A-STAR


A-Star
The UK-Irish Atopic Eczema
Systemic Therapy Register
A PROJECT OF THE BRITISH ASSOCIATION OF DERMATOLOGISTS

2026

Welcome

From our Chief Investigator:
Professor Carsten Flohr

Introduction

A-STAR, which stands for The UK-Irish Atopic Eczema Systemic Therapy Register, is an observational study based in the UK and Ireland. The primary goal of A-STAR is to assess both the short-term and long-term safety and efficacy of systemic immuno-modulators in individuals of all ages suffering from atopic eczema.

In addition to evaluating treatment outcomes, the study aims to analyse the real-world costs associated with these therapies, comparing their expenses to their effectiveness.

The overarching aim of the A-STAR project is to generate evidence to assist clinicians in making informed treatment decisions and to inform policy makers, such as NICE.

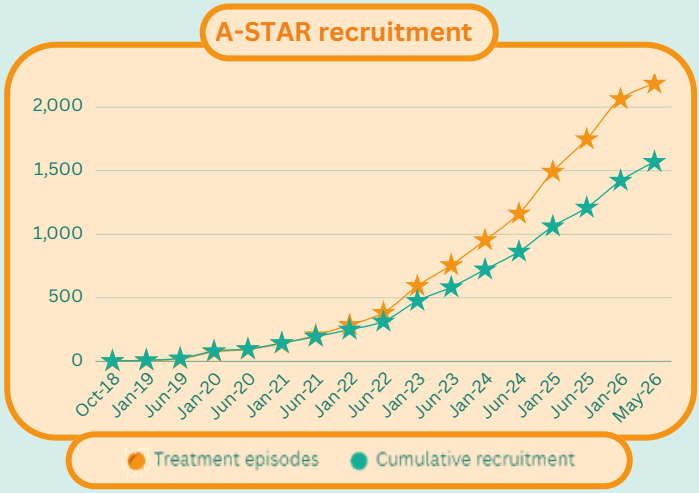
Our year in review:

We have had a great 12 months, celebrating recruiting our **1,500th** patient in March 2026 , and we now have close to **1,600** patients in the register. Alongside this growth, we reached another significant milestone, recording our **2,000th** treatment episode in the register in January 2026, and we are now nearing **2,250** treatment episodes overall.

This year we also opened a new sub-study, CHART-AD, led by Professor Michael Ardern-Jones from the University of Southampton, expanding the research opportunities available within A-STAR.

In addition, we hosted our first in-person all-pharma event at BAD House in November 2025, 'A-STAR Going Deeper', which brought together industry partners for a day of collaboration and discussion.

We were also thrilled to welcome Dr. Cherry Choudhary to the team this year through the Galderma Trainee Fellowship. In this role, Cherry is working closely with the A-STAR team,joining the Steering and Data Analysis Committees and taking an active role in data analyses and the development of conference abstracts and publications. As part of the fellowship, Cherry is also undertaking structured training in pharmacoepidemiological methodology alongside the A-STAR Coordinating Centre, further strengthening the clinical and analytical expertise within the programme.



Looking forward

We achieved two major milestones in our site network: opening our **60th** UK site and our fourth in Ireland, as well as launching our first site in Northern Ireland at Belfast Health and Social Care Trust, further strengthening our reach and capacity to support high-quality dermatology research.

CHART-AD

This year, we launched CHART-AD as a sub-study of A-STAR Bio led by Professor Michael Ardern-Jones from the University of Southampton, in collaboration with Janssen Immunology. The study aims to improve understanding of why people with atopic eczema respond differently to biologic treatments.

By linking detailed clinical information with advanced biological sampling, CHART-AD will help inform the development of more personalised therapies, focusing on dupilumab non-responders.

The study reached an early milestone with the recruitment of its **first** participant in March 2026.

A-STAR bioresource

Alongside this, A-STAR Bio, lead by Professor Nick Reylonds from the University of Newcastle, continues to grow, with nearly **100** participants now enrolled, providing a strong foundation to support high-quality translational research.

Chronic hand eczema

Looking ahead, a key priority for A-STAR is to broaden the register to better reflect the full spectrum of eczematous skin disease seen in clinical practice. A major development is the planned inclusion of chronic hand eczema (CHE) patients.

