masterclasses in dermatology

NP/PA institute



masterclasses in dermatology
NP/PA institute

Managing Cutaneous Lupus Erythematosus across the Care Continuum: Diagnosis, Treatment, and Interdisciplinary Management

Joseph F. Merola, MD, MMSc, FAAD, FACR

Dermatologist, Rheumatologist
Chair of Dermatology | Professor of Dermatology, Distinguished Professor
Professor of Medicine, Rheumatology
Professor, Peter O'Donnell Jr. School of Public Health (OSPH)
UT Southwestern Medical Center, Dallas, TX

with Rosemary Son, MPAS, PA-C

Lead APP, UTSW Dermatology



Supported by an educational grant from Biogen.

All material in this presentation: © 2026 Joseph F. Merola. All rights reserved. No copying, recording, or distribution without prior written permission.

Disclosures

J.F. Merola is a consultant and/or investigator for AbbVie, Amgen, AZ, Biogen, Boehringer Ingelheim, Bristol Myers Squibb, Dermavant, Eli Lilly, Incyte, Janssen, LEO Pharma, Moonlake, Novartis, Pfizer, Sanofi-Regeneron, Sun Pharma, and UCB

- Non-profit / board disclosures
  - President, PPACMAN; Immediate Past-President, Medical Dermatology Society
  - Co-President, GRAPPA; President-Elect, Rheum-Derm Society (RDS)
  - Board: AAD, IDEOM, Lupus Foundation of America, National Psoriasis Foundation

Rosemary Son is a consultant for Incyte, LEO Pharma, Novartis, Sanofi, and Takeda Pharmaceuticals USA

This activity may include discussion of off-label, investigational, or unapproved uses of drugs.

Learning Objectives



Recognize the clinical presentations of acute, subacute, and chronic CLE, including atypical findings, to support timely diagnosis



Interpret current evidence on CLE therapies, including emerging targeted biologic and small molecule agents



Apply evidence-based, patient-centered CLE management strategies across the care continuum to optimize outcomes within an interdisciplinary team

CLE = cutaneous lupus erythematosus.

Overview

- Dermatology providers (must) treat CLE –

(it's our disease)

- Dermatology providers should not fear SLE

(it's going to be OK)

- Dermatology providers should *embrace* new therapies for CLE (/SLE)
- Dermatology providers should be *(very) excited* about the pipeline of drugs for CLE (/SLE)



SLE = systemic lupus erythematosus.

01

Recognizing CLE in Practice: Subtypes, Classification, and What They Look Like

Presented by Joseph F. Merola, MD, MMSc, FAAD, FACR

Acute, subacute, and chronic CLE

Chronic subtypes: DLE and more

Typical and atypical presentations

Multiple subtypes and SLE

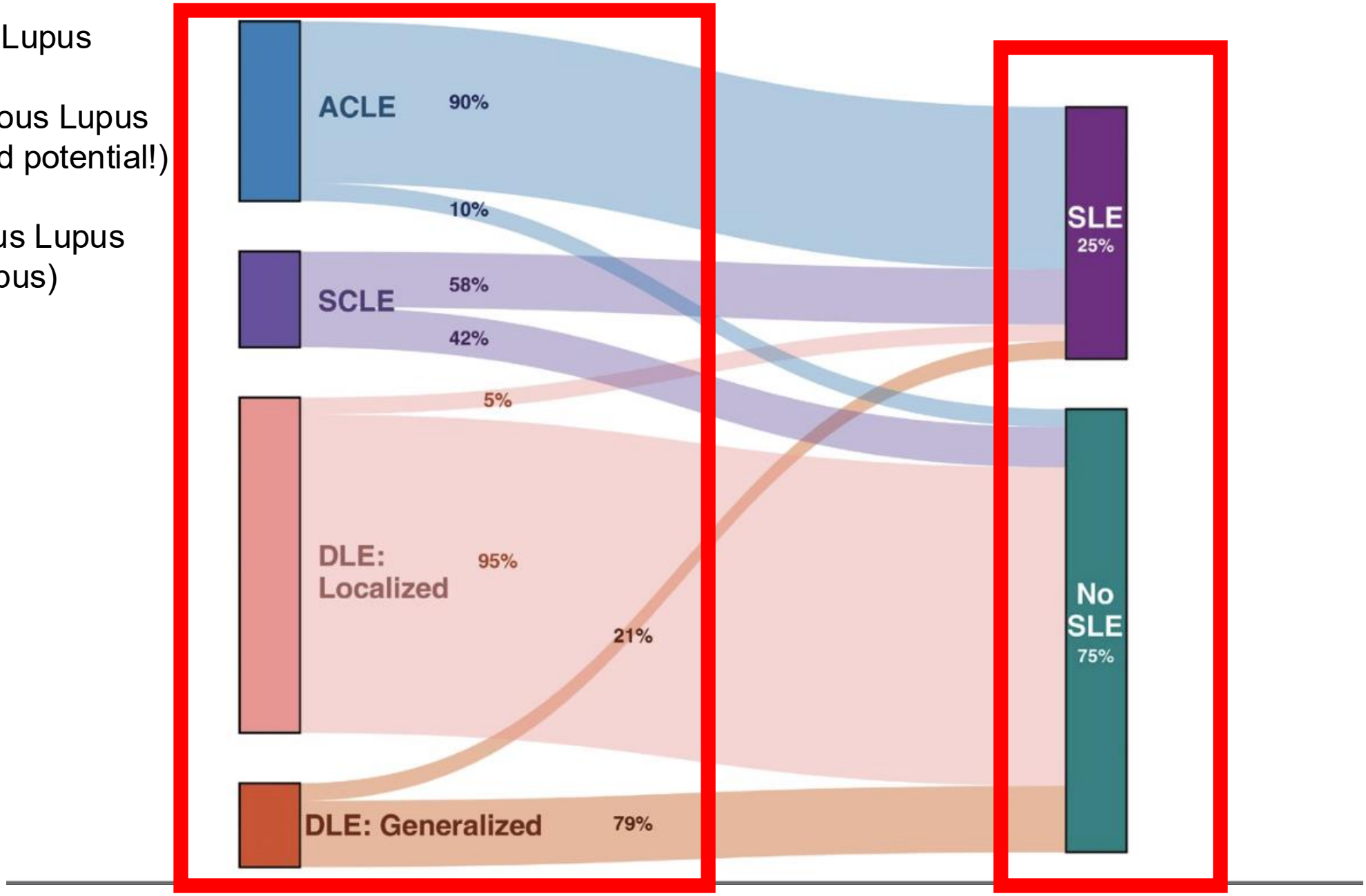
Recognize Diagnose Burden Treat Team

ACLE = Acute Cutaneous Lupus

SCLE = Subacute Cutaneous Lupus
(don't forget drug-induced potential!)

CCLE = Chronic Cutaneous Lupus
(subset DLE = discoid lupus)

Scan me!



Childs B, **Merola JF**. *J Clin Aesthet Dermatol*. 2025;18(10):40-47.

Typical Presentations

Acute, subacute, and chronic CLE



ACLE

Malar erythema, nasolabial folds spared



SCLE, annular

Polycyclic plaques with trailing scale



SCLE, extensive

Photodistributed, non-scarring



DLE, active

Indurated scaly plaques, dyspigmentation



DLE, scalp

Scarring alopecia with central atrophy

CLE Subtypes: Key Clinical Distinctions

Morphology, scarring potential, and SLE association differ by subtype

	Acute CLE (ACLE)	Subacute CLE (SCLE)	Chronic CLE (CCLE): DLE
Morphology	Malar erythema and edema, sparing nasolabial folds; generalized photodistributed eruption	Annular/polycyclic or papulosquamous (psoriasiform) plaques	Indurated scaly plaques, follicular plugging, central atrophy
Distribution	Cheeks, nose; generalized form on sun-exposed skin	V of neck, upper back, shoulders, extensor arms; face often spared	Face, scalp, ears (conchal bowls); generalized if above and below the neck
Scarring	None	Non-scarring; may leave hypopigmentation	Scarring, dyspigmentation, scarring alopecia
SLE association	90+%	~58%	Localized ~5%; generalized ~21%
Serology	ANA+; dsDNA, Sm often positive	Anti-Ro/SSA common	Often ANA negative or low titer
Pearl	Tracks with systemic flares	Always review medications (drug-induced)	Treat early: damage is permanent

SLE association = co-prevalent SLE in cross-sectional data (see later slide).

Merola JF. UpToDate. Updated July 29, 2026. Accessed October 15, 2026. https://www.uptodate.com/contents/overview-of-cutaneous-lupus-erythematosus. Biazar C, et al. *Autoimmun Rev*. 2013;12(3):444-454. Vera-Recabarren MA, et al. *Br J Dermatol*. 2010;162(1):91-101.

Chronic CLE Subtypes: DLE and More

Atypical variants are easy to miss; biopsy when in doubt

Discoid lupus (DLE)

Most common CCLE. Localized (head and neck) or generalized. Scarring, dyspigmentation, scarring alopecia.

Hypertrophic (verrucous) DLE

Thick hyperkeratotic plaques on arms and face; mimics SCC, keratoacanthoma, hypertrophic lichen planus.

Lupus panniculitis (profundus)

Firm, deep nodules on face, upper arms, buttocks, breasts; heals with lipoatrophy. Biopsy to exclude SPTCL.

Lupus tumidus

Smooth, edematous plaques without scale or scarring; very photosensitive; often ANA negative; responds to antimalarials.

Chilblain lupus

Painful violaceous papules on fingers, toes, nose, ears; triggered by cold and damp.

Mucosal DLE

Oral, lip, nasal, or conjunctival plaques and erosions; can mimic lichen planus; chronic lip lesions carry SCC risk.

Lupus tumidus is classified by some as intermittent CLE. Also seen: DLE and lichen planus overlap; bullous LE (usually with SLE).
SPTCL = subcutaneous panniculitis-like T-cell lymphoma; SCC = squamous cell carcinoma.

Co-Prevalent SLE Disease by Cutaneous Lupus Subtype (Cross-Sectional Data)







Subacute CLE 58%

Acute CLE 90+%

Discoid Lupus
Localized = 5%
Generalized = 21%

Systemic LE

NOTE: Up to 30% OVERLAP

Merola JF. UpToDate. Updated July 29, 2026. Accessed October 15, 2026. https://www.uptodate.com/contents/overview-of-cutaneous-lupus-erythematosus. Biazar C, et al. *Autoimmun Rev*. 2013;12(3):444-454. Watanabe T, Tsuchida T. *Dermatology*. 1995;190(4):277-283. Klein RS, et al. *Rheum Dis Clin North Am*. 2010;36(1):33-51, vii. Vera-Recabarren MA, et al. *Br J Derm.* 2010;162(1):91-101.

Risk of Progression from DLE to SLE

<u>BWH Lupus Registry</u>:

Majority of patients with DLE going on to develop SLE did so in **<1-2 years** from time of DLE diagnosis*

- **The median time to progression from DLE to SLE in this cohort was 453 days**, with the first quartile progressing by 303 days

Elman SA, Joyce C, Costenbader KH, **Merola JF**. *Clin Exp Derm*. 2020;45(1):89-91.

02

Diagnostic Workup: The NP/PA Role – History, Biopsy, Labs, Mimickers, and Measuring Disease

Presented by Rosemary Son, MPAS, PA-C

Exposure, smoking, medication, and occupational history

Ordering and interpreting serologies

CLE vs common mimickers

CLASI and CLA-IGA-R

When to refer

Recognize **Diagnose** Burden Treat Team

Taking the History: What to Ask Every Patient

Triggers and context that change both diagnosis and management

UV exposure

Outdoor work or hobbies, tanning, timing of flares after sun (days to weeks), UVA through windows and car glass

Smoking

Current or former, pack-years, vaping; linked to more severe CLE and reduced antimalarial response

Medications

Any new drug in the prior weeks to months: thiazides, terbinafine, PPIs, CCBs, TNF inhibitors, checkpoint inhibitors, taxanes

Occupation and environment

UV-intensive jobs, silica exposure (SLE risk), cold exposure (chilblain lupus)

Systemic review

Joint pain, oral ulcers, hair loss, Raynaud, pleuritic chest pain, fevers, foamy urine, edema, fatigue

Family and reproductive

Family history of lupus or autoimmunity; pregnancy plans and contraception (they drive drug choice)

UVA = ultraviolet A; PPIs = proton pump inhibitors; CCBs = calcium channel blockers; TNF = tumor necrosis factor.

Chasset F, et al. *J Am Acad Dermatol*. 2015;72(4):634-639 (smoking and antimalarial response). Parks CG, et al. *Arthritis Rheum*. 2002;46(7):1840-1850 (silica and SLE).

Medication Triggers: Drug-Induced SCLE

Clinically and serologically indistinguishable from idiopathic SCLE

Drug class	Examples
Antihypertensives	Hydrochlorothiazide; calcium channel blockers (diltiazem, nifedipine, verapamil); ACE inhibitors
Antifungals	Terbinafine; griseofulvin
Acid suppression	Proton pump inhibitors
Biologics and immunotherapy	TNF inhibitors; immune checkpoint inhibitors (PD-1, PD-L1)
Chemotherapy	Taxanes (docetaxel, paclitaxel); capecitabine and 5-FU; gemcitabine
Antiepileptics	Carbamazepine; phenytoin; others

Clinical pearls

- Onset weeks to months after starting the drug (sometimes longer)
- Anti-Ro/SSA usually positive; anti-histone less useful than in systemic drug-induced lupus
- Stop the culprit if possible; lesions typically resolve over weeks to months
- Serologies may persist after skin clears
- Treat the skin like SCLE in the meantime: photoprotection, topicals, antimalarials

ACE = angiotensin-converting enzyme; SSA = Sjögren syndrome-related antigen A.

Grönhagen CM, et al. *Br J Dermatol*. 2012;167(2):296-305. Lowe GC, et al. *Br J Dermatol*. 2011;164(3):465-472. **Merola JF**. UpToDate. Updated October 16, 2025. Accessed October 15, 2026. https://www.uptodate.com/contents/drug-induced-lupus.

Skin Biopsy: When, How, and What to Expect

When

- Diagnosis uncertain or morphology atypical
- Before starting systemic therapy
- Poor response to standard therapy
- Possible panniculitis, hypertrophic DLE, or mimic

How

- 4-mm punch from an active, established lesion (avoid old scar)
- Scalp DLE: active border; consider 2 punches (vertical and horizontal sections)
- Panniculitis: deep incisional or wedge to reach fat
- DIF optional; lesional skin, supportive not required

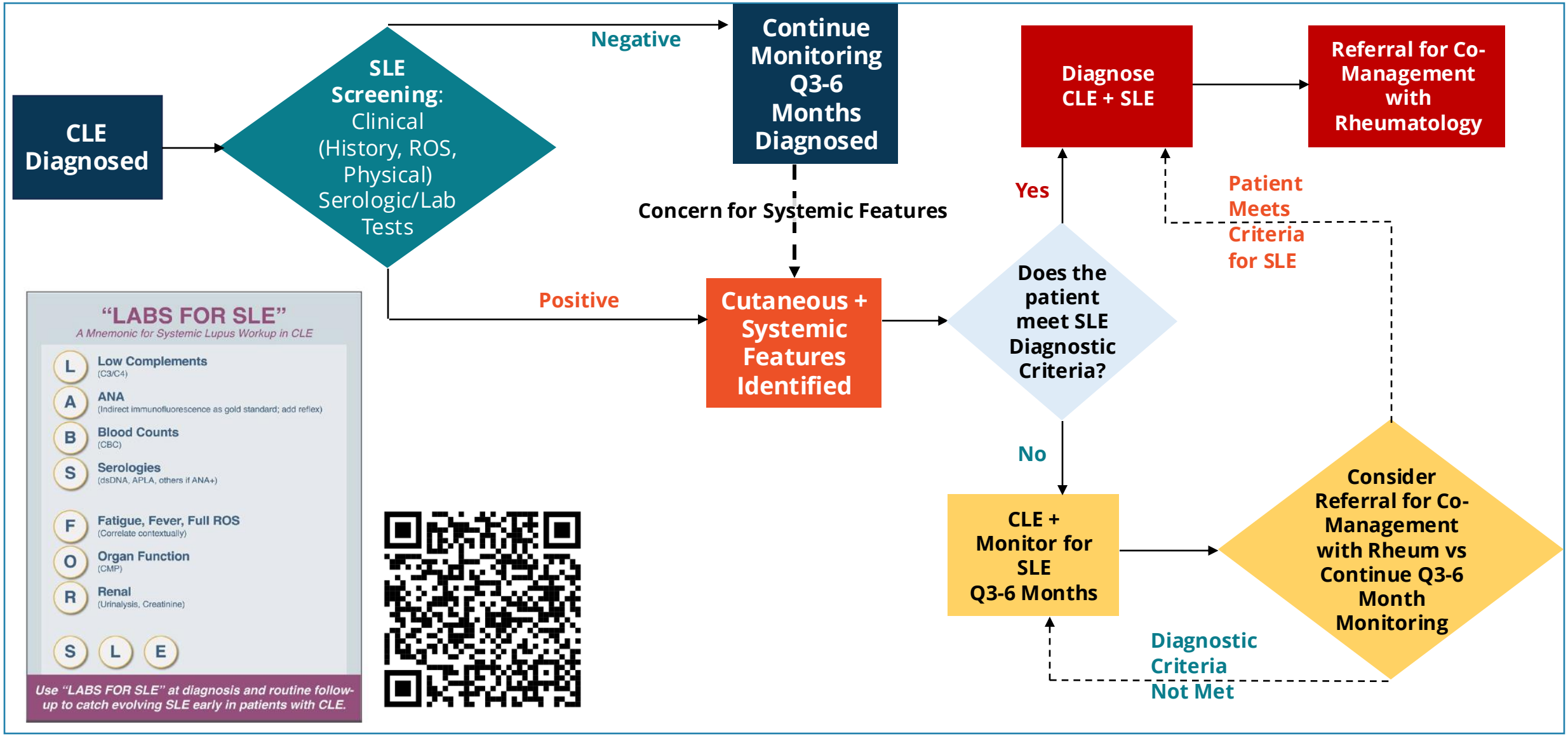
What the report shows

- Interface (vacuolar) dermatitis
- Superficial and deep perivascular and periadnexal lymphocytes
- Dermal mucin
- DLE: follicular plugging, basement membrane thickening

Caveat: dermatomyositis can look identical histologically (interface change plus mucin). Correlate with the clinical picture and serologies.

DIF = direct immunofluorescence.

Approach to CLE Patient Monitoring



Adapted from Childs B, **Merola JF**. *J Clin Aesthet Dermatol*. 2025;18(10):40-47.

In Clinic: Ordering and Explaining Labs

APP PERSPECTIVE

Baseline at diagnosis

ANA with reflex (dsDNA, Sm, RNP), anti-Ro/SSA and La/SSB, CBC with differential, CMP, urinalysis with urine protein/creatinine, C3 and C4. Add antiphospholipid antibodies if SLE features or pregnancy planning.

Monitoring, every 3 to 6 months

Systemic review, CBC, urinalysis; complements and dsDNA when SLE features. Highest yield in the first 1 to 2 years after diagnosis.

