Prevalence of comorbidities in the UZ Leuven psoriasis cohort

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Background

Although psoriasis is traditionally considered an inflammatory skin disorder, it appears associated to multiple systemic comorbidities. Shared pathogenic mediators, including the IL-17A pathway, comprise a potential mechanistic link. Data on the prevalence of these comorbidities in Belgium are limited. We performed a monocentric retrospective electronic chart review, identifying over 2000 psoriasis patients. This study was approved by the ethics committee.

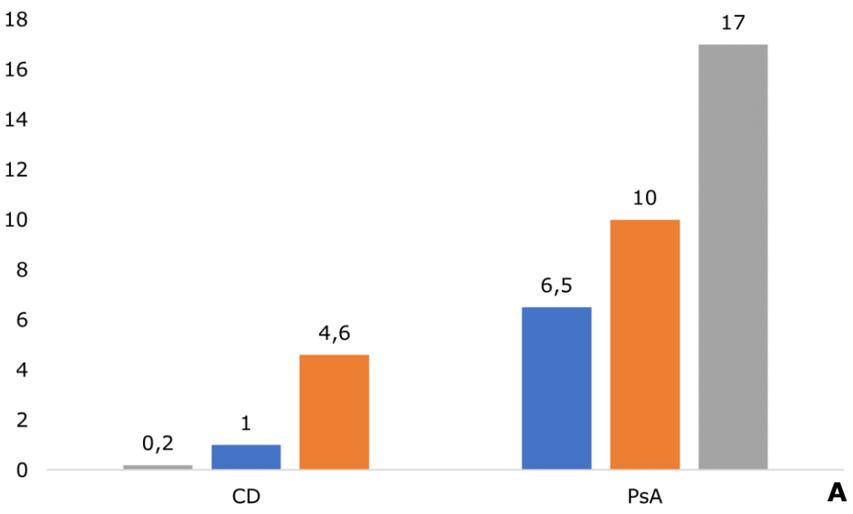
Objectives

- To analyze the prevalence of comorbidities in the UZ Leuven (UZL) psoriasis cohort.
- To compare the results to the overall Belgian population.

Methods

- A monocentric retrospective electronic chart review identified 2076 unique patients who were assigned to the psoriasis care pathway of the University Hospitals of Leuven between January 2009 and December 2018.
- The extracted patient characteristics comprised age (0-70 years old vs >70 years old), sex (male vs female), Crohn's disease (CD; present vs absent), psoriatic arthritis (PsA; present vs absent), dyslipidemia (present vs absent), diabetes mellitus (DM; present vs absent), arterial hypertension (AHT; present vs absent), BMI (<18.5 vs ≥18.5 vs <25 vs ≥25 vs <30 vs ≥30) and smoking status (present vs absent).
- The prevalence of these comorbidities was compared to a previously published Belgian biologic-naïve psoriasis cohort (n = 308) and to the British Association of Dermatologists Biologics Intervention Register (BADBIR), one of the largest European registers (n = 8399).
- The prevalence of comorbidities in the UZL cohort was compared to the overall Belgian population (grand mean of the 2008, 2013 and 2018 Sciensano national Health Interview Survey (HIS) prevalence).

Results



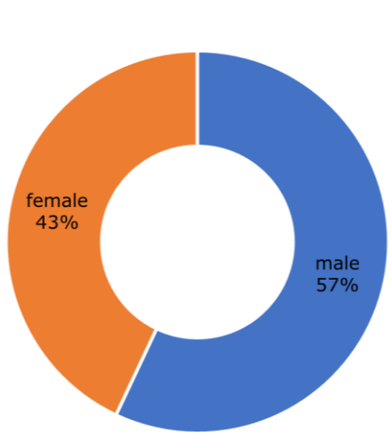


Figure 1: gender distribution across cohorts.

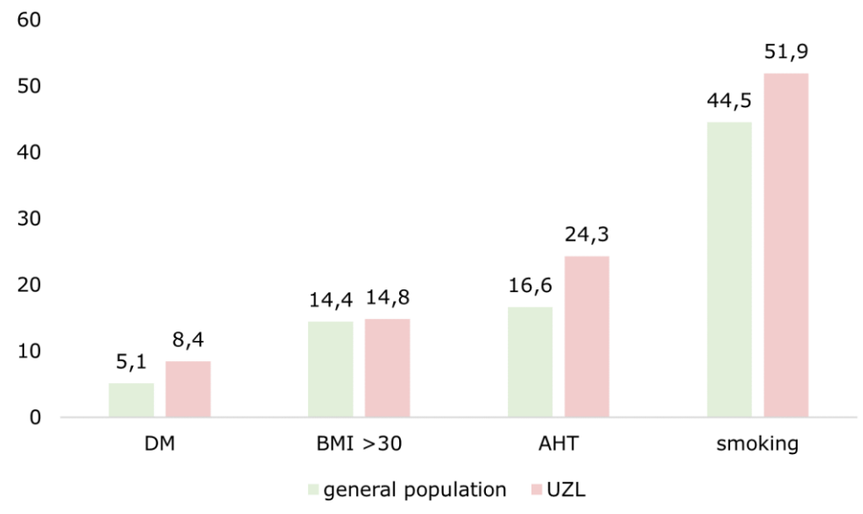


Figure 3: prevalence of comorbidities in the UZL cohort vs the Belgian HIS grand mean in %.

