Growing up with atopic dermatitis: Achieving sustained outcomes for moderate-to-severe disease

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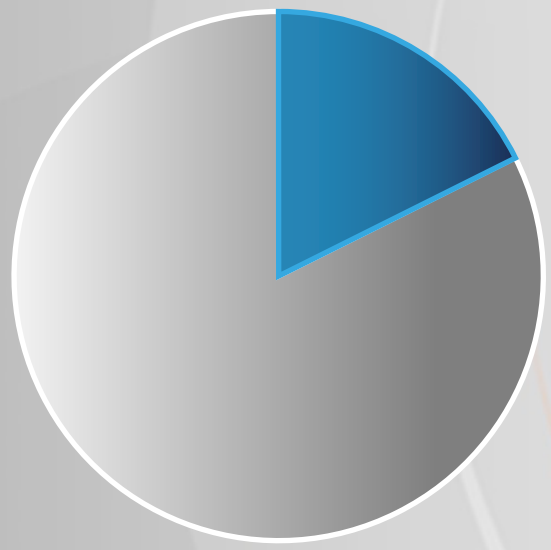
Why is an accurate assessment of the burden of moderate-to-severe atopic dermatitis critical?

Atopic dermatitis

Worldwide incidence

Children

15–20%



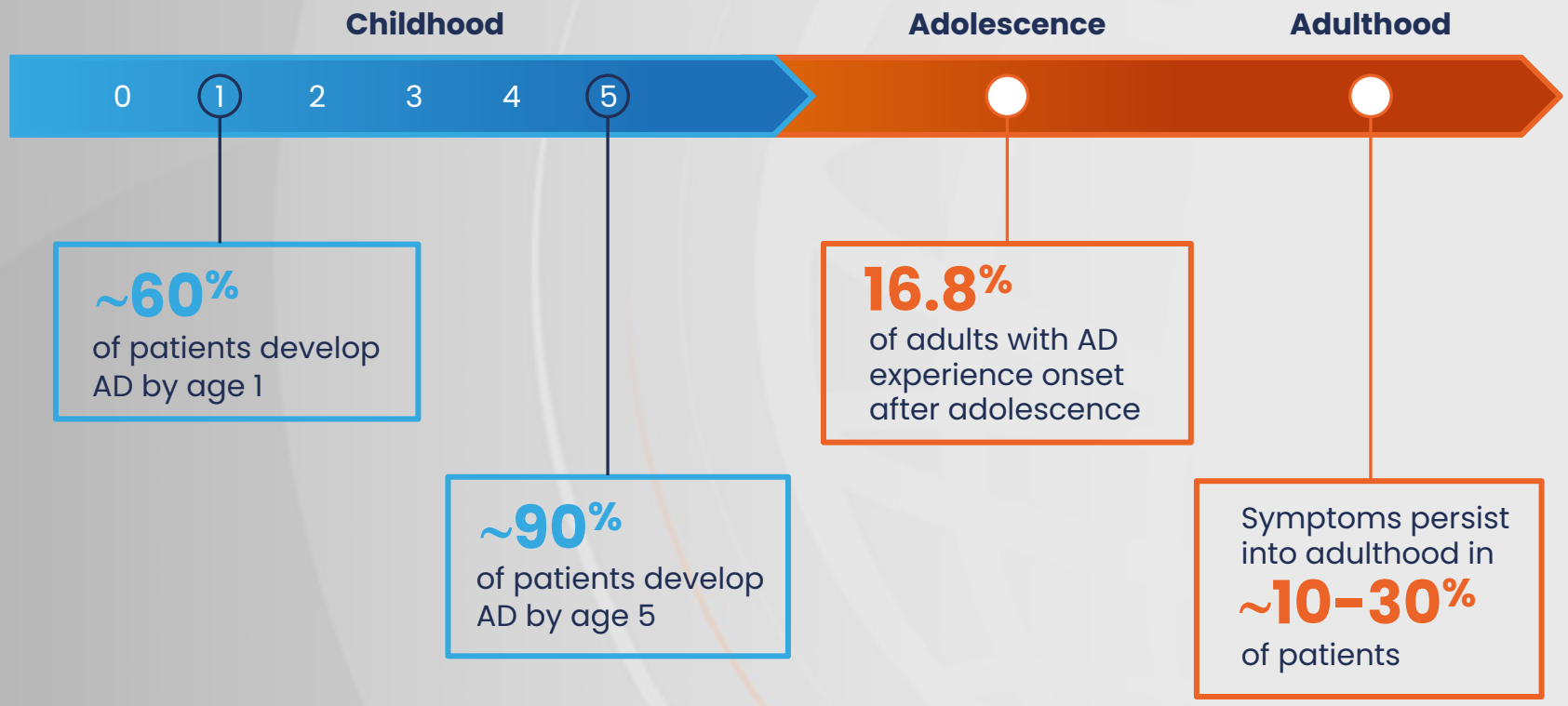
Adults

1–3%

Avena-Woods C. Am *J Manag Care*. 2017;23:S115–23.

Atopic dermatitis

Onset and persistence of symptoms



AD, atopic dermatitis.

Avena-Woods C. *Am J Manag Care*. 2017;23:S115–23.

The patient journey

Essential clinical features[1]

Adults

- Pruritus
- Erythematous skin lesions and vesicles
  - History of flexural involvement
  - Not in groin and axillae regions

Infants and children

- Pruritus
- Erythematous skin lesions and vesicles
  - Face, neck, extensor involvement
  - History of flexural involvement
  - Not in groin and axillae region

Chronic relapsing inflammatory conditions[2]

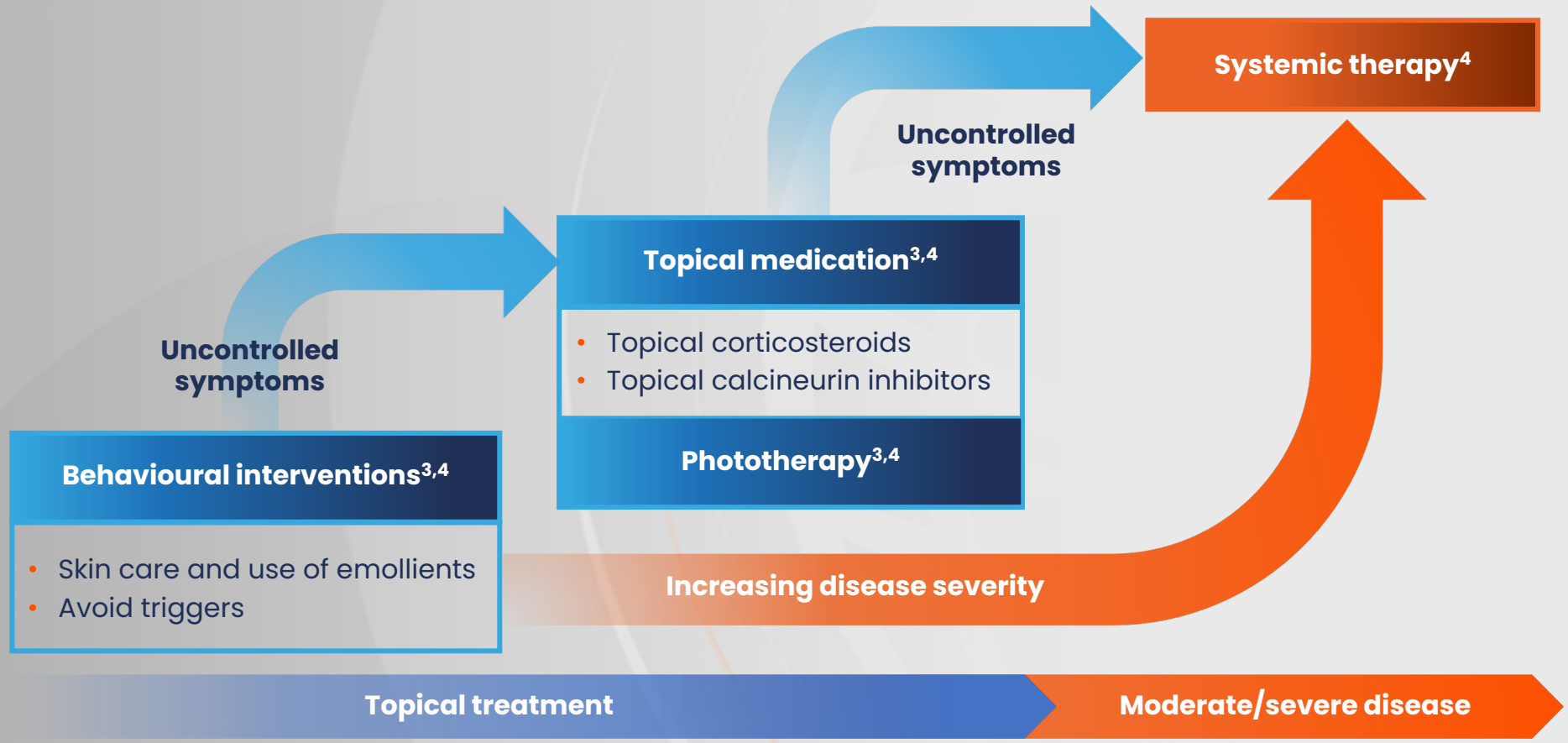
Three different clinical phases:

- Acute (vesicular, weeping, crusting eruption)
- Subacute (dry, scaly, erythematous papules and plaques)
- Chronic (lichenification, thickening)

Initial symptoms and diagnosis → **Clinical presentation**

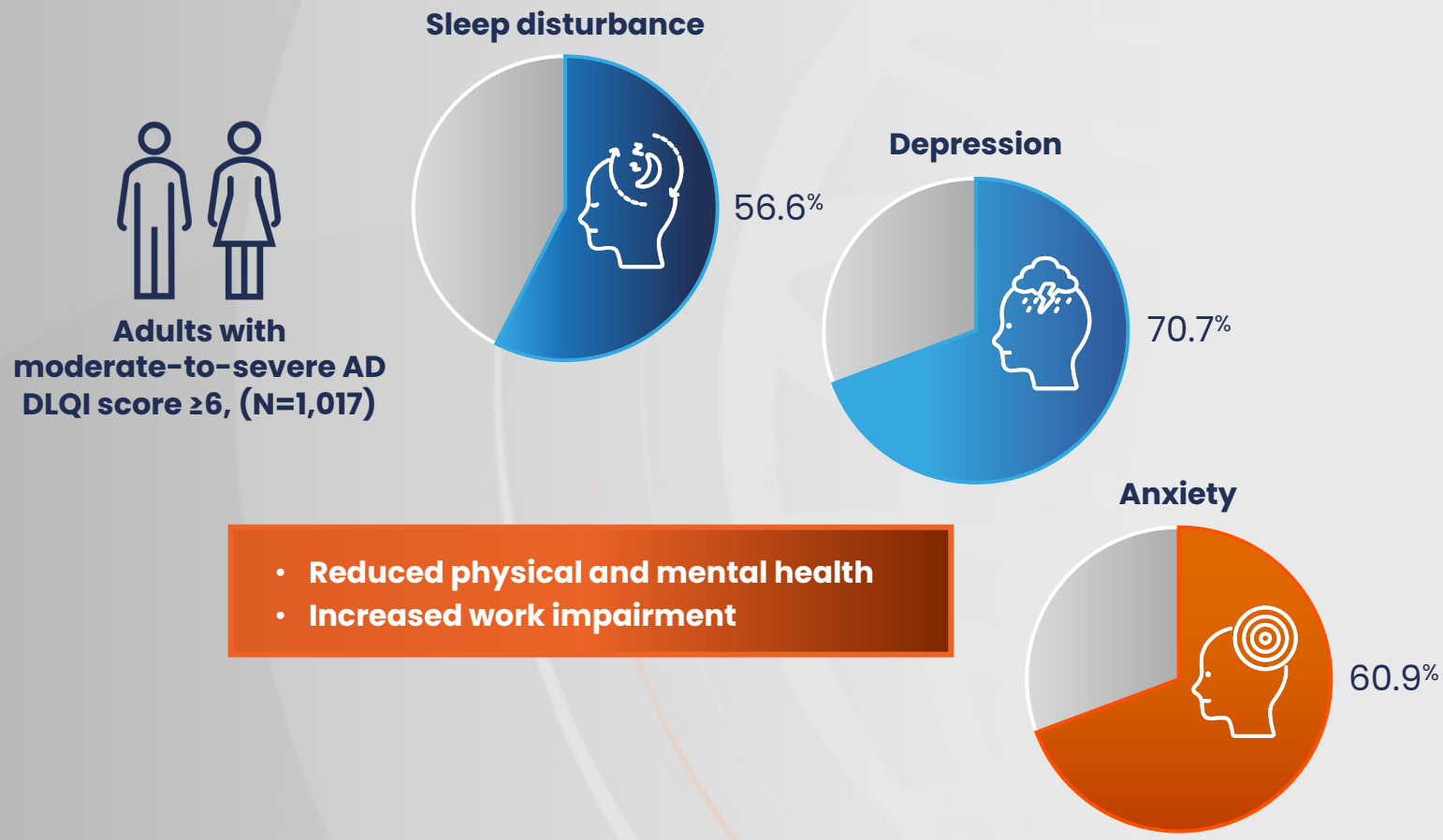
1. Eichenfield LF, et al. *J Am Acad Dermatol*. 2014;70:338–51; 2. Avena-Woods C. *Am J Manag Care*. 2017;23:S115–23;
3. Eichenfield LF, et al. *J Am Acad Dermatol*. 2014;71:116–32; 4. Simpson EL, et al. *J Am Acad Dermatol*. 2017;77:623–33.

The patient journey



1. Eichenfield LF, et al. *J Am Acad Dermatol*. 2014;70:338–51; 2. Avena-Woods C. *Am J Manag Care*. 2017;23:S115–23;
3. Eichenfield LF, et al. *J Am Acad Dermatol*. 2014;71:116–32; 4. Simpson EL, et al. *J Am Acad Dermatol*. 2017;77:623–33.

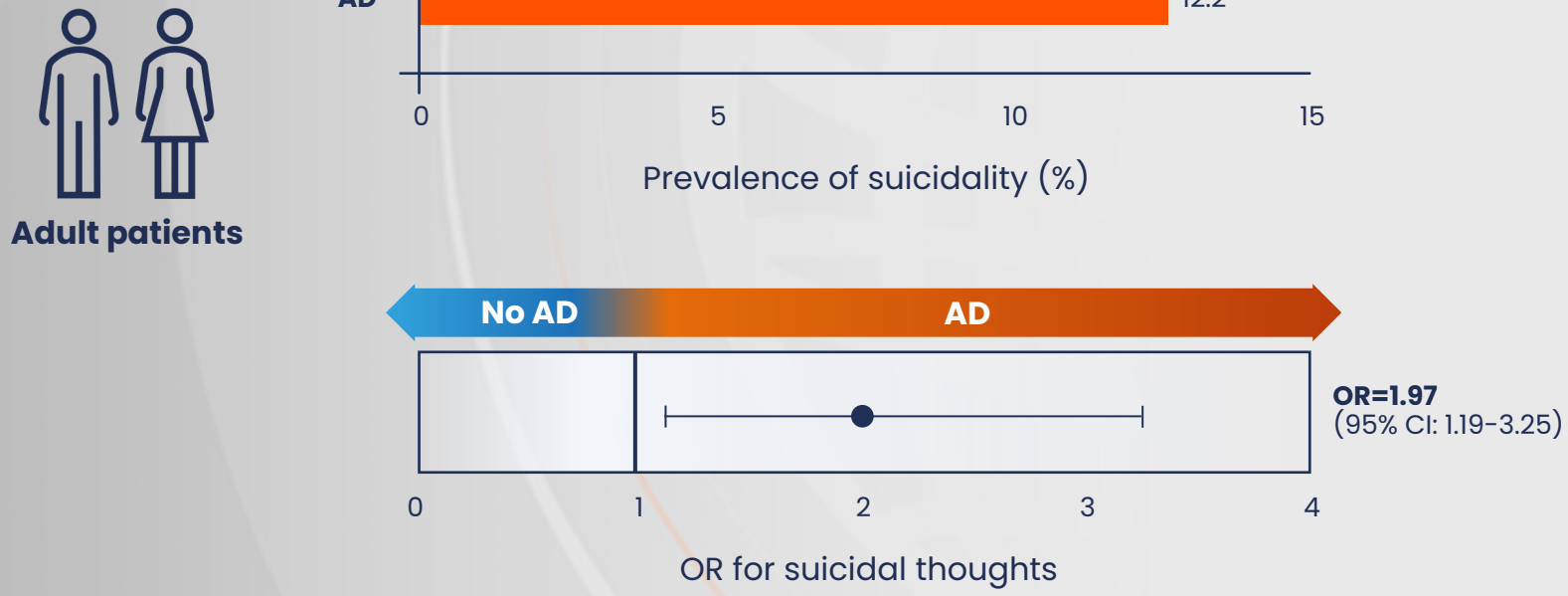
The burden of recurrent AD symptoms



DLQI, Dermatology Life Quality Index.
Kwatra SG, et al. *Adv Ther*. 2021;38:1627–37.

The burden of recurrent AD symptoms

Suicidality: Meta-analysis of 14 studies



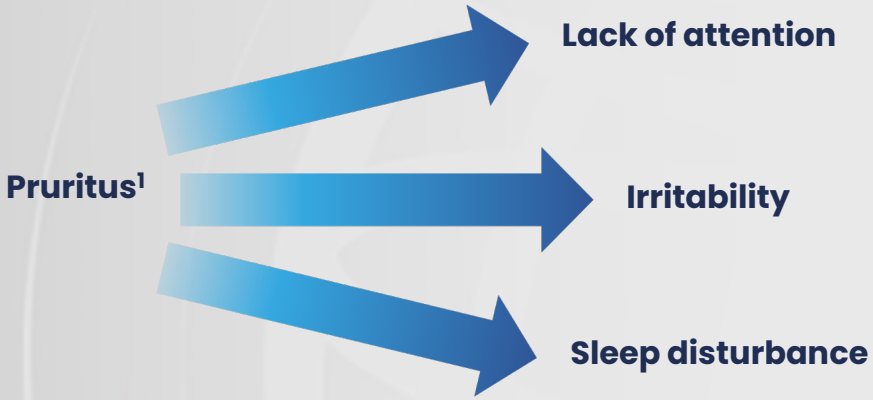
CI, confidence interval; OR, odds ratio.

Patel KR, et al. *J Am Acad Dermatol*. 2019;80:402–10.