Explaining a positive ANA

"A positive ANA is common and does not equal lupus. It tells us to keep watching; your symptoms, exam, and other tests tell us whether lupus is affecting the rest of the body."

Closing the loop

Decide who orders and follows each lab (derm vs rheum vs PCP). Abnormal urine or new cytopenia triggers same-week contact.

ANA = antinuclear antibody; SSB = Sjögren syndrome-related antigen B; CBC = complete blood count; CMP = comprehensive metabolic panel.
Adapted from Childs B, **Merola JF**. *J Clin Aesthet Dermatol*. 2025;18(10):40-47. Discussion: how does your practice divide lab ordering and follow-up?

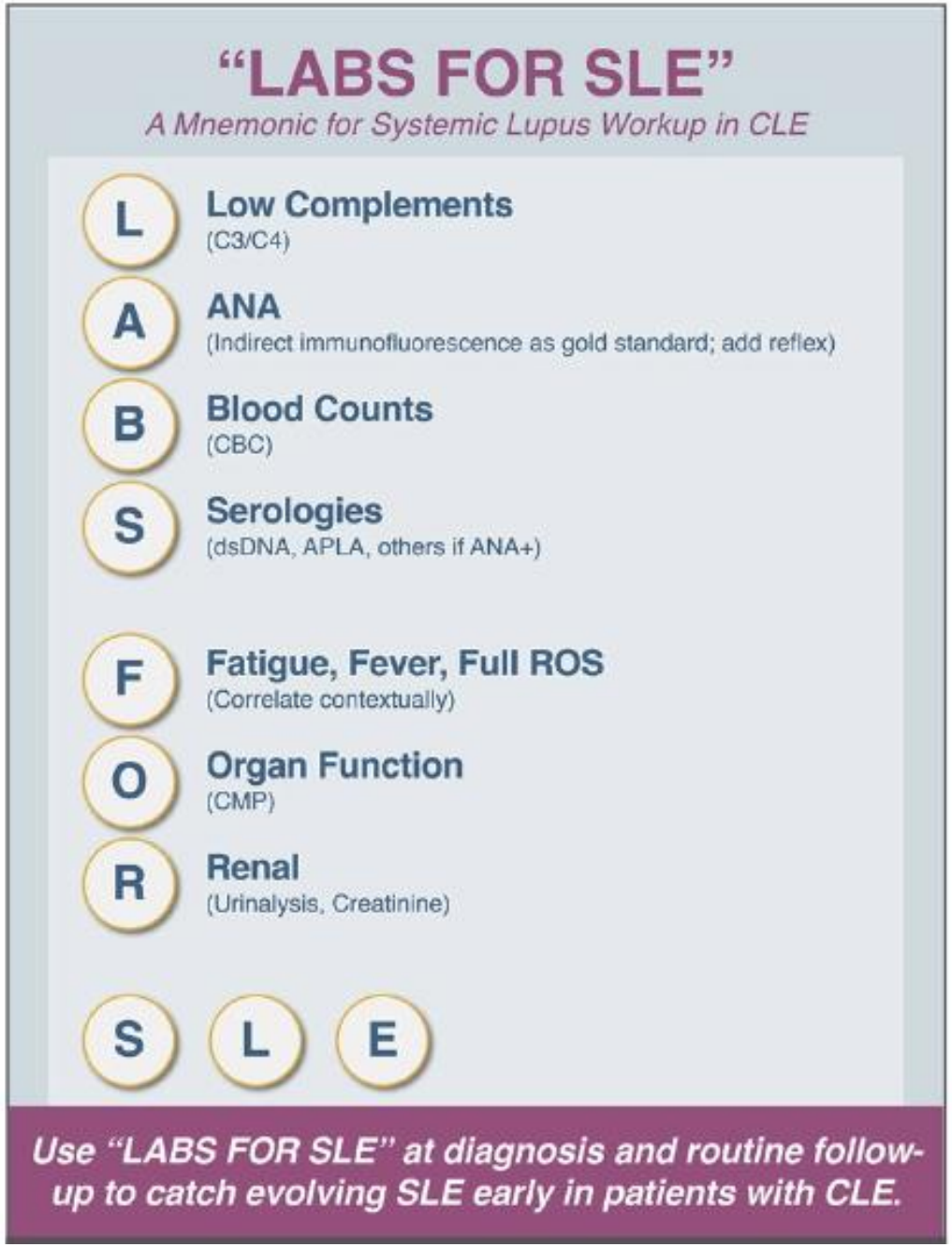
02b

Diagnostic Workup: Serologic Consideration – Labs

Presented by Rosemary Son, MPAS, PA-C

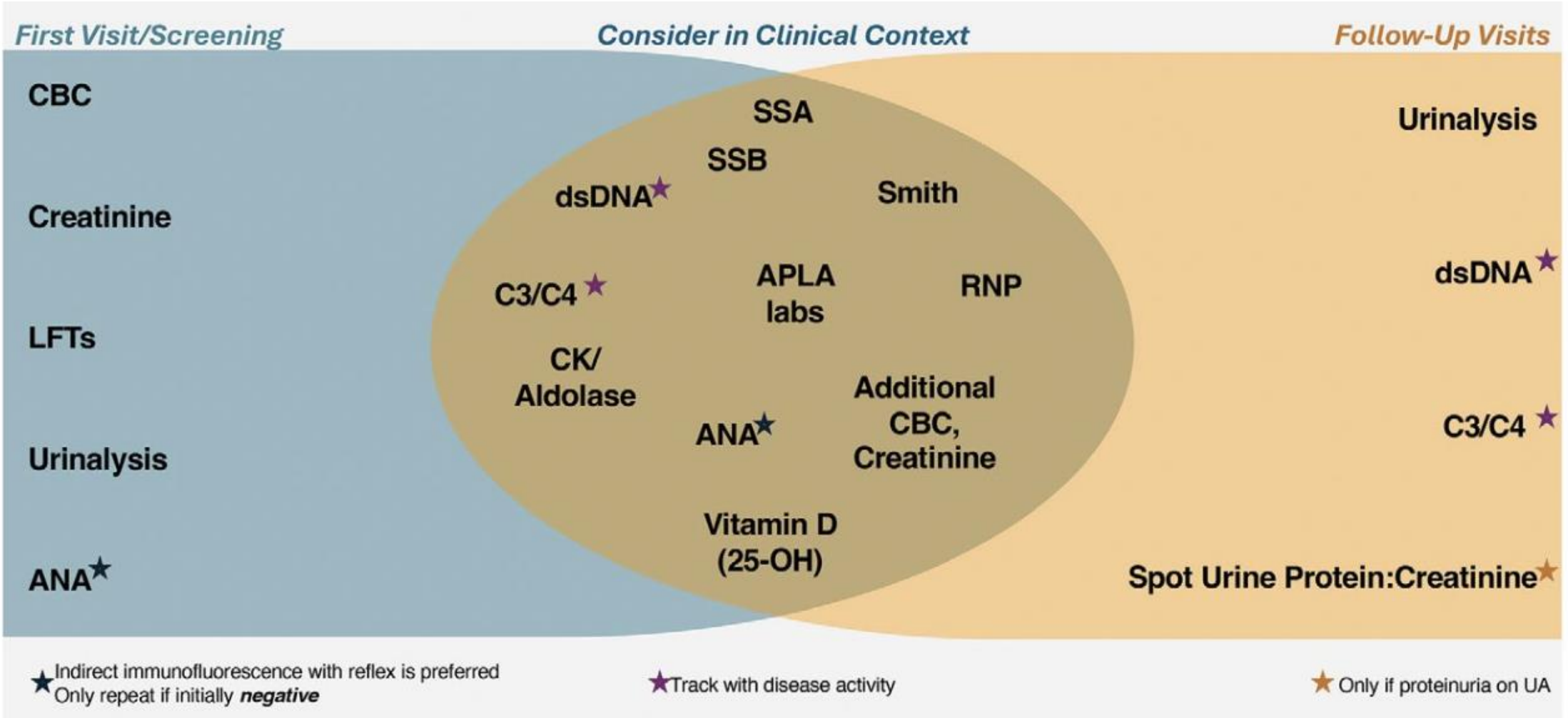
ANA / serologies review at high level

Recognize | **Diagnose** | Burden | Treat | Team



Childs B, **Merola JF**. *J Clin Aesthet Dermatol*. 2025;18(10):40-47.

Screening vs Monitoring CLE



Childs B, **Merola JF**. *J Clin Aesthet Dermatol*. 2025;18(10):40-47.

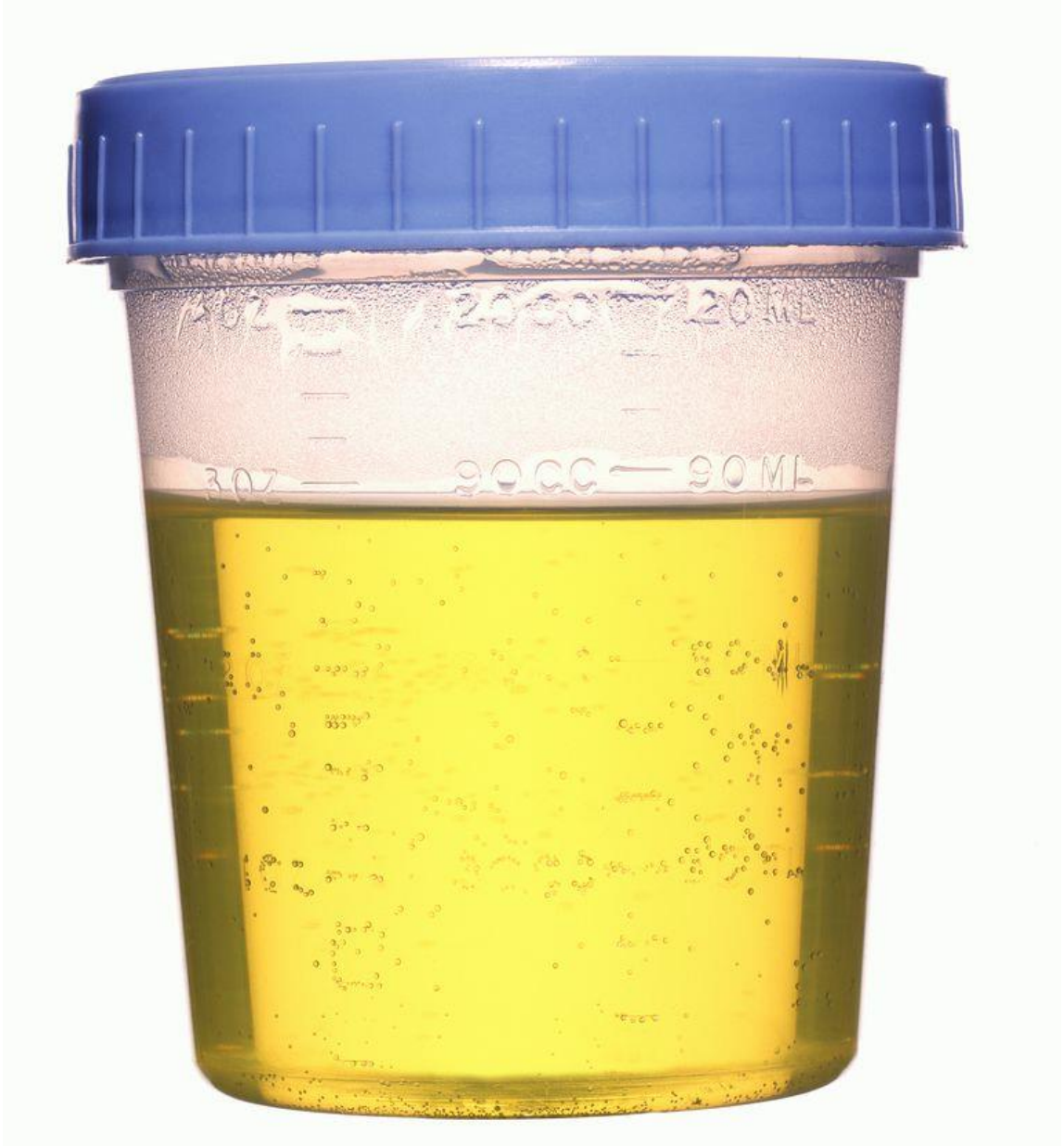
(l)upus vs (L)upus

- Patterns of SLE activity
  - Intermittent relapsing / remitting
  - Chronic active
  - Quiescent

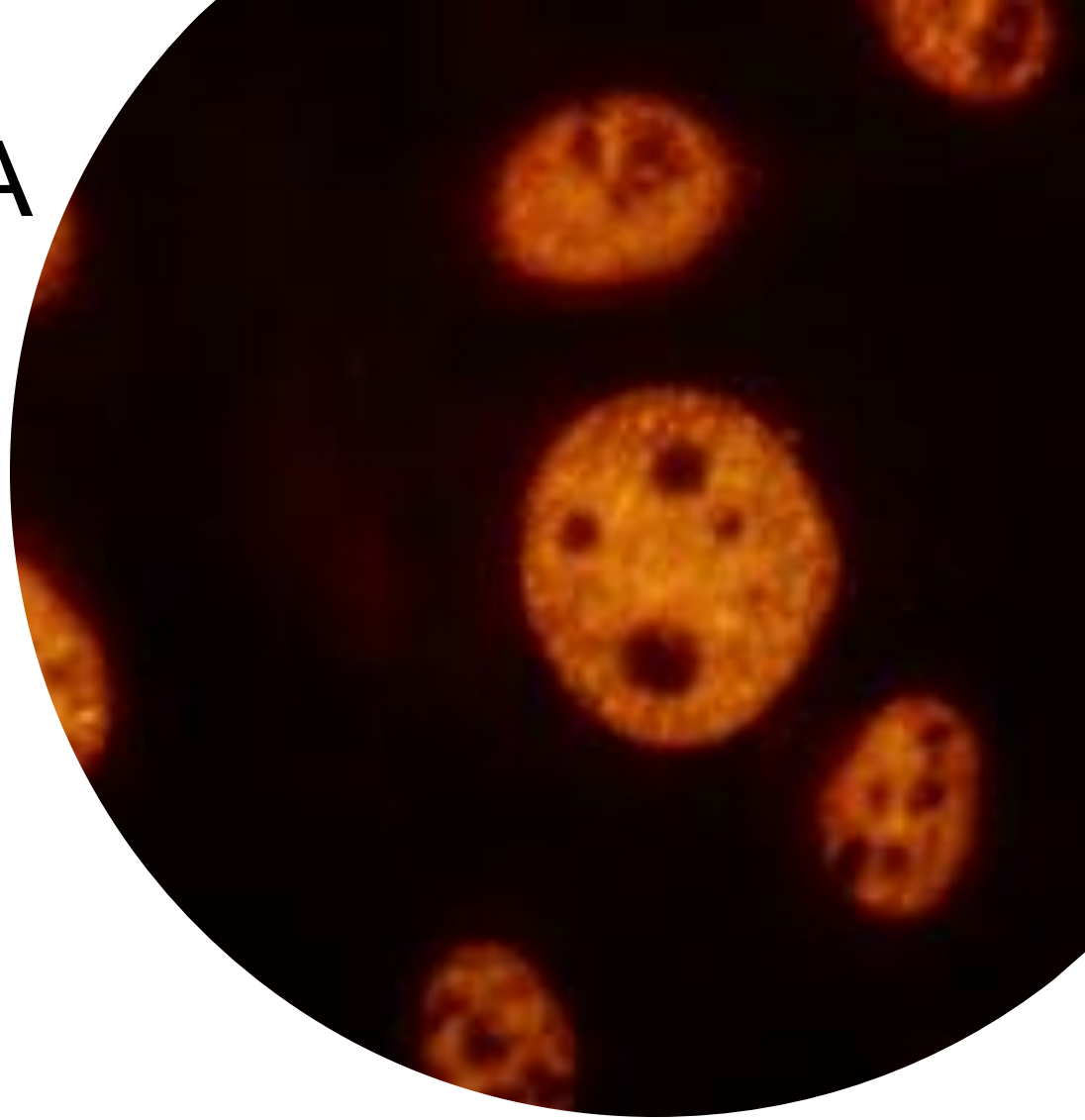
- Study (n=515 patients with SLE) with mild or inactive disease
  - One in four patients followed over a two-year period will have a clinically silent laboratory abnormality that could lead to a change in management
  - Recommend q 3- to 4-month monitoring depending on underlying activity

Gladman DD, et al. *J Rheumatol*. 2013;40(5):630-633.

Work-Up of Your Patient with CLE: Lab Testing?

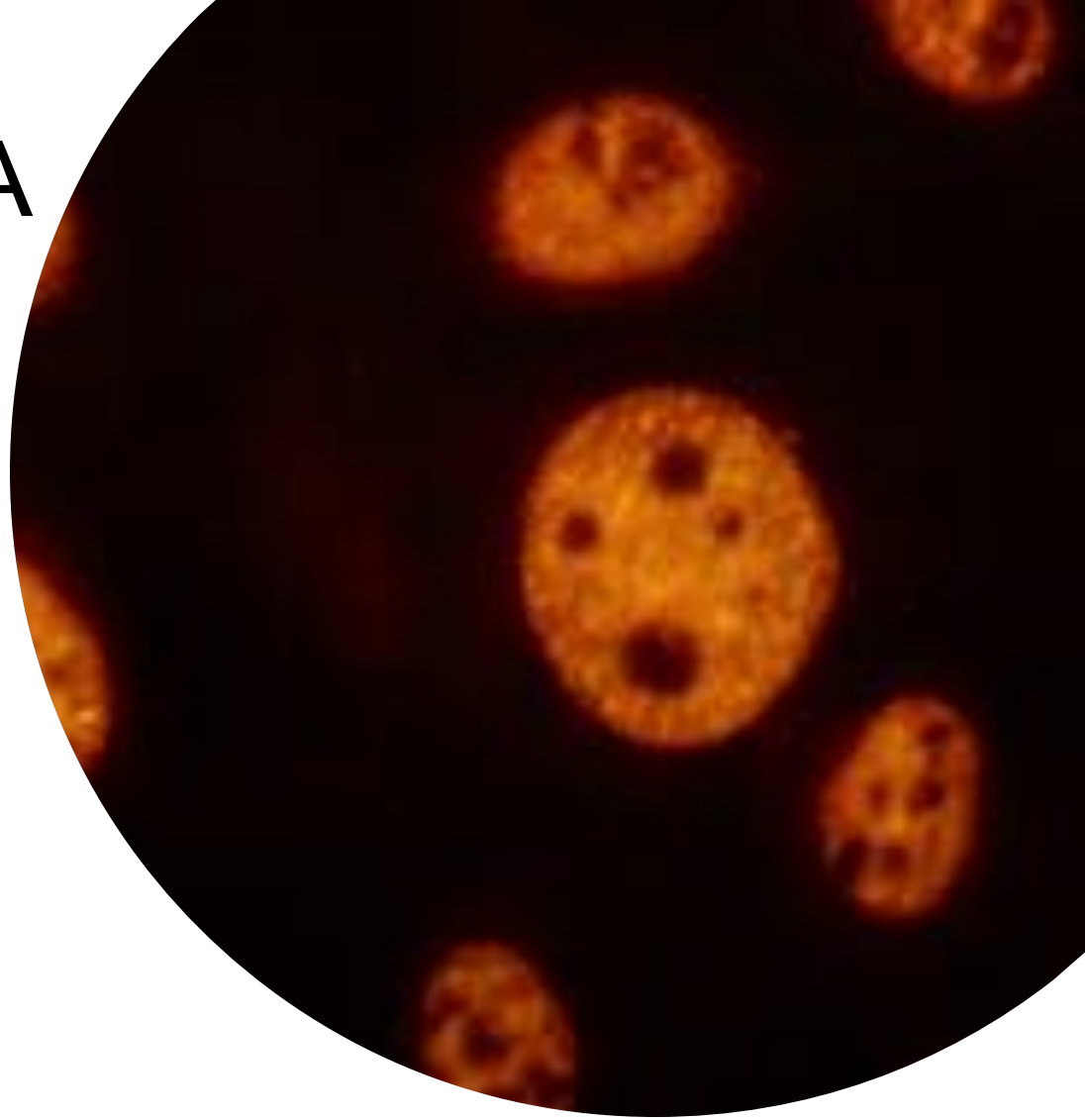


The ANA



- Highly dependent on the serum dilution used for testing and on the age of the individual
- For example, of randomly selected, *healthy* individuals
  - 30% +ANA at a 1:40 serum dilution
  - 13% +ANA at a 1:80 serum dilution
  - 5% +ANA at a 1:160 serum dilution
  - 3% +ANA at a 1:320 dilution
- 1:160 dilution probably yields the optimal balance between sensitivity and specificity in most labs
- Interpretation is all about *clinical context*

The ANA



- ? “ANA negative lupus”
  - Rare
  - Usually associated with autoantibodies against cytoplasmic antigens (SSA/Ro)
    - 2.5-5% SSA positivity with negative ANA
    - ***Suggest separately testing Ro/SSA by ELISA apart from ANA if high suspicion for SCLE, photosensitivity, Sjögren’s, pregnancy**

ELISA = enzyme-linked immunosorbent assay.