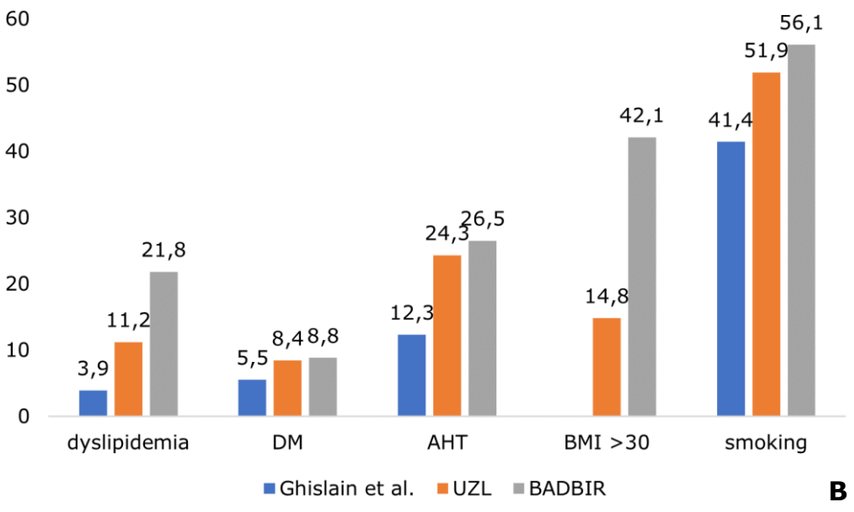


Figure 2 A and B: prevalence of systemic comorbidities in %.

Table 1: demographics per cohort.

	Ghislain et al.	UZL	BADBIR
Number of patients	308	2076	8399
Gender	185 male 123 female	1063 male 1013 female	4897 male 3502 female
Mean age (years)	48.9	57.5	45.5

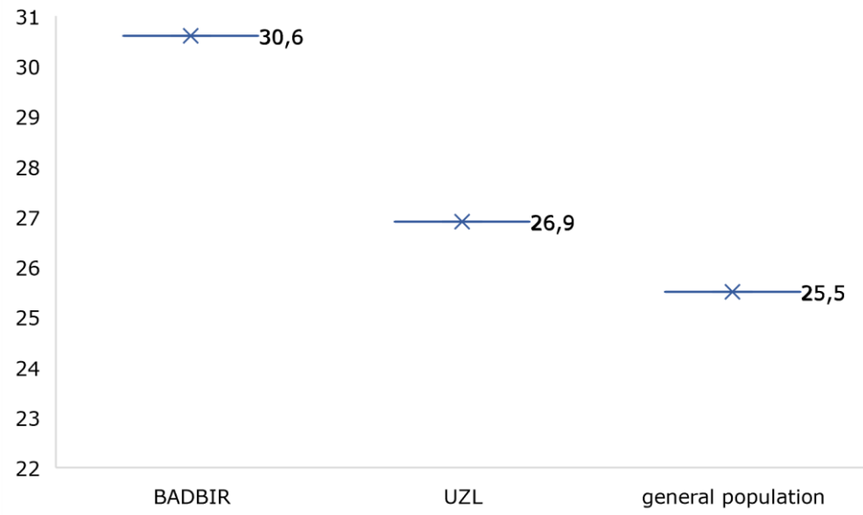


Figure 4: mean BMI of the UZL and BADBIR cohort vs the Belgian HIS grand mean.

Discussion

- We present a high prevalence of CD, PsA, dyslipidemia, DM and AHT in the UZL cohort compared to the previously reported Belgian psoriasis cohort by Ghislain et al. (Fig 2 A and B) and the overall Belgian population (Fig 3 and 4).
- The BADBIR cohort reports a higher prevalence of dyslipidemia and obesity compared to the UZL cohort (Fig 2 B).
- Differences between cohorts may be attributed to regional variation, which underlines the importance of local data.
- To the best of our knowledge, the UZL cohort represents the largest Belgian psoriasis sample to date.
- Systemic comorbidities may impact the quality of life and prognosis of psoriasis patients.

Conclusion

- Psoriasis is associated with multiple comorbidities, yet differences in prevalence can be observed between cohorts.
- The dermatologist is ideally placed to screen for these comorbidities and refer when indicated.

Ghislain PD et al. JAAD International 2021, 4: 15-17; Iskandar IYK et al. British Journal of Dermatology 2015, 173(2): 510-518; Drieskens S et al. Health Interview Survey Belgium 2008 - 2013 - 2018: Interactive Analysis. Brussels: Sciensano.

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