EPH203
The Prevalence of Alopecia Areata in Germany: Results of an Insurance Claims Database Analysis

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OBJECTIVE

- To describe the age- and sex-specific epidemiology, most frequently visited physician specialities and frequency of comorbidities for patients with AA in Germany from 2018–2020 to better understand the burden of this disease.

CONCLUSION

- This study contributes to understanding the substantial impact of AA in Germany. People with AA frequently report associated comorbidities such as immune, mood and anxiety disorders.

- In this study, women consistently reported AA more frequently than men irrespective of age group.

- Understanding the prevalence of AA-related visits by physician specialty can identify areas for educational and quality improvements in the management of AA in Germany.

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METHODS

Study design

- This cross-sectional observational cohort study used anonymised German health claims data from »4.5 million insured patients across Germany from the WIG2 (Scientific Institute for Health Economics and Health System Research) benchmark database for the period 01/01/2017–31/12/2020.

- All patients were insured by statutory health insurance providers, and full billing information of utilised health services in hospitals, the ambulatory sector and pharmaceuticals were used.

- Two AA populations were identified from International Statistical Classification of Diseases and Related Health Problems (ICD-10) codes and analysed using more/less strict criteria as a proxy for illness severity (Table 1).

Outcomes

- For each study year (2018–2020), the annual prevalence and perceived incidence (with a diagnosis-free baseline period of one calendar year prior to the respective study year) of AA stratified by age group (<18, ≥18 years) and sex, extrapolated to the entire population in Germany were analysed.

- Population estimates for the years 2018 to 2020 of the Federal Statistical Office (DESTATIS [Statistisches Bundesamt]) were used as a reference for extrapolation to the German population.

- Clinician speciality visited and predefined comorbidities of interest were also analysed.

- Results are descriptive, with prevalence and incidence reported as the number of cases per 100,000 German population, and the proportions (%) of patients treated at least once by each physician speciality and the proportions (%) of patients with each comorbidity reported.

BACKGROUND

- Alopecia Areata (AA) is an autoimmune disease defined by non-scarring hair loss that typically affects the scalp but can also affect other parts of the body.

- AA affects 2% of the world's population, and the prevalence is increasing,[1] but epidemiological data for AA specific to Germany are scarce.[2]

- A number of topical and systemic treatments are widely used to treat AA; however, until recently, none was explicitly approved for the treatment of AA[3]

- Since some commonly used medications for the treatment of AA are classed as lifestyle medicines, they are not reimbursable in Germany.[3]

- However, AA can be associated with a substantial quality-of-life impairment and psychological burden.[4]

KEY RESULT

Figure 1. Prevalence of AA in Germany (using more strict and less strict criteria) overall, and stratified by age group and sex in adults, from 2018 to 2020
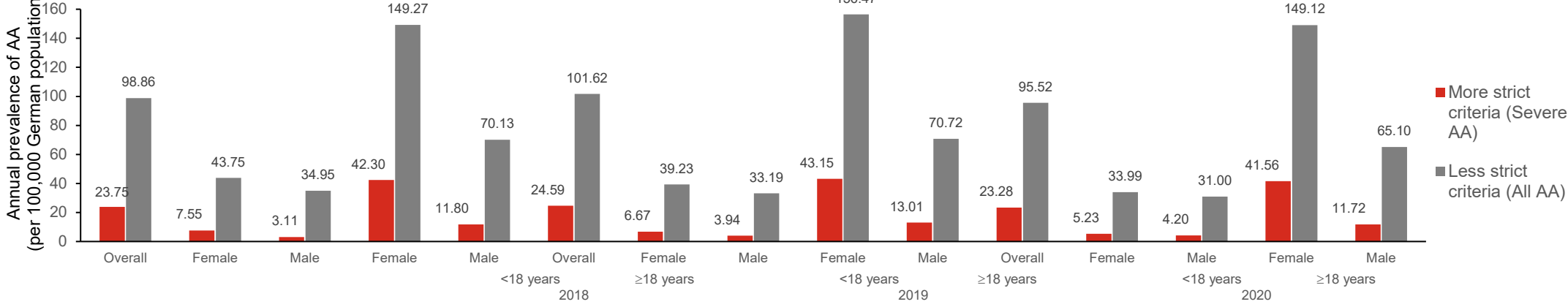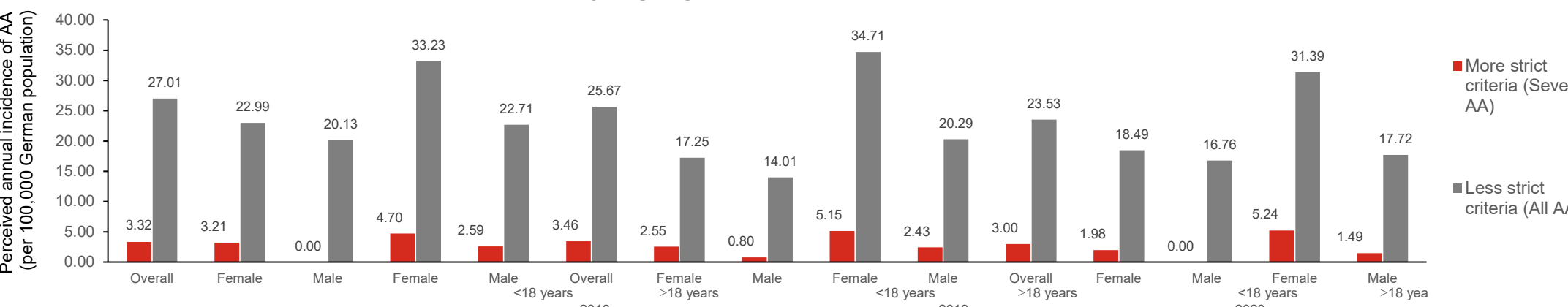