For Reference…

TABLE 1. Recommended screening investigations for patients with cutaneous lupus

SCREENING TEST	RATIONALE FOR SYSTEMIC LUPUS SCREENING
ANA (IIF titer)	High sensitivity for SLE; entry criterion for classification per 2019 EULAR/ACR criteria. A positive ANA suggests a possible autoimmune process; higher titer (eg ≥1:160) increases specificity for SLE.[6]
CBC	Detect hematologic involvement – anemia (hemolytic or chronic disease), leukopenia, lymphopenia, thrombocytopenia. These cytopenias are common in SLE and may precede clinical symptoms.[27]
UA ± spot urine protein-to-Cr ratio	Screens for lupus nephritis; proteinuria, hematuria, cellular casts. Even mild proteinuria or hematuria can be an early sign of renal SLE; quantify protein if UA abnormal.[46]
Serum Cr and BUN	Assesses renal function. Elevated creatinine may indicate significant nephritis; baseline needed to compare over time.[46]
Liver enzymes (LFTs)	Baseline for medication safety; also, lupus can rarely affect liver or cause autoimmune hepatitis.
ESR and CRP	General inflammatory markers. ESR often elevated in active SLE; CRP can indicate inflammation or infection (CRP disproportionately high suggests infection rather than lupus flare).[46,47]
Complement C3, C4	Low levels suggest active SLE (immune complex consumption). Normal in purely cutaneous disease; dropping levels over time may predict flare.[46]
Anti-dsDNA antibody	Highly specific for SLE. Indicates increased risk of renal disease; titers fluctuate with disease activity in many patients.[32]
Anti-Smith antibody	Specific for SLE (though less common); once positive, confirms SLE diagnosis. Usually static titer.[48]
Anti-Histone	Associated with both idiopathic SCLE and drug-induced SCLE.[44]
SSA (Ro) and SSB (La) antibodies	Associated with SCLE and Sjögren's. SSA+ in a patient who has ANA-negative CLE still suggests connective tissue disease. Not specific for SLE, but SSA+ patients with CLE should be monitored for mild SLE features. Additionally, SSA is associated with a 6-to-10 fold increased risk for neonatal lupus often presenting with neonatal heart block.[25]
RNP antibody	High-titer RNP can indicate mixed connective tissue disease or SLE overlap with features like Raynaud's. Anti-U1 RNP antibodies are most commonly associated with mixed connective tissue disease, while anti-U3 RNP antibodies are associated with pulmonary hypertension in scleroderma.[49,50]
RF and CCP antibodies	Indicative of rheumatoid arthritis; may rule out association of SLE and rheumatoid arthritis ("Rhupus").[51]
APLA (lupus anticoagulant, anticardiolipin, β2-glycoprotein)	If positive, indicates risk for antiphospholipid syndrome (APS); important if patient plans pregnancy or has thrombosis risk. Some check in all SLE; in CLE, check if clinical suspicion (unexplained DVT, miscarriage, livedo).[46]
Skin biopsy for DIF (at diagnosis)	Analyzing DIF on a lesional or sun-exposed skin can support lupus diagnosis (lupus band test). A positive lupus band in nonlesional skin correlates with systemic disease in some, but not all studies.[52] This test is adjunct and rarely needed if serologies are clear.

ACR: American College of Rheumatology; ANA: antinuclear antibody; APLA: antiphospholipid antibody; BUN: blood urea nitrogen; CBC: complete blood count; CCP: anti-cyclic citrullinated peptide antibodies; CLE: cutaneous lupus erythematosus; Cr: creatinine; CRP: C-reactive protein; DIF: direct immunofluorescence; dsDNA: double-stranded DNA; DVT: deep vein thrombosis; ESR: erythrocyte sedimentation rate; EULAR: European League Against Rheumatism; IIF: indirect immunofluorescence; LFT: liver function test; RF: rheumatoid factor; RNP: ribonucleoprotein antibody; SCLE: subacute cutaneous lupus erythematosus; SLE: systemic lupus erythematosus; UA: urinalysis

Childs B, **Merola JF**. *J Clin Aesthet Dermatol*. 2025;18(10):40-47.

Serologies → Clinical Associations

- **Anti-dsDNA**
  - Glomerulonephritis
  - More severe SLE
  - Tracks with disease activity
- **Anti-Ro antibodies**
  - Subacute cutaneous LE
  - Photosensitivity
  - Neonatal lupus (heart block)
  - Cutaneous vasculitis
  - Sjögren's syndrome
    - Anti-La/SSB antibodies are more strongly associated with Sjögren's syndrome
- **Mixed connective tissue disease (MCTD) / RNP**
  - Anti-U1 ribonucleoprotein antibodies (RNP)
  - Anti-U3 ribonucleoprotein antibodies (pulm HTN in SCL)
    - Puffy hands, arthritis, Raynaud's phenomenon; pulmonary hypertension
  - MCTD → SLE or scleroderma (? Distinct entity)

HTN = hypertension.

Merola JF. UpToDate. Updated October 16, 2025. Accessed October 15, 2026. https://www.uptodate.com/contents/drug-induced-lupus.
Merola JF. In: *Lupus Erythematosus: Clinical Evaluation and Treatment*. 2nd ed. Springer; 2012.

Serologies → Clinical Associations

- **Anti-Smith**
  - High specificity for SLE
- **Anti-histone**
  - Both idiopathic SLE and drug-induced
- Anti-synthetases
- ANCAs
- Rheumatoid factor (RF) and anti-cyclic citrullinated peptide (CCP) antibodies
  - Rheumatoid arthritis; ? rhupus

ANCAs = antineutrophil cytoplasmic antibodies.

Merola JF. UpToDate. Updated October 16, 2025. Accessed October 15, 2026. https://www.uptodate.com/contents/drug-induced-lupus.
Merola JF. In: *Lupus Erythematosus: Clinical Evaluation and Treatment*. 2nd ed. Springer; 2012.

New ACR/EULAR Criteria for Classification of SLE

- Serum titer of ANA ≥1:80 !! (on hep-2 cells or equivalent)

- At least *10 points* from criteria:

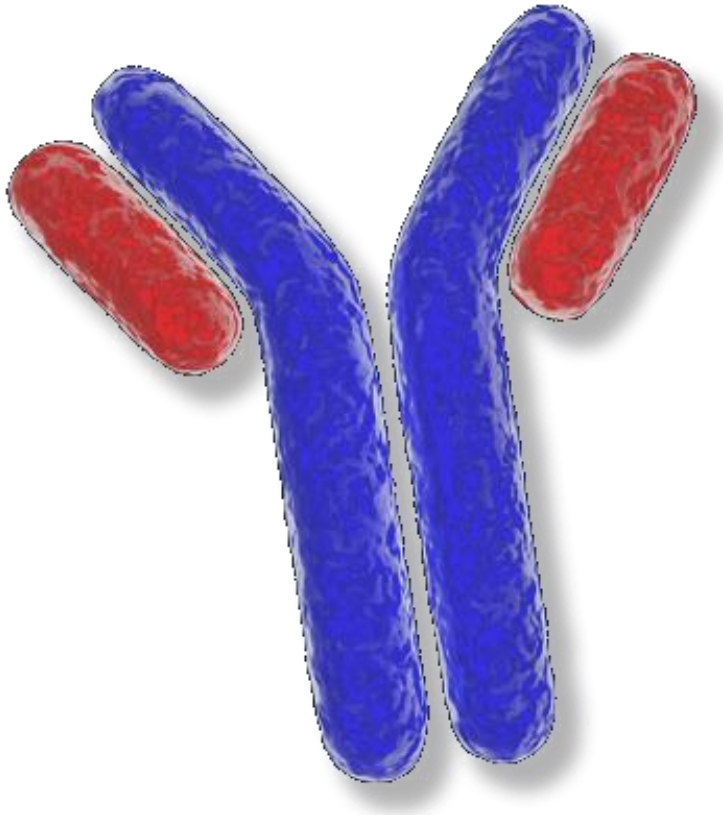
Immunologic domains	Points
Antiphospholipid antibody domain	
Anticardiolipin IgG >40 GPL or anti-β2GP1 IgG >40 units or lupus anticoagulant	2
Complement proteins domain	
Low C3 or low C4	3
Low C3 and low C4	4
Highly specific antibodies domain	
Anti-dsDNA antibody	6
Anti-Smith antibody	6

Clinical domains	Points
Constitutional domain	
Fever	2
Cutaneous domain	
Nonscarring alopecia	2
Oral ulcers	2
Subacute cutaneous or discoid lupus	4
Acute cutaneous lupus	6
Arthritis domain	
Synovitis in at least two joints or tenderness in at least two joints, and at least 30 min of morning stiffness	6
Neurologic domain	
Delirium	2
Psychosis	3
Seizure	5
Serositis domain	
Pleural or pericardial effusion	5
Acute pericarditis	6
Hematologic domain	
Leukopenia	3
Thrombocytopenia	4
Autoimmune hemolysis	4
Renal domain	
Proteinuria >0.5g/24 hr	4
Class II or V lupus nephritis	8
Class III or IV lupus nephritis	10

Aringer M, et al. *Arthritis Rheumatol*. 2019;71(9):1400-1412.

Antiphospholipid Antibodies

- Laboratory tests to order
  - Lupus anticoagulant
  - Anticardiolipin antibodies (IgG / IgM)
  - Anti-β2 glycoprotein-1 antibodies (IgG / IgM)
    - **(NOT beta2-microglobulin)**
  - Anti-prothrombin antibodies



Anti-Ro/SSA, Pregnancy, and Neonatal Lupus



Cutaneous neonatal lupus

"The identification of cutaneous neonatal lupus in an anti-SSA/Ro exposed infant ... predicts a 6- to 10-fold risk for a subsequent child with cardiac neonatal lupus."

Izmirly, 2010

- **Consider HCQ in Ro-positive pregnancy:** 77-86% relative risk reduction of fetal congenital heart block
- Test Ro/SSA in every woman with CLE who is pregnant or planning pregnancy
- Refer early to obstetrics/MFM for fetal heart monitoring
- Continue HCQ through pregnancy; stop teratogens well before conception

HCQ = hydroxychloroquine.

Izmirly PM, et al. *Arthritis Rheumatol*. 2010;62(4):1153-1157. Tunks RD, et al. *Am J Obstet Gynecol*. 2013;208(1):64.e1-7. Izmirly PM, et al. *Circulation*. 2012;126(1):76-82.

CLE vs Common Mimickers

Mimic	Can look like	Clues favoring the mimic	Helpful test
Rosacea	ACLE	Papules, pustules, telangiectasia, flushing; no scale or scarring	Clinical; biopsy if unclear
Seborrheic dermatitis	ACLE	Greasy scale in nasolabial folds, brows, scalp, ears	Clinical
Dermatomyositis	ACLE, SCLE	Violaceous, itchy; heliotrope, Gottron papules, nailfold changes; weakness	CK, aldolase, myositis antibodies
Contact or photoallergic dermatitis	ACLE, SCLE	Itch, vesicles, eczematous change; exposure-shaped borders	Patch or photopatch testing
Polymorphous light eruption	SCLE, tumidus	Itchy papules hours after sun; clears in days	History; biopsy
Psoriasis	Papulosquamous SCLE	Elbows, knees, scalp, nails; not photodistributed	Biopsy
Tinea corporis	Annular SCLE	Active scaly border, often asymmetric	KOH
Lichen planopilaris	Scalp DLE	Perifollicular scale and erythema; no dyspigmentation	Biopsy

CK = creatine kinase; KOH = potassium hydroxide.

The Red Face and the Hands: Key Distinguishing Features



ACLE

Malar erythema that spares the nasolabial folds; may be edematous; photosensitive

Rosacea

Centrofacial papules, pustules, telangiectasia; flushing triggers; no scale

Seborrheic dermatitis

Greasy yellow scale that involves the nasolabial folds, brows, scalp

Dermatomyositis

Violaceous; involves nasolabial folds and eyelids (heliotrope); prominent itch

Look at the hands. Lupus favors the skin between the knuckles; dermatomyositis favors the knuckles themselves (Gottron papules), with ragged cuticles and nailfold changes.

Measuring Disease: CLASI and CLA-IGA-R

Activity is treatable; damage is not. Score activity and damage separately.

CLASI

Albrecht, 2005

Activity (CLASI-A, 0 to 70)

- Erythema, scale, and hypertrophy by body area
- Mucous membrane lesions
- Recent non-scarring hair loss

Damage (CLASI-D, 0 to 56)

- Dyspigmentation
- Scarring, atrophy, panniculitis
- Scarring alopecia

CLA-IGA-R

Cutaneous Lupus Activity Investigator Global Assessment, Revised

- One global score per patient, 0 (clear) to 4 (severe)
  - Erythema
  - Other morphologic characteristics (OMC)
- **0 or 1 = clear or almost clear**
- Primary endpoint in the AMETHYST trial (week 16)
- Developed by our group; quick to record at each visit

In practice

- Use CLA-IGA-R alongside for a quick global read
- Trial responder language: CLASI-50 (clinically meaningful endpoint in studies), CLASI-70, and CLA-IGA-R 0/1
- Take the same standardized photos each visit

CLA-IGA-R developed by the speaker's group.
CLASI = Cutaneous Lupus Erythematosus Disease Area and Severity Index.
Albrecht J, et al. *J Invest Dermatol*. 2005;125:889-894 (CLASI).

When to Refer to Specialists

Dermatology

- Diagnosis uncertain or biopsy needed
- Any scarring DLE, especially scalp, face, ears
- Atypical variants: panniculitis, hypertrophic, chilblain
- No response after 8 to 12 weeks of topicals plus antimalarial

Rheumatology

- Systemic symptoms: arthritis, serositis, oral ulcers, fevers
- ANA 1:80 or higher with dsDNA or Sm, or low complements
- Cytopenias or abnormal urinalysis
- ACLE or generalized DLE (higher SLE association)

Same-week / urgent

- Proteinuria, hematuria, or rising creatinine
- Neurologic symptoms, chest pain, or dyspnea
- Severe cytopenias
- Pregnancy with anti-Ro/SSA: obstetrics/MFM

Also: ophthalmology for a baseline retinal exam in the first year of hydroxychloroquine; behavioral health when screening is positive.

03

Burden and Impact of CLE: Why Early Recognition Changes Lives

Presented by Rosemary Son, MPAS, PA-C

Morbidity and quality of life
Chronic course and permanent skin change
DLE: dyspigmentation and scarring alopecia
Psychosocial symptom review and support

Recognize | Diagnose | **Burden** | Treat | Team

CLE Impact on Quality of Life and Systemic Comorbidities



CLE severely impairs quality of life with effects comparable to or worse than hypertension, type 2 diabetes, congestive heart failure, and recent myocardial infarction



Disease activity, pain severity, fatigue levels, and body dissatisfaction are significant independent predictors of overall quality of life

- Generalized disease, facial involvement, and scarring are associated with worse outcomes



Patients have significant comorbidities, including cardiovascular disease and mental health disorders

QOL = quality of life.

Slide courtesy of Dr. Scott Elman.

Klein R, et al. *J Am Acad Dermatol*. 2011;64(5):849-858. Ogunsanya ME, et al. *Br J Dermatol*. 2019;180(6):1430-1437. Verma SM, et al. *Br J Dermatol*. 2014;170(2):315-321. **Merola JF**, Baker M, Krzywy H, et al. Presented at: European Academy of Dermatology and Venereology (EADV) Congress; September 17-20, 2025; Paris, France.

Chronic CLE: A Prolonged Course with Lasting Change

Damage accrues quietly while activity is undertreated

Prolonged, relapsing course

Chronic CLE often persists for years, with flares after sun, smoking, or stopping therapy

Dyspigmentation

Hyper- and depigmentation are often more visible and distressing in skin of color

Scarring alopecia

Scalp DLE destroys follicles; hair loss is permanent once scarring sets in

Skin cancer in old scars

Squamous cell carcinoma can arise in long-standing DLE scars, especially lips and sun-exposed skin

Why identify DLE early?

- Activity responds to treatment; scarring does not reverse
- Facial involvement and scarring predict worse quality of life
- Early antimalarials plus intralesional or potent topical steroids can prevent damage
- Scalp DLE deserves prompt systemic therapy

Klein R, et al. *J Am Acad Dermatol*. 2011;64(5):849-858. Verma SM, et al. *Br J Dermatol*. 2014;170(2):315-321.

DLE: The Evolution of a Lesion over Time



Early (active)

Erythematous, indurated papules and plaques; adherent scale; follicular plugging



Established

Erythematous plaques with central atrophy; hypo- and hyperpigmentation



Late (damage)

Atrophic scar, depigmentation, permanent scarring alopecia

Window of opportunity: treat while lesions are red and indurated, before they are white, atrophic, and bald.

Established DLE image source: https://dermnetnz.org/images/discoid-lupus-erythematosus-images.

Psychosocial Impact: Asking about Symptoms and Support



What patients carry

- Appearance concerns, stigma, and visible scarring
- Hair loss and identity
- Low mood, fatigue, and pain
- Sun avoidance limiting work, exercise, and social life



Ask about symptoms

- How is your skin affecting your mood, sleep, or work?
- Have you felt down, anxious, or hopeless on most days?
- Any change in energy, appetite, or concentration?
- Is anything about your appearance or hair hard to live with?



