055%, 0.057%)	0.060% (0.059%, 0.061%)	0.061% (0.060%, 0.062%)
0 - 5	0.022% (0.021%, 0.024%)	0.025% (0.024%, 0.027%)	0.028% (0.026% , 0.029%)	0.027% (0.026%, 0.028%)
6 - 11	0.046% (0.045%, 0.048%)	0.053% (0.051%, 0.055%)	0.057% (0.055%, 0.059%)	0.058% (0.056%, 0.059%)
12 - 17	0.070% (0.068%, 0.071%)	0.076% (0.075%, 0.078%)	0.081% (0.080%, 0.083%)	0.081% (0.079%, 0.083%)
18 +	0.091% (0.090%, 0.092%)	0.098% (0.097%, 0.099%)	0.104% (0.103%, 0.104%)	0.106% (0.106%, 0.107%)
18 - 44	0.106% (0.105%, 0.107%)	0.114% (0.113%, 0.115%)	0.119% (0.118%, 0.120%)	0.123% (0.121%, 0.124%)
45 - 64	0.088% (0.087%, 0.089%)	0.096% (0.095%, 0.097%)	0.100% (0.099%, 0.101%)	0.103% (0.102%, 0.104%)
65 +	0.057% (0.056%, 0.058%)	0.056% (0.055%, 0.058%)	0.063% (0.061%, 0.064%)	0.066% (0.065%, 0.068%)
AT/AU	0.003% (0.003%, 0.003%)	0.005% (0.005%, 0.005%)	0.006% (0.005%, 0.006%)	0.006% (0.006%, 0.006%)
Female	0.004% (0.004%, 0.004%)	0.007% (0.006%, 0.007%)	0.007% (0.007%, 0.008%)	0.008% (0.008%, 0.008%)
Male	0.002% (0.002%, 0.002%)	0.003% (0.003%, 0.003%)	0.004% (0.004%, 0.004%)	0.004% (0.004%, 0.005%)
< 18	0.002% (0.002%, 0.002%)	0.004% (0.004%, 0.004%)	0.004% (0.004%, 0.004%)	0.005% (0.005%, 0.005%)
0 - 5	0.001% (0.001%, 0.001%)	0.001% (0.001%, 0.002%)	0.002% (0.002%, 0.002%)	0.002% (0.002%, 0.003%)
6 - 11	0.002% (0.002%, 0.003%)	0.003% (0.003%, 0.004%)	0.004% (0.003%, 0.004%)	0.004% (0.004%, 0.005%)
12 - 17	0.003% (0.002%, 0.003%)	0.006% (0.006%, 0.007%)	0.006% (0.005%, 0.006%)	0.007% (0.006%, 0.007%)
18 +	0.003% (0.003%, 0.003%)	0.005% (0.005%, 0.005%)	0.006% (0.006%, 0.006%)	0.007% (0.006%, 0.007%)
18 - 44	0.003% (0.003%, 0.003%)	0.005% (0.005%, 0.005%)	0.005% (0.005%, 0.006%)	0.006% (0.006%, 0.006%)
45 - 64	0.004% (0.003%, 0.004%)	0.006% (0.005%, 0.006%)	0.007% (0.007%, 0.007%)	0.007% (0.007%, 0.008%)
65 +	0.003% (0.003%, 0.003%)	0.004% (0.004%, 0.005%)	0.005% (0.005%, 0.006%)	0.006% (0.006%, 0.006%)
Annual incidence rate (per 100,000 patient-years) (95% CI)				
AA	37.11 (36.75, 37.47)	36.85 (36.49, 37.21)	39.15 (38.79, 39.51)	40.48 (40.12, 40.84)