Figure 2. Perceived incidence* of AA in Germany (using more strict and less strict criteria) overall, and stratified by age group and sex in adults, from 2018 to 2020

*Perceived incidence assumes an incident case if there was a diagnosis-free baseline period of one calendar year prior to the respective study year.
AA, alopecia areata

Figure 3. Predefined comorbidities of interest for patients with AA identified using more strict and less strict criteria in 2020 in Germany
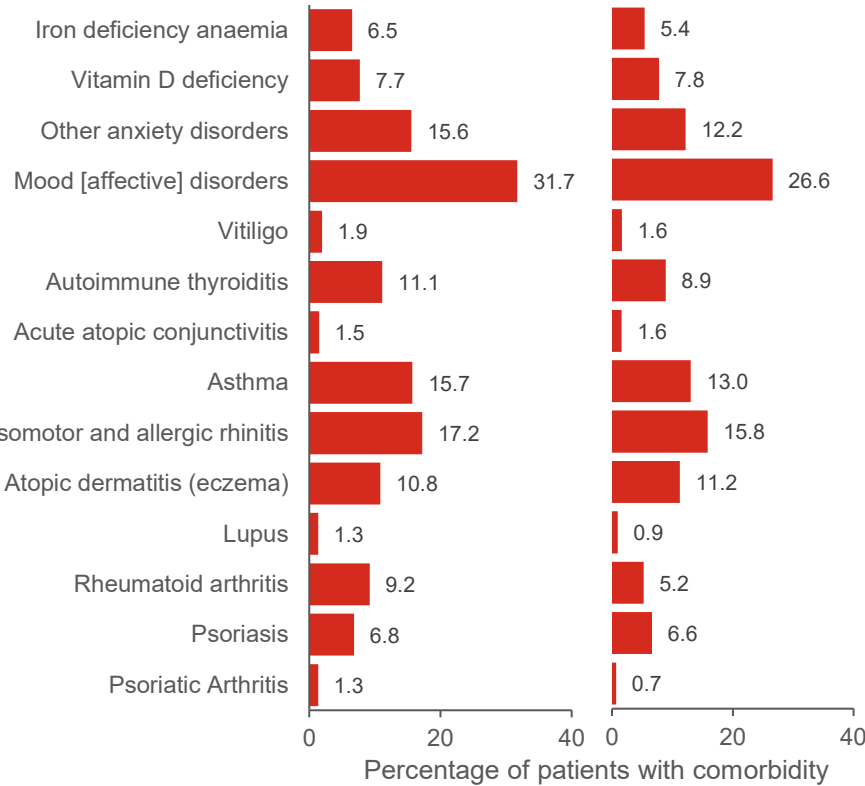
Predefined comorbidities of interest were psoriatic arthritis, psoriasis, rheumatoid arthritis, lupus, atopic dermatitis, vasomotor and allergic rhinitis, asthma, acute atopic conjunctivitis, autoimmune thyroiditis, vitiligo, mood (affective) disorders, other anxiety disorders, vitamin D deficiency, iron deficiency anaemia. The proportions of patients reporting each comorbidity was similar in each study year (2018–2020)
AA, alopecia areata