Support and refer

- If the answer is yes: talk it through, then refer to behavioral health
- Urgent pathway for any safety concern
- Support groups and patient organizations (eg, Lupus Foundation of America)
- Cosmetic camouflage, hair prostheses, UPF clothing
- Social work for cost and access

UPF = ultraviolet protection factor.

Ask open questions first; no formal instrument is required at each visit. CLE quality-of-life impairment is comparable to or worse than hypertension, diabetes, and heart failure.

Klein R, et al. *J Am Acad Dermatol*. 2011;64(5):849-858. Ogunsanya ME, et al. *Br J Dermatol*. 2019;180(6):1430-1437.

Key Learning Points: Recognizing CLE

1. **Subtype drives the plan.**
   ACLE, SCLE, and DLE differ in morphology, scarring, and SLE association (ACLE 90+%, SCLE ~58%, generalized DLE ~21%, localized DLE ~5%).

2. **Think beyond the classic plaque.**
   Tumidus, panniculitis, chilblain, hypertrophic, and mucosal variants need a high index of suspicion and often a biopsy.

3. **The history is diagnostic and therapeutic.**
   Ask about UV, smoking, occupation, and every new medication; drug-induced SCLE is common and reversible.

4. **Labs answer one question: is there systemic disease?**
   ANA in context, Ro/SSA separately, and CBC, urinalysis, complements every 3 to 6 months, especially early.

5. **Measure, photograph, and act early.**
   Score activity vs damage (CLASI), refer scarring or systemic disease promptly, and screen for psychosocial burden.

04

Current and Emerging CLE Therapies: From Photoprotection to Targeted Pathways

Presented by Joseph F. Merola, MD, MMSc, FAAD, FACR

2023 EULAR and 2025 ACR updates
Lifestyle as first-line therapy
Topicals, antimalarials, systemic agents
Anifrolumab, belimumab, litifilimab, deucravacitinib, enpatoran
Positioning new agents

Guideline Updates: What NPs/PAs Need to Know

Cutaneous recommendations within the SLE guidelines

2023 EULAR

- **HCQ for all,** target 5 mg/kg actual body weight/day
- **Glucocorticoids:** maintenance 5 mg/day or less; withdraw when possible
- **Skin, first line:** topical steroids or calcineurin inhibitors, antimalarials, and/or systemic steroids
- **Skin, second line:** methotrexate, mycophenolate, anifrolumab, or belimumab
- **Add belimumab or anifrolumab** if not responding to HCQ or unable to taper steroids

2025 ACR

- **HCQ for all, indefinitely:** 5 mg/kg/day or less long term
- **Steroids:** taper below 5 mg/day, ideally off, within 6 months
- **Mild, persistent skin:** add quinacrine or switch to chloroquine before immunosuppressants
- **Moderate to severe, refractory:** add methotrexate, MPAA, anifrolumab, and/or belimumab (none prioritized); lenalidomide if all fail
- **Subtype-specific:** dapsone (bullous, vasculitis); pentoxifylline, PDE5i, or CCB (chilblain)

Common ground: photoprotection plus topicals plus HCQ for everyone; escalate early to steroid-sparing therapy; avoid chronic prednisone.

Recommendations address skin disease in SLE; widely extrapolated to isolated CLE.

EULAR = European Alliance of Associations for Rheumatology; ACR = American College of Rheumatology; MPAA = mycophenolic acid analog; CCB = calcium channel blocker.

Fanouriakis A, et al. *Ann Rheum Dis*. 2024;83(1):15-29. Sammaritano LR, et al. *Arthritis Care Res* (Hoboken). 2026;78(7):815-839.

Lifestyle Modifications: First-Line Management

Free, safe, and effective, but only if we counsel well

Photoprotection

- Broad-spectrum UVA and UVB; ACR 2025: SPF 70+ chemical or 50+ physical
- Tinted (iron oxide) formulas add visible-light protection
- Generous application; reapply every 2 hours outdoors
- UPF clothing, wide-brim hats, UV window film (UVA passes through glass)
- Check vitamin D; supplement as needed

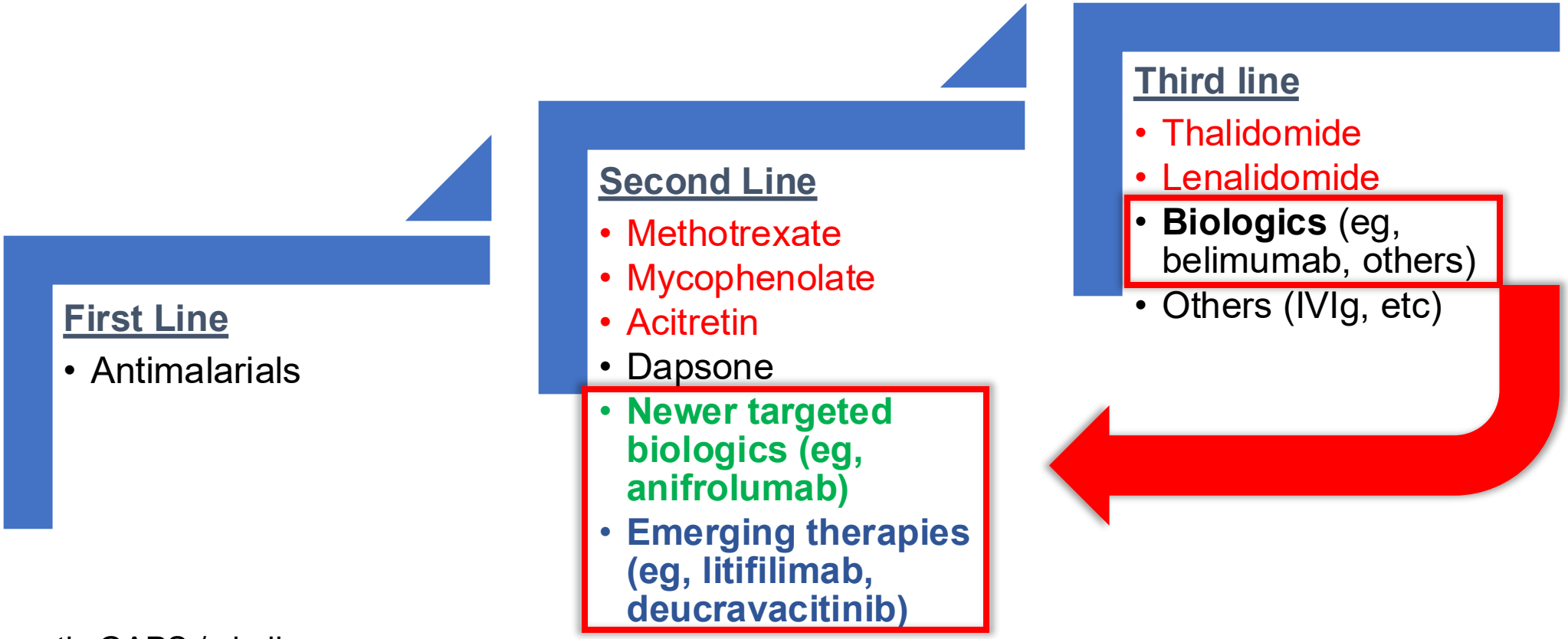
Smoking cessation

- Smoking is linked to more active, extensive CLE
- Smokers respond less well to antimalarials
- Ask, advise, refer at every visit
- Pharmacotherapy plus quitline (1-800-QUIT-NOW)

Medication review

- Screen for SCLE triggers: thiazides, terbinafine, PPIs, CCBs, TNF inhibitors, checkpoint inhibitors
- Coordinate any change with the prescriber
- Check interactions before adding systemic therapy
- Review pregnancy plans and contraception

Sammaritano LR, et al. *Arthritis Care Res* (Hoboken). 2026;78(7):815-839. Chasset F, et al. *J Am Acad Dermatol*. 2015;72(4):634-639.



- Major therapeutic GAPS / challenges
  - Safety / tolerability of current 2nd/3rd-line agents
    - Immunosuppression / infection and other risks
  - Monitoring requirements / monitoring burden
  - Polypharmacy / compatibility with other concurrent medications, esp with comorbidities
  - Prevalent population includes women of childbearing potential / pregnancy risks and severe, known teratogenicity
  - IV route of administration (esp in dermatology), access for patients with CLE

Slide courtesy of **Joseph F. Merola, MD, MMSc**.

Topicals and Antimalarials: Where Each Fits

* Topicals for isolated, low-impact disease only; start a systemic antimalarial early

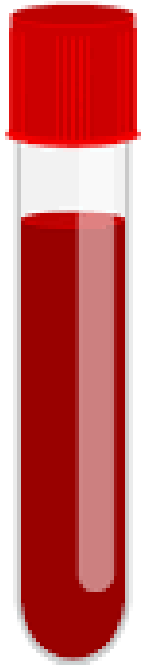
Therapy	Use when	Time to effect	Benefits	Limitations and monitoring
Topical corticosteroids	Isolated, low-impact localized lesions only	2 to 4 weeks	Inexpensive, targeted	Atrophy, telangiectasia; lower potency on face
Topical calcineurin inhibitors	Isolated, low-impact lesions on face or folds	4 to 8 weeks	No atrophy; steroid-sparing	Burning; limited penetration in thick DLE
Intralesional triamcinolone	Isolated, low-impact lesion, as a bridge	2 to 4 weeks	Rapid, local control	Atrophy, dyspigmentation; not for widespread disease
Hydroxychloroquine (first-line antimalarial)	Start early for all CLE; do not wait for topicals to fail	8 to 12 weeks	Disease-modifying; lowers flares and damage	5 mg/kg/day or less; retinal screening; adherence
Quinacrine or chloroquine	Second antimalarial step after partial response	4 to 12 weeks	Option before immunosuppression (ACR 2025)	Quinacrine: compounded, yellow skin discoloration

Move early: when disease is widespread, scarring-prone, or not controlled on a first-line antimalarial within about 3 months, move to systemic and targeted therapy rather than repeated topicals or intralesional steroids.

Retinal screening (AAO 2016): baseline exam within the first year, then annually after 5 years (sooner with risk factors).

Marmor MF, et al. *Ophthalmology*. 2016;123(6):1386-1394.

Hydroxychloroquine: Blood Level Monitoring



- **<100 ng/mL**: highly suggestive of **nonadherence**
- **100-200 ng/mL**: possibly suggestive of nonadherence
- **~300-700 ng/mL**: this is the therapeutic range
  - We would not necessarily alter the patient's dose if they are slightly below 300 ng/mL
- **>700 ng/mL**: consider decreasing the daily dose
  - The studies to date do not clearly show increased risk of retinal toxicity with higher levels (likely because it is more reflective of cumulative exposure rather than one-time serum or whole blood levels), however side effects may be higher; suggests considering decreasing the daily dose if above ~700

Traditional Treatments: Systemic Agents

Steroid-sparing options when topicals and antimalarials are not enough

Therapy	Best for	Time to effect	Benefits	Limitations and monitoring
Methotrexate	Refractory SCLE or DLE; arthritis	6 to 12 weeks	Weekly, inexpensive, familiar	Teratogen; CBC and liver tests; folic acid; limit alcohol
Mycophenolate (MPAA)	Refractory CLE; nephritis	6 to 12 weeks	Steroid-sparing	Teratogen; GI upset, cytopenias, infection
Retinoids (acitretin, isotretinoin)	Hypertrophic DLE	4 to 8 weeks	Helpful for hyperkeratotic lesions	Teratogen (acitretin: avoid pregnancy 3 years); lipids, liver tests
Dapsone	Bullous LE, vasculitis	2 to 6 weeks	Fast for neutrophilic disease	G6PD first; hemolysis, methemoglobinemia, hypersensitivity
Thalidomide or lenalidomide	Severe refractory CLE	2 to 4 weeks	High, rapid response	Teratogen (REMS); neuropathy; VTE (caution with APLA); relapse on stopping

REMS = risk evaluation and mitigation strategy; VTE = venous thromboembolism; APLA = antiphospholipid antibodies.
Short oral steroid courses: bridge only.
Drugs@FDA: FDA-Approved Drugs. Accessed October 15, 2026. https://www.accessdata.fda.gov/scripts/cder/daf/.

The CLE/SLE Therapeutic Landscape at a Glance

Every agent discussed today, organized by role and target

FOUNDATION

Current standard

Hydroxychloroquine
Antimalarial; first line for CLE; blood levels flag nonadherence (therapeutic ~300–700 ng/mL)

Corticosteroids
Topical and systemic

HCQ in Ro/SSA+ pregnancy
Consider: 77–86% relative risk reduction of fetal congenital heart block

CONVENTIONAL

Systemic · 2nd / 3rd line

Methotrexate
Useful with arthritis

Mycophenolate · Azathioprine
Nephritis; mycophenolate for ILD

Acitretin · Dapsone
Second-line cutaneous options

Thalidomide · Lenalidomide
Third line; teratogenic; caution with APLA

IVIG
Third-line option

APPROVED TARGETED

SLE / lupus nephritis

Anifrolumab
Anti-IFNAR1; FDA-approved for SLE; IV q4w; SC weekly autoinjector approved Apr 2026

Belimumab
Anti-BLyS (BAFF); FDA-approved for SLE and lupus nephritis

Voclosporin
Calcineurin inhibitor; lupus nephritis, with MMF

Rituximab
Anti-CD20; off-label (nephritis, ILD)

EMERGING

Investigational in CLE / SLE

Litifilimab
Anti-BDCA2 (pDC → type I IFN); SC q4w; AMETHYST Ph 2/3; FDA Breakthrough Therapy (Jan 2026)

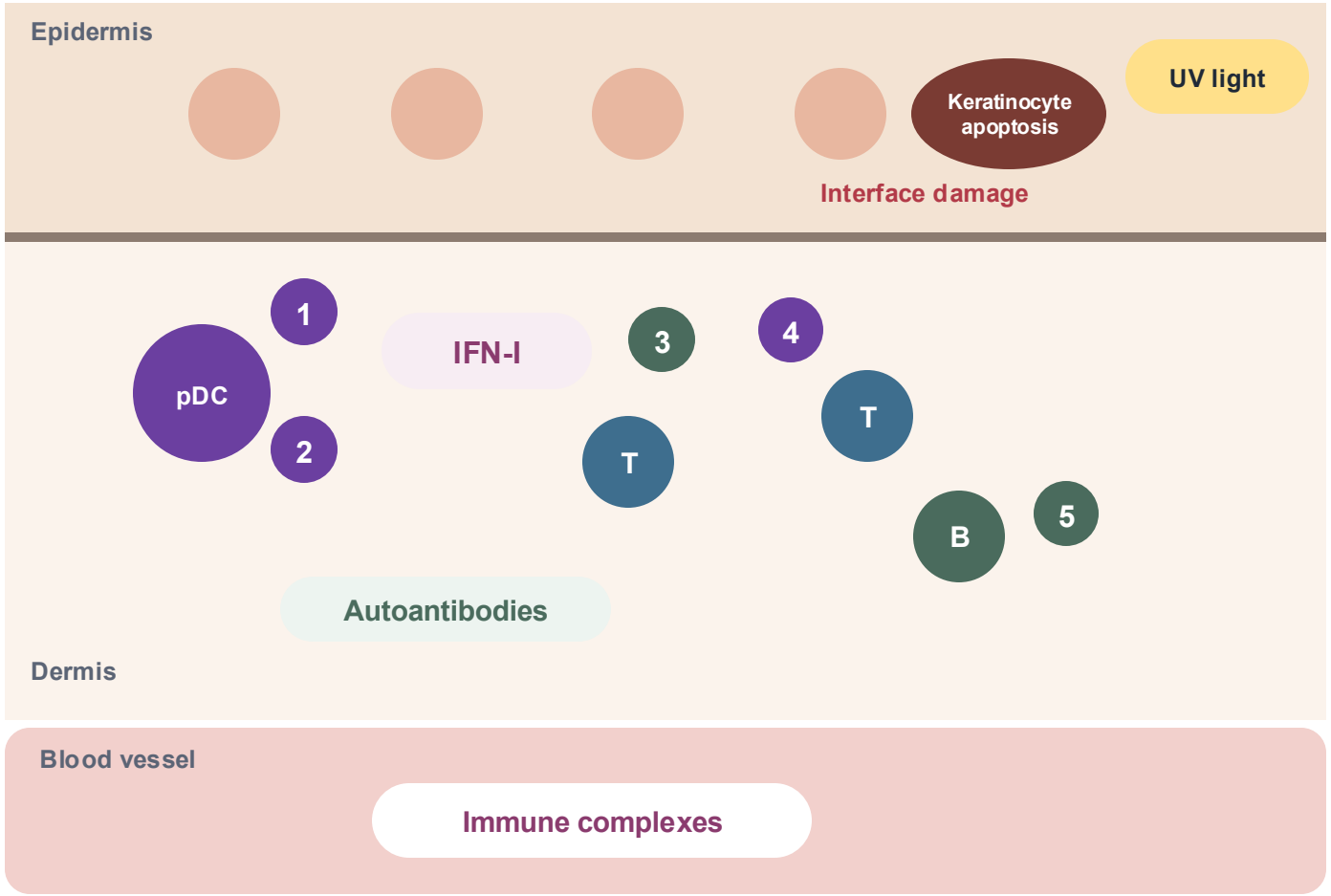
Deucravacitinib
Oral allosteric TYK2 inhibitor; PAISLEY Ph 2 (SLE, CLE); approved for psoriasis

Enpatoran
Oral TLR7/8 inhibitor; WILLOW Ph 2 (CLE ± SLE)

Investigational agents are not FDA-approved for CLE or SLE.
BDCA2 = blood dendritic cell antigen 2; IFNAR1 = type I interferon receptor subunit 1; ILD = interstitial lung disease; MMF = mycophenolate mofetil; pDC = plasmacytoid dendritic cell.
Drugs@FDA: FDA-Approved Drugs. Accessed October 15, 2026. https://www.accessdata.fda.gov/scripts/cder/daf/.

Targeting the Pathway: Where Each Agent Acts

Simplified schematic of cutaneous lupus pathogenesis; numbers mark each agent's target



1. **Litifilimab (investigational)**
   Anti-BDCA2 on pDCs; reduces type I interferon production

2. **Enpatoran and afimetoran (investigational)**
   Oral TLR7/8 inhibitors acting in the endosome, upstream of interferon

3. **Anifrolumab (approved for SLE)**
   Blocks the type I interferon receptor (IFNAR1) on responding cells

4. **Deucravacitinib (approved for psoriasis; investigational in SLE, CLE)**
   Oral TYK2 inhibitor; dampens interferon and cytokine signaling

5. **Belimumab (approved for SLE, lupus nephritis)**
   Anti-BLyS; limits B-cell activation and autoantibody production

Schematic; simplified and not to scale. Afimetoran: SLE Phase 2 primary endpoint reported.

Wenzel J. *Nat Rev Rheumatol*. 2019;15(9):519-532. Morand E, et al. *Nat Rev Rheumatol*. 2024;20(4):232-240. Drugs@FDA: FDA-Approved Drugs. Accessed October 15, 2026. https://www.accessdata.fda.gov/scripts/cder/daf/.