CHE is common and can be highly burdensome, particularly affecting work, other daily activities, and quality of life. Incorporating a CHE cohort will make the register more inclusive, enabling participation from a wider patient group and supporting research across a broader range of disease presentations. This expansion has been informed by collaboration with established European registries, including Denmark's SCRATCH registry, which now has a CHE cohort, alongside atopic eczema.

Together, these developments reflect A-STAR's commitment to evolve with emerging clinical needs and remaining flexible, inclusive and research-focused.

Advanced topical therapies:

In parallel with widening disease inclusion, A-STAR is committed to expanding the range of treatments captured within the register, including advanced topical therapies. As new targeted, steroid-sparing topicals emerge, it is increasingly important to capture their real-world use and outcomes, including comparisons with systemic treatments.

Any expansion will align with national guidance, including NICE approval and prescribing pathways, particularly for therapies used in secondary care. By incorporating advanced topicals, A-STAR will further strengthen and future-proof its dataset, supporting high-quality research across the full spectrum of atopic eczema severity and treatment approaches.

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Meet the team

Chief Investigator

A-STAR Bioresource Study Lead

CHART-AD Study Lead

Study Manager

Research Fellow

Deputy Study Manager

A-STAR Bioresource Study Manager

Pharmacovigilance Officer

Operations Assistant

Senior Statistician

Senior Data Manager

Data Manager

BAD Team

Director of Research

Research Manager

Key figures and statistics

1,600 Patients enrolled

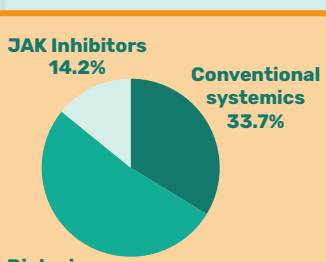
Treatment episodes **2,200**

6,400 Follow-up visits

64 Sites

60 UK

4 IRE



6,600 EASI Scores	**6,800** POEM scores
6,950 (C)DLQI / IDQOL scores	**6,250** IGA scores

Eligibility and treatments

Inclusion criteria ✓

1. Paediatric and adult patients with atopic eczema who due to the severity of their disease and/or impact on quality of life are commencing on or switching to another systemic immuno-modulatory agent.
2. Written informed consent for study participation obtained from the patient or parents / legal guardian, with assent as appropriate by the patient, depending on the level of understanding.
3. Participants consent to participate in long-term follow up and access to all medical records,
   a. including hospital admission records and
   b. linkage to data held by NHS bodies
   c. ***or*** other national providers of healthcare data.
4. A diagnosis of atopic eczema in keeping with the UK diagnostic criteria.

Exclusion criteria ✗

1. Insufficient understanding of the study by the patient and/or parent/guardian.
2. Patients who are currently participating in a randomised clinical trial.

Treatments included to date

Conventional systemics	Biologics	JAK Inhibitors
Azathioprine	Dupilumab	Abrocitinib
Ciclosporin (O/S)	Lebrikizumab	Baricitinib
Methotrexate (O/S)	Tralokinumab	Upadacitinib
Mycophenolate mofetil	Nemolizumab	
Prednisolone		

Substantial amendment 5 (SA05)

Substantial Amendment SA05 marked an important step forward for the A-STAR study, introducing a series of protocol, administrative, and materials updates designed to better reflect real-world clinical practice while reducing barriers to participation for both sites and patients.

"What has changed?"

- SA05 enhanced the protocol by adding **smoking and alcohol consumption data** at baseline and follow up and introducing formal **remote consenting** via post or secure email.
- Eligibility criteria were widened, allowing enrolment of patients who **had started systemic treatment within the previous four weeks**, provided pre-treatment measures were available.
- Data collection was simplified, with CRF updates and replacement of the disease control question with the validated **RECAP** questionnaire.
- Recruitment materials were updated, including a redesigned **poster** with clearer wording, A-STAR Bio information, and a link to the study website.

"How does this make recruitment easier for our sites?"

- More flexible consenting, reducing the need for extra clinic visits.
- Better fit with routine practice, enabling sites to recruit without delaying treatment.
- Clearer recruitment materials, supporting quicker patient understanding and discussions.
- Simpler assessments, reducing staff burden and improving data consistency.

