Atopic dermatitis (AD) is a heterogeneous disease with a diverse clinical picture. Correspondingly, its severity varies from mild disease with flexural eczema, which may be successfully treated with a short-term topical treatment, to very severe universal disease requiring systemic immunomodulatory treatment.

In the current literature the terms phenotype and endophenotype are often used. The first describes the clinical picture met by the clinician in the clinic, and the second is mostly used to encompass different biomarkers found in biological samples such as blood and skin. A significant part of the research published in recent years has centred on correlating endophenotype to the prognostic risk of comorbidities and response to treatment, especially as AD has entered the age of biologics. However, in the clinical situation with the patient and patient’s family, it would be optimal to be able to make risk assessments and predictions from the severity and clinical history of the patient’s disease.

In this issue of the BJD, Mulick et al. report on their study of 11 866 children from the Avon Longitudinal Study of Parents and Children birth cohort. The study aimed to classify AD into robustly identifiable subtypes, using data generated from questionnaires on the presence of flexural dermatitis and severity within the previous year, collected at 11 time points over the child’s first 14 years of age.

The study is performed elegantly, and should in many ways serve as guidance for future epidemiological studies. The authors divide the population into an explorative (development) cohort, on which they perform latent class analysis, and a validation cohort to confirm the results obtained in the first group. From the latent class analysis models, they found the optimal number of phenotype groupings is five, comprising four disease phenotypes — Unaffected/Rare, Severe–Frequent AD, Moderate–Frequent AD, Moderate–Declining AD and Mild–Intermittent AD — and that there are clinically relevant associations between the different subgroups and asthma. They also show that family history of AD increases the risk of having one of the severe phenotypes.

Altogether, the study demonstrates that there are phenotypic subtypes of AD, and that they are clinically meaningful. The approach is based on clinical subtypes, and together with studies performed on endophenotypes, we are moving towards a better taxonomy within the large and heterogeneous group of patients with AD, the ultimate goal being a precise and personalized risk assessment, intervention and treatment.

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Icelandic study of cutaneous squamous cell carcinoma (cSCC) epidemiology highlights the worldwide burden of disease and challenges of in situ and invasive cSCC registry data

In the UK, from 2013 to 2015, cutaneous squamous cell carcinomas (cSCCs) affected 111 per 100 000 person years (PY) in men and 42 per 100 000 PY in women, with the incidence rising by around 5% every year. Adalsteinsson et al., in this issue, report a substantially lower incidence of 14 and 13·2 per 100 000 PY in men and women, respectively, in Iceland in 2017. This difference may, in part, be owing to the fact that the Icelandic registry reports only the first tumour, which under-reports by up to 50%, compared with the UK data.
where the first tumour per patient per annum is reported.\(^1\)
There is also geographical variation with lower ultraviolet radiation (UVR) exposure at the higher Icelandic latitudes.

This article provides national statistics for in situ cSCC, which are often neglected from cancer registries.\(^2\) A large proportion of in situ cSCCs are managed without histopathological confirmation, which must be considered when interpreting pathology report-based data. It is widely accepted that in situ cSCC is a precursor to invasive cSCC.\(^3\) Those with an in situ cSCC have a 16-fold higher risk of developing an invasive cSCC in the year after diagnosis vs. the general population.\(^4\) Therefore, one might expect the epidemiology of in situ cSCC to be similar to invasive cSCC; however, this article illustrates the complexity of the relationship between in situ and invasive disease.

Adalsteinsson et al.,\(^5\) and others,\(^6,7\) describe how women are more likely to develop in situ cSCC than men; however, for invasive disease, the reverse is seen. Furthermore, women are significantly more likely than men to develop both in situ and invasive cSCC on lower limbs and less likely to develop them on head and neck sites. Perhaps women are more likely to seek medical attention earlier, are more likely to undergo a biopsy or the atypical keratinocytes are behaving less aggressively. This possible difference in aggressive behaviour and gender body site variation could be a result of lower cumulative UVR and thereby mutational burden in less frequently sun-exposed sites.\(^6,7\)

The rapid increase in incidence of both in situ and invasive cSCCs described over the study period (1981–2017) is of great concern. In England, skin cancers account for more 2-week-wait (urgent cancer) referrals than any other specialty,\(^9\) and the incidence of cSCC continues to rise.\(^2\) The 2021 British Association of Dermatologists cSCC guidelines aim to streamline patient stratification and follow-up.\(^10\)

This article provides valuable knowledge regarding the epidemiology of cSCC and highlights the importance of skin cancer prevention and early detection in reducing the global burden of disease. Further translational research is essential to better understand the relationship between in situ, early-invasive and high-risk advanced cSCC.

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Development of tools for the evaluation of pruritus

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Pruritus is a frequent symptom that can be truly awful for many patients, with a huge impact on their quality of life (QoL).\(^1\) Until now, it has been difficult to assess improvements in pruritus in the absence of an effective aetiologically targeted treatment.\(^2\) Fortunately, there is a growing number of clinical trials evaluating clinical effects on patients’ pruritus.\(^3\) In randomized controlled trials of newer antipruritic substances, it is crucial to select reliable pruritus assessment tools that assess patient-related outcomes, and that reflect the real-world course of the symptom. Although health-related QoL assessment cannot always serve as the primary endpoint because of its multidimensionality, tools providing QoL information may be important for the detection of any impact of the symptom on the daily life and social functioning of patients, and for the detection of changes in these parameters.