Anifrolumab

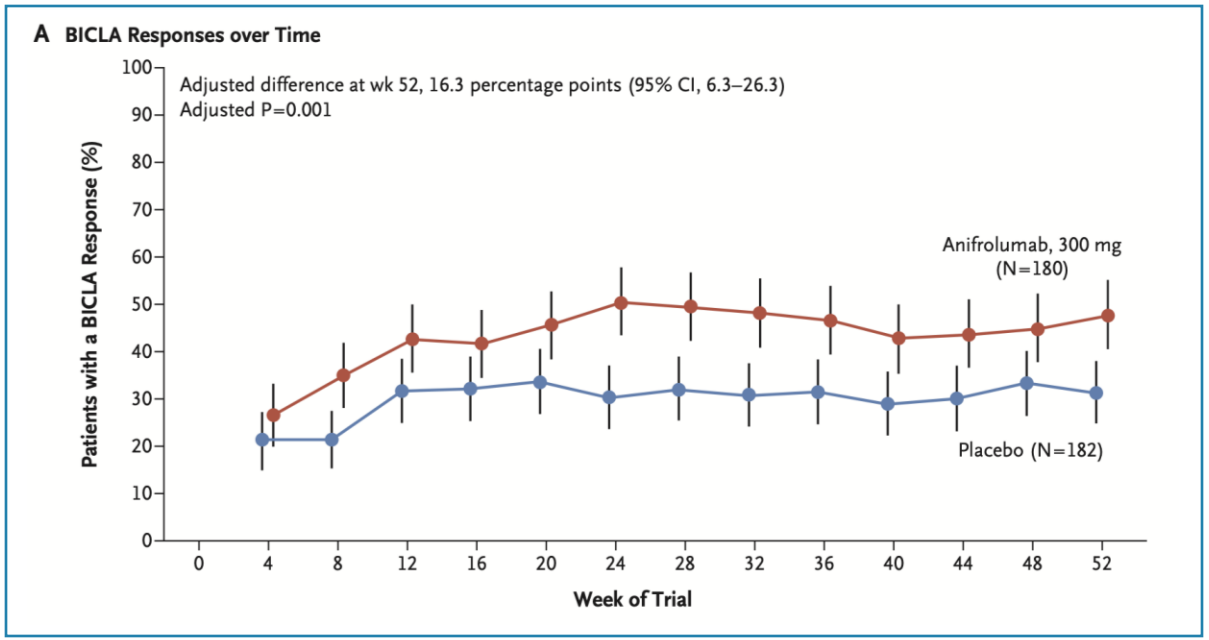
The NEW ENGLAND JOURNAL of MEDICINE

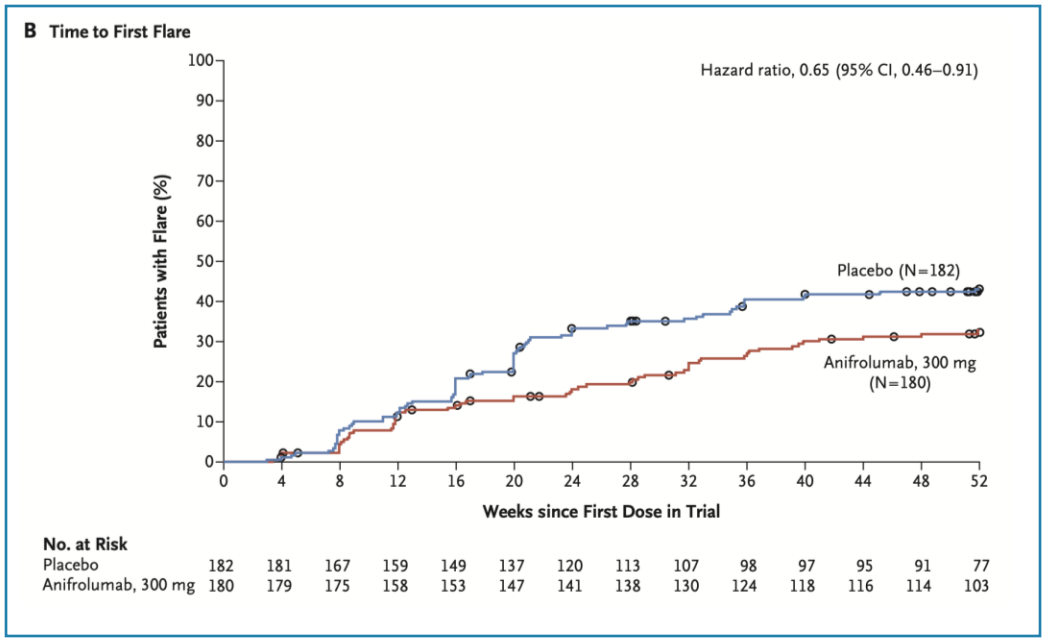
ESTABLISHED IN 1812 JANUARY 16, 2020 VOL. 382 NO. 3

Trial of Anifrolumab in Active Systemic Lupus Erythematosus

E.F. Morand, R. Furie, Y. Tanaka, I.N. Bruce, A.D. Askanase, C. Richez, S.-C. Bae, P.Z. Brohawn, L. Pineda, A. Berglind, and R. Tummala, for the TULIP-2 Trial Investigators*

- Type I interferon receptor antagonist
- FDA-approved for SLE
- **NEW:** SC 120 mg once-weekly autoinjector FDA-approved Apr 2026 (TULIP-SC)



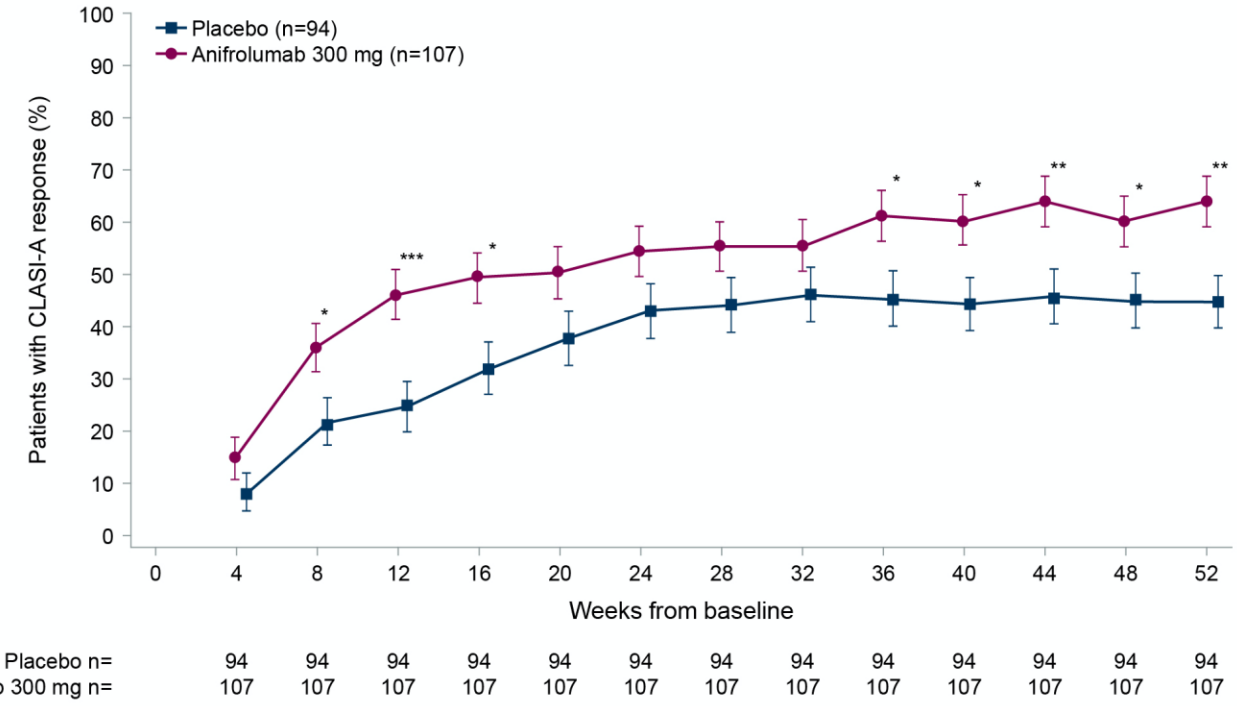


Morand EF, et al. *N Engl J Med*. 2020;382(3):211-221. Manzi S, et al. *Arthritis Rheumatol*. 2026;78(6):1258-1267.

Improvement in Cutaneous Symptoms in Patients with SLE Treated with Anifrolumab

Early and Sustained Reduction in Severity of Skin Disease with Anifrolumab Treatment in Patients with Active SLE Measured by the Cutaneous Lupus Erythematosus Disease Area and Severity Index (CLASI): Pooled Data from 2 Phase 3 Studies

Percentage of Patients with CLASI-A ≥10 at Baseline Achieving ≥50% Reduction in CLASI-A from Baseline over Time in Pooled Data from the TULIP-1 and TULIP-2 Trials



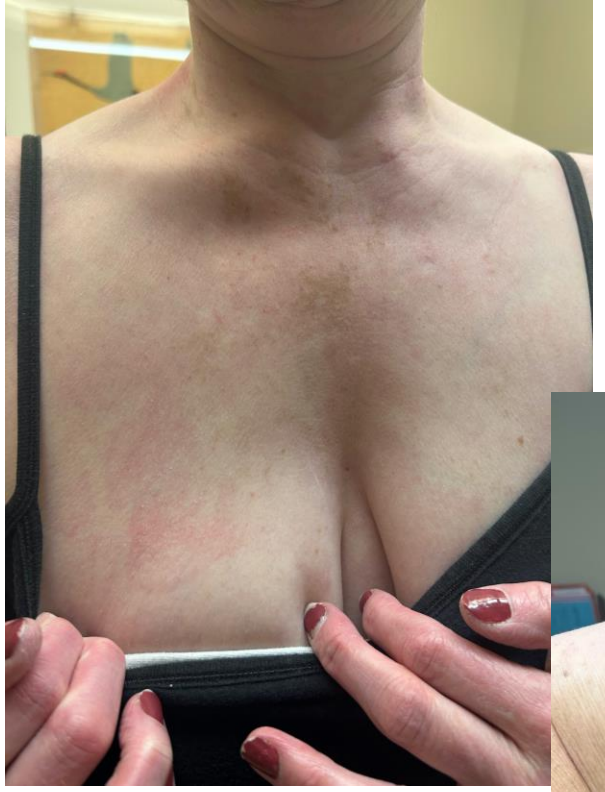
CLASI, Cutaneous Lupus Erythematosus Disease Area and Severity Index; CLASI-A, CLASI activity score; n, number of patients in analysis; OCS, oral corticosteroids.
Points are estimates and bars are standard errors. A response is defined as ≥50% reduction in CLASI-A from baseline for patients with baseline CLASI-A ≥10. Responder rates are calculated using a stratified Cochran–Mantel–Haenszel approach, with stratification factors SLEDAI-2K score at screening, Day 1 OCS dosage, type I IFN gene signature test result at screening, and study (TULIP-1 and TULIP-2).
Nominal *P*-values are presented,**P*<0.05; ***P*<0.01; ****P*<0.001.

Werth V, et al. *Arthritis Rheumatol.* 2020;72(Suppl 10):0985.





After 1 dose anifrolumab IV





Gaffney RG, **Merola JF.** *JAAD Case Rep*. 2023;44:71-73.

Efficacy and Safety of Litifilimab in Cutaneous Lupus Erythematosus (CLE): 24-Week Results of the Phase 2 Study

FDA Breakthrough Status

AMETHYST Part A

Joseph F. Merola[1,2,3], Victoria P. Werth[4,5], Benjamin F. Chong[1], Filippa Nyberg[6,7], Eric F. Morand[8], David Fivenson[9], Francois Chasset[10], Qianyun Li[11], Michael Schindelar[11], Effie Pournara[12], Weihong Yang[11]

[1]Department of Dermatology, UT Southwestern Medical Center, Dallas, Texas, USA; [2]Division of Rheumatic Diseases, Department of Internal Medicine, UT Southwestern Medical Center, Dallas, Texas, USA; [3]Peter O'Donnell Jr. School of Public Health, UT Southwestern Medical Center, Dallas, Texas, USA; [4]Department of Dermatology, Penn Medicine, University of Pennsylvania, Philadelphia, Pennsylvania, USA; [5]Corporal Michael J. Crescenz VA Medical Center, Philadelphia, Pennsylvania, USA; [6]Department of Medicine, Karolinska Institution for Medicine, Stockholm, Sweden; [7]Department of Dermatology, Karolinska University Hospital, Stockholm, Sweden; [8]Centre for Inflammatory Disease, Monash University, Melbourne, Victoria, Australia; [9]Fivenson Dermatology, Ann Arbor, MI, USA; [10]Service de Dermatologie, allergologie et médecine vasculaire AP-HP. Sorbonne Université - Hôpital Tenon, Paris, France; [11]Biogen, Cambridge, MA, USA; [12]Biogen, Baar, Zug, Switzerland

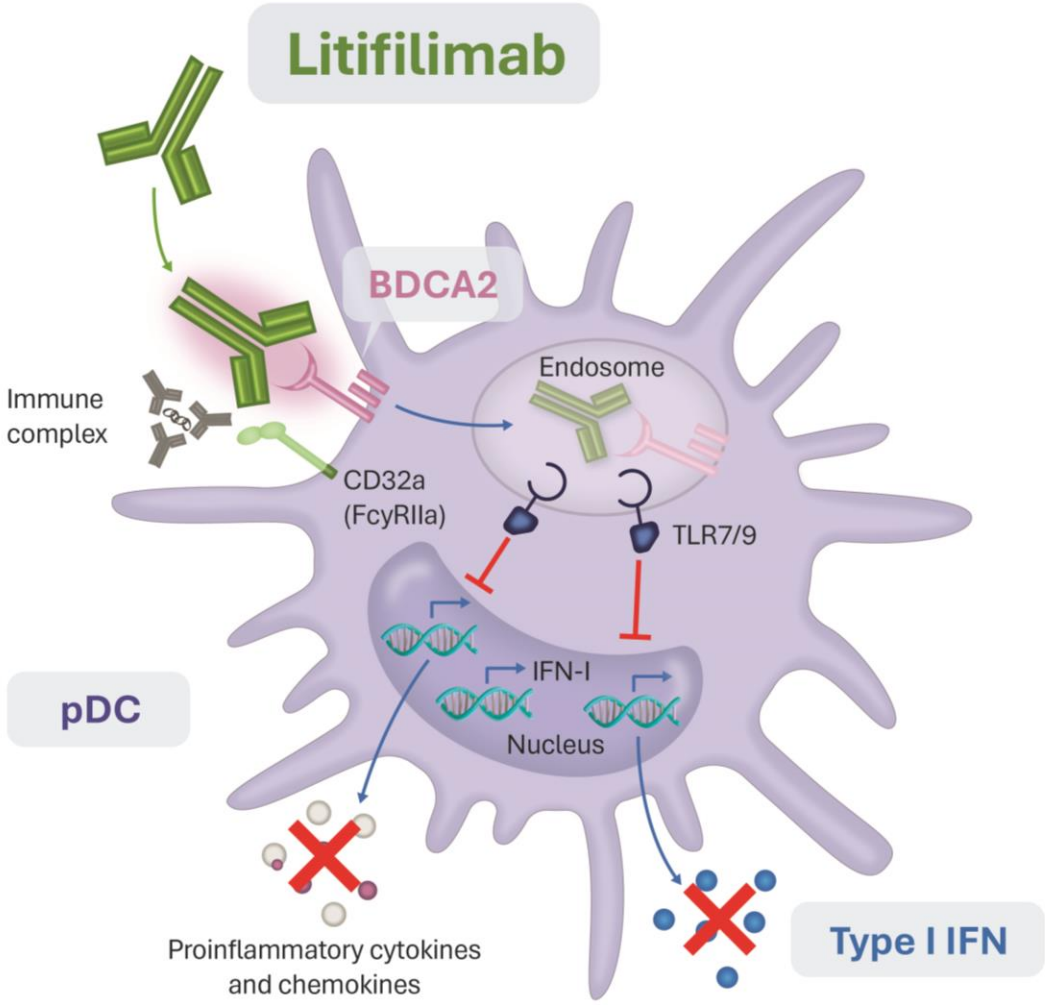
Merola JF, et al. Presented at: American Academy of Dermatology (AAD) Annual Meeting; March 27-31, 2026; Denver, CO. Late-breaker.

CLE/SLE and Litifilimab: BDCA2 Inhibition

Plasmacytoid dendritic cells (pDCs), specialized immune cells, are an important source of IFN-I and other proinflammatory cytokines and chemokines

Litifilimab is a humanized IgG1 monoclonal antibody that binds to BDCA2 on pDCs, inhibiting the production of IFN-I and other proinflammatory chemokines and cytokines, upstream of other immune pathways

FDA Breakthrough Therapy Designation for Litifilimab (January 2026)



BDCA2 = blood dendritic cell antigen 2; CD = cluster of differentiation; CLE = cutaneous lupus erythematosus; IFN-I = type I interferon; IgG1 = immunoglobulin G1; MoD = mechanism of disease; pDC = plasmacytoid dendritic cell; TLR = toll-like receptor.