CHART-AD

Understanding variable treatment response in atopic eczema

CHART-AD (Characterisation of Response to Treatment in atopic eczema) is a collaborative study with Janssen Immunology (part of Johnson & Johnson Innovative Medicine), delivered in partnership with the University of Southampton (Lead Investigator Professor Michael Ardern-Jones) and A-STAR. The study aims to improve understanding of why some patients with atopic eczema experience incomplete responses to biologic therapy.

"CHART-AD investigates the biological reasons why a substantial number of patients with moderate-to-severe atopic eczema continue to experience persistent disease activity despite treatment with biologic therapies, such as dupilumab"

Recruitment

60 adults with AD treated with dupilumab for 16±4 weeks, split into two groups

- persistent disease activity (EASI ≥ 7)
- good clinical response (EASI <7)

Deep phenotyping

- Skin biopsies
- Transcriptomics
- Blood sampling
- Asthma assessments

Collaboration and delivery

- Biological samples are processed at designated A-STAR bioresource centres in Southampton, Newcastle and Guy's and St. Thomas', aligned with established expertise for each sample type.
- Experimental analyses will be conducted through Johnson & Johnson.
- Raw data will be returned to A-STAR and the University of Southampton for analysis.
- Recruitment will be running across 6-10 ASTAR UK sites.

Looking ahead:

By linking detailed molecular profiling with real-world treatment outcomes, CHART-AD aims to advance precision medicine in atopic eczema. The findings are expected to help explain why current therapies work well for some patients but not others, and to inform the development of more targeted, effective treatments for atopic eczema in the future.

1st patient recruited in March 2026

Sites A-STAR experiences

Laura Davey - Nurse PI - Oxford University Hospitals

The research delivery team at Oxford University Hospitals

At the Oxford site, the team is strongly committed to the A-STAR study through ongoing recruitment of adult and paediatric participants and the delivery of high-quality, complete data. This is supported by regular patient follow-up, timely and accurate eCRF entry, and a collaborative departmental culture in which all staff actively identify eligible patients. Since assuming the Principal Investigator role in February 2025, responsibilities have included study oversight, governance, and regulatory activity. Close partnership with paediatric nurses enhances recruitment and supports families, while a proactive approach to patient engagement helps address attendance or symptom concerns promptly. Regular discussion of A-STAR at governance meetings maintains visibility, drives recruitment, and ensures the Oxford site remains an engaged and reliable contributor to the study.

Sehrish Zeeshan - Research Nurse - West Hertfordshire Teaching Hospital NHS Trust

The research delivery team at West Hertfordshire Teaching Hospitals NHS Trust

I began my research career in dermatology at West Herts Teaching Hospitals in October 2024 and took the lead on A-STAR recruitment in January 2025. While our team is small, we benefit from the immense support of our Principal Investigator, Dr Victoria Brown, alongside the dedicated dermatologists and Clinical Nurse Specialists across Watford, St Albans and Hemel Hempstead Hospitals.

There is a collaborative culture of research in dermatology at West Herts. Everyone is approachable and they help me to identify eczema patients who may be eligible for recruitment into the ASTAR study. I have regular meetings with Dr Victoria Brown, the local PI for this study, and we ensure that we maintain high standards of research governance.

I am incredibly proud to be part of the A-STAR team, which is contributing to vital eczema research that will shape the future of care for these patients.

Claire Lyttle - Nurse - Belfast Health & Social Care Trust

The research delivery team at Belfast Health & Social Care Trust

The Department of Dermatology, Belfast Trust opened as a site for the Atopic Eczema Systemic Therapy Register (A-STAR) in December 2025. We are the 60th site to open across the UK and Ireland and achieved one of the fastest activations from site initiation visit to first recruit across all sites.
Once approvals were received, study set up proved straightforward, with all queries being addressed quickly and efficiently. It helped a lot that the ASTAR team were so approachable and we also had a very positive response from colleagues here at Belfast Trust. We had a target date for our first recruitment and this helped us to stay focused and keep the momentum.
A STAR has been a welcome addition to our growing Dermatology research portfolio. Thanks to our wonderful consultants, research nurses and patients for their dedication to the study so far!
We feel proud to be involved with the study - representing Northern Ireland population and look forward to building on our successful start.

A big thank you from the A STAR team to all of our sites and their dedicated staff. Your continued commitment and hard work make a real difference.