Figure 4. Most frequently visited clinician specialities for AA in Germany (using more strict and less strict criteria) from 2018 to 2020
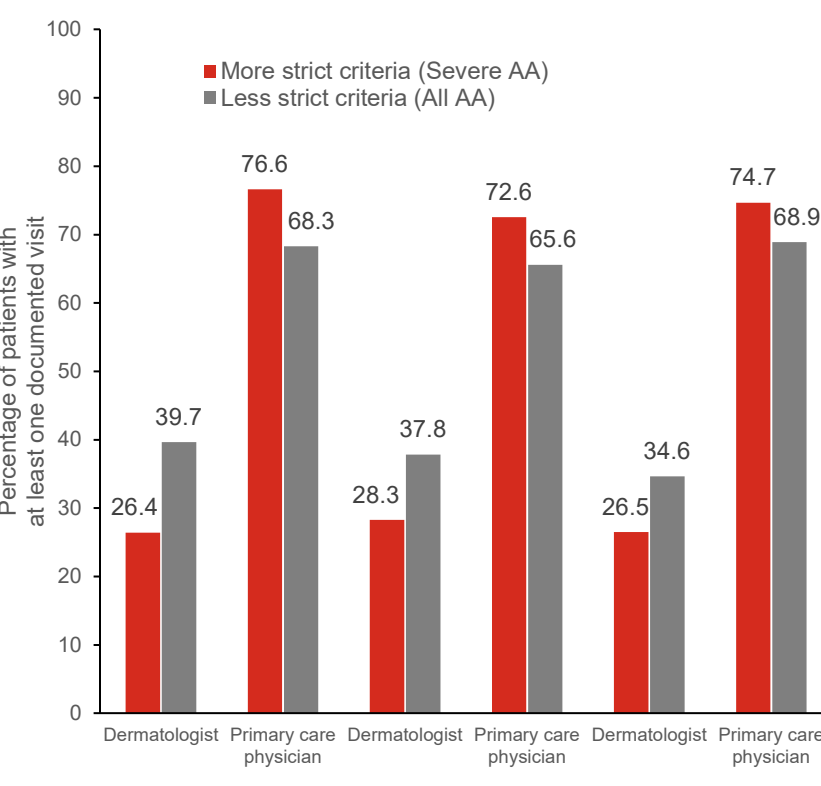
Other named specialities (internist, paediatrician, gynaecologist, urologist, rheumatologist, oral, maxillofacial and facial surgeon, ear, nose and throat surgeon, surgeon, neurologist/psychiatrist/psychotherapist) were visited by small proportions of patients with AA (0–7.2% using either criteria for AA) over the three-year period.
AA, alopecia areata

Limitations

- Limitations include that analyses were based on health claims data, which contain limited clinical information.
- In claims data, the presence of a diagnostic code on a medical record does not constitute proof of a diagnosis of AA.
- It was not possible to link prescription claims to a specific diagnosis. Because it could not be confirmed that the medications were prescribed for the treatment of AA, the treatment rates reported in this study may be biased.
- Prescription treatments were used as a proxy for severity of illness, which may not accurately represent the disease and may not capture severity in untreated patients.

Table 1: AA population definitions

Population	Inclusion criteria setting	Specific Diagnosis in ICD-10-GM code L63 alopecia areata
More strict AA criteria (Severe AA)*	At least one diagnosis (ICD-10-GM code L63.0 or L63.1) as a main inpatient diagnosis or at least two verified outpatient/secondary inpatient diagnoses in different quarters OR	L63.0: Alopecia (capitis) totalis L63.1: Alopecia universalis
	At least one diagnosis (ICD-10-GM code L63.2 or L63.8 or L63.9) as a main inpatient diagnosis or at least two verified outpatient/secondary inpatient diagnoses in different quarters AND a prescription by the diagnosing physician of one of the pharmaceuticals listed in Table 2	L63.2: Ophiasis L63.8: Other alopecia areata L63.9: Alopecia areata, unspecified
Less strict AA criteria (All AA)	At least one diagnosis (ICD-10-GM code L63.0 or L63.1 or L63.2 or L63.8 or L63.9) as a main inpatient diagnosis or at least two verified outpatient/secondary inpatient diagnoses in different quarters	L63.0: Alopecia (capitis) totalis L63.1: Alopecia universalis L63.2: Ophiasis L63.8: Other alopecia areata L63.9: Alopecia areata, unspecified

*Severe AA was determined using either diagnosis codes specific for severe forms of AA or more general diagnosis codes in combination with prescriptions for specific treatments (Table 2); therefore, these prescriptions were used as a proxy for severe disease, as per previously published analyses.[5]
AA, alopecia areata; ICD-10-GM, International Statistical Classification of Diseases and Related Health Problems (ICD-10) adapted to the specific requirements of the German health care system.

Table 2: Treatments used for the identification of severe AA[5]

Therapy type	Generic name
Immunomodulator	Methotrexate, azathioprine, cyclosporine, sulfasalazine, tofacitinib, baricitinib, apremilast, ruxolitinib, dupilumab, secukinumab, ixekizumab, brodalumab, mycophenolic acid, dapsone (oral)
Oral steroids	Betamethasone/betamethasone acetate/betamethasone sodium phosphate, cortisone acetate, dexamethasone/dexamethasone acetate/ dexamethasone phosphate/dexamethasone sodium phosphate, fludrocortisone acetate, hydrocortisone/hydrocortisone acetate/ hydrocortisone cypionate/hydrocortisone sodium phosphate/hydrocortisone sodium succinate, methylprednisolone/methylprednisolone acetate/ methylprednisolone acetate/methylprednisolone sodium succinate, prednisolone/prednisolone acetate/prednisolone sodium phosphate, prednisone, triamcinolone/triamcinolone diacetate/triamcinolone hexacetonide

AA, alopecia areata; ATC, anatomical therapeutic chemical.

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