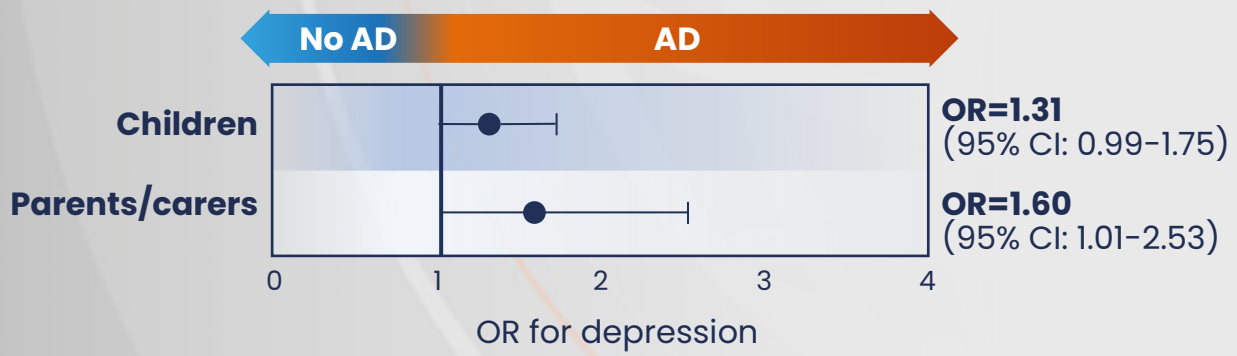
The burden of recurrent AD symptoms

Impact on children and their families

Infants and children

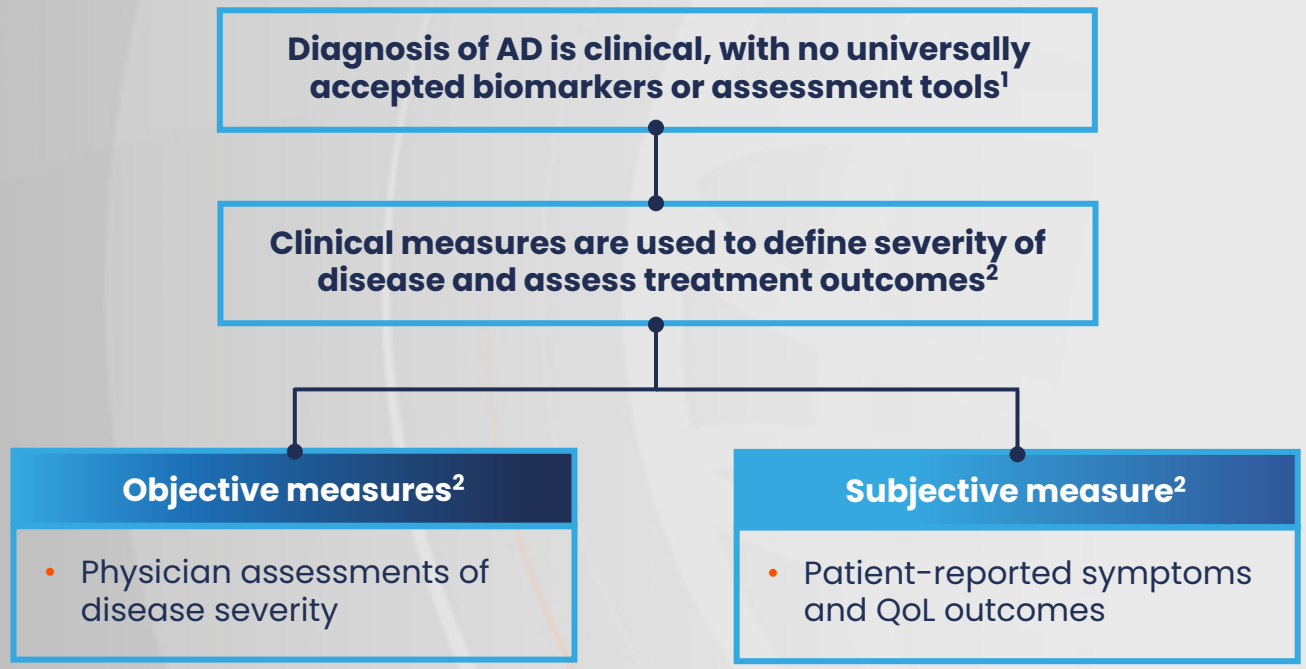


Increased OR for depression in children with AD and their parents[2]



1. Na CH, et al. *Children*. 2019;6:133; 2. Patel KR, et al. *J Am Acad Dermatol*. 2019;80:402–10.

Assessing the severity of AD and its impact on patient QoL

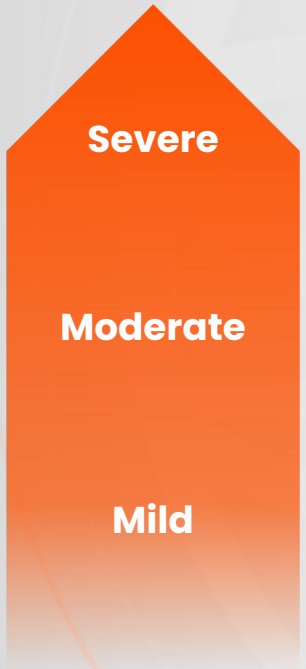


QoL, quality of life.

1. Lara-Corrales I, et al. *J Cutan Med Surg*. 2019;23:3S–11S; 2. Gooderham MJ, et al. *J Cutan Med Surg*. 2018;22:10S–16S.

Assessing the severity of AD and its impact on patient QoL

Disease severity groups are used for clinical trials and practical management



There is no gold standard for defining disease severity groups

Gooderham MJ, et al. *J Cutan Med Surg*. 2018;22:10S–16S.

Assessing the severity of AD and its impact on patient QoL

Objective measures

Tool	Description
EASI	• Disease extent and severity on 4 clinical signs • 4 defined body regions • Maximum score of 72
SCORAD	• Disease extent and severity on 6 clinical signs • Patient-reported pruritus and sleep loss • Maximum score of 103
PGA	• Overall disease severity at a given time point • 6-point severity scale
BSA	• Disease extent as a percentage of total body surface area
ADSI	• Erythema, excoriation, exudation, lichenification and pruritus • Each on a 4-point scale
SASSAD	• 6 clinical signs • 6 sites on the body

EASI and SCORAD are the only outcome measures that have been validated for use in both clinical trials and in a clinic setting

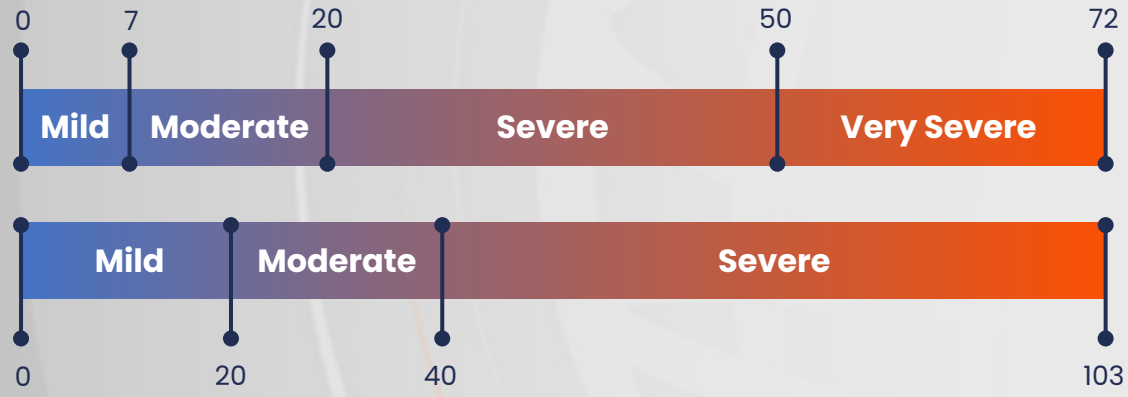
ADSI, AD Severity Index; BSA, body surface area; EASI, Eczema Area and Severity Index; PGA, Physician Global Assessment; SASSAD, Six Area, Six Sign AD; SCORAD, Scoring AD.

Gooderham MJ, et al. *J Cutan Med Surg*. 2018;22:10S–16S.

Assessing the severity of AD and its impact on patient QoL

EASI[1,2]

- Disease extent and severity on 4 clinical signs
- 4 defined body regions
- Maximum score of 72



SCORAD[1,2]

- Disease extent and severity on 6 clinical signs
- Patient-reported pruritus and sleep loss
- Maximum score of 103

1. Gooderham MJ, et al. *J Cutan Med Surg*. 2018;22:10S–16S; 2. Bieber T, et al. *J Allergy Clin Immunol*. 2017;139:S58–64.

Assessing the severity of AD and its impact on patient QoL

Subjective, patient-reported measures

Severity of symptoms

Tool	Description
POEM[1]	• Severity and duration of 7 symptoms experienced over the preceding week
Pruritus NRS[1]	• 0–10 scale of patient-reported itch
Skin pain NRS[2]	• 0–10 scale of patient-reported itch

Quality of life

Tool	Description
DLQI[1]	• 10-item questionnaire assessing impact on daily activities, sleep and overall QoL

POEM, DLQI and pruritus NRS are often used in AD clinical trials

NRS, Numerical Rating Scale; POEM, Patient Oriented Eczema Measure.

1. Gooderham MJ, et al. *J Cutan Med Surg*. 2018;22:10S–16S; 2. Newton L, et al. *J Patient Rep Outcomes*. 2019;3:42.

Assessing the severity of AD and its impact on patient QoL

QoL of paediatric patients and their parents/carers

General dermatology tools

- Dermatology life quality index (DLQI)
- Children's dermatology life quality index (CDLQI)
- Family dermatology life quality index (FLQI)
- Infant's dermatitis QoL index (IDQoL)
- Skindex-teen
- Toddler QoL survey

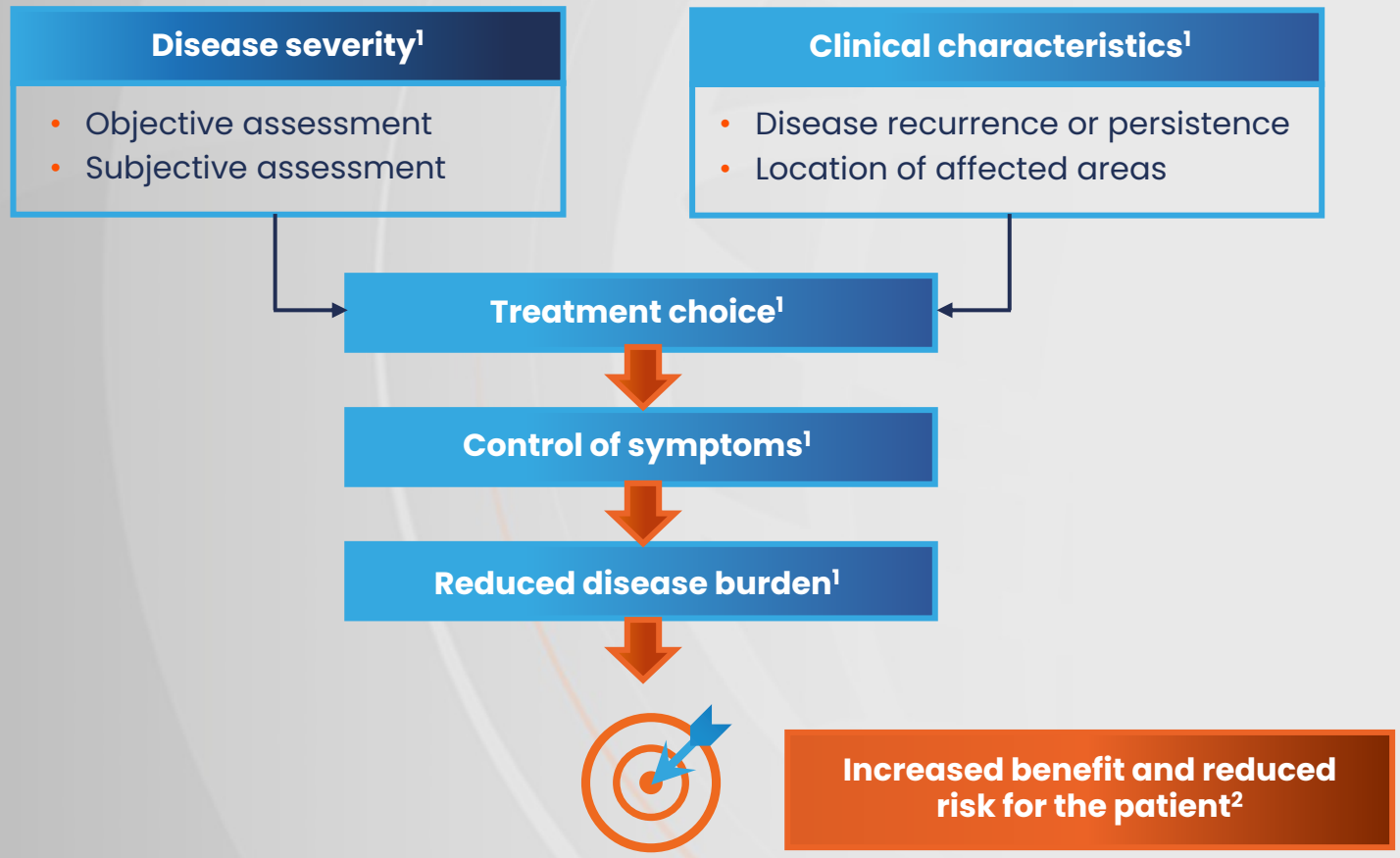
AD-specific tools

- Dermatitis family index (DFI)
- Childhood AD impact scale (CADIS)
- Childhood impact of AD (CIAD)
- DISABKIDS AD Module
- Parents' index of QoL in AD (PIQoL-AD)
- QoL in primary caregivers of children with AD (QPCAD)
- QoL in parents of children with AD

Na CH, et al. *Children*. 2019;6:133.

Summary and conclusions

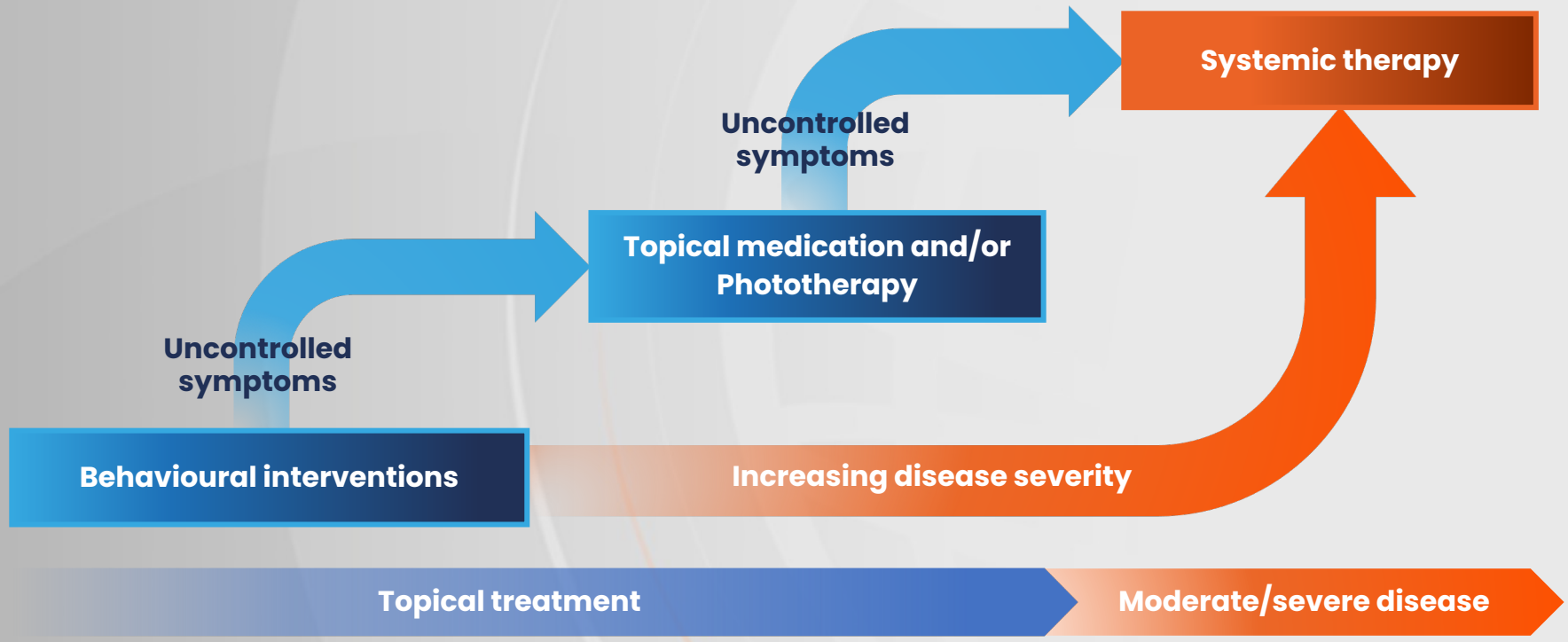
Why is it important to assess disease severity?



1. Gooderham MJ, et al. *J Cutan Med Surg*. 2018;22:10S–16S; 2. Simpson EL, et al. *J Am Acad Dermatol*. 2017;77:623–33.

Can systemic therapy achieve sustained control of signs, symptoms and quality of life in atopic dermatitis?

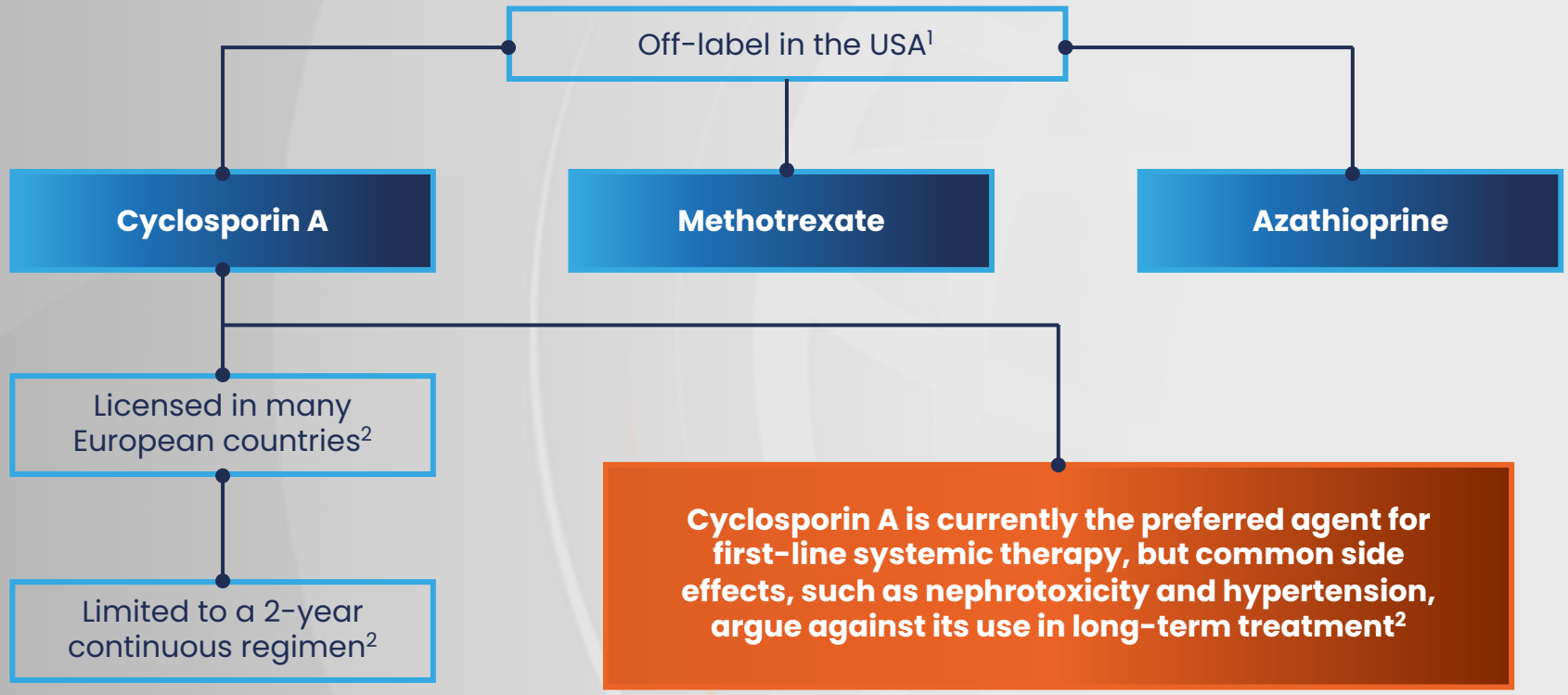
Systemic therapy in the current treatment pathway for AD



AD, atopic dermatitis.

Simpson EL, et al. *J Am Acad Dermatol*. 2017;77:623–33.

Conventional systemic therapy for AD



1. Davari DR, et al. *J Asthma Allergy*. 2021;14:595–607; 2. Wollenberg A, et al. *J Eur Acad Dermatology Venereol*. 2018;32:850–78.