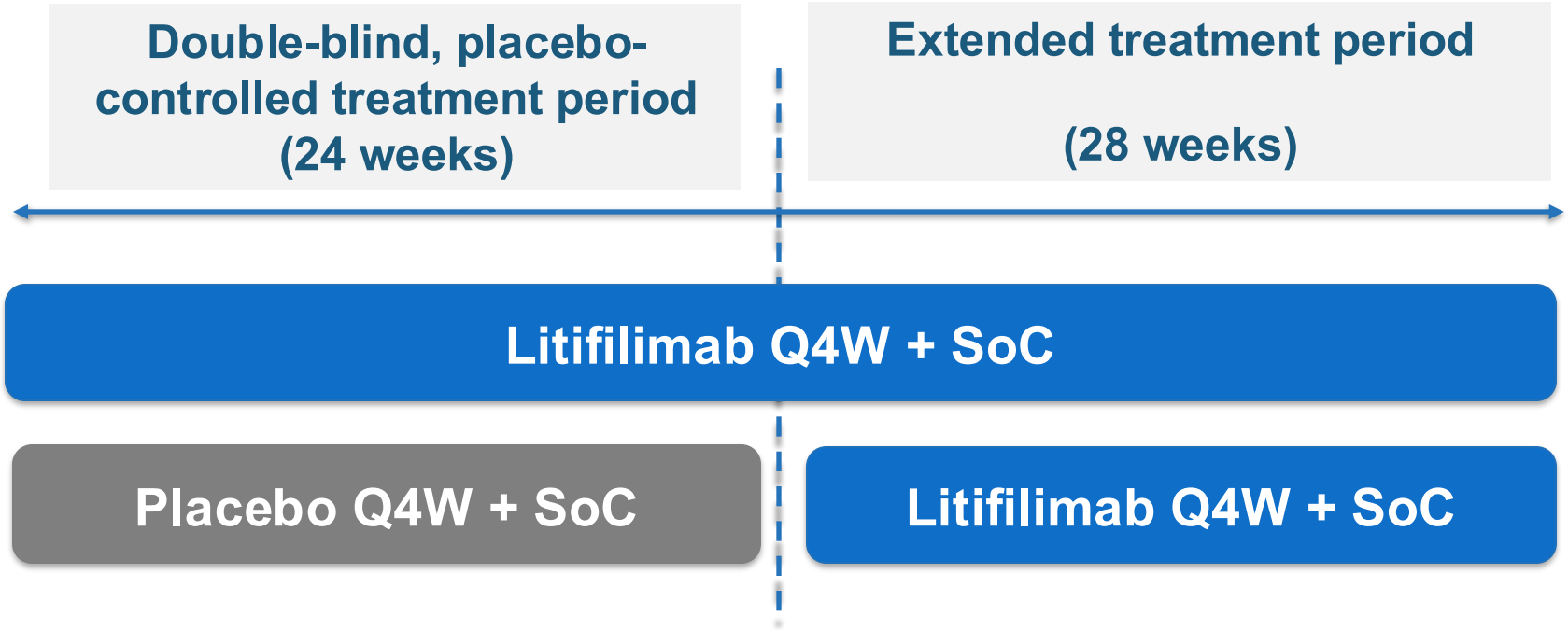
Niebel D, et al. *Am J Clin Dermatol.* 2023;24(4):521-540. Maz M, et al. *J Autoimmun*. 2022;132:102865. Wenzel J. *Nat Rev Rheumatol*. 2019;15(9):519-532. Fetter T, et al. *Front Med (Lausanne)*. 2022;9:915828. Fetter T, Wenzel J. *Exp Dermatol*. 2020;29(11):1123-1132. Achtman J, Werth VP. *Arthritis Res Ther*. 2015;17(1):182. Petty A, et al. *Curr Allergy Asthma Rep*. 2020;20(5):12. Pellerin A, et al. *EMBO Mol Med.* 2015;7(4):464-476. Furie RA, et al. *J Clin Invest.* 2019;129(3):1359-1371. Furie R, et al. *Arthritis Rheumatol*. 2025;77(12):1726-1738. Gardet A, et al. *Front Immunol.* 2019;10:275. Rönnblom L, Leonard D. *Lupus Sci Med.* 2019;6(1):e000270. Kaul A, et al. *Nat Rev Dis Primers.* 2016;2:16039.

AMETHYST Part A Study Design

AMETHYST is a seamless, two-part, Phase 2/3, double-blind, placebo-controlled study

Key Inclusion Criteria

- Age ≥18 years
- Histologically confirmed CLE ± systemic manifestations
- CLASI-A score ≥10
- Refractory/intolerant to antimalarials
- Stable on lupus SoC



SoC = standard of care.

Werth V, et al. *J Invest Dermatol*. 2023;143(5 Suppl):S100 (Abstract 583). ClinicalTrials.gov. Updated October 9, 2026. Accessed October 15, 2026. https://www.clinicaltrials.gov/ct2/show/NCT05531565.

Baseline Characteristics: Well-Balanced between Treatment Groups

74.2% female Litifilimab: **76.3%** (45/59) Placebo: **70.6%** (24/34)	**66.7%** White Litifilimab: **61.0%** (36/59) Placebo: **76.5%** (26/34)	**24.7%** Hispanic or Latino Litifilimab: **22.0%** (13/59) Placebo: **29.4%** (10/34)	
Characteristics	**Litifilimab (n = 59)**	**Placebo (n = 34)**	**Total (N = 93)**
CLASI-A total score, mean (SD)	**20.2 (9.4)**	**19.4 (7.2)**	**19.9 (8.6)**
CLASI-A total score > 20 (Severe activity), % (n)	37.3% (22)	32.4% (11)	35.5% (33)
CLA-IGA-R erythema score, % (n)			
0 (Clear), 1 (Almost clear), 2 (Mild)	0	0	0
3 (Moderate)	66.1% (39)	70.6% (24)	67.7% (63)
4 (Severe)	33.9% (20)	29.4% (10)	32.3% (30)
Participants taking CLE/SLE concomitant medications, % (n)	76.3% (45)	76.5% (26)	76.3% (71)

Interpreting CLASI-A Scores[1]: 0–9: mild | 10–20: moderate | 21–70: severe

[1]Klein R, et al. *Arch Dermatol*. 2011;147(2):203-208. **Merola JF**, et al. Presented at: AAD Annual Meeting; March 27-31, 2026; Denver, CO. Late-breaker.

Baseline Characteristics: Concomitant Medication Use Was Balanced between Treatment Groups

Characteristics, % (n)	Litifilimab (n = 59)	Placebo (n = 34)	Total (N = 93)
Participants taking CLE/SLE concomitant medications, % (n)	**76.3% (45)**	**76.5% (26)**	**76.3% (71)**
Antimalarial	71.2% (42)	52.9% (18)	64.5% (60)
Immunosuppressant	22.0% (13)	20.6% (7)	21.5% (20)
NSAIDs	1.7% (1)	0	1.1% (1)
Oral corticosteroid	23.7% (14)	20.6% (7)	22.6% (21)
Topical steroid	13.6% (8)	8.8% (3)	11.8% (11)
Other	6.8% (4)	11.8% (4)	8.6% (8)

NSAIDs = non-steroidal anti-inflammatory drugs.

Merola JF, et al. Presented at: AAD Annual Meeting; March 27-31, 2026; Denver, CO. Late-breaker.

Baseline Characteristics – CLE Subtypes: Majority of Participants Had DLE or DLE with SCLE

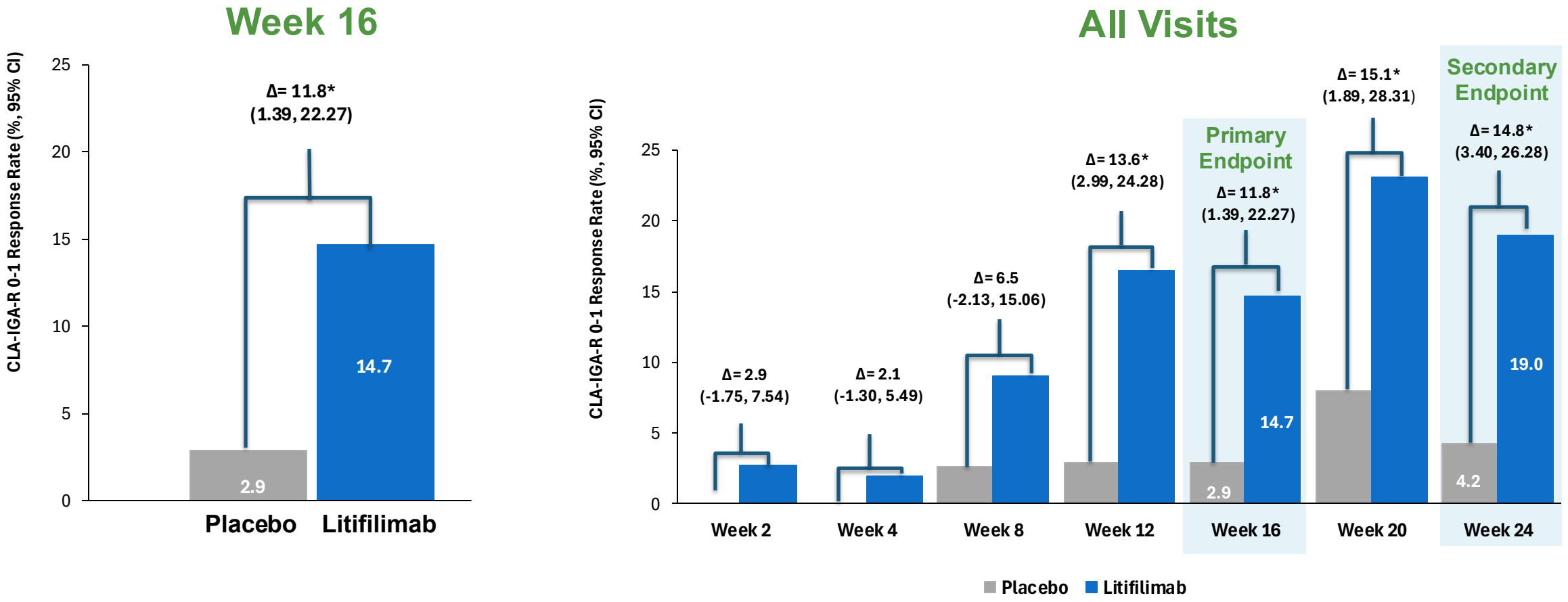
Active CLE Subtype, % (n)	Litifilimab (n = 59)	Placebo (n = 34)	Total (N = 93)
DLE[a]	54.2% (32)	50.0% (17)	52.7% (49)
SCLE[b]	27.1% (16)	35.3% (12)	30.1% (28)
Both DLE and SCLE	11.9% (7)	11.8% (4)	11.8% (11)
Other CLE combinations	6.8% (4)	2.9% (1)	5.4% (5)

[a]Without SCLE; [b]Without DLE.

Merola JF, et al. Presented at: AAD Annual Meeting; March 27-31, 2026; Denver, CO. Late-breaker.

Primary Endpoint: CLA-IGA-R, 0-1 at Week 16

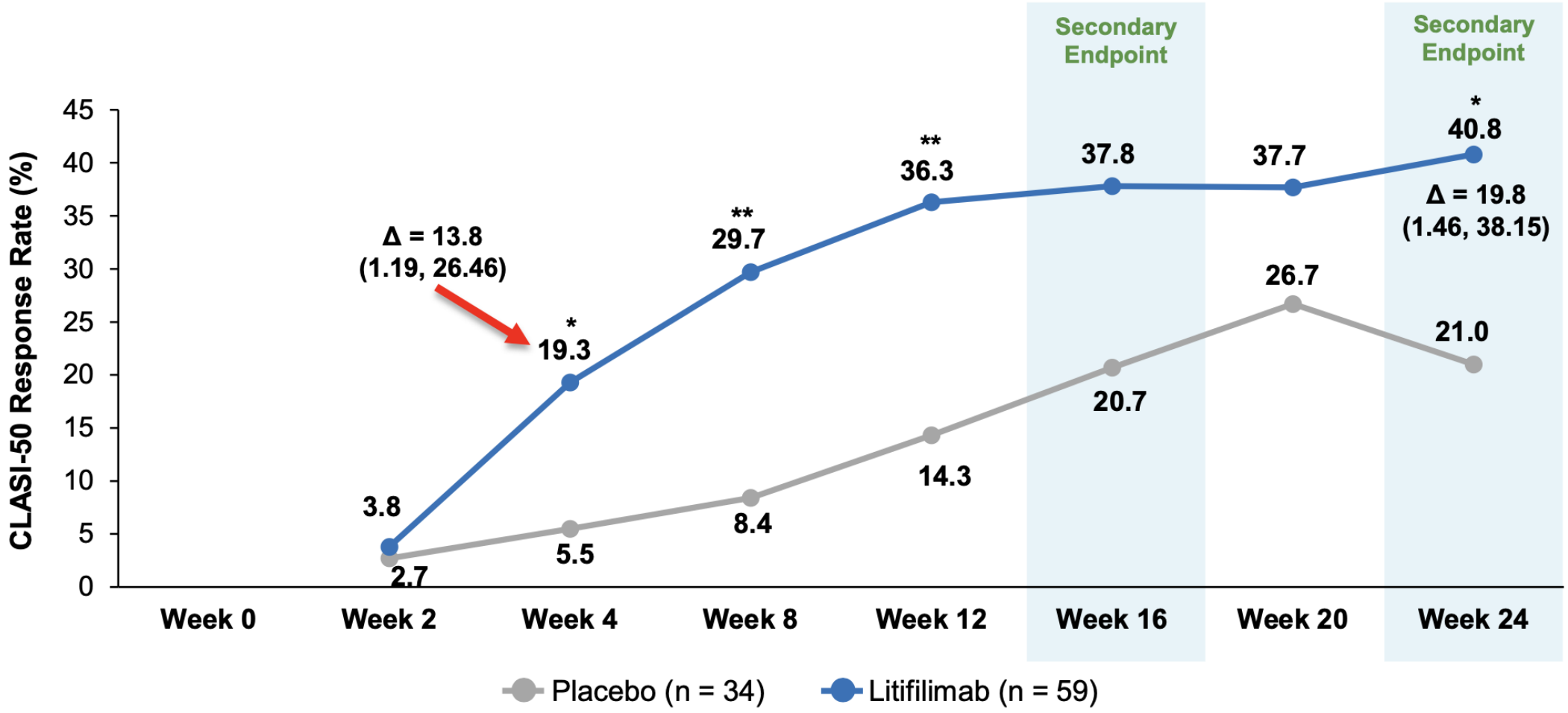
More participants treated with litifilimab had clear/almost clear skin



~~Nominal~~ P-values < 0.05 are marked with an asterisk (*) and P-values < 0.01 are marked with double asterisk (**).

Merola JF, et al. Presented at: AAD Annual Meeting; March 27-31, 2026; Denver, CO. Late-breaker.

CLASI-50: Litifilimab-Treated Participants Showed Early Improvement in CLASI-A

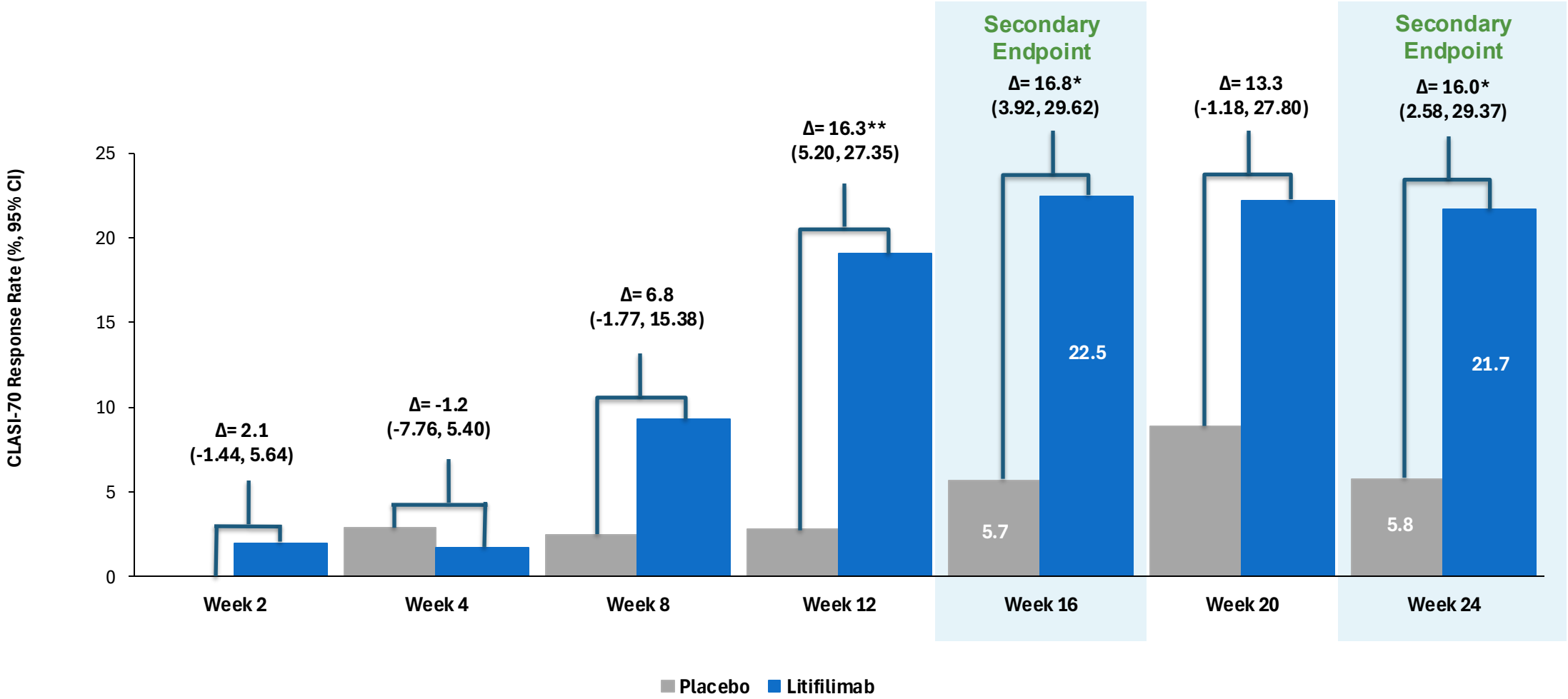


Nominal P values < 0.05 are marked with an asterisk (*) and nominal P values < 0.01 are marked with double asterisk (**). The unconditional treatment effect is estimated based on standardized estimator method using logistic regression model with covariates adjustment. Participants who used disallowed medication or discontinued study treatment due to safety or lack of efficacy were considered as non-responders after the event happened.
CLASI-50 = ≥50% improvement from baseline in Cutaneous Lupus Erythematosus Disease Area and Severity Index–Activity (CLASI-A).

Merola JF, et al. Presented at: AAD Annual Meeting; March 27-31, 2026; Denver, CO. Late-breaker.

CLASI-70

More participants treated with litifilimab had ≥70% reduction in CLASI from baseline



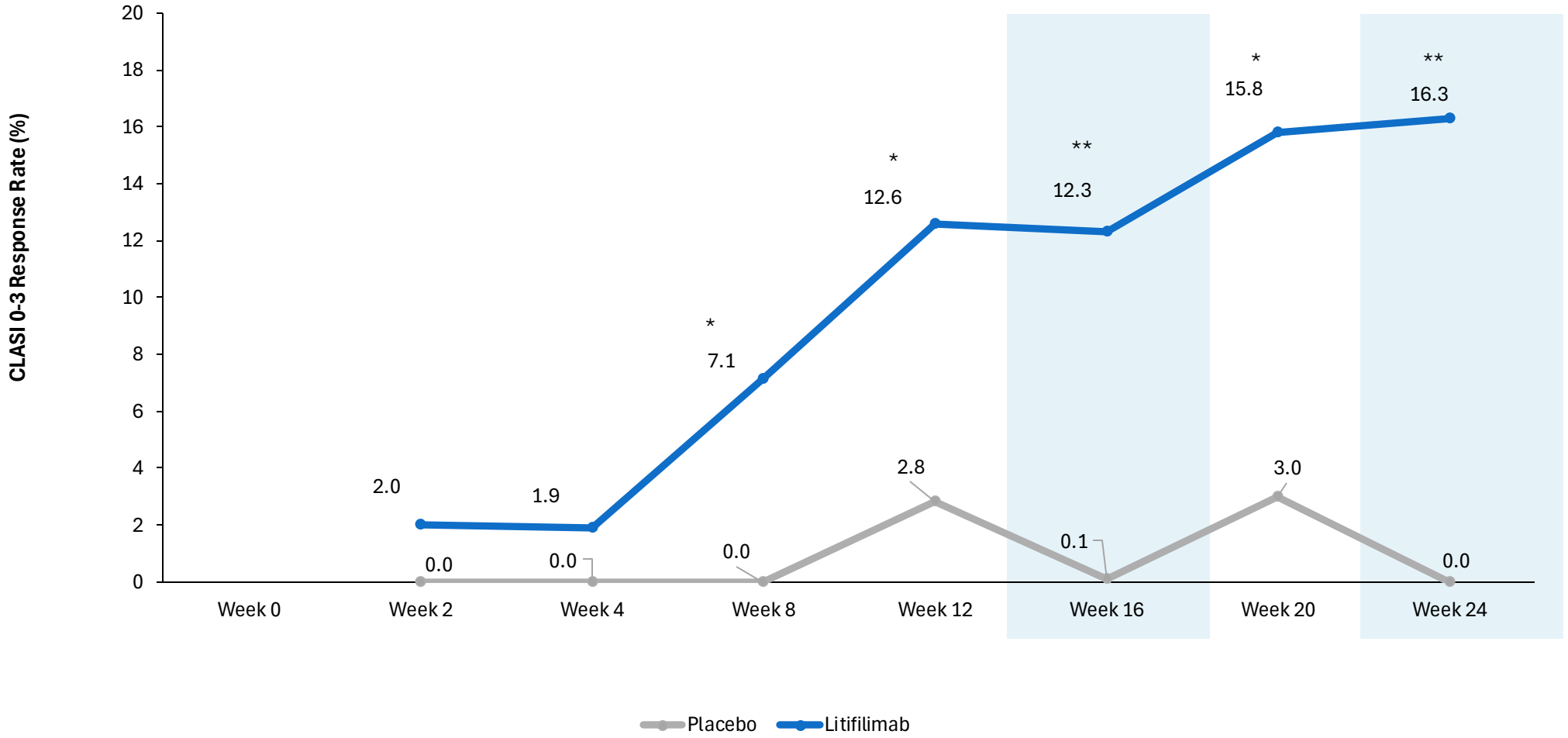
Nominal P-values < 0.05 are marked with an asterisk (*) and P-values < 0.01 are marked with double asterisk (**).