Female	2.63 (2.54, 2.73)	2.17 (2.08, 2.26)	2.52 (2.43, 2.61)	2.78 (2.69, 2.88)
Male	45.97 (45.42, 46.53)	43.12 (42.58, 43.67)	46.89 (46.34, 47.46)	47.32 (46.77, 47.87)
< 18	28.02 (27.58, 28.46)	30.41 (29.95, 30.88)	31.24 (30.78, 31.70)	33.47 (33.00, 33.94)
0 - 5	23.55 (22.93, 24.18)	25.82 (25.17, 26.49)	27.88 (27.21, 28.55)	25.36 (24.74, 26.00)
6 - 11	13.48 (12.52, 14.48)	13.74 (12.78, 14.76)	15.17 (14.18, 16.22)	14.41 (13.46, 15.42)
12 - 17	22.33 (21.31, 23.38)	26.25 (25.13, 27.40)	25.68 (24.60, 26.79)	26.00 (24.92, 27.10)
18 +	30.03 (28.96, 31.12)	32.21 (31.08, 33.35)	36.79 (35.61, 37.99)	30.88 (29.82, 31.95)
18 - 44	40.66 (40.24, 41.08)	39.75 (39.33, 40.17)	42.16 (41.73, 42.58)	44.47 (44.04, 44.90)
45 - 64	47.78 (47.09, 48.47)	48.66 (47.95, 49.37)	49.70 (49.01, 50.39)	53.27 (52.57, 53.98)
65 +	38.34 (37.72, 38.97)	37.87 (37.24, 38.50)	39.10 (38.48, 39.73)	40.65 (40.02, 41.29)
AT/AU	26.52 (25.65, 27.42)	19.32 (18.57, 20.09)	25.92 (25.00, 26.87)	28.31 (27.41, 29.23)
Female	3.53 (3.37, 3.68)	2.93 (2.79, 3.08)	3.40 (3.25, 3.55)	3.50 (3.35, 3.65)
Male	1.72 (1.61, 1.83)	1.39 (1.29, 1.49)	1.62 (1.52, 1.73)	2.05 (1.94, 2.17)
< 18	1.87 (1.70, 2.06)	1.90 (1.72, 2.08)	2.01 (1.84, 2.20)	2.15 (1.97, 2.34)
0 - 5	0.58 (0.41, 0.82)	0.42 (0.27, 0.62)	1.22 (0.95, 1.53)	1.03 (0.80, 1.32)
6 - 11	2.11 (1.81, 2.44)	1.44 (1.20, 1.73)	1.69 (1.42, 1.98)	2.28 (1.98, 2.62)
12 - 17	2.38 (2.09, 2.70)	3.09 (2.75, 3.46)	2.71 (2.40, 3.04)	2.66 (2.36, 2.99)
18 +	2.83 (2.72, 2.95)	2.24 (2.14, 2.34)	2.66 (2.55, 2.77)	2.95 (2.84, 3.06)
18 - 44	2.49 (2.34, 2.66)	2.52 (2.36, 2.69)	2.26 (2.12, 2.41)	2.95 (2.79, 3.12)
45 - 64	3.29 (3.11, 3.48)	2.25 (2.10, 2.41)	3.09 (2.91, 3.27)	2.89 (2.72, 3.06)
65 +	2.49 (2.23, 2.77)	1.42 (1.22, 1.63)	2.62 (2.33, 2.92)	3.13 (2.84, 3.44)

3 **Abbreviations:** AA: Alopecia areata; AT: Alopecia totalis; AU: Alopecia universalis; CI: confidence interval.

4 **Notes:**

5 [1] Individual weights in each year (2016-2019) were assigned using data from the American Community Survey based on census division, age, sex, and policy holder status.

6 [2] Annual prevalence was calculated as the number of patients who had at least 2 IP or OP claims with a diagnosis for AA or AT/AU ≥ 14 days apart during the year of analysis or the
7 year prior divided by the number of patients who were continuously enrolled during that period. Binomial exact intervals are shown.

8 [3] Incidence rate was calculated as number of patients who had at least 2 IP or OP claims with a diagnosis for AA or AT/AU ≥ 14 days apart during the year of analysis but not the year
9 prior divided by the total patient-years of continuous enrollment during that period. Wilson score intervals are shown.

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