We are proud of the high standards you maintain every day. You are consistently responsive and proactive, helping us stay on track and continuously improve. The quality of support across sites is excellent. We also really value the strong relationships we have built. The collaboration and open communication make working together both effective and enjoyable.

Thank you for everything you do!

A-STAR patient stories

Aiden's Story - A paediatric A-STAR patient from GSTT

I'm Aiden, this is my Astar story

When I started taking baricitinib roughly a year ago, I was asked "Do you want to be part of the A-STAR study?" so I said "Yes I would". (It's to help with severe eczema.)
This whole A-STAR has been fantastic! Oh! And all of the A-STAR clinical ladies are so friendly! We always talk about fun things.
I've been saving all of my vouchers I've received, so I can get me and my little brother some new toys!
None of it hurts, especially when they put the numbing cream for the blood tests!
Thank you for reading my story!

Tip from Aiden: *It's always a better trip when you have something fun to do after, I've been to the Imperial War Museum, Natural History Museum, and more...*

The 1st CHART-AD patient recruited at Southampton

Reflecting on their first visit, our pioneer participant described a smooth and comfortable experience: "I've felt really easy. I came in and did a couple of breathing exercises that were very straightforward, and then we had a few very non-intrusive skin tests that were really easy. There was no discomfort in the slightest. Then, obviously, the worst bit that people are going to be scared of is the biopsies, but it was very, very well professionally done. I didn't feel a thing. I'm very happy —there is nothing to be worried about." This successful first recruitment sets a positive tone for the study's growth in Southampton. We look forward to continuing this vital work and ensuring that all future participants feel just as supported and informed throughout their journey with us.

A-STAR nurse PIs and the NIHR associate PI scheme

In the evolving landscape of clinical research, the role of the Nurse PI has become a cornerstone of the A-STAR study. By bridging the gap between frontline patient care and rigorous scientific inquiry, these leaders bring a unique, patient-centered perspective to study management. Below, two of our Nurse PIs share their experiences in driving recruitment and professional growth at their respective sites.

A Structured Path to Success - Catherine Rennie – Norfolk and Norwich

My research journey began as a research nurse at the Norfolk and Norwich site in 2021, progressing to Principal Investigator in September 2024. By introducing a structured recruitment approach, including weekly biologics list screening and early distribution of Patient Information Sheets, we streamlined participant engagement and successfully met our recruitment target of 56 participants ahead of schedule. This role has significantly strengthened my confidence in clinical leadership and specialist skills such as EASI scoring, demonstrating the valuable contribution nurses can make in leading impactful clinical research.

The Bridge Between Research and Care - Nicola Housam – Plymouth

Being a Nurse PI in Plymouth has enabled me to combine clinical expertise with research delivery, using long-standing patient relationships to build trust and support recruitment. Beyond data collection, the role has strengthened nursing's professional profile, supported skill development and career progression, and helped bridge clinical practice and research, while keeping patient-centred care at the core.

NIHR

The NIHR Associate PI Scheme is a 6-month, in-role programme that gives healthcare professionals hands-on experience in delivering clinical research, supported by mentorship from a local PI. It's open to doctors, nurses, and allied health professionals looking to get more involved in NIHR portfolio studies, and provides valuable research training without funding.

A-STAR has the highest number of Associate PIs of all UK NIHR-supported dermatology studies, and A-STAR Bio also offers participation as a separate study, expanding opportunities across both programmes.

For more information on the scheme, visit the NIHR website here.

Our pharmaceutical collaborators

We extend our sincere thanks to our pharmaceutical partners for their generous support and continued commitment to the A-STAR study, which remains vital to building a robust registry and advancing understanding of disease mechanisms, progression and treatment response in atopic eczema.

We were delighted to bring partners together at our first in-person all-pharma event, 'A-STAR Going Deeper', hosted at BAD House in November 2025. The event provided a valuable opportunity to strengthen collaboration, share insights, and align on the future direction of the study.

We are pleased to continue our collaboration with Pfizer, renewing our partnership in 2026, and we warmly acknowledge the continued support from AbbVie, Almirall, Sanofi, and Incyte Dermatology, whose involvement has enabled expansion of recruitment and enhanced scientific impact.

almirall · sanofi · abbvie · Pfizer · GALDERMA · Incyte Dermatology

Galderma trainee fellowship

Dr Cherry Choudhary

We were delighted to welcome Dr Cherry Choudhary to the A-STAR team this year as the awardee of the Galderma Trainee Fellowship. Through this two-year fellowship, Cherry joins the A-STAR Steering and Data Analysis Committees and is working closely with the A-STAR coordinating team at King's College London, taking an active role in data analyses and the development of conference abstracts and publications.