CLASI-70 = ≥70% improvement from baseline in Cutaneous Lupus Erythematosus Disease Area and Severity Index–Activity.

Merola JF, et al. Presented at: AAD Annual Meeting; March 27-31, 2026; Denver, CO. Late-breaker.

CLASI-A 0-3

More participants treated with litifilimab improved



Nominal P-values < 0.05 are marked with an asterisk (*) and P-values < 0.01 are marked with double asterisk (**).

Merola JF, et al. Presented at: AAD Annual Meeting; March 27-31, 2026; Denver, CO. Late-breaker.

Observed Skin Improvements in Participants



The outcomes shown are not intended to be representative of all participants treated with litifilimab. Results are individual and not indicative of typical outcomes for each participant.

The participants featured in these images provided written consent for the use of their photographs.

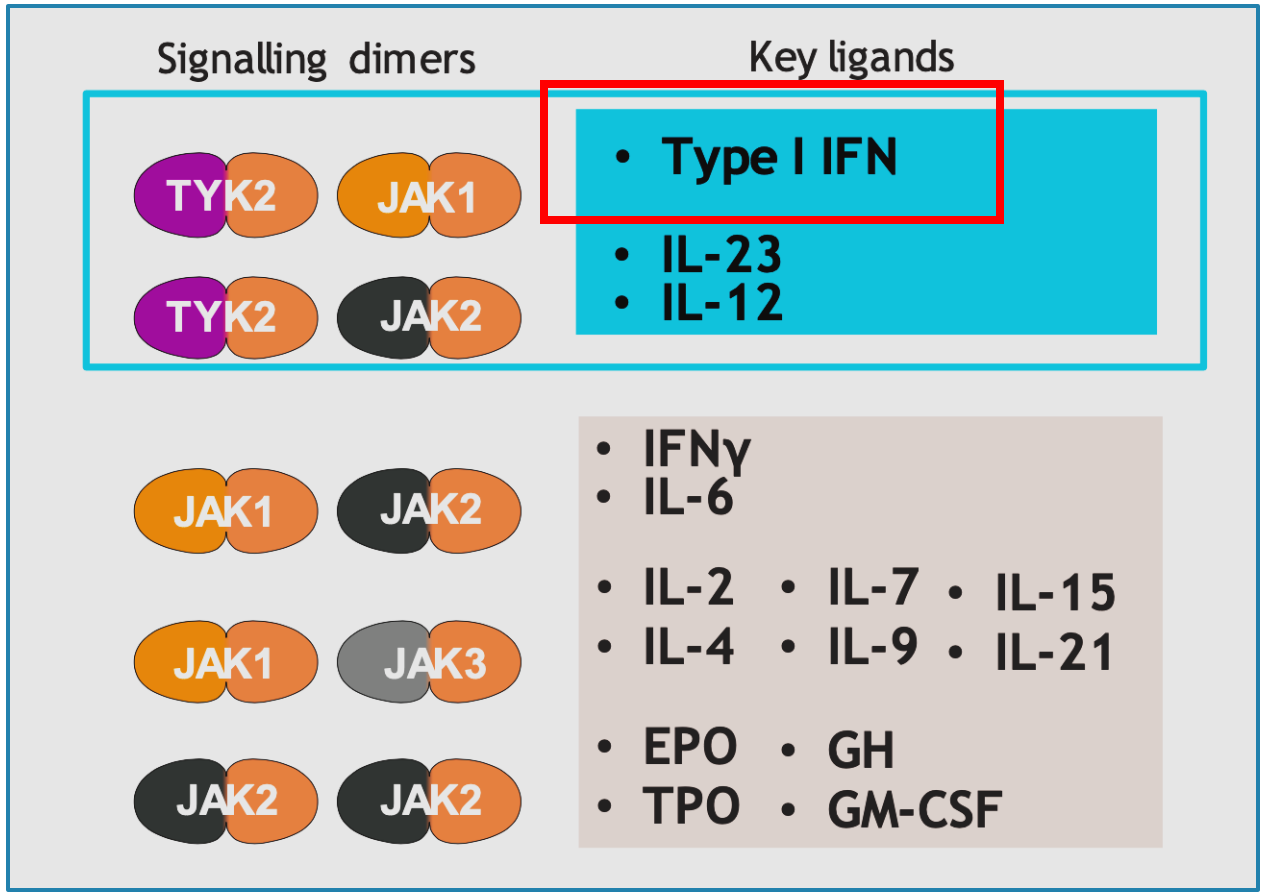
Merola JF, et al. Presented at: AAD Annual Meeting; March 27-31, 2026; Denver, CO. Late-breaker.

Safety Outcomes: Litifilimab Was Generally Well-Tolerated

Events, % (n)	Litifilimab (n = 59)	Placebo (n = 34)
Any event	74.6% (44)	64.7% (22)
Mild	54.2% (32)	41.2% (14)
Moderate	18.6% (11)	20.6% (7)
Severe	1.7% (1)	2.9% (1)
Related event[a]	20.3% (12)	26.5% (9)
Serious event[b]	6.8% (4)	2.9% (1)
Most common event (≥ 10% in either group)		
Nasopharyngitis	6.8% (4)	14.7% (5)
Headache	3.4% (2)	11.8% (4)
Viral infections occurring in > 1 participant in either group[c]		
COVID-19	3.4% (2)	0
Oral herpes	3.4% (2)	2.9% (1)
Viral upper respiratory tract infection	1.7% (1)	5.9% (2)

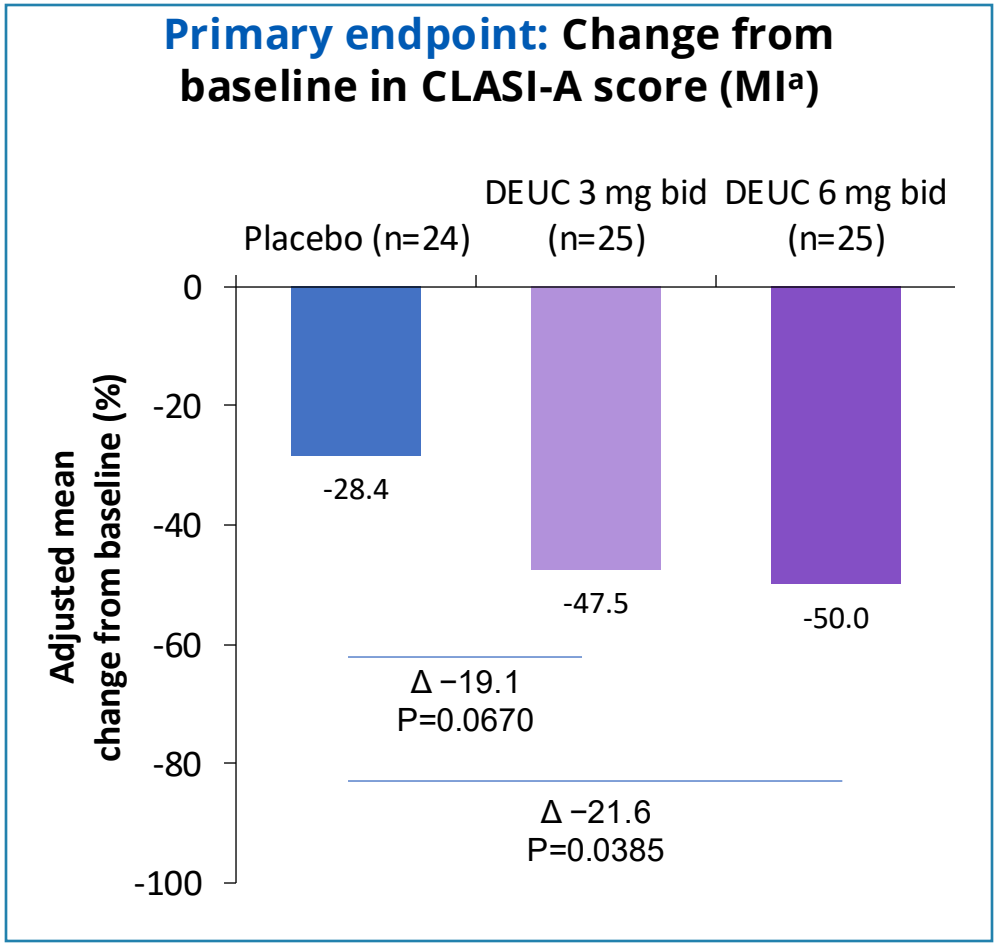
[a]AEs assessed by the investigator; [b]No fatal events; [c]Mild or moderate; no severe events.
AEs = adverse events
Merola JF, et al. Presented at: AAD Annual Meeting; March 27-31, 2026; Denver, CO. Late-breaker.

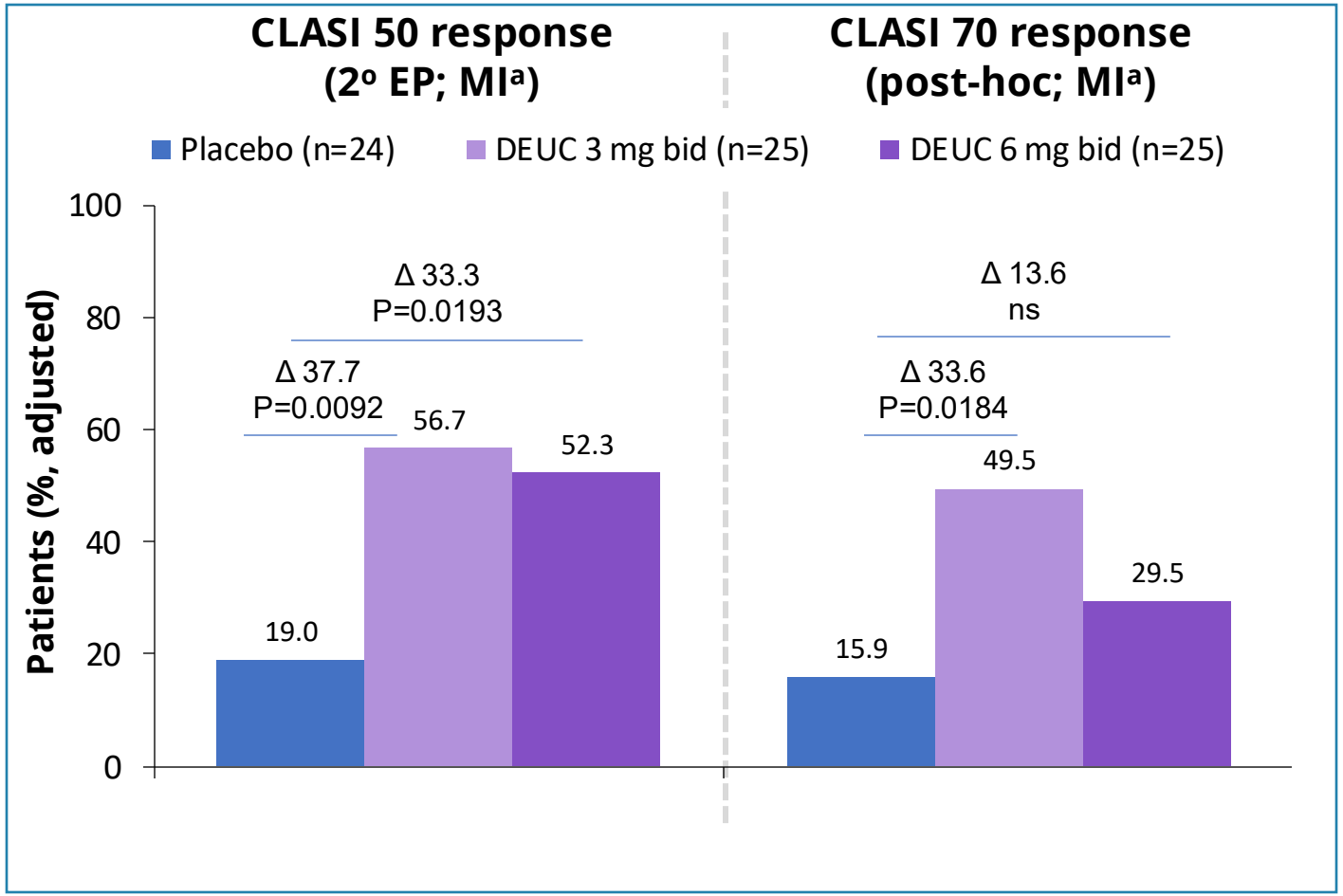
Efficacy and Safety of Deucravacitinib, an Oral, Selective, Allosteric TYK2 Inhibitor, in Patients with Active Systemic Lupus Erythematosus: A Phase 2, Randomized, Double-Blind, Placebo-Controlled Study



Morand E, et al. Presented at: EULAR European Congress of Rheumatology; June 1-4, 2022; Copenhagen, Denmark, and virtual.

PAISLEY CLE: Efficacy at Week 16 of Oral Deucravacitinib in Patients with Cutaneous Lupus Erythematosus

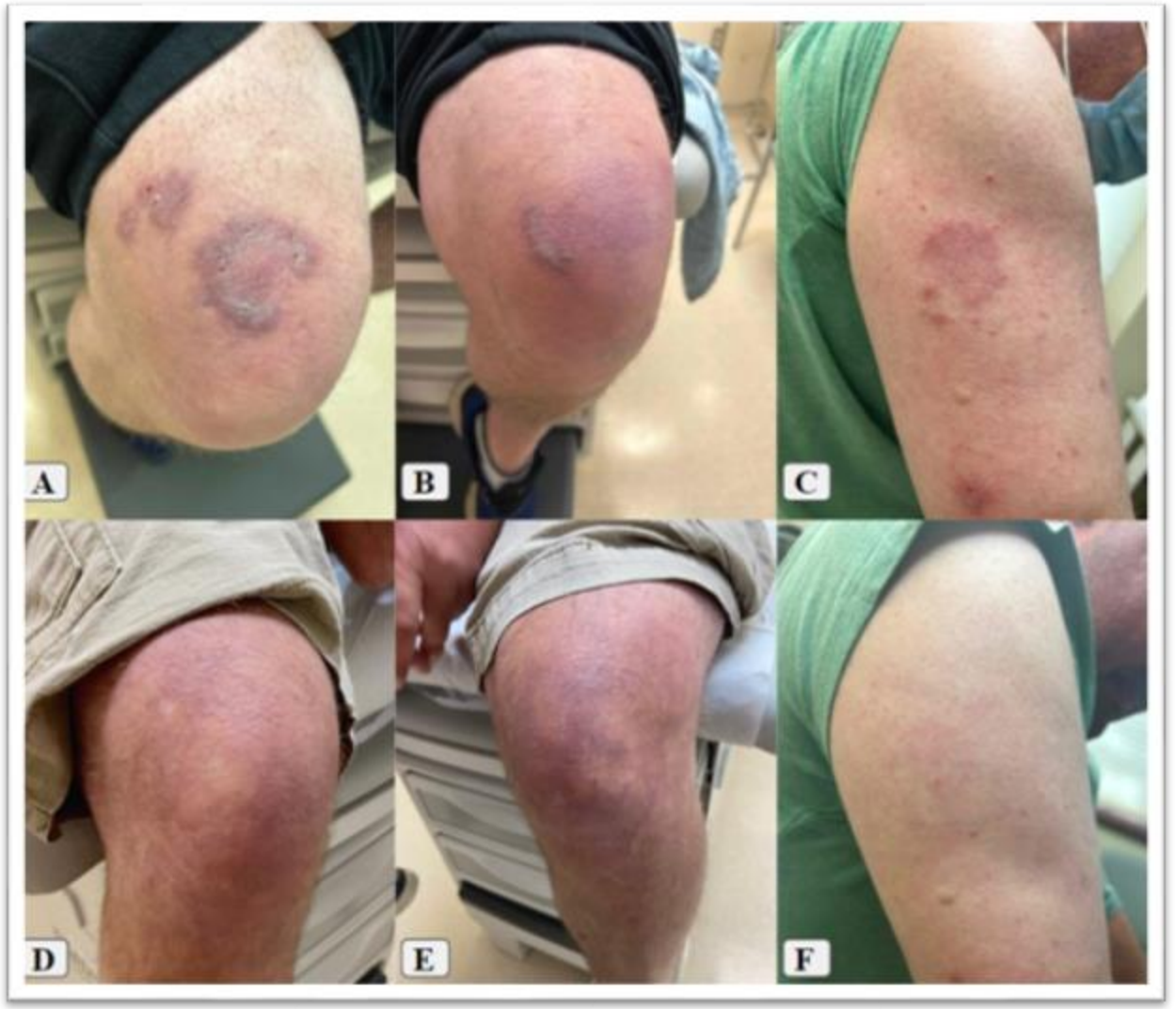




[a]A composite variable strategy was used that set CLASI-A scores to the baseline value after occurrence of key intercurrent events (ICEs). Subsequent missing data were addressed via multiple imputation under a missing not at random assumption. Regression analyses adjusting for stratification factors and baseline CLASI-A score were used for treatment effect inference. P-value <0.1 represents statistical significance.