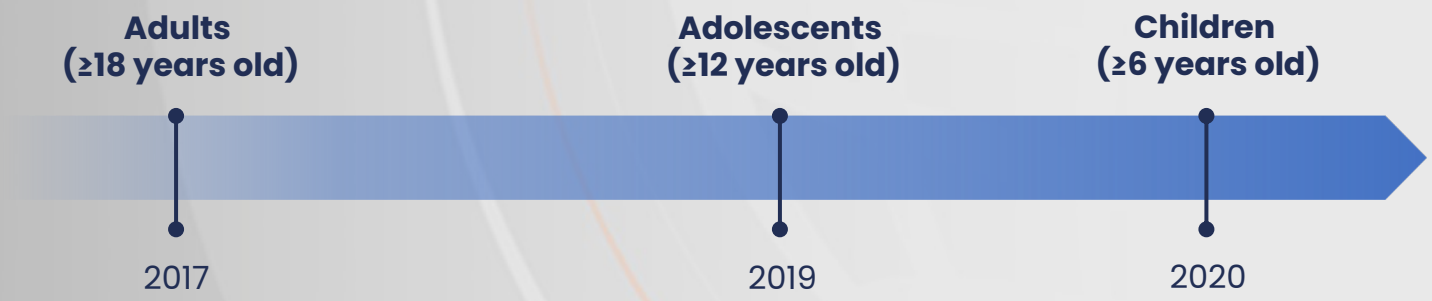
Approved systemic therapy for AD

Biologics

Dupilumab[1]

- mAb against IL-4Rα
- Inhibits IL-4 and IL-13 signalling

FDA approval history for use of dupilumab for moderate-to-severe AD not controlled with topical treatment[2]

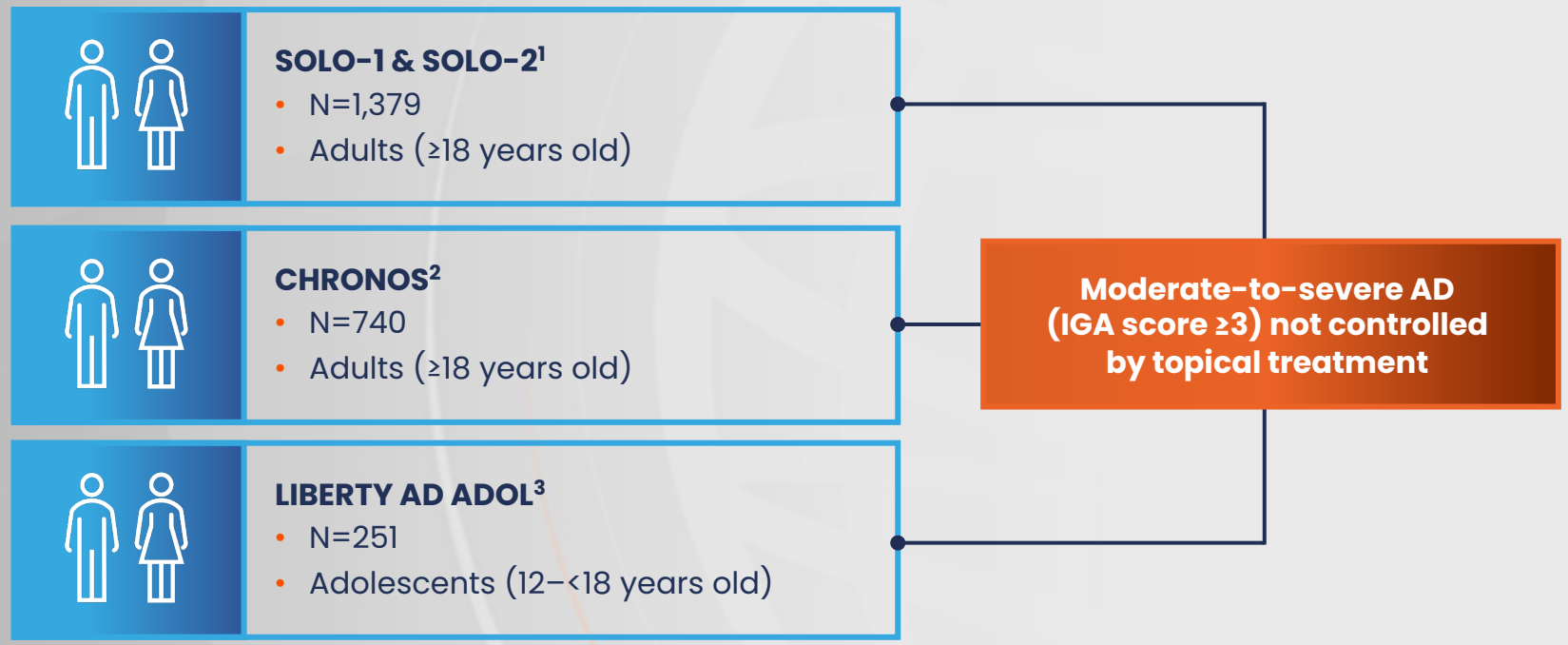


FDA, US Food and Drug Administration; IL, interleukin; IL-4Rα, interleukin-4 receptor alpha; mAb, monoclonal antibody.

1. Davari DR, et al. *J Asthma Allergy*. 2021;14:595–607; 2. FDA. Dupilumab approval history available at: www.accessdata.fda.gov/scripts/cder/daf/index.cfm?event=overview.process&ApplNo=761055 (accessed 13 September 2021).

Phase III trials of dupilumab in adults and adolescents

Study design: Patient populations



IGA, Investigator's Global Assessment.

1. Simpson EL, et al. *N Engl J Med*. 2016;375:2335–48; 2. Blauvelt A, et al. *Lancet*. 2017; 389:2287–303; 3. Simpson ET, et al. *JAMA Dermatol*. 2020;156:44–56; 4. Paller AS, et al. *J Am Acad Dermatol*. 2020;83:1282–93.

Phase III trials of dupilumab in adults and adolescents

Study design: Treatment

SOLO-1 & SOLO-2[1]
- Dupilumab 300 mg QW or Q2W
- No topical medication

CHRONOS[2]
- Dupilumab 300 mg QW or Q2W
- Topical medication given to all groups

LIBERTY AD ADOL[3]
- Dupilumab 200 mg or 300 mg Q2W (weight-tiered), or 300 mg Q4W
- Topical treatment only as a rescue

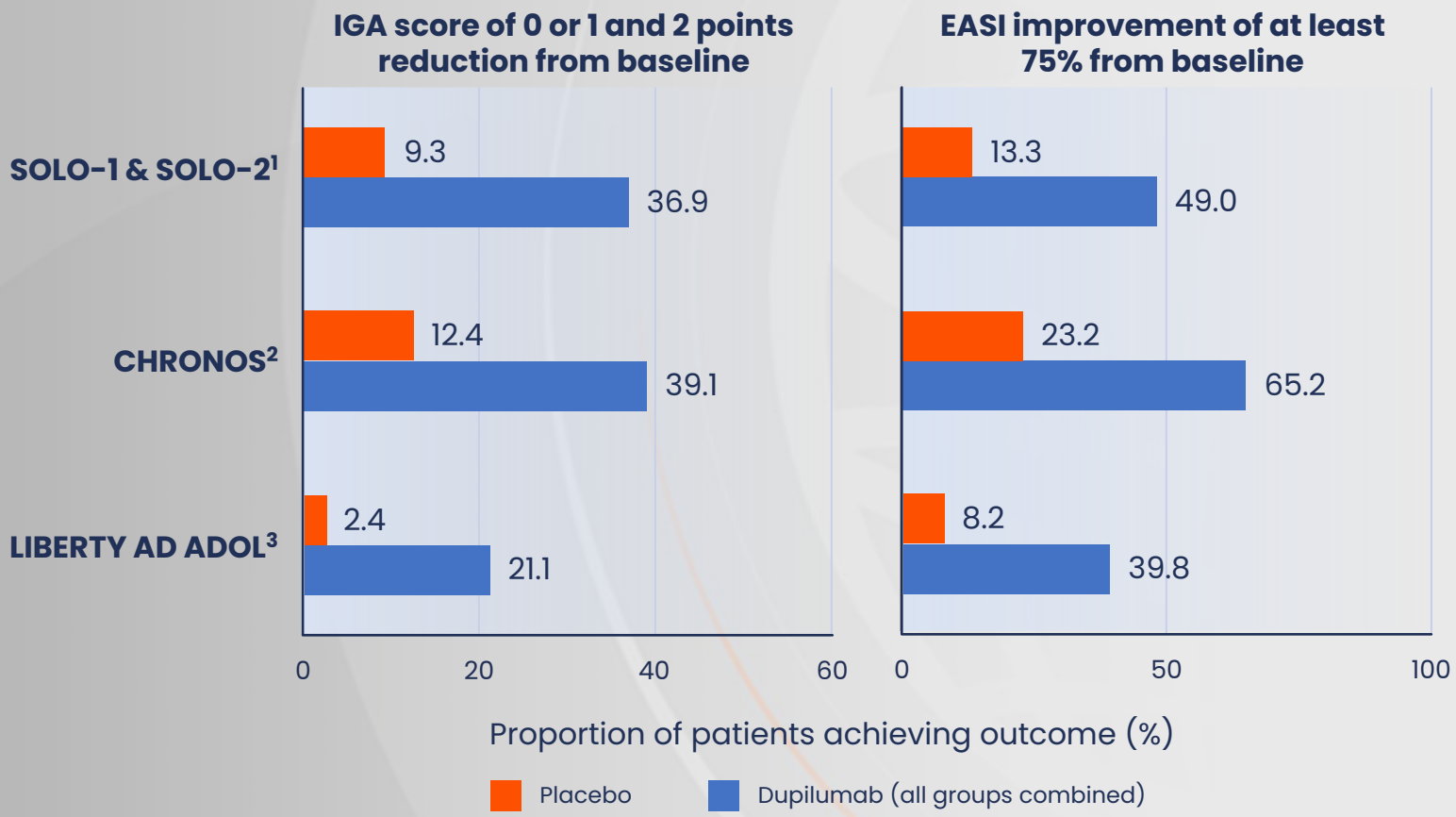
Primary endpoints:[1–3]
- IGA score of 0 or 1 and ≥2 points reduction from baseline at week 16
- EASI-75 at week 16

EASI, Eczema Area and Severity Index; Q2W, once every 2 weeks; QW, once a week.

1. Simpson EL, et al. *N Engl J Med*. 2016;375:2335–48; 2. Blauvelt A, et al. *Lancet*. 2017; 389:2287–303; 3. Simpson ET, et al. *JAMA* Dermatol. 2020;156:44–56.

Phase III trials of dupilumab in adults and adolescents

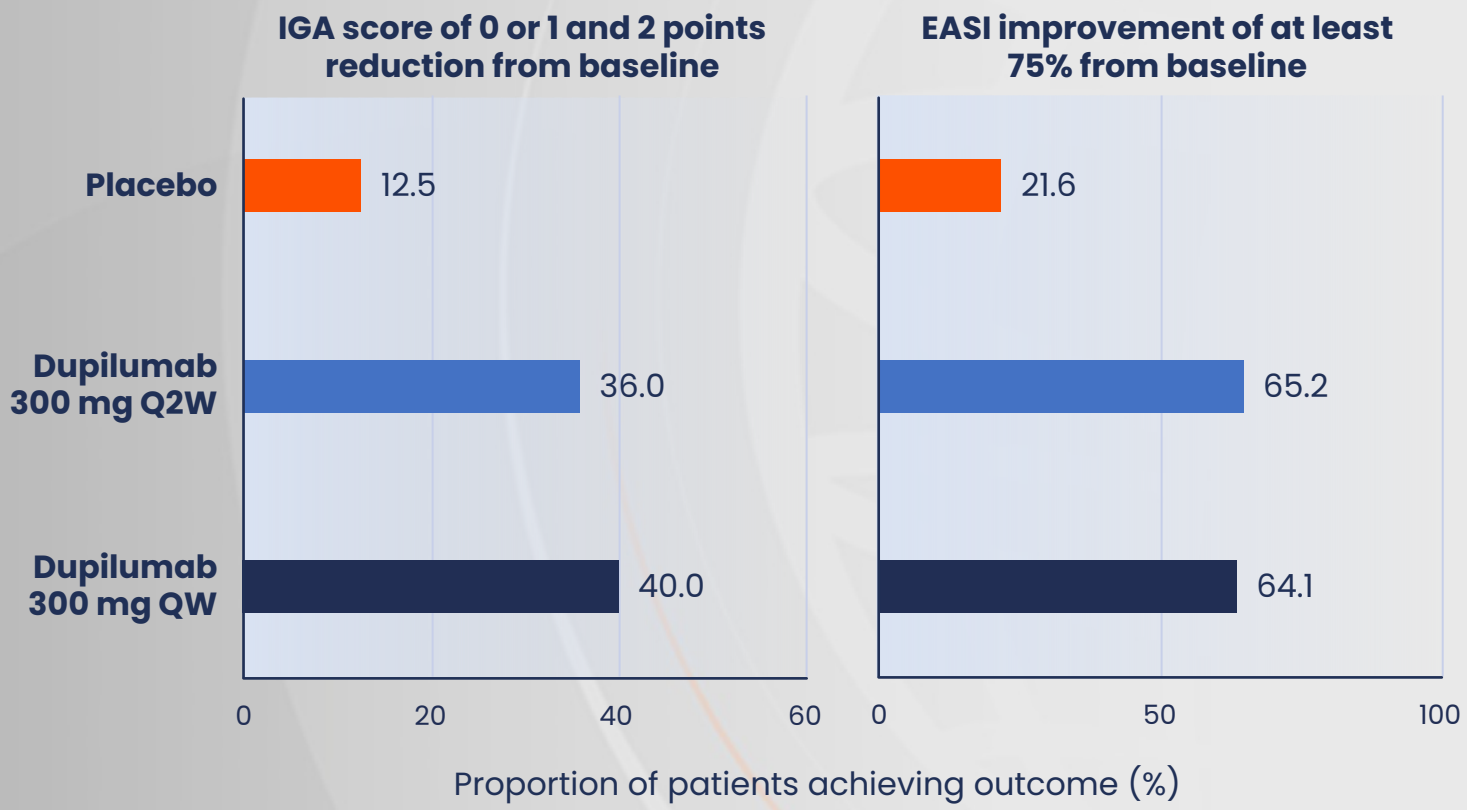
Efficacy: Week 16



1. Simpson EL, et al. *N Engl J Med*. 2016;375:2335–48; 2. Blauvelt A, et al. *Lancet*. 2017; 389:2287–303; 3. Simpson ET, et al. *JAMA Dermatol*. 2020;156:44–56.

Long-term efficacy of dupilumab: CHRONOS

Efficacy: Week 52



Blauvelt A, et al. *Lancet*. 2017; 389:2287–303.

Long-term efficacy of dupilumab: SOLO CONTINUE

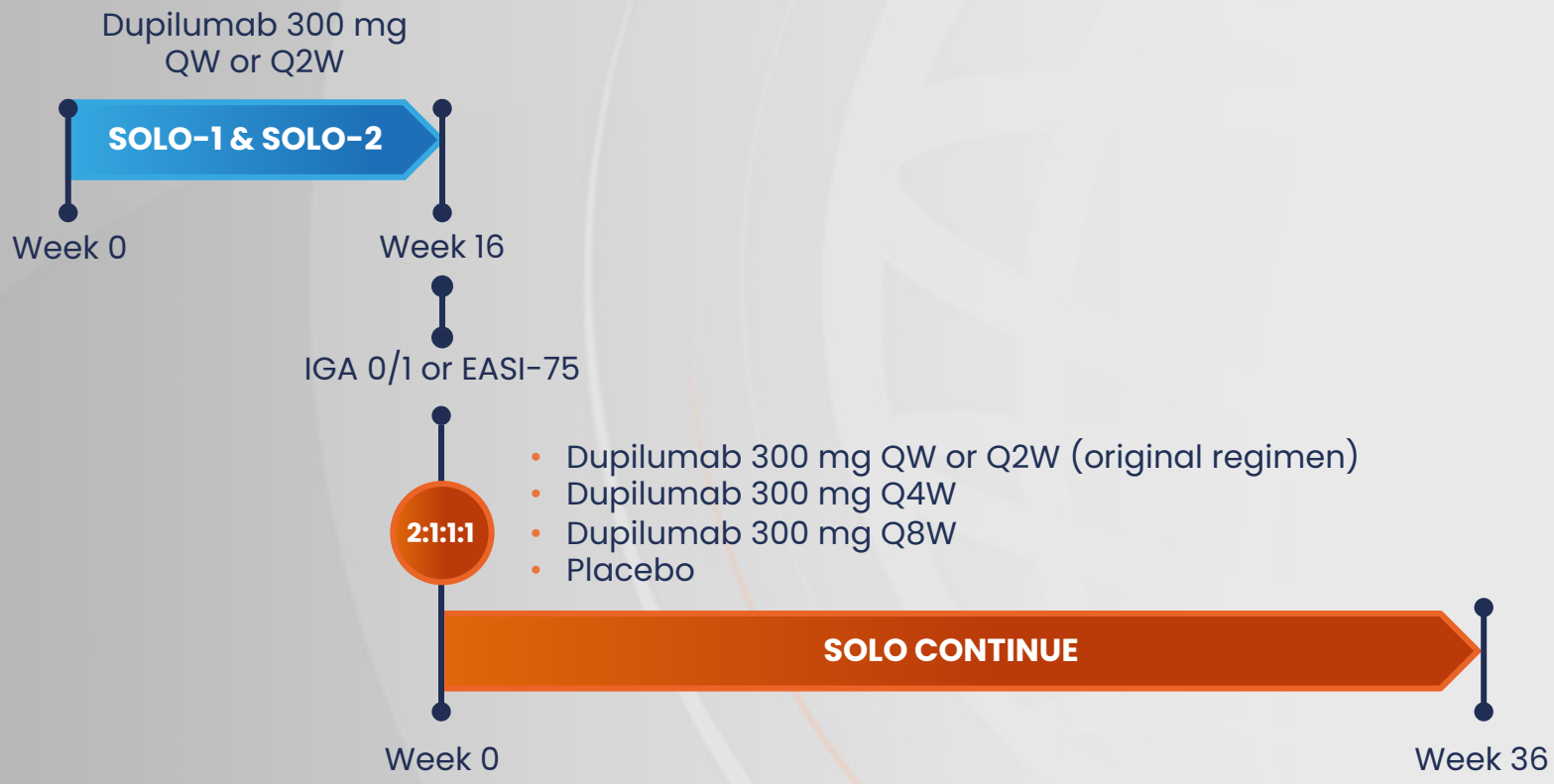
Study design

- Patients with moderate-to-severe AD
- Treated with dupilumab
- Achieved IGA score of 0 or 1, or at least 75% EASI score improvement at week 16 in SOLO-1 and SOLO-2
- N=422

Worm M, et al. *JAMA Dermatol*. 2020;156:131–43.

Long-term efficacy of dupilumab: SOLO CONTINUE

Study design



Q4W, once every 4 weeks; Q8W, once every 8 weeks.

Worm M, et al. *JAMA Dermatol*. 2020;156:131–43.

Long-term efficacy of dupilumab: SOLO CONTINUE

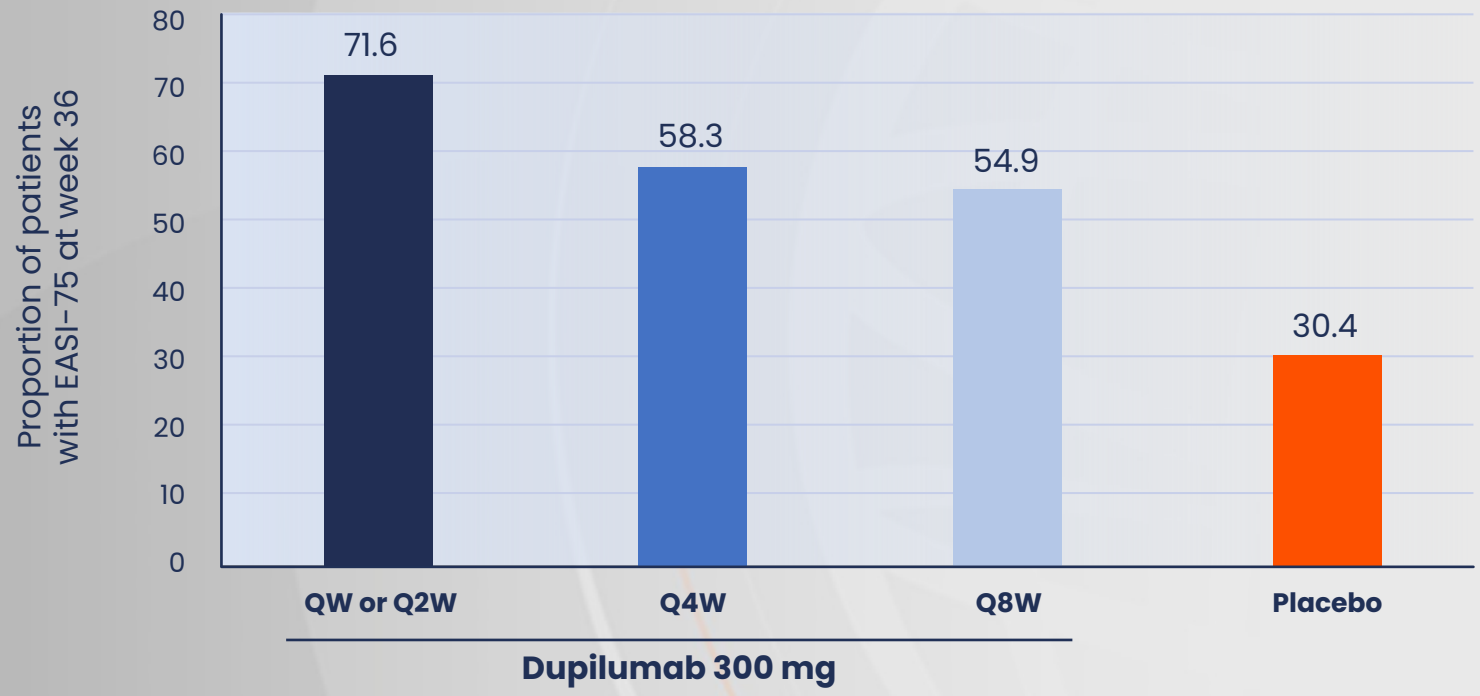
Efficacy: Week 36 - Mean change in EASI score

! Continued response over time was most consistently maintained with dupilumab administered weekly or every 2 weeks

Worm M, et al. *JAMA Dermatol*. 2020;156:131–43.

Long-term efficacy of dupilumab: SOLO CONTINUE

Efficacy: Week 36 - Proportion of patients with EASI-75

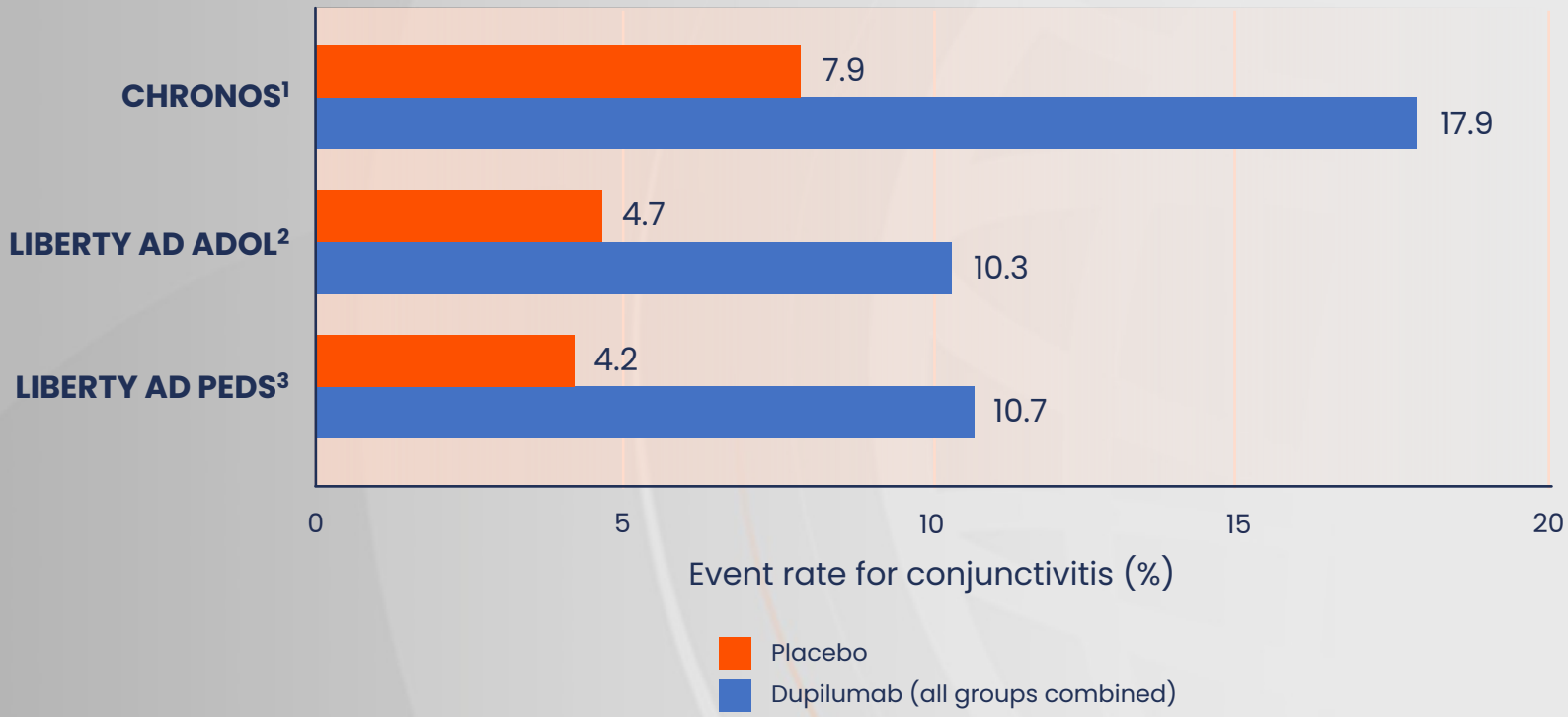


! Switching to longer dosage intervals or placebo resulted in reduced response to treatment

Worm M, et al. *JAMA Dermatol*. 2020;156:131–43.

Dupilumab safety profile

Incidence of conjunctivitis

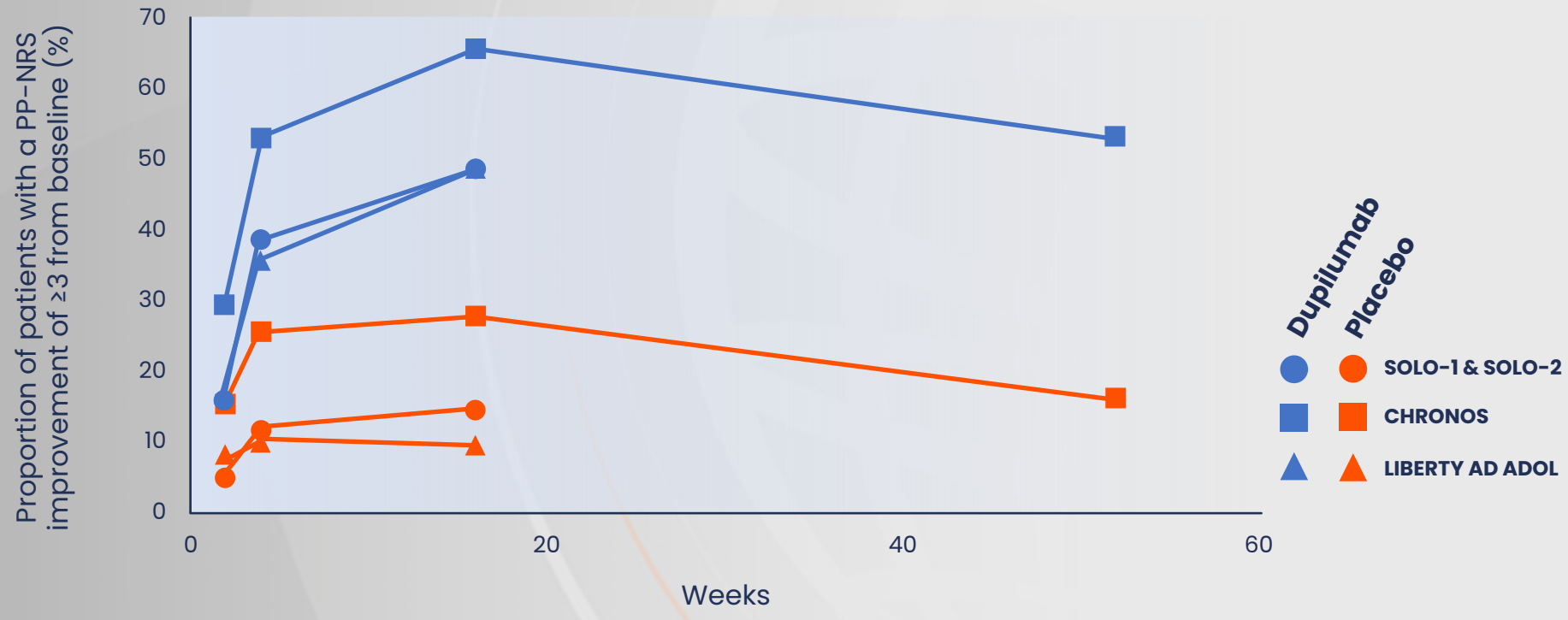


A higher incidence of conjunctivitis was observed in patients receiving dupilumab across all age groups in different trials

1. Blauvelt A, et al. *Lancet*. 2017;389:2287–303; 2. Simpson ET, et al. *JAMA Dermatol*. 2020;156:44–56; 3. Paller AS, et al. *J Am Acad Dermatol*. 2020;83:1282–93.

Impact of effective systemic treatment on patient QoL

Pruritus in adults and adolescents: SOLO-1, SOLO-2, CHRONOS and AD ADOL

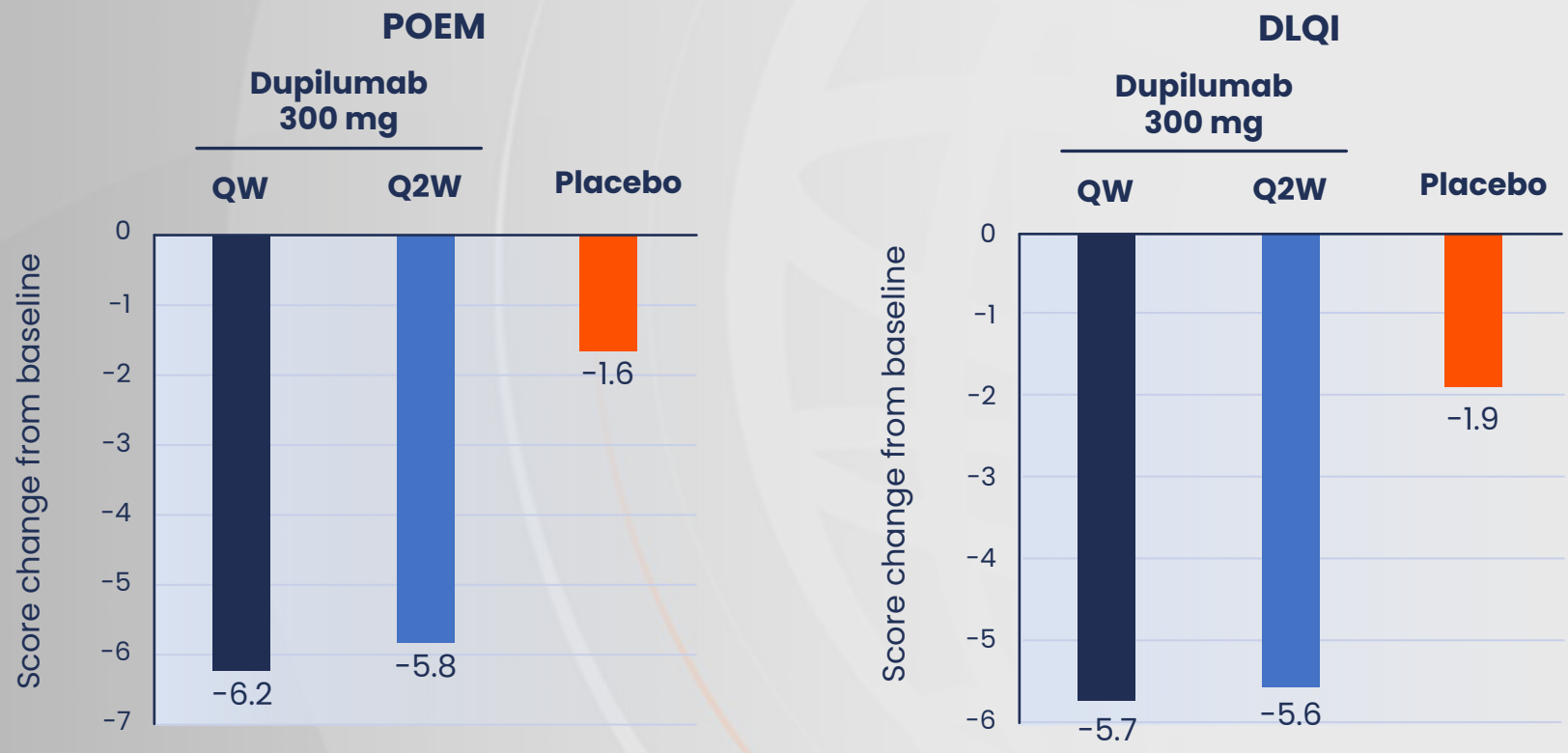


PP-NRS, Peak Pruritus Numerical Rating Scale; QoL, quality of life.

Silverberg JI, et al. *J Am Acad Dermatol*. 2020;82:1328–36.

Impact of effective systemic treatment on patient QoL

Adult patient-reported outcomes: SOLO-1 and SOLO-2



DLQI, Dermatology Life Quality Index; POEM, Patient Oriented Eczema Measure.
Cork MJ, et al. *J Dermatolog Treat*. 2020;31:606–14.

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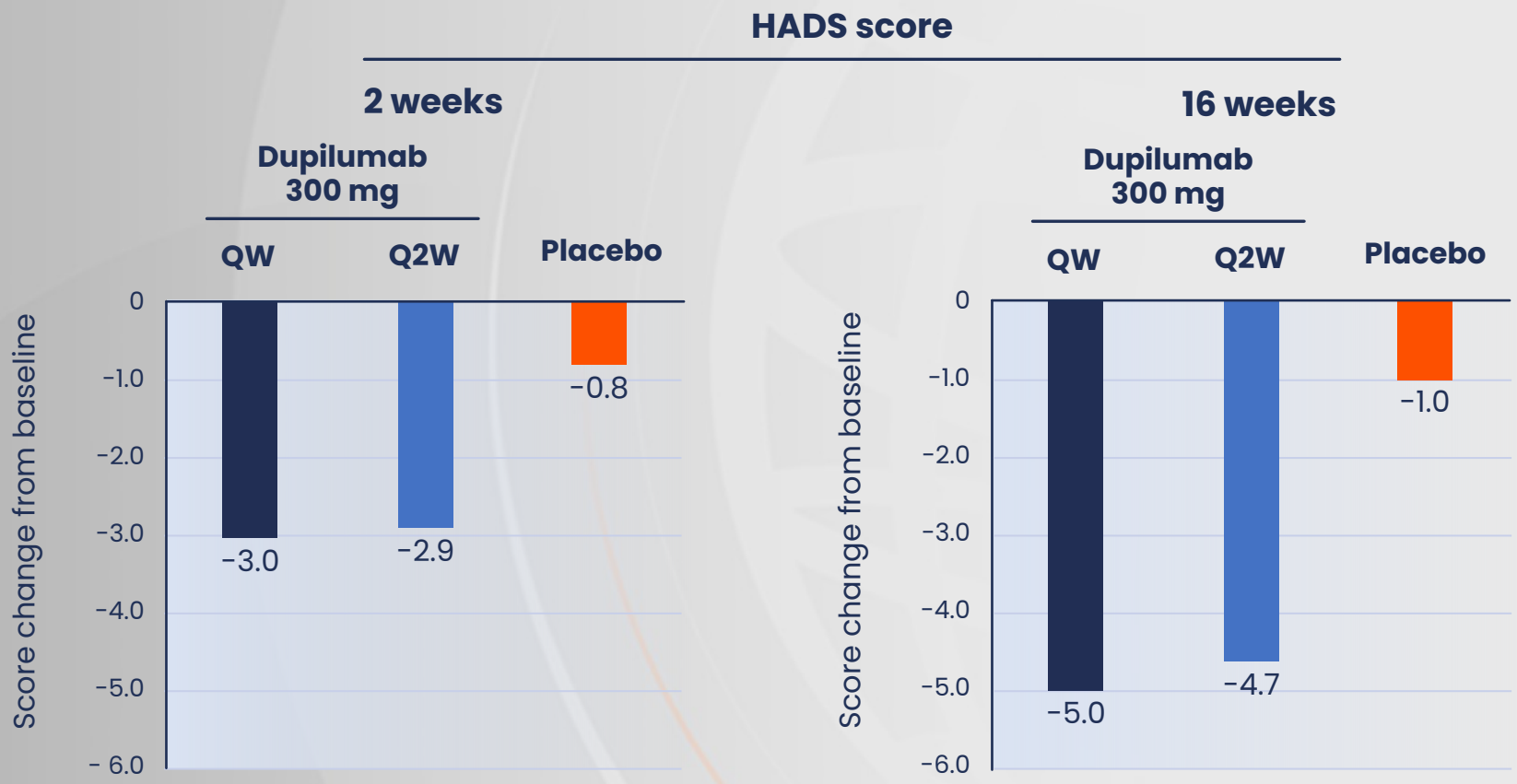
Impact of effective systemic treatment on patient QoL

Anxiety and depression in adults: SOLO-1 and SOLO-2



HADS, Hospital Anxiety and Depression Scale.

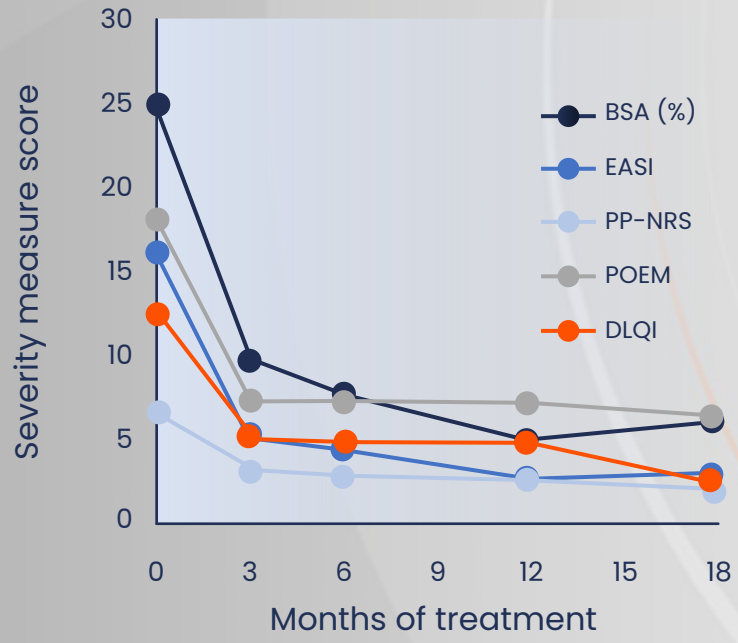
Cork MJ, et al. *J Dermatolog Treat*. 2020;31:606–14.

Real-world effect of dupilumab on QoL

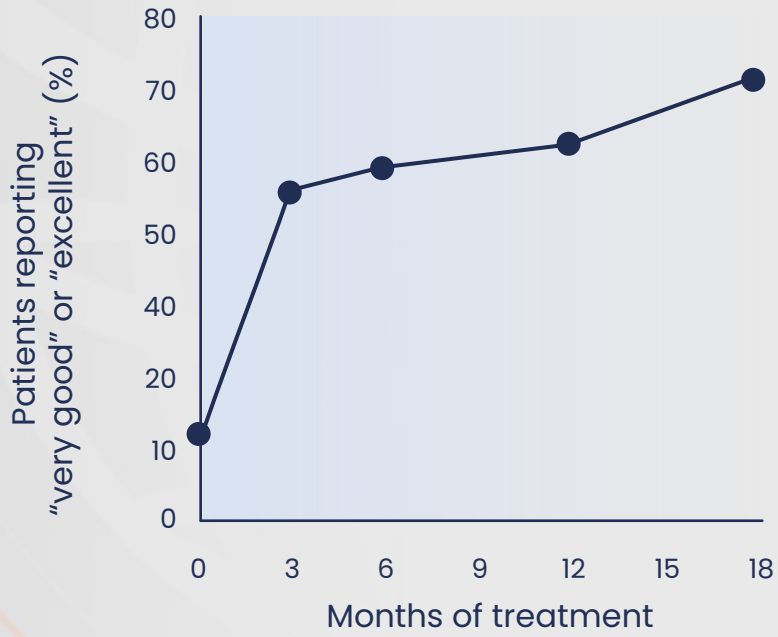
PROSE registry (NCT03428646): USA and Canada

- n=563
- Adults and adolescents (≥12 years old)
- Moderate-to-severe AD
- Initiated dupilumab as per approved PI

AD severity



PGAD questionnaire



BSA, body surface area; PGAD, Patient Global Assessment of Disease.

Bagel J, et al. Presented at the European Academy of Dermatology and Venereology 30th congress 2021. Abstract #2007.

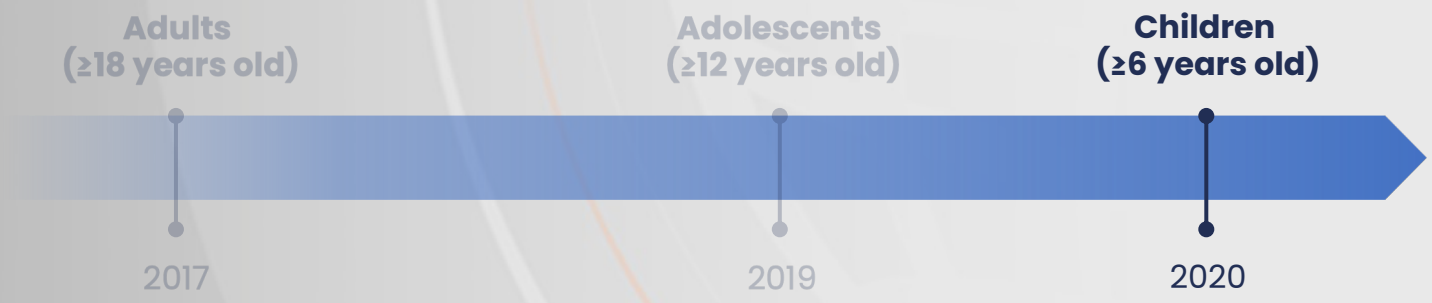
Approved systemic therapy for AD

Biologics

Dupilumab[1]

- mAb against IL-4Rα
- Inhibits IL-4 and IL-13 signalling

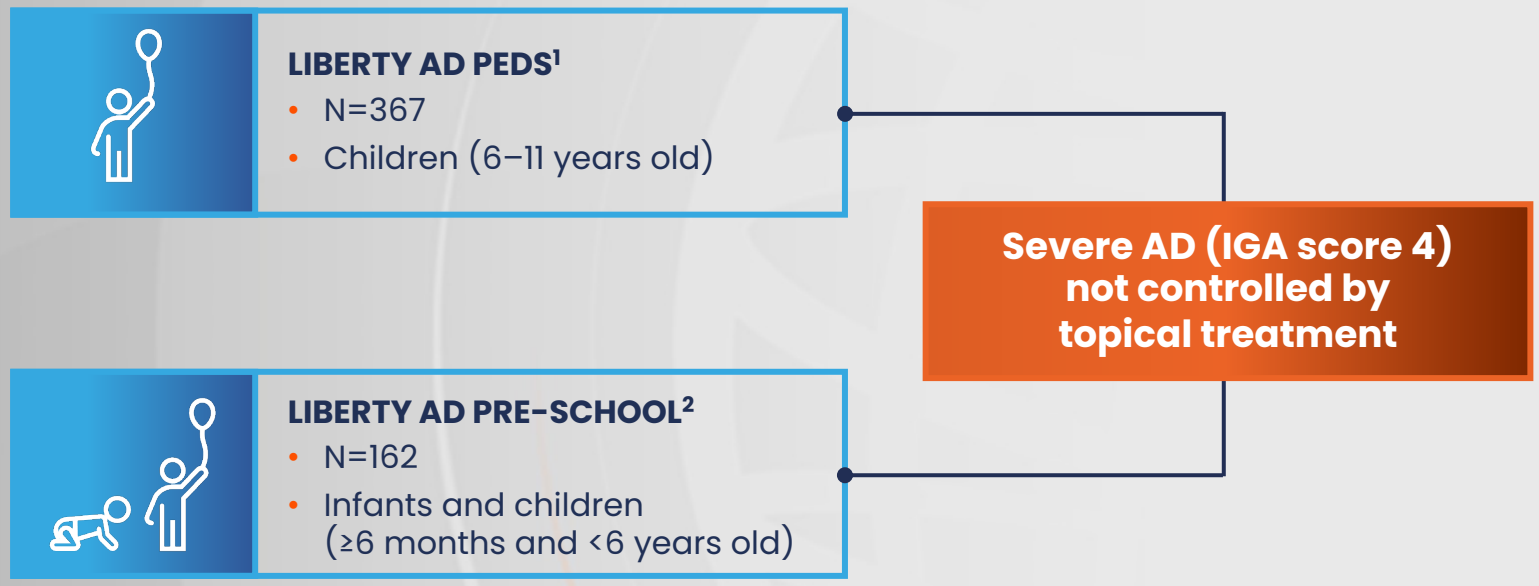
FDA approval history for use of dupilumab for moderate-to-severe AD not controlled with topical treatment[2]



1. Davari DR, et al. *J Asthma Allergy*. 2021;14:595–607; 2. FDA. Dupilumab approval history available at: www.accessdata.fda.gov/scripts/cder/daf/index.cfm?event=overview.process&ApplNo=761055 (accessed 13 September 2021).

Phase III trials of dupilumab in children and infants

Study design



1. Paller AS, et al. *J Am Acad Dermatol*. 2020;83:1282–93; 2. Paller AS, et al. *J Eur Acad Dermatology Venereol*. 2021;35:464–75.

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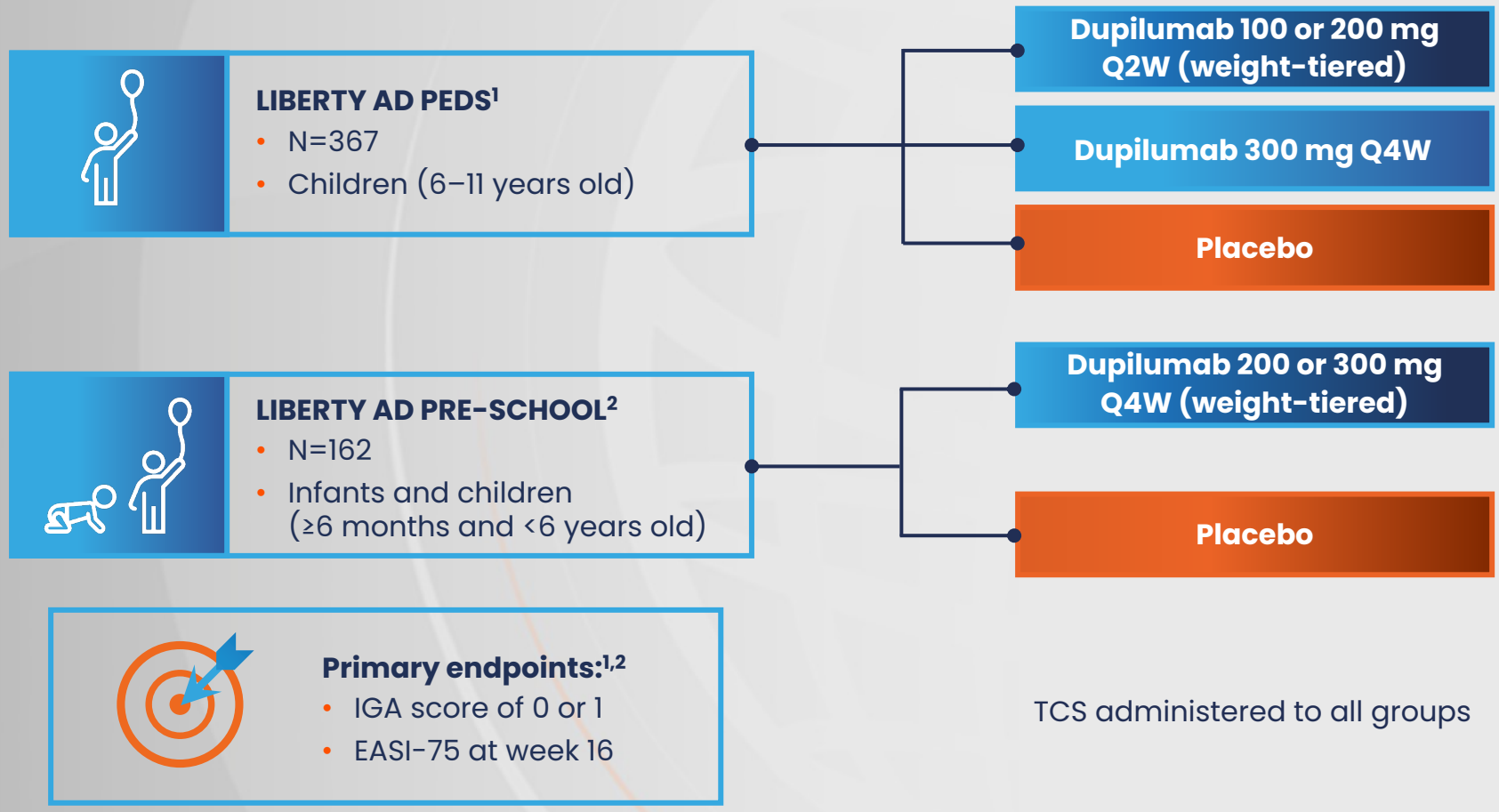


TCS, topical corticosteroids.

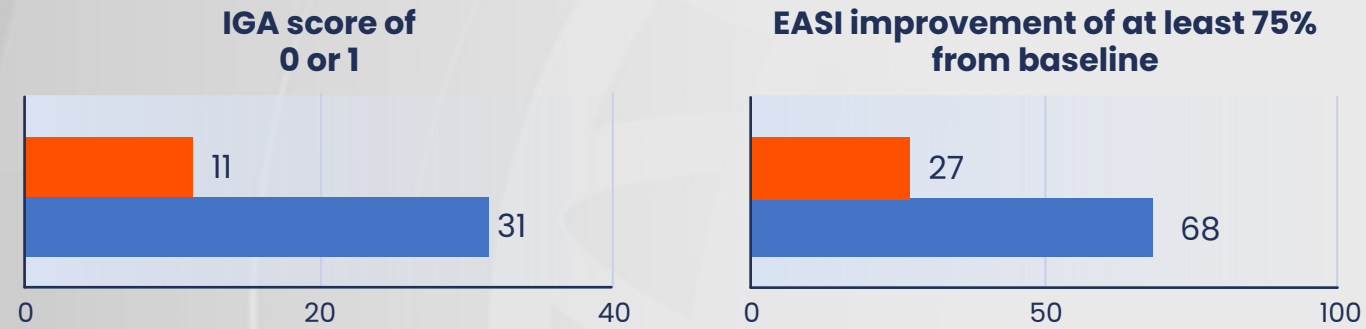
1. Paller AS, et al. *J Am Acad Dermatol*. 2020;83:1282–93; 2. Paller AS, et al. *J Eur Acad Dermatology Venereol*. 2021;35:464–75.

Phase III trials of dupilumab in children and infants

Efficacy: Week 16

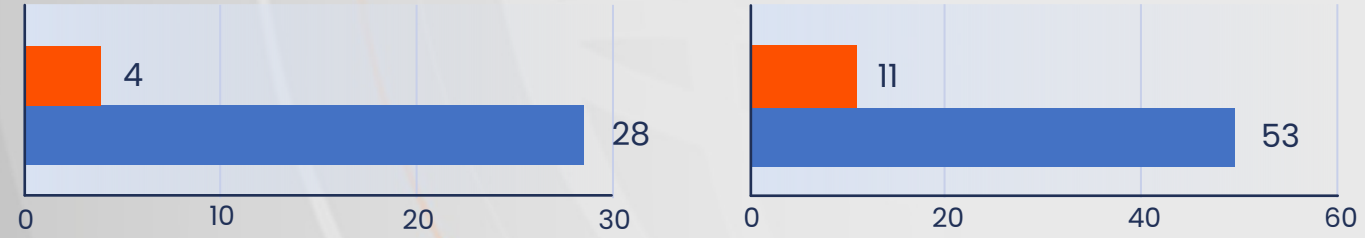
LIBERTY AD PEDS[1]

- 6–11 years old
- FDA-approved[2]



LIBERTY AD PRE-SCHOOL[3]

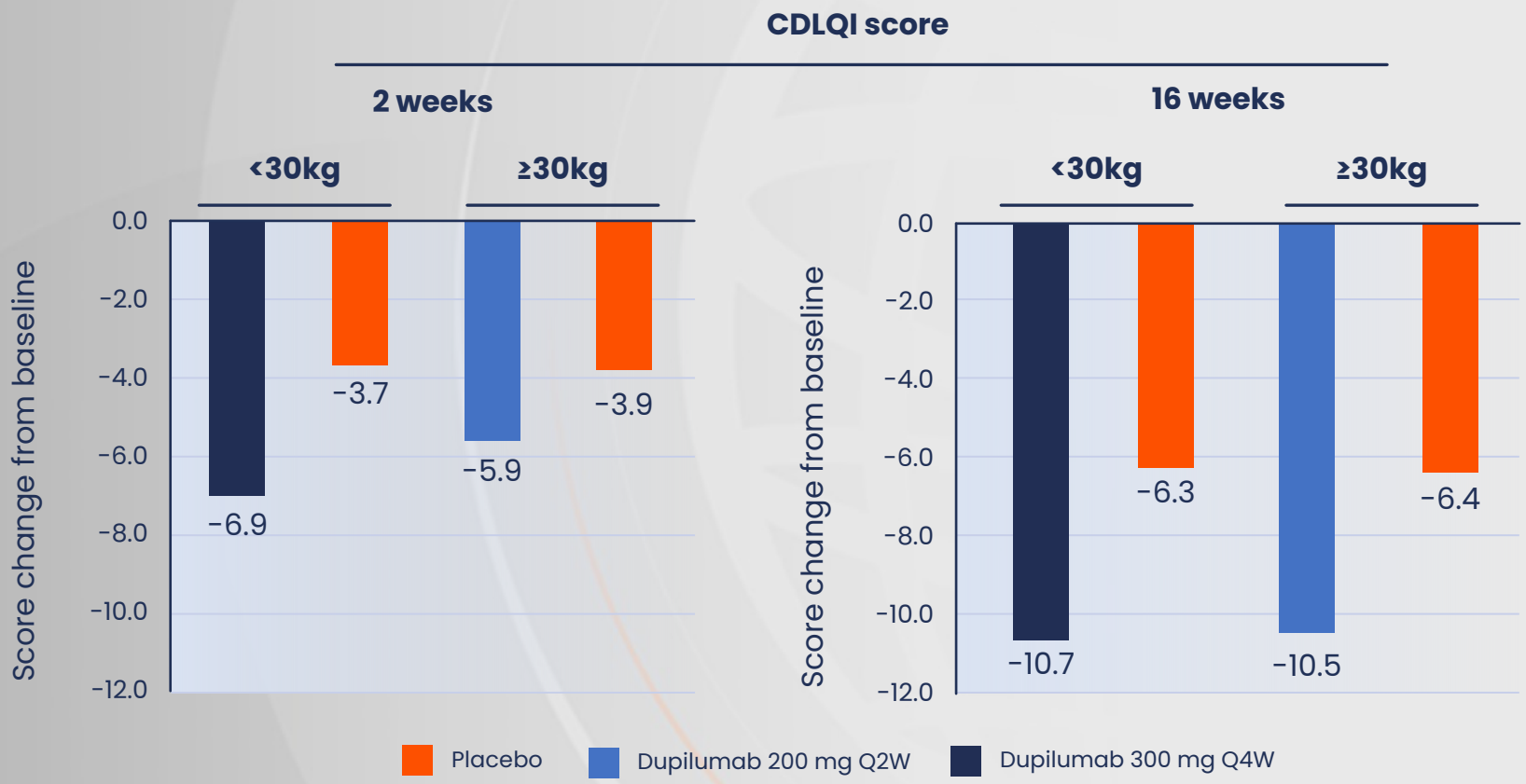
- ≥6 months and
- <6 years old
- Not yet approved



1. Paller AS, et al. *J Am Acad Dermatol*. 2020;83:1282–93; 2. FDA. Dupilumab. Prescribing information. 2021. Available at: www.accessdata.fda.gov/drugsatfda_docs/label/2021/761055s035lbl.pdf; 3. Sanofi. Press release: Dupilumab pivotal trial meets all primary and secondary endpoints becoming first biologic medicine to significantly reduce signs and symptoms of moderate-to-severe atopic dermatitis in children as young as 6 months. 2021. Available at: www.sanofi.com/en/media-room/press-releases/2021/2021-08-30-07-00-00-2288011. All links accessed 4 October 2021.

Impact of effective systemic treatment on children QoL

QoL in children : LIBERTY AD PEDS



CDLQI, Children's Dermatology Life Quality Index.
Irvine AD, et al. Presented at Revolutionizing Atopic Dermatitis, 13 November 2020. Abstract #357.

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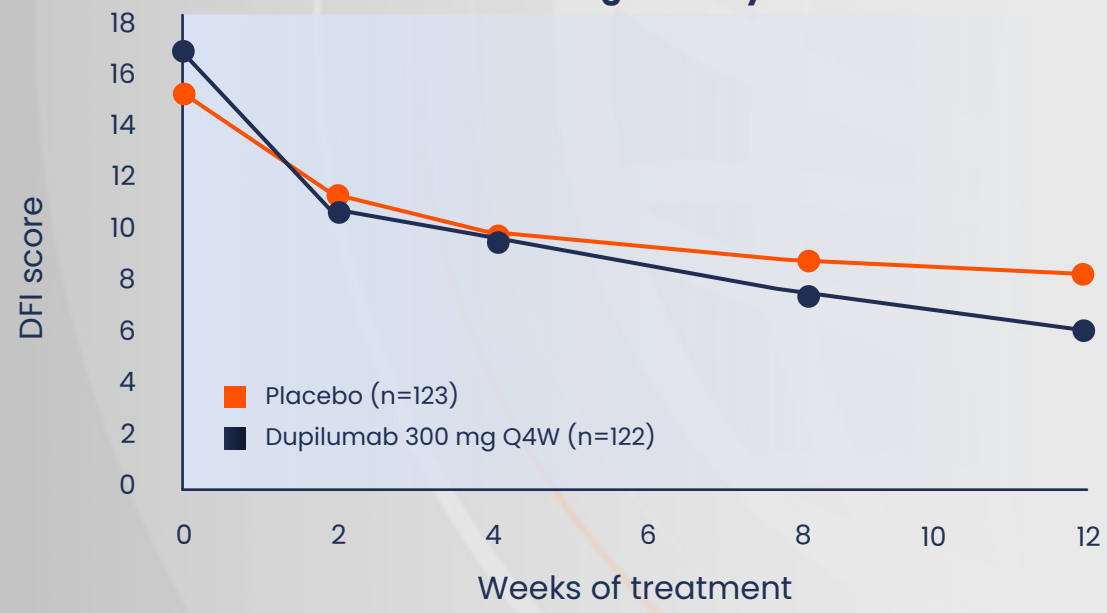
Impact of effective systemic treatment on family QoL

QoL in families of children: LIBERTY AD PEDS

DFI questionnaire: Impact of AD on family life[1]

- Housework
- Food preparation
- Sleep
- Family leisure activity
- Shopping
- Expenditure
- Tiredness
- Emotional distress
- Relationships
- Helping with treatment

DFI score change with systemic treatment[2]



DFI, Dermatitis Family Impact.

1. Paller AS, et al. Presented at the European Academy of Dermatology and Venereology 30th congress 2021. Abstract #1648;
2. Paller AS, et al. Presented at the European Academy of Dermatology and Venereology 30th congress 2021. Poster #P0239.

Evolving clinical landscape for AD

Biologics

Tralokinumab[1–3]

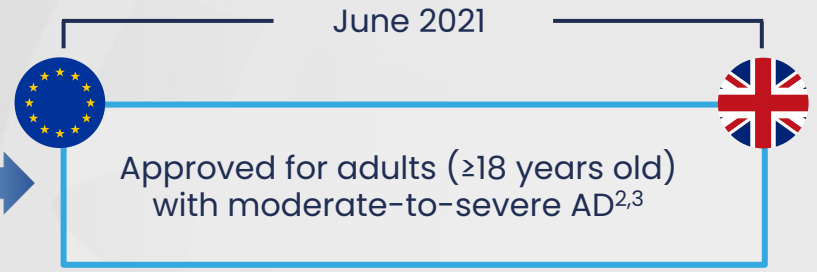
- mAb against IL-13

Lebrikizumab[1]

- mAb against IL-13

Nemolizumab[1]

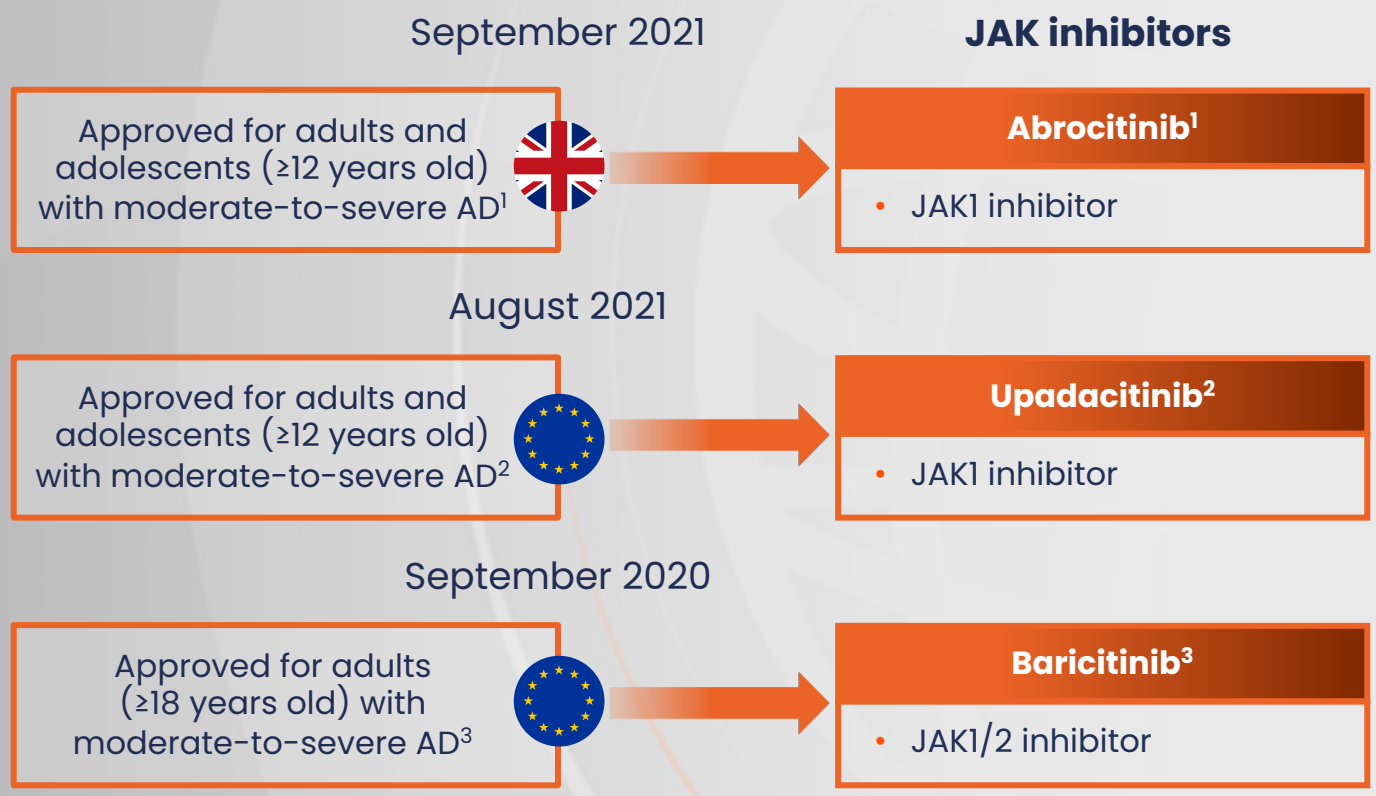
- mAb against IL-31Rα



EMA, European Medicines Agency; MHRA, UK Medicines and Healthcare products Regulatory Agency; SmPC, summary of product characteristics.
1. Puar N, et al. *Ann Allergy Asthma Immunol*. 2021;126:21–31; 2. EMA. Tralokinumab. Medicine overview. 2021. Available at: www.ema.europa.eu/en/documents/overview/adtralza-epar-medicine-overview_en; 3. MHRA. Tralokinumab. SmPC. 2021. Available at: www.mhraproducts4853.blob.core.windows.net/docs/5bdfd28124141b01e93d94af030d2f098f5bafa7. All links accessed 4 October 2021.

Evolving clinical landscape for AD

JAK inhibitors



JAK, Janus kinase.

1. MHRA. Abrocitinib. SmPC. 2021. Available at: www.medicines.org.uk/emc/product/12873/smpc#gref; 2. EMA. Upadacitinib. SmPC. 2021. Available at: www.ema.europa.eu/en/documents/product-information/rinvoq-epar-product-information_en.pdf; 3. EMA. Baricitinib. SmPC. 2020. Available at: www.ema.europa.eu/en/documents/product-information/olumiant-epar-product-information_en.pdf. All links accessed 4 October 2021.

Summary and conclusions

Holistic patient assessment

- Disease severity
- QoL
- Individual patient factors

Systemic biologic and small-molecule therapies

- Improved disease response
- Improved QoL
- Prevent disease progression
- Prevent future comorbidities

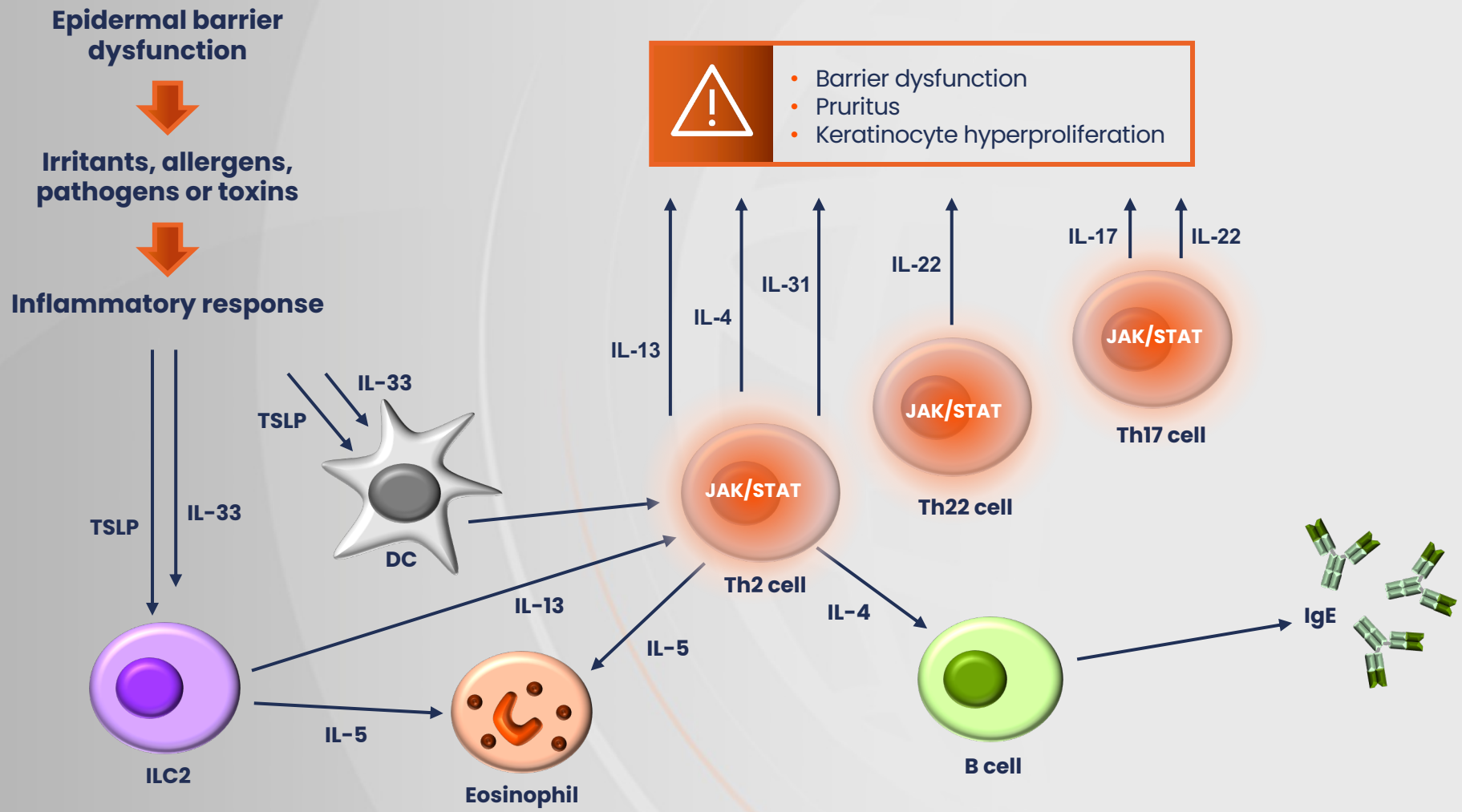
Efficacy → **High benefit**

Safety → **Low risk**

Simpson EL, et al. *J Am Acad Dermatol*. 2017;77:623–33.

How may emerging systemic therapies change the management of moderate-to-severe atopic dermatitis?

Pathophysiology of AD



AD, atopic dermatitis; DC, dendritic cell; IgE, immunoglobulin E; IL, interleukin; ILC2, type 2 innate lymphoid cells; JAK, Janus kinase; STAT, signal transducer and activator of transcription; Th, T helper; TSLP, thymic stromal lymphopoietin.

Puar N, et al. *Ann Allergy, Asthma Immunol*. 2021;126:21–31.

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Emerging systemic therapies targeting type 2 inflammation

Agent in phase III trials for AD

Biologics

Tralokinumab
- mAb against IL-13

Lebrikizumab
- mAb against IL-13

Nemolizumab
- mAb against IL-31Rα

JAK inhibitors

Abrocitinib
- JAK1 inhibitor

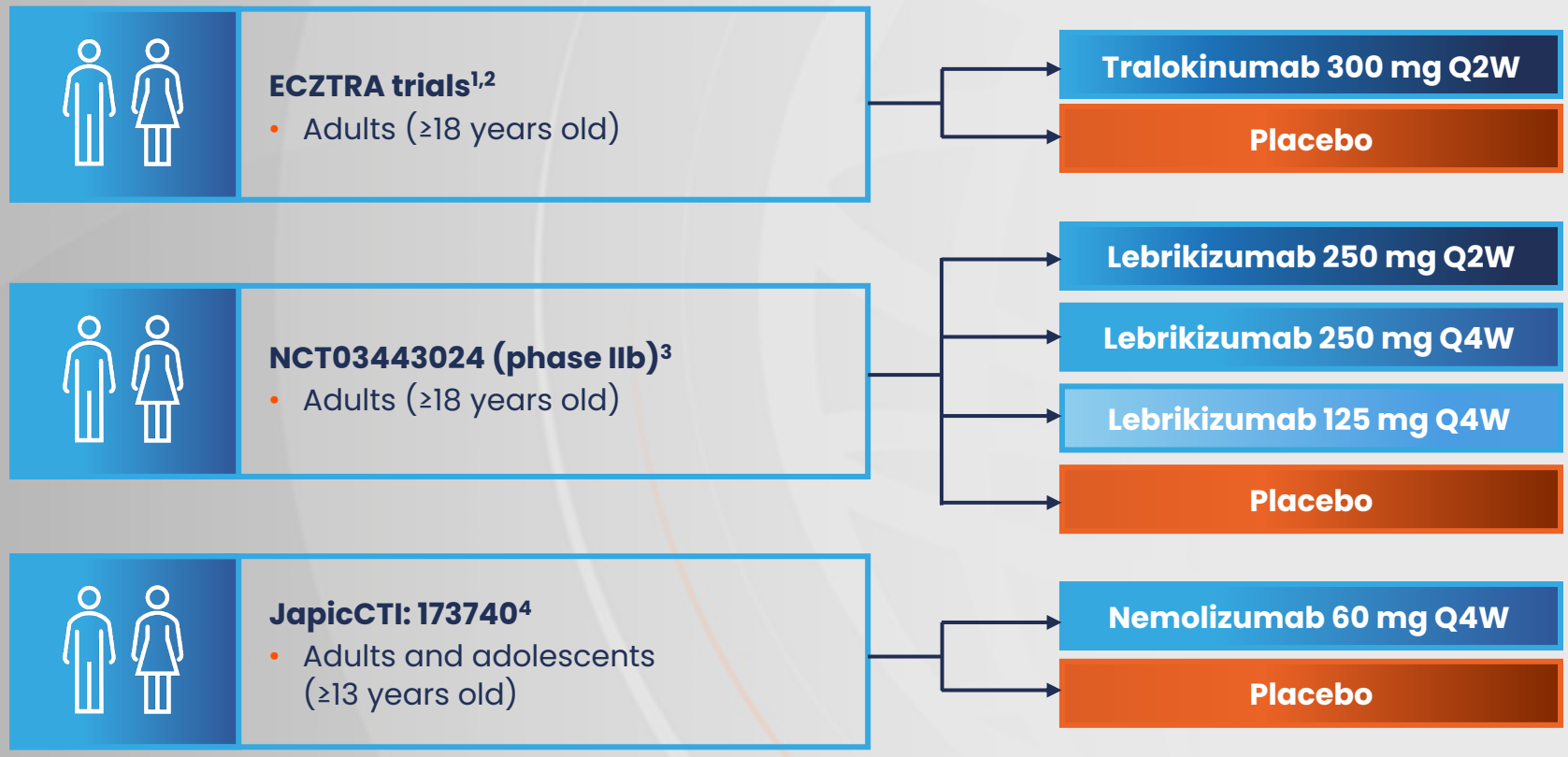
Upadacitinib
- JAK1 inhibitor

Baricitinib
- JAK1/2 inhibitor

mAb, monoclonal antibody.

Puar N, et al. *Ann Allergy, Asthma Immunol*. 2021;126:21–31.

Selected clinical trials which tested biologics for AD



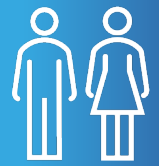
Q2W, once every 2 weeks; Q4W, once every 4 weeks.

1. Wollenberg A, et al. *Br J Dermatol*. 2021;184:437–92; 2. Silverberg JI, et al. *Br J Dermatol*. 2021;184:450–63; 3. Thyssen JA, et al. Presented at the European Academy of Dermatology and Venereology 30th congress 2021. Abstract 1055; 4. Kabashima K, et al. *N Engl J Med*. 2020;383:141–50.

Emerging systemic biologics for AD: Tralokinumab

ECZTRA trials: Study design

ECZTRA-1 and ECZTRA-2[1]



- N=1,596
- Adults (≥18 years old)
- Moderate-to-severe AD for ≥1 year
- Inadequate response to topical treatment
- AD treatment washed out before randomization

ECZTRA-3[2]

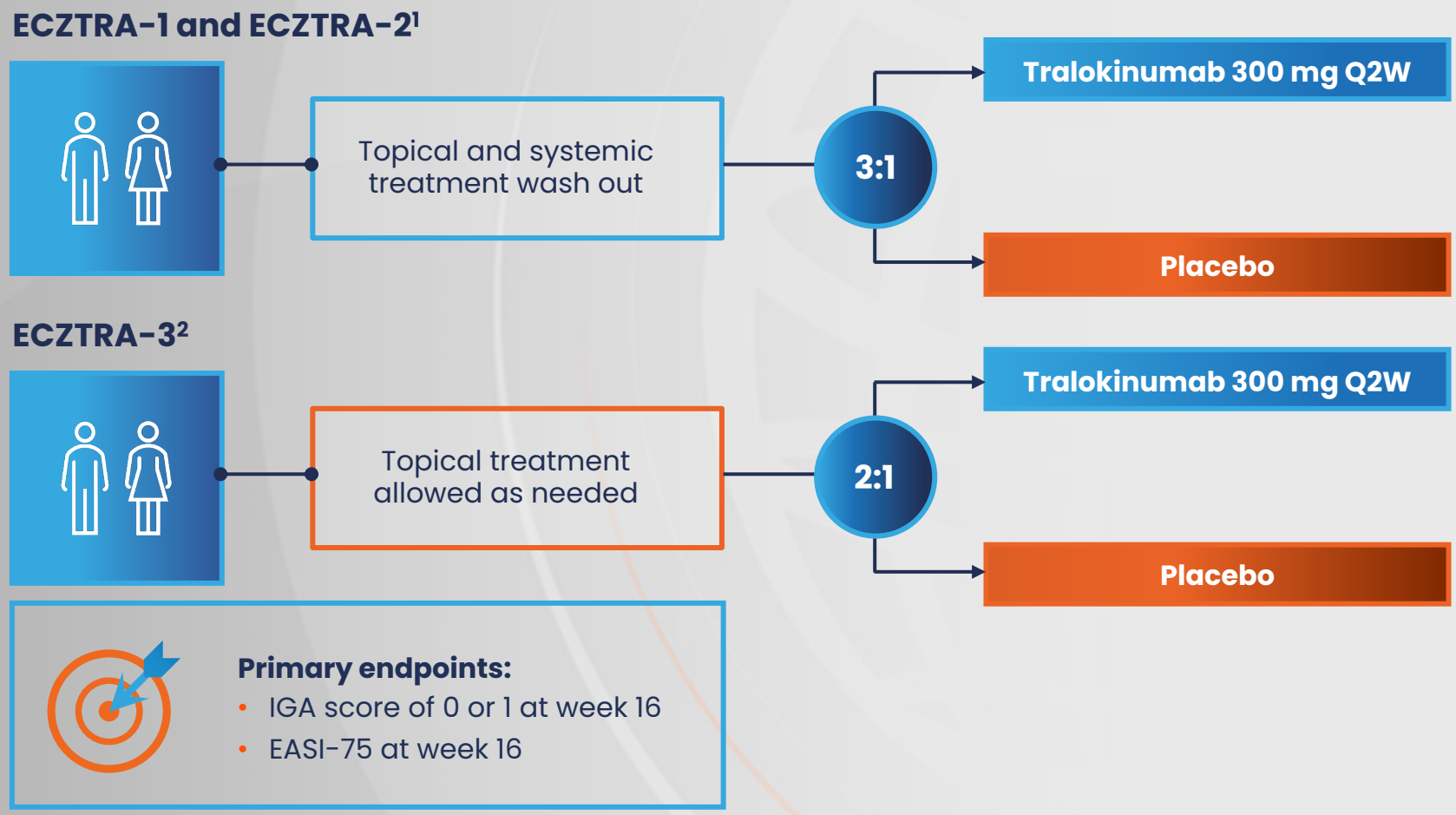
- N=380
- Adults (≥18 years old)
- Moderate-to-severe AD for ≥1 year
- Inadequate response to topical or systemic treatment
- TCS administered during trial

TCS, topical corticosteroids.

1. Wollenberg A, et al. *Br J Dermatol*. 2021;184:437–92; 2. Silverberg JI, et al. *Br J Dermatol*. 2021;184:450–63.

Emerging systemic biologics for AD: Tralokinumab

ECZTRA trials: Study design

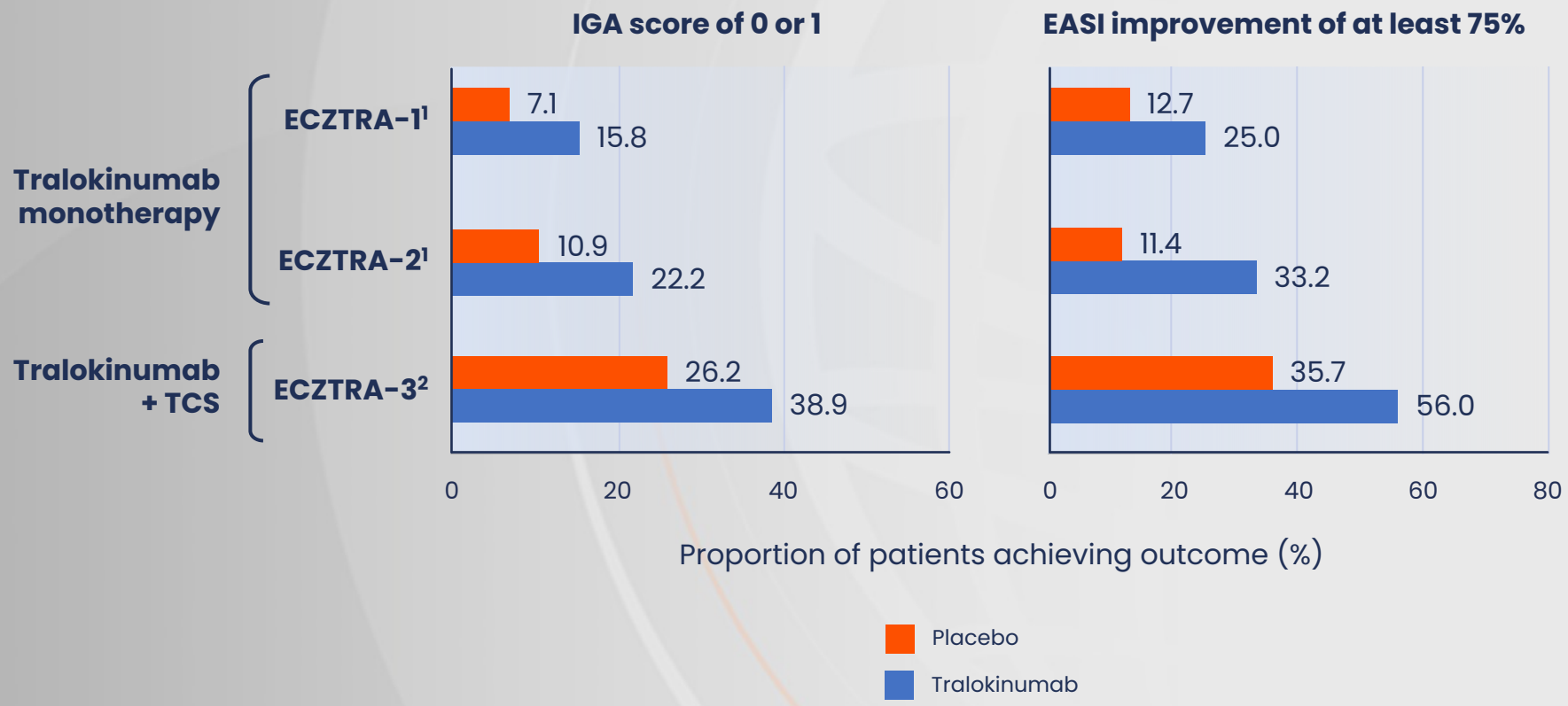


EASI, Eczema Area and Severity Index; IGA, Investigator Global Assessment.

1. Wollenberg A, et al. *Br J Dermatol*. 2021;184:437–92; 2. Silverberg JI, et al. *Br J Dermatol*. 2021;184:450–63.

Emerging systemic biologics for AD: Tralokinumab

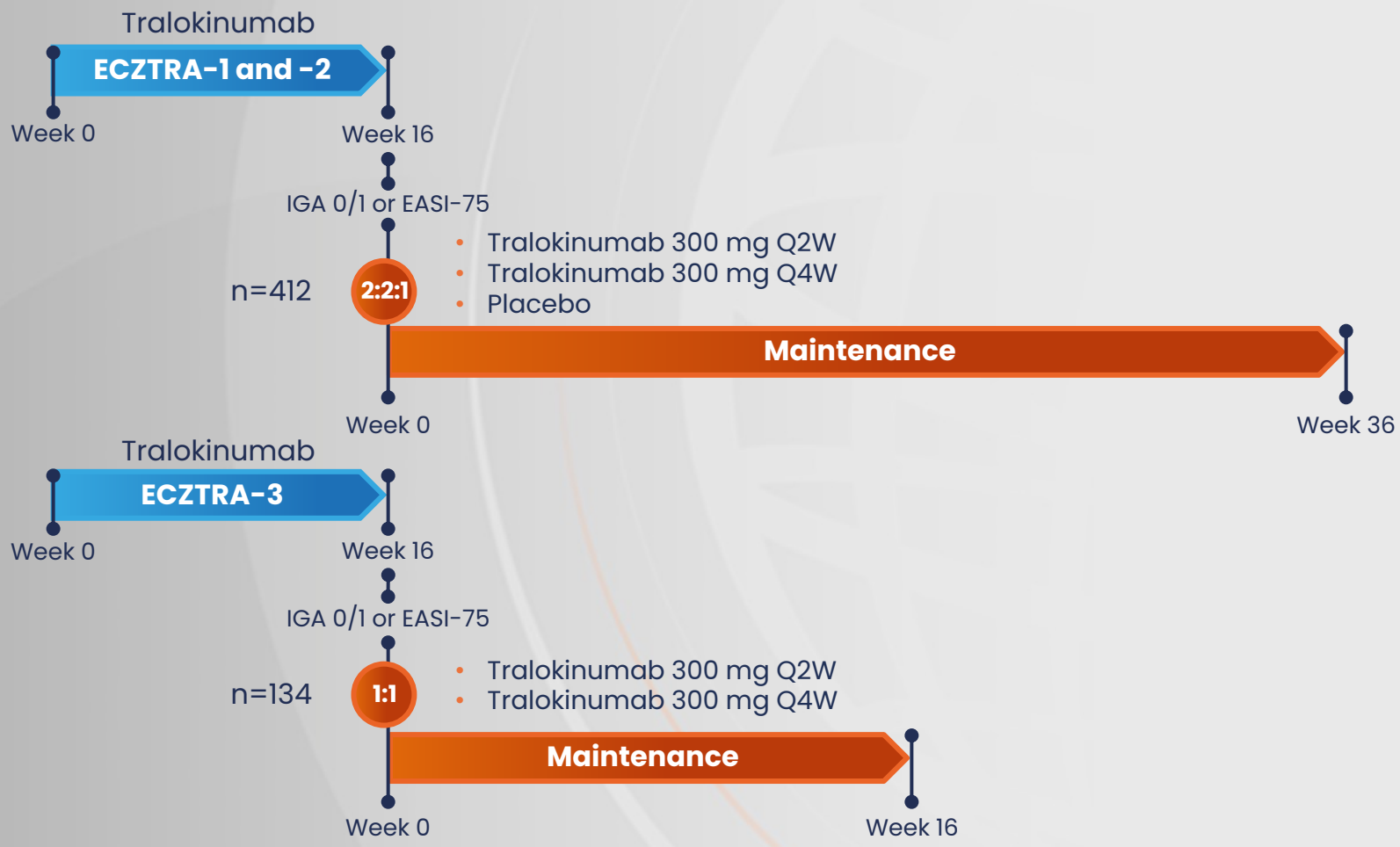
ECZTRA trials: Primary efficacy results



1. Wollenberg A, et al. Br J Dermatol. 2021;184:437–92; 2. Silverberg JI, et al. *Br J Dermatol*. 2021;184:450–63.

Emerging systemic biologics for AD: Maintenance treatment

ECZTRA trials: Maintenance study design

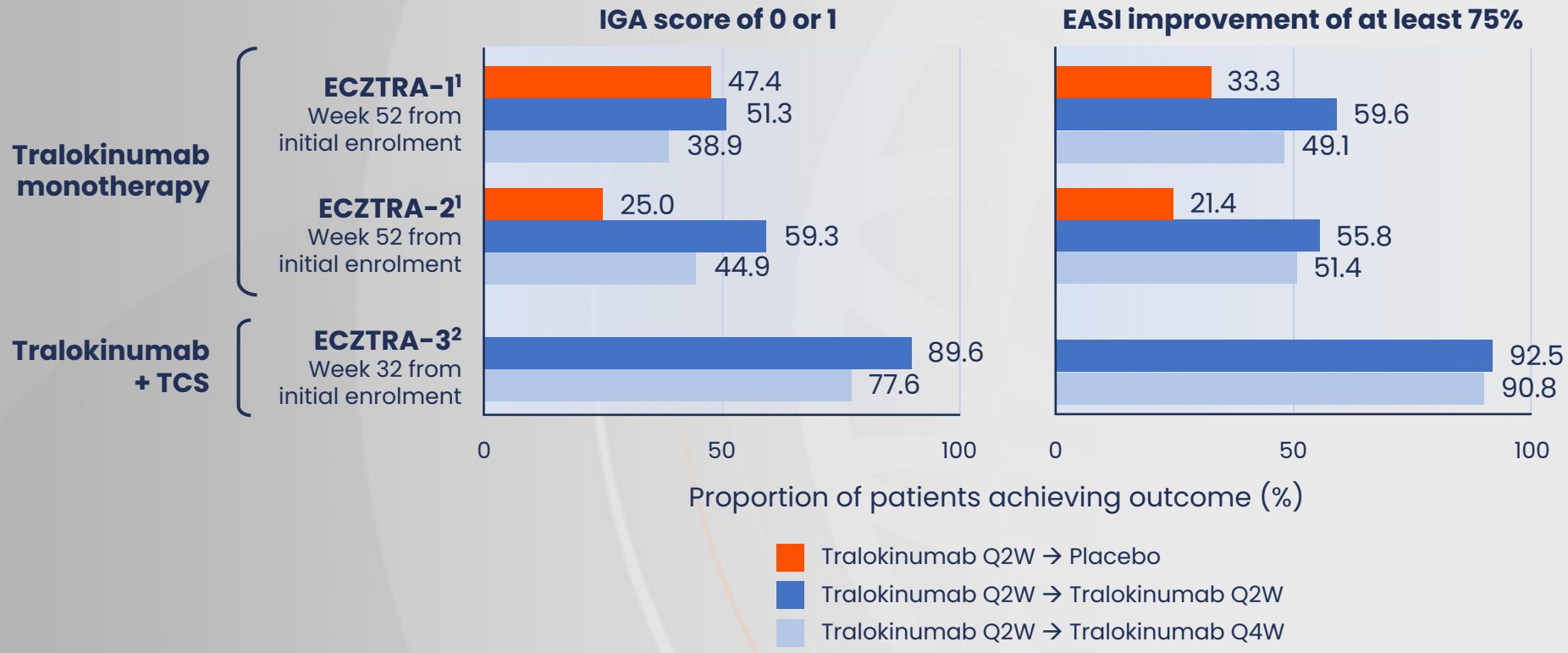


Q4W, every 4 weeks.

1. Wollenberg A, et al. *Br J Dermatol*. 2021;184:437–492; 2. Silverberg JI, et al.. *Br J Dermatol.* 2021;184:450–63.

Emerging systemic biologics for AD: Maintenance treatment

ECZTRA trials: Maintenance efficacy results

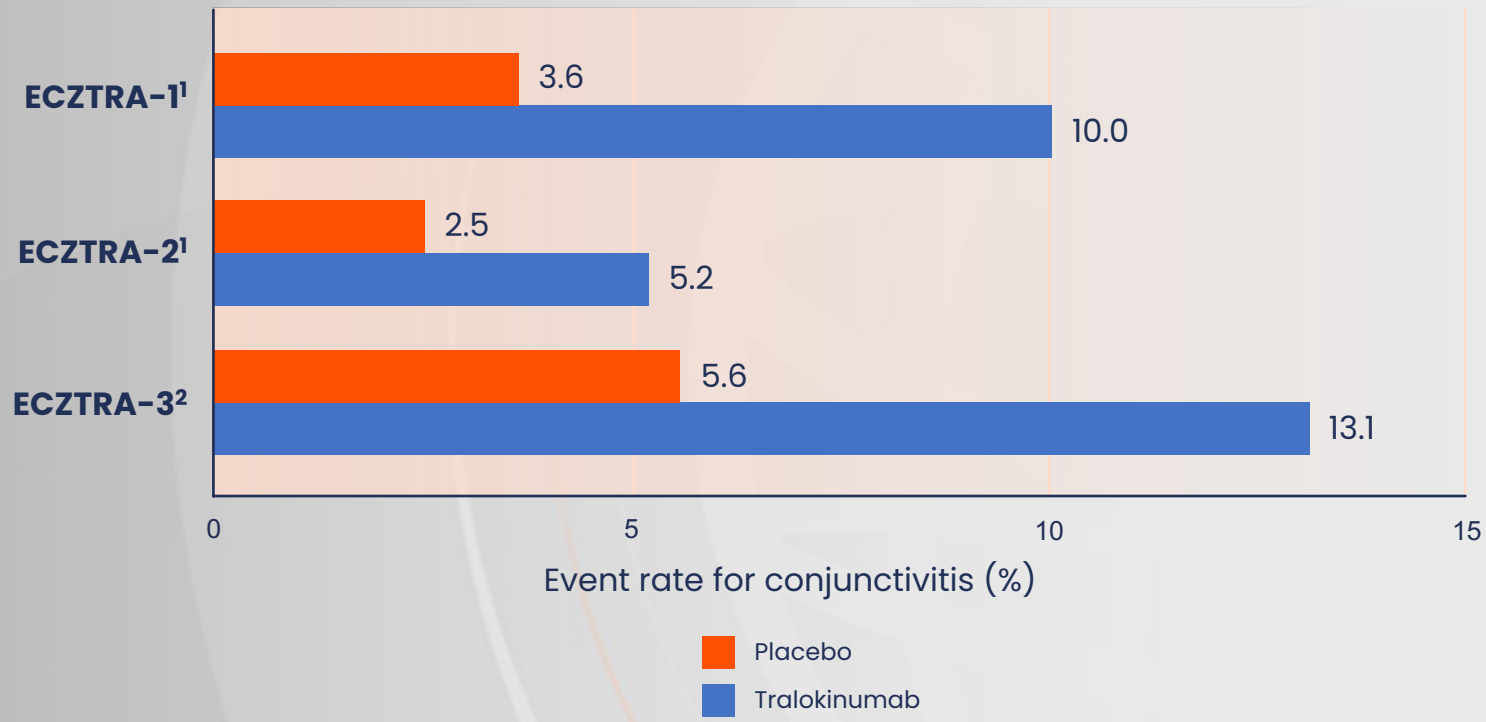


EASI-75 response was maintained in 74–84.1% of patients from ECZTRA-1 and -2 treated with tralokinumab for >2 years (ECZTEND trial)[3]

1. Wollenberg A, et al. *Br J Dermatol*. 2021;184:437–92; 2. Silverberg JI, et al. *Br J Dermatol*. 2021;184:450–63; 3. Blauvelt A, et al. Presented at the European Academy of Dermatology and Venereology 30th congress 2021. Abstract #153.

Emerging systemic biologics for AD: Safety profile

ECZTRA trials: Incidence of conjunctivitis

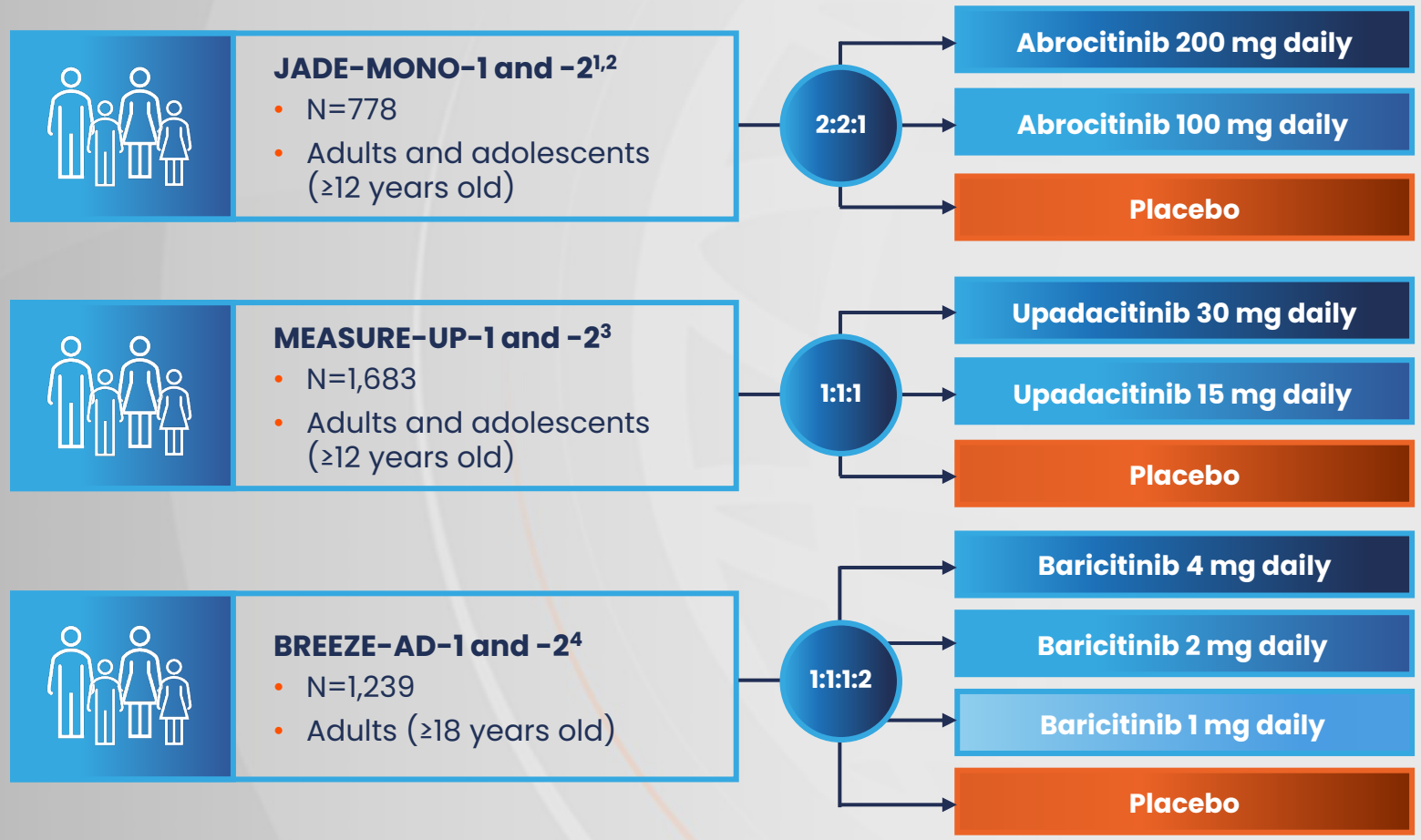


! A higher incidence of conjunctivitis was observed in patients receiving tralokinumab

1. Wollenberg A, et al. *Br J Dermatol*. 2021;184:437–92; 2. Silverberg JI, et al.. *Br J Dermatol*. 2021;184:450–63.

Phase III trials of JAK inhibitor monotherapy for AD

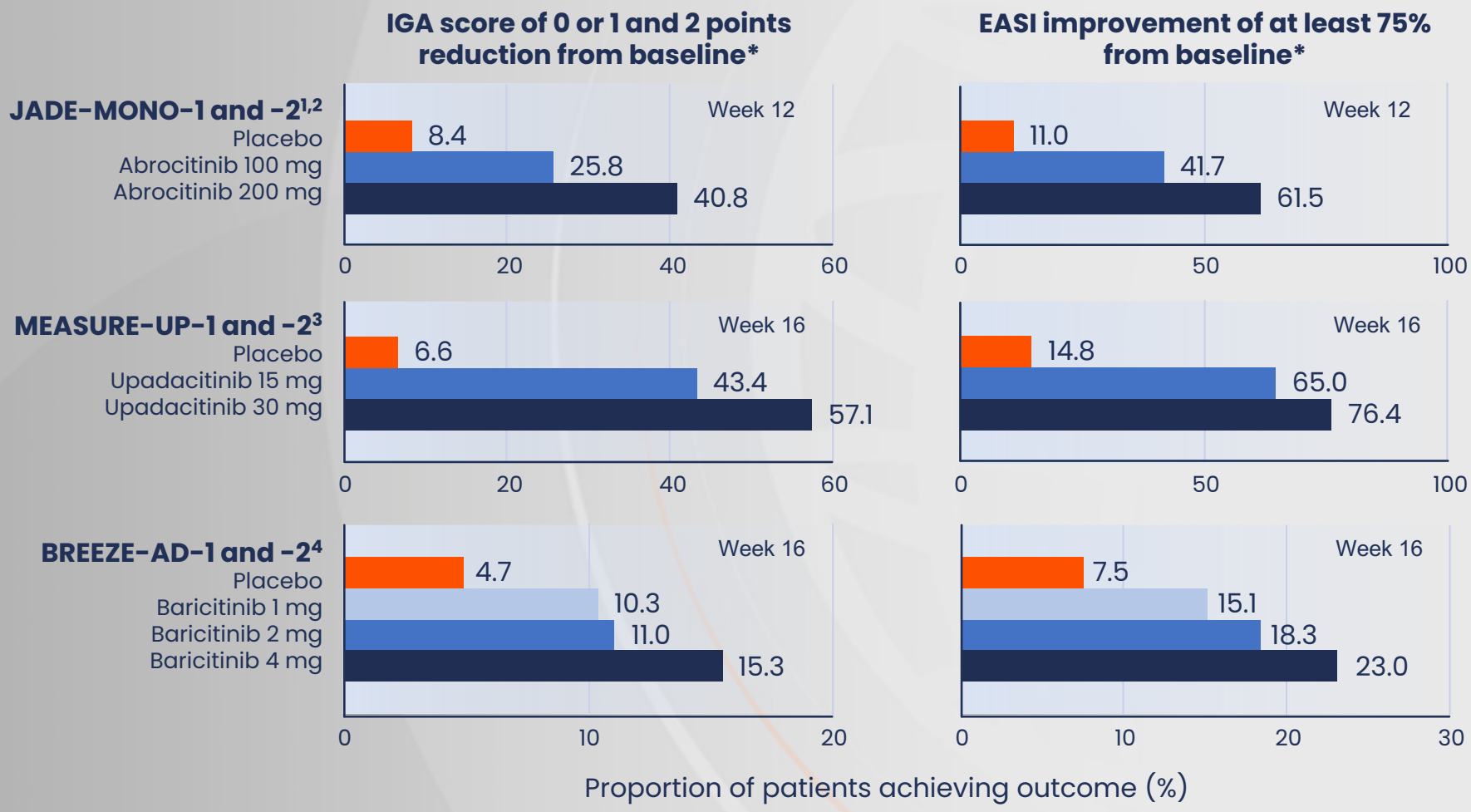
Study design



1. Simpson EL, et al. *Lancet*. 2020;396:255–66; 2. Silverberg JI, et al. *JAMA Dermatology*. 2020;156:863–73; 3. Guttman-Yassky E, et al. *Lancet*. 2021;397:2151–68; 4. Simpson EL, et al. *Br J Dermatol*. 2020;183:242–55.

Phase III trials of JAK inhibitor monotherapy for AD

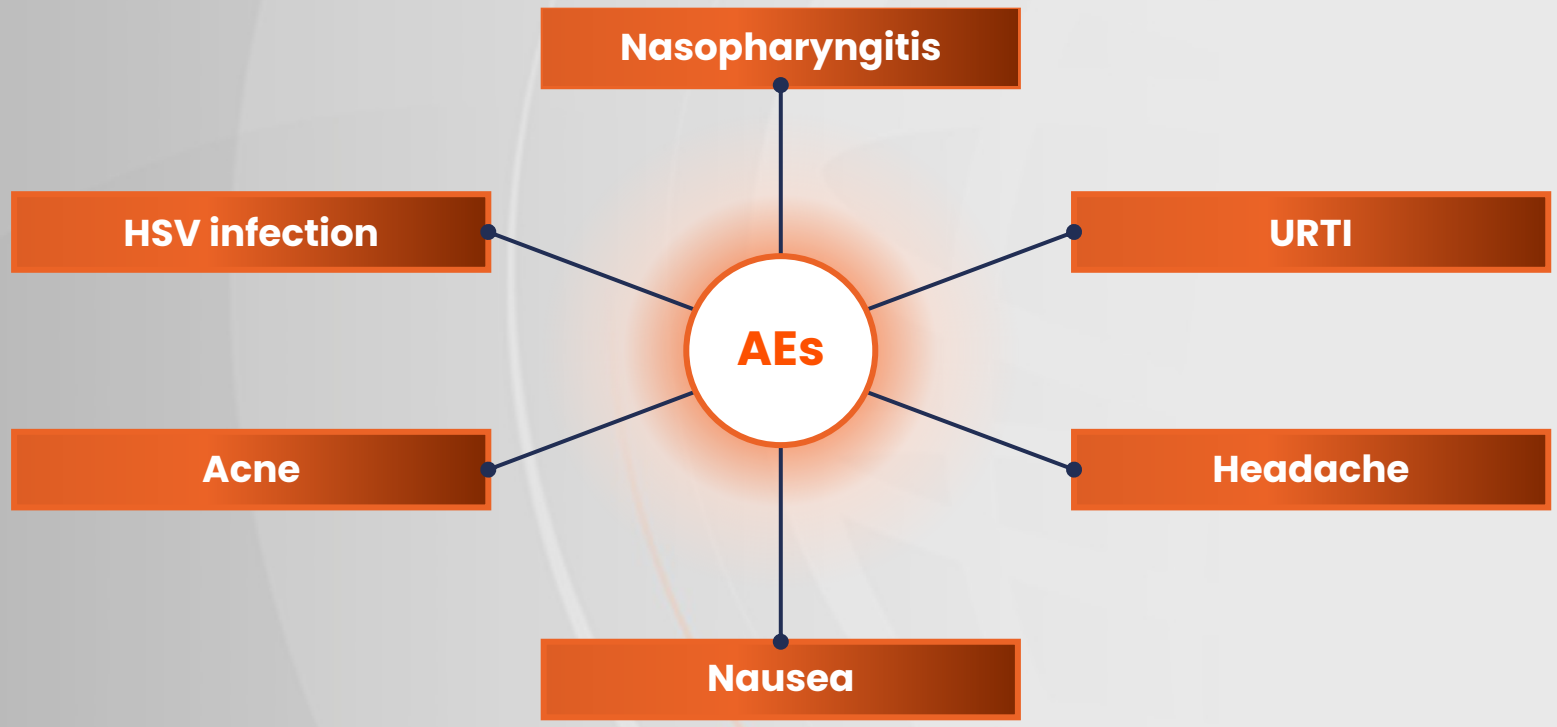
Study outcomes



*Cross-trial comparisons cannot be made.

1. Simpson EL, et al. *Lancet*. 2020;396:255–66; 2. Silverberg JI, et al. *JAMA Dermatology*. 2020;156:863–73; 3. Guttman-Yassky E, et al. *Lancet*. 2021;397:2151–68; 4. Simpson EL, et al. *Br J Dermatol*. 2020;183:242–55.

JAK inhibitors: Commonly reported AEs



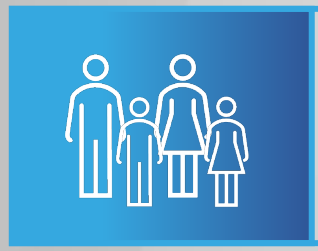
AE, adverse event; HSV, herpes simplex virus; URTI, upper respiratory tract infection.

1. Simpson EL, et al. *Lancet*. 2020;396:255–66; 2. Silverberg JI, et al. *JAMA Dermatology*. 2020;156:863–73; 3. Guttman-Yassky E, et al. *Lancet*. 2021;397:2151–68; 4. Simpson EL, et al. *Br J Dermatol*. 2020;183:242–55.

JAK inhibitors: Maintenance treatment

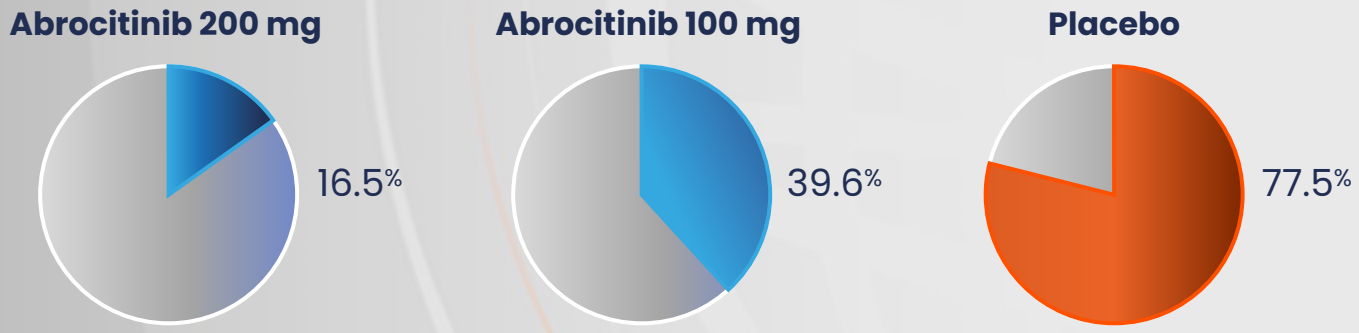
JADE REGIMEN

Study design[1]



- N=1,233
- Adults and adolescents (≥12 years old)
- Open-label induction with abrocitinib 200 mg for 12 weeks
- Patients who responded to induction were randomized 1:1:1

Proportion of patients experiencing flares during maintenance[2]

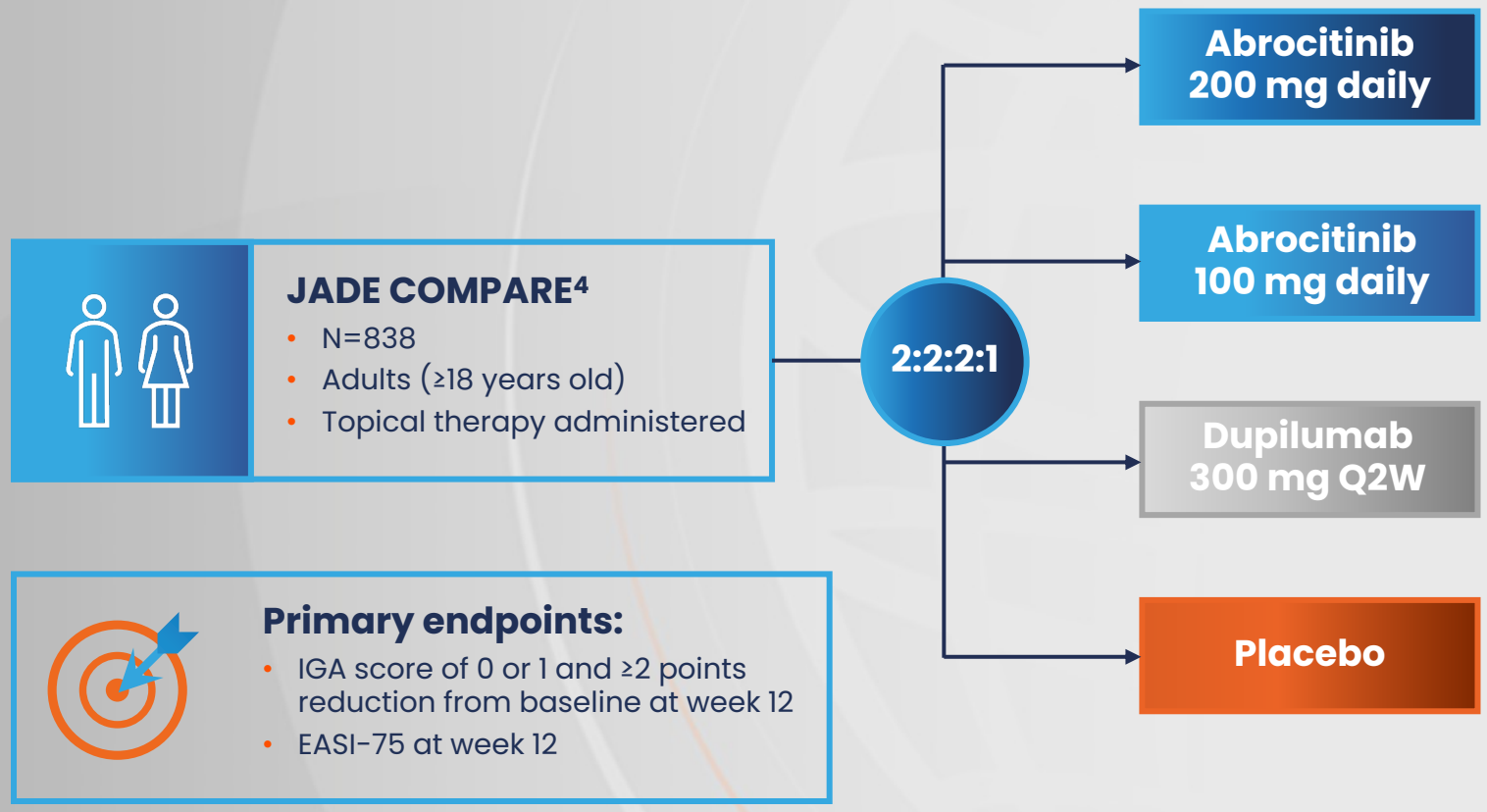


Maintenance treatment with abrocitinib reduced the risk of flare in patients with AD in a dose-dependent manner[2]

1. Blauvelt A, et al. *J Am Acad Dermatol*. 2021;S0190-9622:02343–4; 2. Thyssen JP, et al. Presented at the European Academy of Dermatology and Venereology 30th congress 2021. Poster #P0207.

JAK inhibitors vs biologics: Abrocitinib vs dupilumab

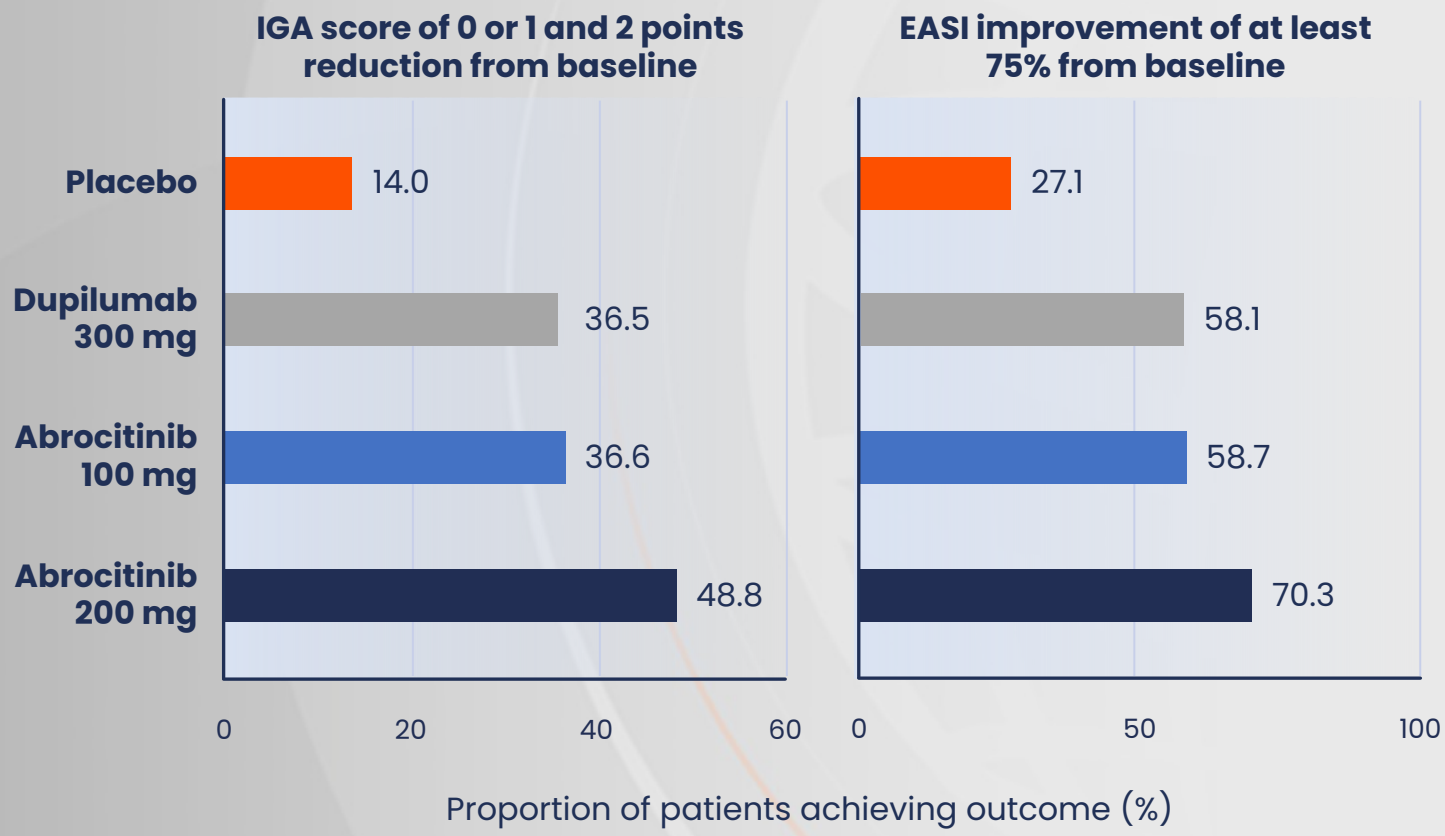
JADE COMPARE: Study design



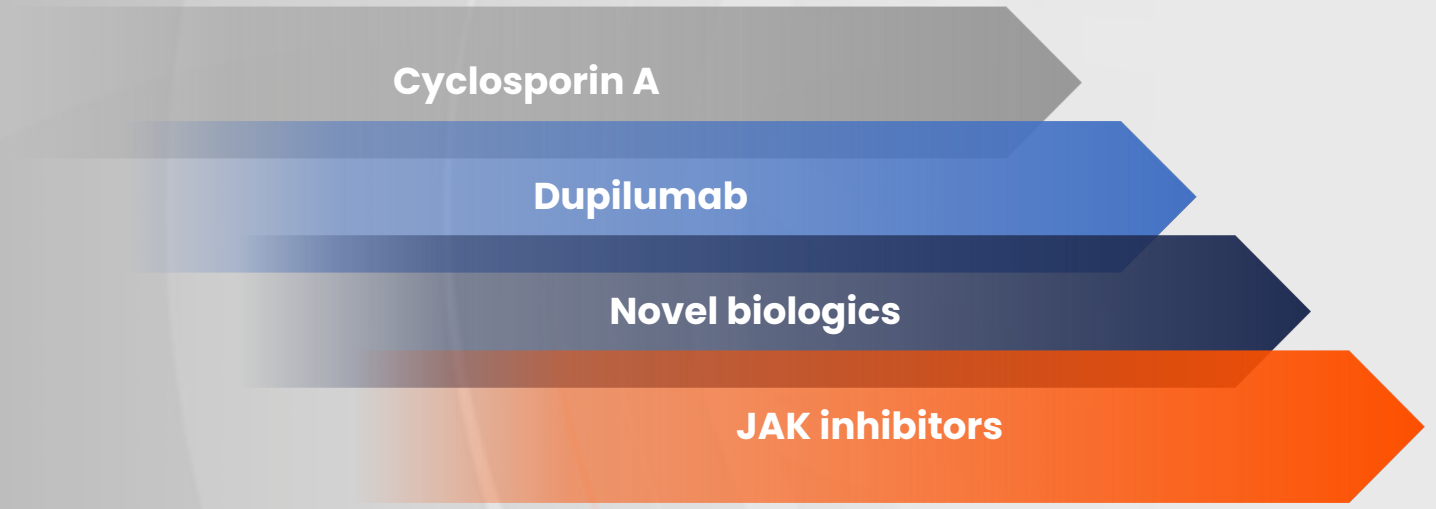
Bieber T, et al. *N Engl J Med*. 2021;384:1101–12.

JAK inhibitors vs biologics: Abrocitinib vs dupilumab

JADE COMPARE: Efficacy



The future of systemic treatment for moderate-to-severe AD



The patient journey

Essential clinical features[1]

Adults

- Pruritus
- Erythematous skin lesions and vesicles
  - History of flexural involvement
  - Not in groin and axillae regions

Infants and children

- Pruritus
- Erythematous skin lesions and vesicles
  - Face, neck, extensor involvement
  - History of flexural involvement
  - Not in groin and axillae region

Chronic relapsing inflammatory conditions[2]

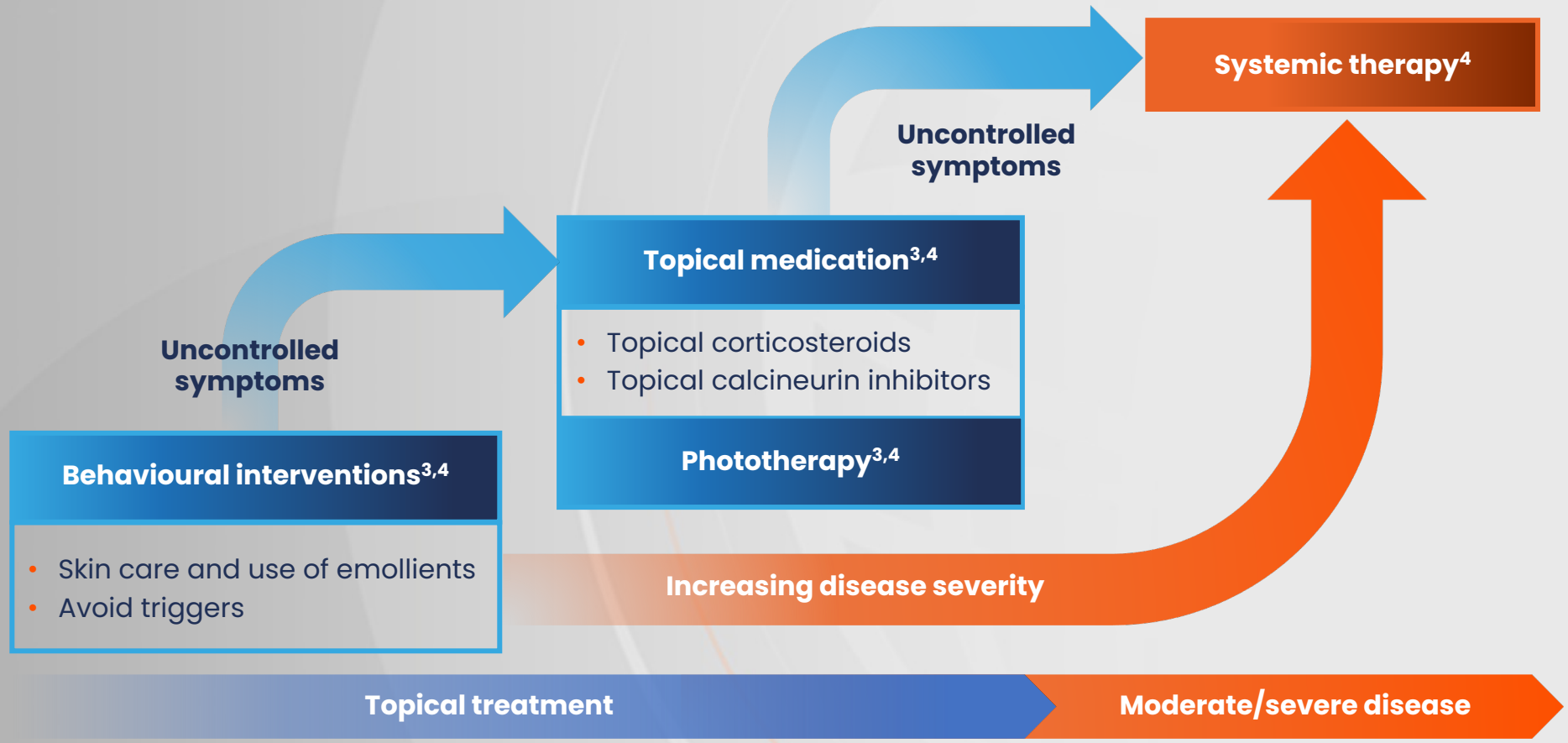
Three different clinical phases:

- Acute (vesicular, weeping, crusting eruption)
- Subacute (dry, scaly, erythematous papules and plaques)
- Chronic (lichenification, thickening)

Initial symptoms and diagnosis → **Clinical presentation**

1. Eichenfield LF, et al. *J Am Acad Dermatol*. 2014;70:338–51; 2. Avena-Woods C. *Am J Manag Care*. 2017;23:S115–23;
3. Eichenfield LF, et al. *J Am Acad Dermatol*. 2014;71:116–32; 4. Simpson EL, et al. *J Am Acad Dermatol*. 2017;77:623–33.

The patient journey



1. Eichenfield LF, et al. *J Am Acad Dermatol*. 2014;70:338–51; 2. Avena-Woods C. *Am J Manag Care*. 2017;23:S115–23;
3. Eichenfield LF, et al. *J Am Acad Dermatol*. 2014;71:116–32; 4. Simpson EL, et al. *J Am Acad Dermatol*. 2017;77:623–33.