The fellowship also provides structured training in pharmacoepidemiology methodology, including dedicated time with the team at the A-STAR Coordinating Centre, as well as support for travel and related research expenses. Awarded following a competitive open national call, this fellowship strengthens trainee engagement within A-STAR and supports the development of future clinical-academic leaders in dermatology.

GALDERMA

EST. 1981

Recent publications & conference abstracts

Healthcare resource use, costs and health-related quality of life in the UK-Irish Atopic eczema Systemic Therapy Register (A-STAR): a pilot study

Carlos Chivardi, Elizaveta Gribaleva, Bolaji Coker, Man Fung Tsoi, Rebecca Carroll, David Prieto Merino, Manisha Baden, Paula E Beattie, Sara J Brown, Tim Burton, Ross Hearn, John R Ingram, Alan D Irvine, Graham A Johnston, Irene Man, Graham Ogg, Mandy Wan, Richard B Warren, Richard T Woolf, Nick J Reynolds, Michael R Ardern Jones, Carsten Flohr, and Andrea Manca on behalf of the UK-Irish A-STAR Group

Background:
Managing moderate-to-severe atopic eczema (AE) is challenging. Novel systemic immunomodulatory therapies are effective but costly, whereas conventional treatments require more intense safety monitoring. While available randomised trials assess efficacy, they do not reflect real-world practice or cost-effectiveness. The UK-Irish Atopic Eczema Systemic Therapy Register (A-STAR) was established to generate real-world evidence on systemic AE treatments.

Objective:
To assess healthcare resource utilisation, costs, and health-related quality of life (HRQoL) over one year in A-STAR participants and evaluate data quality in a pilot analysis.

Methods:
A-STAR is a multicentre prospective register recruiting paediatric (<16 years) and adult (≥16 years) AE patients initiating or switching systemic immunomodulatory therapy. Healthcare utilisation (GP visits, A&E attendance, hospitalisations, specialist consultations, and therapy costs) was valued using national average unit costs and tariffs. HRQoL was measured via the EQ5D instrument reimbursement decisions.

Results:
Among 120 participants (92 adults, 28 children) with a median follow up to 12 months, adults had higher mean healthcare costs per year, including A&E (£120.41 vs. £84.29 in children), GP (£111.15 vs. £78.46), and specialist visits (£205.17 vs. £121.00). Systemic therapy costs per year were £25,523 (SD=£24,424) in adults and £20,242 (SD=£18,994) in children, averaged across all treatment options. Mean EQ5D scores improved from baseline to one year (adults: 0.608 to 0.769; children: 0.482 to 0.751).

Conclusions:
Systemic therapy improved HRQoL but incurred notable costs. A-STAR is well positioned to support future comparative economic evaluations of alternative treatment strategies to inform clinical and reimbursement decisions.

In press

Impact of minimal disease activity on quality of life in atopic eczema patients: results from the UK-Irish Atopic eczema Systemic TherApy Register (A-STAR)

Man Fung Tsoi, Elizaveta Gribaleva, David Prieto-Merino, Rebecca Carroll, Bolaji Coker, Manisha Baden, Paula E. Beattie, Tim Burton, Moira Clark, Sharmela Darne, Nicola Housam, Alan D. Irvine, Graham A. Johnston, Irene Man, Charlene Murphy, Graham Ogg, Sophia Paget, Nick J. Reynolds, Mandy Wan, Richard B. Warren, Michael Ardern-Jones, Carsten Flohr, on behalf of the A-STAR Study Group

Introduction:

Achieving minimal disease activity (MDA) in atopic eczema was associated with improvement in other patient-reported outcomes (PROs) in post-hoc analyses of clinical trials. There is limited evidence for this association in the real-world setting.

Aim:

To describe the impact of achieving MDA on other PROs in atopic eczema patients in the A-STAR register.

Methods:

530 patients aged ≥12 years who initiated systemic treatment and had Eczema Area and Severity Index (EASI) and Peak Pruritus Numerical Rating Scale score (PP-NRS) measurements at both drug initiation and 4-6 months were included. Patients were stratified by achieving MDA at 4-6 months. MDA was defined as a composite of EASI-90/EASI ≤3 and PP-NRS-0/1 at the same visit. Improvement in PROs included reduction in Dermatology Life Quality Index (DLQI) / Patient-Oriented Outcome Measures (POEM) ≥4, DLQI 0/1 and POEM≤2. Appropriate adjusted regression models were used to compare between two groups. MDA non-achievers at 4-6 months were used as reference.

Results:

At 4-6 months, 81 (15.3%) of patients achieved MDA. At baseline, MDA achievers had lower PROs (non-MDA vs MDA: DLQI: 14.9±7.6 vs. 11.7±8.2; PP-NRS: 6.8±2.1 vs. 5.6±2.6; POEM: 19.9±6.4 vs. 16.3±8.2, p≤0.001). However, the difference in baseline EASI was not statistically significant (15.7±10.9 vs. 18.0±11.9; p=0.10). Using MDA non-achievers as reference, MDA achievement was associated with higher reduction in DLQI (adjusted regression coefficient (95%CI): -5.4 (-6.9, -4.0)) and POEM (-8.7 (-10.4, -7.0)) at 4-6 months. Achieving MDA was also associated with increased odds of DLQI reduction≥4 (adjusted odds ratio (aOR) (95%CI): 16.8 (7.0-47.7), DLQI≤1 (13.3 (7.2-25.1), POEM reduction≥4 (11.6 (4.9-32.7)) and POEM≤2 (17.9 (9.4-35.2)).

Conclusion:

Achieving MDA at 4-6 months was associated with larger improvements in PROs. Further studies are needed to assess predictors and long-term benefits of achieving MDA in the real-world setting.

Drug survival of dupilumab, methotrexate and ciclosporin in patients with atopic eczema: results from the UK-Irish Atopic eczema Systemic TherApy Register (A-STAR)

Elizaveta Gribaleva, Man Fung Tsoi, David Prieto-Merino, Rebecca Carroll, Bolaji Coker, Manisha Baden, Paula E. Beattie, Tim Burton, Sharmela Darne, Moira Clark, Nicola Housam, Alan D. Irvine, Graham A. Johnston, Irene Man, Charlene Murphy, Graham Ogg, Sophia Paget, Nick J. Reynolds, Mandy Wan, Richard B. Warren, Michael Ardern-Jones, Carsten Flohr, on behalf of the A-STAR Study Group

Introduction:
Drug survival of systemic medications in atopic eczema is a commonly used measure of the effectiveness and tolerability informing clinical decision-making. This study evaluates the drug survival of methotrexate, ciclosporin and dupilumab in A-STAR register patients.

Methods:
Patients who initiated oral (oMTX) and subcutaneous methotrexate (s/c MTX), cyclosporin (CsA), and dupilumab were included. Patients were stratified by treatment received. 1-year drug survival was calculated using Kaplan-Meier estimates. oMTX was used as a reference. Adjusted hazard ratio (aHR) and corresponding 95% confidence intervals (95%CI) were estimated using Cox-proportional hazard models with covariate adjustment.

Results:
1132 drug episodes (oMTX: 289, s/c MTX: 51, CsA: 117, dupilumab: 675) were included. Baseline characteristics were largely similar among the patients across the treatment groups, except for higher EASI and number of previous systemic therapies in the CsA and dupilumab groups. 1-year survival rates of CsA, oMTX, s/c MTX and dupilumab were 34%, 56%, 64% and 83%, respectively. When stratifying the dupilumab cohort by the number of previous conventional systemic treatments (1 and ≥2), there was no statistically significant difference in dupilumab survival between the sub-groups. Median time on treatment (interquartile range) varied from 6.0 months (2.2-11.4) for CsA, 7.4 (3.0-18.7) for oMTX, 9.6 (5.0-16.4) for s/c MTX, to 16.6 (6.9-30.6) for dupilumab. Using oMTX as a reference, dupilumab was associated with a lower chance of drug discontinuation (aHR (95%CI): 0.26 (0.19-0.36)), whereas drug discontinuation was significantly higher in those receiving CsA (1.53 (1.08-2.17)). There was no significant difference in drug survival between s/c and oMTX (0.73 (0.41-1.31)). Similar trends were observed in adult compared to paediatric patients.

Conclusion:
Dupilumab demonstrated the highest drug survival, with CsA showing the highest rate of drug discontinuation among four assessed treatment modalities, fitting in with clinical experience. Further analyses to stratify survival by reasons for discontinuation are underway.

Treatment Journey in atopic eczema Patients on Abrocitinib: Real-World Evidence from the DREAM TO TREAT AD (D2TAD) Consortium

David Prieto-Merino, Elizaveta Gribaleva, Thomas Birkner, Niels Steen Krogh, Bolaji Coker, Ahmet Akkoc, Axel Hertzschuch, Merel C. Postema, Benoit Raymond, Anne Grete Frostrup, Lara Cutlar, Louise A. A. Gerbens, Alan D. Irvine, Maria Oberländer Christensen, Wouter Ouwerkerk, Phyllis I. Spuls, Simon Francis Thomsen, Stephan Weidinger, Thomas Werfel, Jochen Schmitt, Carsten Flohr, on behalf of the UK-Irish A-STAR, SCRATCH DK, TREAT-NL/BE and TREATgermany register study groups

Introduction:
There is a lack of real-world evidence on systemic treatment patterns in moderate-to-severe atopic eczema (AD). D2T AD is a European register-based study evaluating the use of abrocitinib in routine clinical care in Denmark, Germany, the Netherlands, Belgium, and the United Kingdom.

Aim:
To describe the systemic treatment journey of AD patients prior to abrocitinib initiation.

Methods:
Prospectively collected data from ASTAR UK (UK), SCRATCH Denmark (DK), TREATgermany (GER), and TREAT-NL/BE (NL/BE) registers from patients receiving abrocitinib were harmonised and aggregated. Patient characteristics and treatment patterns were summarised using descriptive statistics.

Results:
261 abrocitinib treated patients were included (DK:50; GER:89; NL/BE:72; UK: 50). The mean (SD) age varied from 31.0 (15.7) in the UK to 40.3 (13.7) in GY. There was significant heterogeneity in exposure to systemic treatments prior to abrocitinib initiation between GER and other countries: 36% of GER patients were systemic-naive vs 6.9% in the NL/BE, 2% in the UK, and 0% in DK. In GER, abrocitinib was most used as a 2nd line treatment, while in DK, NL/BE, and the UK as 4th line therapy. The most commonly used systemic medications directly prior to abrocitinib were dupilumab (50%) and upadacitinib (18.8%) in GER, dupilumab (42%), baricitinib (12%) and methotrexate (12%) in the UK, dupilumab (28.4%) and upadacitinib (26.9%) in the NL/BE, and dupilumab (44%) and baricitinib (38%) in DK. The higher start dose of abrocitinib (200 mg) was prescribed more frequently in DK (90%), GER (70.8%), and the UK (60%), while the lower dose was more predominant in NL/BE (54%). The average reduction in EASI per month ranged from -4.6 in GER and UK, -3.5 in NL/BE, to -3 in DK.

Conclusion:
There is significant variability in treatment journeys before abrocitinib initiation across European registers, which is likely to impact the observed differences in treatment effectiveness.

Atopic eczema in older adults: findings from the UK-Irish Atopic eczema Systemic therapy Register (A-STAR)

David J. Gawkrodger, Man Fung Tsoi, Elizaveta Gribaleva, David Prieto-Merino, Rebecca Carroll, Bolaji Coker, Manisha Baden, Paula E. Beattie, Tim Burton, Moira Clark, Sharmela Darne, Nicola Housam, Alan D. Irvine, Graham A. Johnston, Irene Man, Charlene Murphy, Graham Ogg, Sophia Paget, Nick Reynolds, Mandy Wan, Richard B. Warren, Michael Ardern-Jones, Carsten Flohr, on behalf of the A-STAR Study Group

Introduction:
Atopic eczema is increasingly common in the older adults, and real-world experience with systemic therapies is limited.

Aim:
We therefore examined therapeutic choices and clinical patterns in atopic eczema patients' older adult patients with atopic eczema (≥60 years of age).

Methods:
A-STAR patients recruited were stratified by age at enrolment (≥60, n=69; 18-<60, n=742; <18, n=336: this sequence used throughout) and age of drug initiation between October 2018 and November 2025. The chi-square test was used to assess the statistical significance of differences in characteristics among the groups, with $p<0.05$ considered statistically significant.

Results:
Older adult atopic eczema patients starting systemic therapy were predominantly male (65.2%, 54.0, 57.1) with a higher proportion of Fitzpatrick I/II skin type (62.3%, 59.4, 44.9) versus V/VI (4.3%, 10.7, 18.5; $p<0.001$). At drug initiation, the mean EASI (17.0, 18.0, 21.8; $p<0.001$), DLQI (14.0, 15.5, 14.0; $p=0.006$) and POEM (18.8, 20.1, 18.7; $p=0.007$) were significantly different among the age groups. Differences in clinical phenotype were confined to follicular eczema (1.1%, 8.5, 16.5) and ichthyosis (20.4%, 25.2, 15.0;) ($p<0.001$). Allergic co-phenomena also differed between the groups: food allergy was less frequent (23.7%, 42.0, 60.7) and contact allergy more common in the older adults (44.1%, 38.6, 12.8;) ($p<0.001$). The older adult cohort was more commonly exposed to >2 previous systemic treatments (58.1%, 54.0, 35.6; $p<0.001$). Dupilumab (38.7%, 41.8, 49.6; $p<0.001$) and methotrexate (12.9%, 17.0, 26.5) were less utilised in the elderly, though Tralokinumab was more frequently prescribed (10.8%, 4.4, 0.5; $p<0.001$). 12.9% of drug episodes in the older adult group were JAK inhibitors. When prescribing systemic treatments, comorbidities were considered more commonly (26.5%, 17.8, 6.6; $p<0.001$), while the therapeutic profile determined treatment choice less often (19.3%, 29.5, 43).

Conclusion:
The clinical expression of atopic eczema in older adults is subtly different compared to younger groups. Significant differences in selected treatment regimens suggest consideration of co-factors by prescribers.

The association of (hyper)eosinophilia on atopic eczema severity and treatment response: evidence from the UK-Irish Atopic eczema Systemic TherApy Register (A-STAR)

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Background:
Atopic eczema (AD) is often accompanied by elevated blood eosinophils (eos). While eos are central in asthma pathophysiology, their role and clinical relevance in AD is poorly characterized.

Objective:
To assess the relationship between baseline eos levels and AD severity, clinical characteristics, and treatment response.

Methods:
A-STAR is a prospective longitudinal study of AD patients receiving systemic therapy in the UK. Patients enrolled between Oct 2018 and May 2025 with baseline eos counts were included. Eos were stratified as normal (<500/mm³), moderately raised (500–1500/mm³), or hypereosinophilia (hEo) (>1500/mm³), and eos-to-lymphocyte ratio (ELR) into four categories (0–<0.15; 0.15–<0.29; 0.29–<0.49; ≥0.49). Clinical scores were normalized to 0–100. Treatment response outcomes were evaluated through achieving EASI-75 and EASI-90 (≥75% and ≥90% improvement in EASI score from baseline, respectively) for each patient censored at 1 year. Multivariable regression was performed using R 4.4.1.

Results:
719 patients (mean (standard deviation) age 27.6 (15.5) years; 56.1% male) were included; 9.3% had prior dupilumab exposure, and 47.1% received dupilumab during A-STAR follow-up. Patient with hEo (n=64, 8.9%) were younger, with earlier-onset, and erythrodermic phenotype. Compared to those with normal eos, hypereosinophilia was associated with asthma (odds ratio (OR) 2.4, 95% confidence interval (CI) 1.1–2.1) and higher AD severity with EASI +15% (95%CI 9.5, 20.5), DLQI +14.4% (95%CI 5.2, 23.6), PP-NRS +8.8% (95%CI 0.4, 17.1), and POEM +8.3 (95%CI −0.3, 17). ELR ≥0.49 correlated with asthma (OR 3.2, 95%CI 1.7, 6.0) and higher EASI (+11.2%, 95%CI 6.7, 15.7), but not DLQI, PP-NRS, or POEM. Baseline eos counts were not associated with treatment response to any systemic therapy, including both conventional and biologic/small molecule agents.

Conclusion:
High eos counts are associated with more severe AD, independent of asthma, yet baseline eos counts or ELR do not impact treatment response.

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A-STAR publications

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