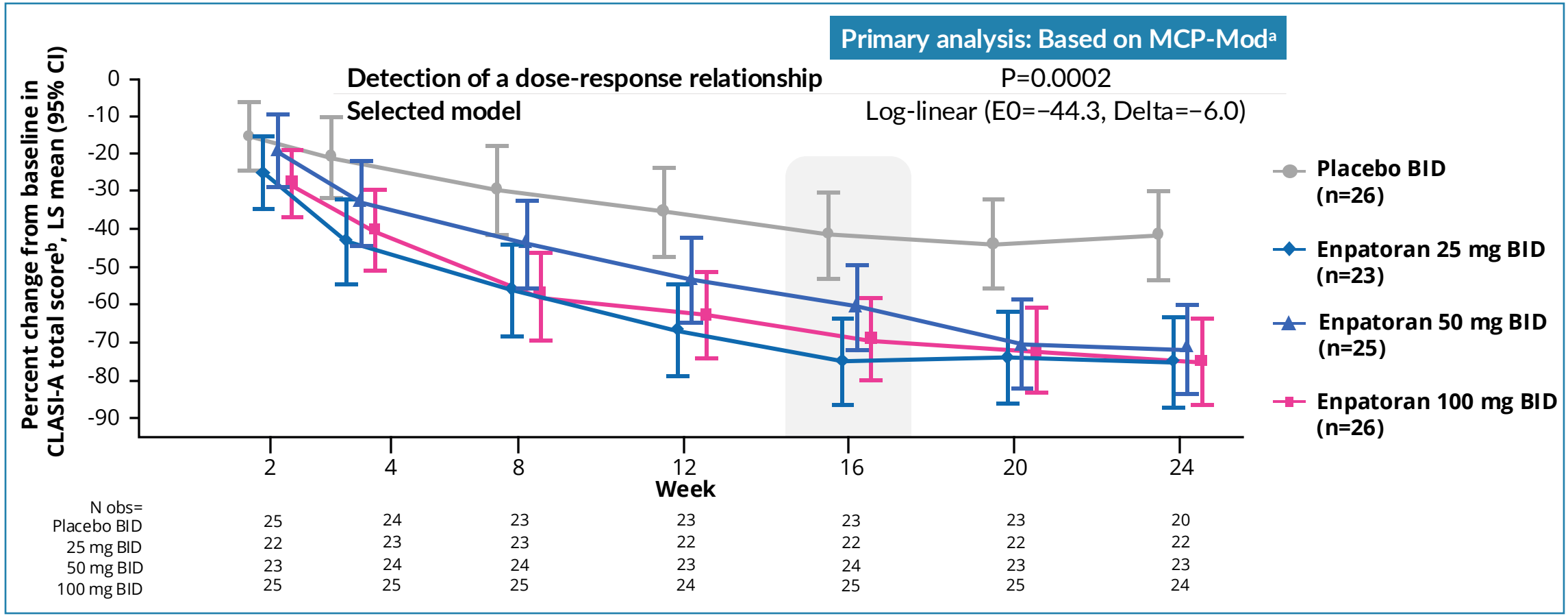
Werth VP, et al. Presented at: AAD Annual Meeting; March 7-11, 2025; Orlando, FL. Late-breaker.

Deucravacitinib for CLE



Zhang A, Gaffney RG**, Merola JF**. *JAAD Case Rep*. 2023;45:110-112. Morand E**, Merola JF**, Tanaka Y, Gladman D, Fleischmann R. *Nat Rev Rheumatol*. 2024;20(4):232-240.

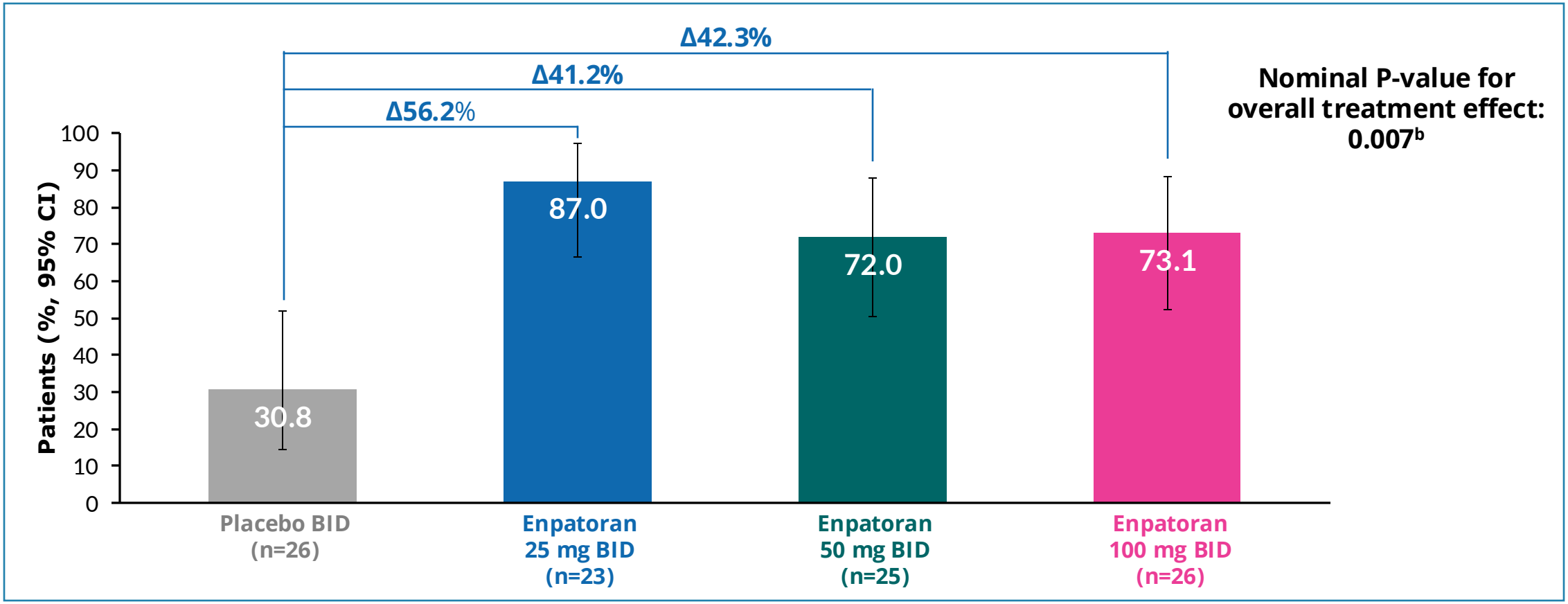
Oral Enpatoran Dual Inhibition of TLR7/8: Primary Endpoint



Significant dose response for enpatoran in reducing CLASI-A from baseline to Week 16

[a]MCP-Mod adjusted for CLASI-A at baseline, region and disease diagnosis (CLE only vs CLE + SLE; FAS; N=100); bMMRM analyses (exploratory endpoint). Enpatoran is an investigational product and has not been proven to be safe and effective in any country.
FAS = full analysis set; LS = least squares; MCP-Mod = multiple comparison procedures-modelling; MMRM = mixed model repeated measures.
Morand E, et al. Presented at: International Congress on SLE; May 21-24, 2025; Toronto, Canada. LBA 827.

CLASI-50 Response at Week 24[a] with Enpatoran



Up to 87% of patients receiving enpatoran had ≥50% reduction in CLASI-A by Week 24

[a]Exploratory endpoint. CLASI-50 response was defined as a decrease in CLASI-A total score of ≥50% from baseline values; [b]Logistic regression. Participants with any intercurrent events (early treatment discontinuation due to any reason, protocol-prohibited medications as determined by EAC, or corticosteroid use not compliant with protocol rules) were considered as non-responders at all visits post-intercurrent event(s).

Morand E, et al. Presented at: International Congress on SLE; May 21-24, 2025; Toronto, Canada. LBA 827.

Emerging Therapy Algorithm: Moving Early

Start the antimalarial now, and move quickly to targeted therapy when disease is not controlled

1 Start early

All patients

- Photoprotection, smoking cessation, medication review
- Hydroxychloroquine as first-line antimalarial, from diagnosis
- Topicals or intralesional steroids only for isolated, low-impact lesions

2 Reassess at about 3 months

Partial or no response

- Check adherence and HCQ level
- Mild persistent disease: quinacrine or chloroquine
- Moderate, scarring-prone, or systemic features: move on now

3 Targeted second line

Move quickly

- Anifrolumab or belimumab (approved for SLE, with skin benefit)
- Investigational: litifilimab, deucravacitinib, enpatoran, afimetoran (trials)
- Historic agents where they fit: methotrexate (arthritis), mycophenolate (nephritis, ILD)

4 Refractory

Specialist care

- Thalidomide or lenalidomide, with teratogen and clot precautions
- Dapsone for bullous or vasculitic disease
- Clinical trial referral

Move rapidly: do not spend years on topicals. Targeted therapy belongs in the early second line for moderate to severe, scarring, or systemic disease.

Investigational agents are not approved for CLE. Based on 2023 EULAR and 2025 ACR recommendations: confirm labeling, pregnancy plans, and trial eligibility for each patient. Teratogens here: methotrexate, mycophenolate, thalidomide, lenalidomide.

Treating the Patient with CLE and SLE

When choosing a second-line agent (after an antimalarial), consider

- (+ arthritis?) ➔
  - Methotrexate, belimumab
- (+ nephritis) ➔
  - Mycophenolate > azathioprine; combination therapy approaches such as MMF + belimumab, MMF + voclosporin, RTX, etc
- (+ ILD) ➔
  - Mycophenolate, ? rituximab, others
- (+ APLA/hypercoagulable?) ➔
  - Caution with thalidomide
- (+ Active systemic lupus despite other standard treatments?)
  - Belimumab, anifrolumab; investigational TLR7/8, BDCA2, TYK2 agents in trials
- Mod-severe active systemic disease
  - Avoid thalidomide, or thalidomide monotherapy; consider combination therapy



RTX = rituximab.

In Clinic: Practical Prescribing

APP PERSPECTIVE

Starting HCQ	Dose by actual body weight (5 mg/kg/day or less); explain the 2- to 3-month timeline; order a baseline eye exam in year one.
Retinal safety	Annual screening after 5 years, sooner with kidney disease, tamoxifen, or higher doses. Reassure: risk is low at proper doses.
Monitoring calendar	Regular lab monitoring and history/physical.
Access to biologics	Prior authorization packets: diagnosis, CLASI or photos, prior therapies with dates and outcomes. Use patient assistance programs.
Pregnancy planning	Continue HCQ in pregnancy; stop teratogens ahead of conception; check Ro/SSA; involve obstetrics.

Key Learning Points: Current and Emerging Therapies

1. **Guidelines agree on the foundation.**
   Photoprotection, topicals, and HCQ (5 mg/kg/day or less) for all; taper steroids below 5 mg/day within 6 months (ACR 2025).

2. **Lifestyle is treatment.**
   Sunscreen, smoking cessation, and a medication review are first-line and cost nothing.

3. **Check adherence before calling disease refractory.**
   HCQ blood levels, then add quinacrine or switch to chloroquine for mild disease; MTX, MPAA, anifrolumab, or belimumab for moderate to severe.

4. **Plan for delayed onset and tolerability.**
   Set a 2- to 3-month timeline, bridge locally, and pair teratogens with contraception.

5. **The pipeline targets the interferon axis.**
   Litifilimab (BDCA2), deucravacitinib (TYK2), enpatoran (TLR7/8), and anifrolumab (IFNAR1) in CLE trials; refer eligible patients.

05

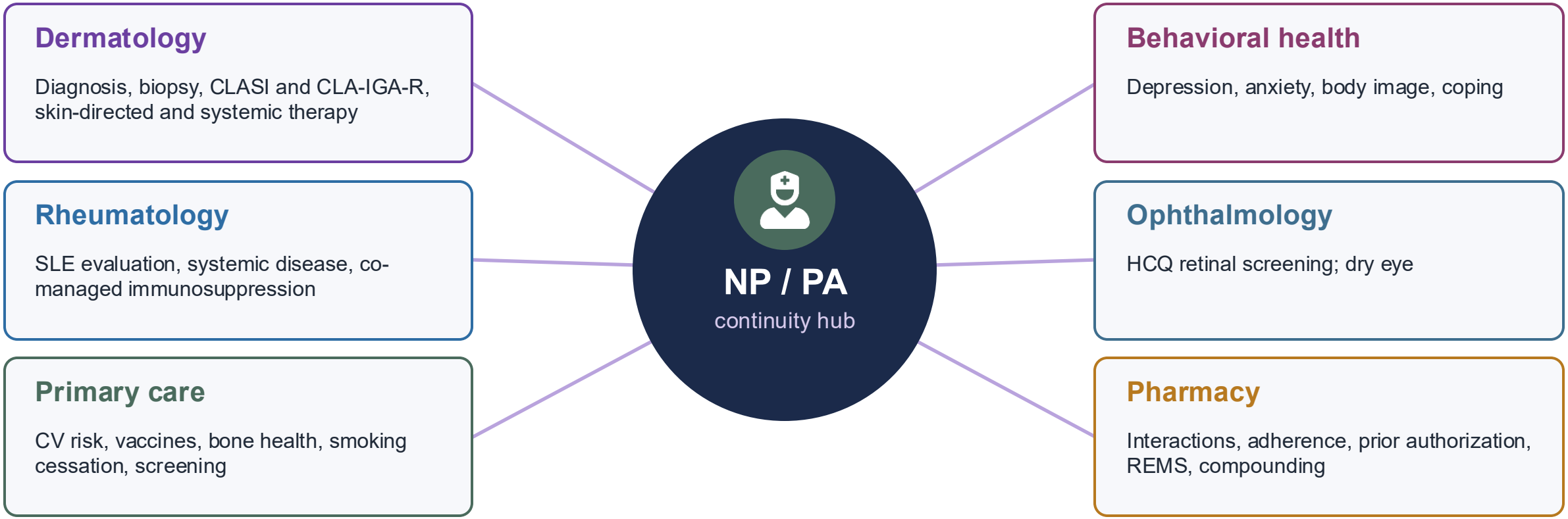
The Role of NPs/PAs in Interdisciplinary CLE Care: The Longitudinal Touchpoint

Presented by Rosemary Son, MPAS, PA-C

Team structure and roles
Structured follow-up and monitoring
Refer vs co-manage
Comorbidities and coordination
Education and shared decision-making

Recognize Diagnose Burden Treat **Team**

The Interdisciplinary CLE Team



Organ-based specialists, added as involvement dictates

Nephrology: lupus nephritis	Neurology: CNS lupus, neuropathy	Pulmonology: ILD, pleuritis	Cardiology: pericarditis, CV risk	Hematology: cytopenias, antiphospholipid	Obstetrics / MFM: pregnancy, anti-Ro/SSA

CV = cardiovascular; REMS = Risk Evaluation and Mitigation Strategy; CNS = central nervous system.

Escalation and Referral: When to Refer vs Co-Manage

Manage in dermatology

- CLE without systemic features
- Stable negative SLE screen
- Responding to topicals and antimalarials
- Photoprotection and adherence on track

Co-manage with rheumatology

- CLE with SLE features or serologic activity
- Need for systemic immunosuppression or a biologic
- ACLE or generalized DLE
- Pregnancy planning on systemic therapy

Refer urgently

- Proteinuria, hematuria, or rising creatinine
- Severe cytopenias
- Neurologic or cardiopulmonary symptoms
- Suspected severe drug reaction



Make co-management work: one shared plan in the record, clear ownership of each lab and prescription, direct messaging or e-consults, and joint derm-rheum clinics where available.

Managing Comorbidities and Coordinating Care

Cardiovascular

Blood pressure, lipids, glucose, smoking; lupus raises CV risk

Mental health

PHQ and GAD screening; fatigue and sleep

Bone health

Steroid exposure: calcium, vitamin D, DXA when indicated

Infection and vaccines

Inactivated vaccines before immunosuppression (influenza, pneumococcal, recombinant zoster, COVID-19); avoid live vaccines on immunosuppressants

Eyes

HCQ screening; dry eye or Sjögren's symptoms

Skin cancer

Full skin exams; biopsy non-healing areas in old DLE scars

Coordinate: one problem list, one medication list, and a named owner for each item.

PHQ = Patient Health Questionnaire; GAD = generalized anxiety disorder; DXA = dual-energy X-ray absorptiometry.

Patient Education and Shared Decision-Making

Photoprotection, triggers, lifestyle

- Daily broad-spectrum sunscreen, tinted for visible light
- UPF clothing, hats, window film
- Quit smoking; avoid known drug triggers
- Cold protection for chilblain lupus

Adherence support and barriers

- Ask without judgment; use HCQ levels as a tool, not a test
- Pill organizers, reminders, 90-day fills
- Address cost: assistance programs, prior auth help
- Address fears (eye safety, side effects) directly

Disease course and prognosis

- CLE is chronic and relapsing but controllable
- Most patients with CLE do not develop SLE; risk is highest early and in ACLE
- Scarring is preventable, not reversible
- Set shared goals; use teach-back

Case for Discussion: Across the Care Continuum

Ms. R, 32

- Scarring plaques on scalp and conchal bowls for 6 months
- Smokes; works outdoors as a landscaper
- ANA 1:160 speckled; CBC normal; urinalysis normal; remainder of antibodies are normal
- HCQ 300 mg daily for 4 months, minimal improvement
- Hopes to start a family next year
- Tearful about hair loss

1. What else do you need from the history and labs?
2. Is she refractory? What would you check first?
3. Who should be on her team, and when?
4. How do you counsel on pregnancy and her medications?
5. Where might emerging therapies fit for her?

Key Learning Points: NPs/PAs in Interdisciplinary Care

1. **NPs and PAs are the continuity hub.**
   They see the patient most often and can connect dermatology, rheumatology, primary care, behavioral health, ophthalmology, and pharmacy.

2. **Structure the follow-up.**
   Baseline, 4- to 8-week check-in, 3-month response visit, then 3- to 6-month monitoring and an annual comorbidity review.

3. **Know when to refer and when to co-manage.**
   Systemic features mean co-management; kidney, neurologic, and severe hematologic signs mean same-week action.

4. **Coordinate comorbidity care.**
   Cardiovascular risk, mood, bone, vaccines, eyes, pregnancy, and skin cancer in old scars.

5. **Educate and decide together.**
   Photoprotection, triggers, adherence, and honest expectations about course and prognosis.

masterclasses in dermatology
NP/PA institute

Thank You!
Questions and Discussion

Joseph F. Merola, MD, MMSc, FAAD, FACR

Dermatologist, Rheumatologist
Chair of Dermatology | Professor of Dermatology, Distinguished Professor
Professor of Medicine, Rheumatology
Professor, Peter O'Donnell Jr. School of Public Health (OSPH)
UT Southwestern Medical Center, Dallas, TX

with Rosemary Son, MPAS, PA-C

Lead APP, UTSW Dermatology



Supported by an educational grant from Biogen.

All material in this presentation: © 2026 Joseph F. Merola. All rights reserved. No copying, recording, or distribution without prior written permission.

Mark your calendar
for what's coming up next!

masterclasses in dermatology annual meeting

February 18–21, 2027
Signia by Hilton
Orlando Bonnet Creek

masterclasses in dermatology NP/PA institute

September 11–12, 2027
New York Marriott Marquis

October 23–24, 2027
Thompson Dallas by Hyatt

masterclasses in dermatology saturday morning live

Two 2026 dates remaining:
November 14, 2026
December 19, 2026



Click on Polling in the app to participate in this session

AMPHITHEATER

You can also scan this QR code: