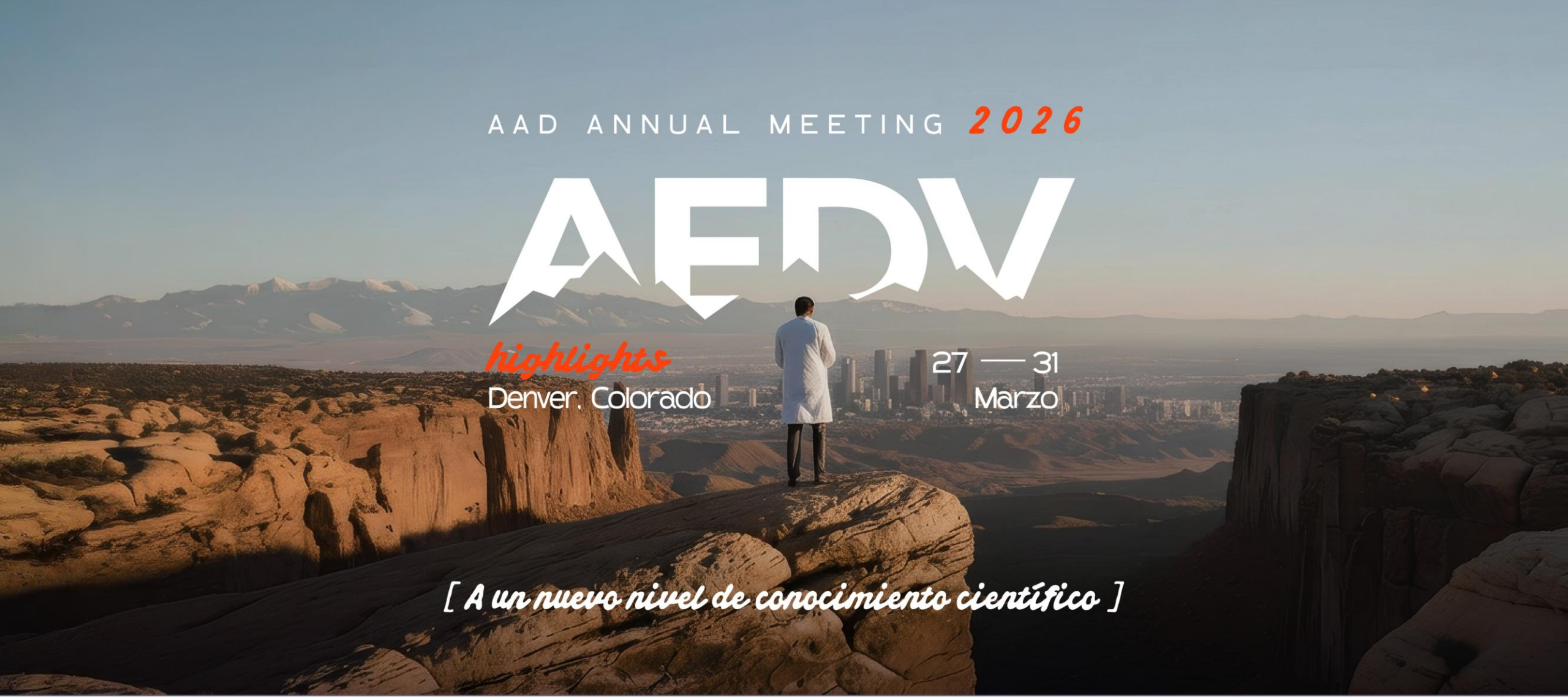

Una iniciativa de:

AEDV 1909 ACADEMIA ESPAÑOLA DE DERMATOLOGÍA Y VENEREOLOGÍA

FUNDACIÓN AEDV PIEL SANA ACADEMIA ESPAÑOLA DE DERMATOLOGÍA Y VENEREOLOGÍA

Con el patrocinio de:

ucb

AAD ANNUAL MEETING 2026

AEDV

highlights

Denver, Colorado

27 — 31 Marzo

Enfermedades autoinmunes y Medicina Interna

La piel no solo refleja la enfermedad sistémica, sino que cada vez más, nos ayuda a anticiparla, clasificarla y tratarla mejor.

SARA BECERRIL ANDRÉS

HOSPITAL UNIVERSITARIO DE LA PLANA, VILLARREAL

highlights
Denver, Colorado

AAD ANNUAL MEETING 2026

27 — 31
Marzo

Enfermedades autoinmunes y Medicina Interna

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ACADEMIA ESPAÑOLA DE DERMATOLOGÍA Y VENEREOLOGÍA

#AEDVenAAD2026

Con el patrocinio de:

ucb

INDIQUE SI TIENE ALGÚN CONFLICTO DE INTERÉS

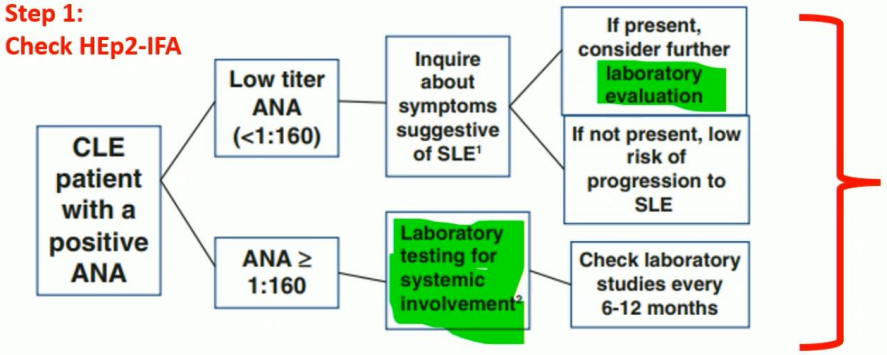
NO TENGO CONFLICTOS DE INTERÉS

LUPUS

CLE → ¿cómo evaluar riesgo sistémico?

You've diagnosed ACA+ CLE: now what?

Step 1:
Check HEp2-IFA



Workup should ideally map to the ACR/EULAR 2019 criteria for SLE diagnosis (coming in a few slides…)

→ Final patient score determines if SLE diagnostic criteria is met

1. Mucosal ulcers, cytopenias, arthritis, miscarriages, or thrombosis
2. Suggested laboratory work-up: CBC with differential, serum BUN and creatinine, urinalysis with microscopy, C3, C4, anti-dsDNA, anti-SSA, anti-SSB, anti-Smith, lupus anticoagulant, anti-cardiolipin, and beta-2-glycoprotein 1-antibodies

Amit Garg, Joseph F. Merola, Laura Fitzpatrick. *Interdisciplinary Approaches to Overlap Disorders in Dermatology & Rheumatology*. 2022

Wake Forest University School of Medicine | The academic core of Atrium Health

1. Confirmar ANA correctamente

✅ **HEp-2 IFA (gold standard** aporta título y patrón)

❌ Evitar "ANA directo" (ELISA ↓ sensibilidad)

2. Estratificar riesgo

Bajo riesgo

ANA <1:160

Sin clínica sistémica

Alto riesgo

ANA ≥1:160

± síntomas (úlceras, citopenias, artritis, trombosis…)

3. Si riesgo ↑ → estudio sistémico

Hemograma, función renal, orina

C3, C4

Anti-dsDNA

Anti-SSA / SSB

Anti-Sm

Antifosfolípidos

4. Seguimiento

Bajo riesgo → control periódico (6–12 meses)

Alto riesgo → estudio + seguimiento estrecho

⚠️ ¿Lupus ANA negativo? Limitaciones del laboratorio

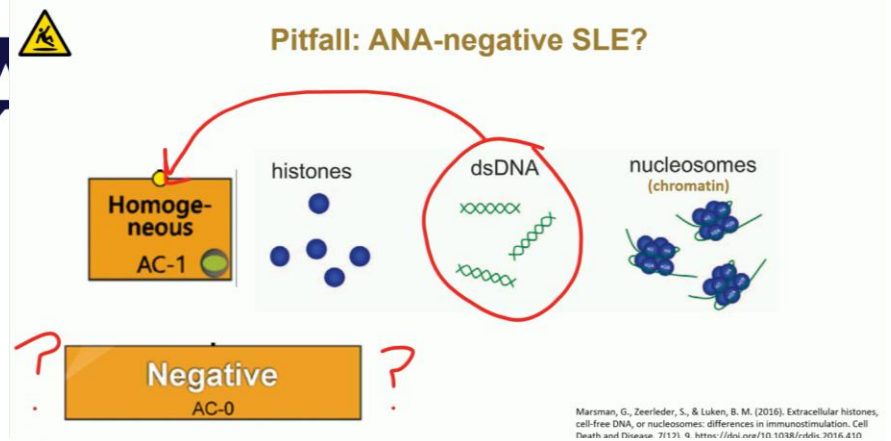
ANA negativo ≠ **descarta LES** (si alta sospecha clínica)

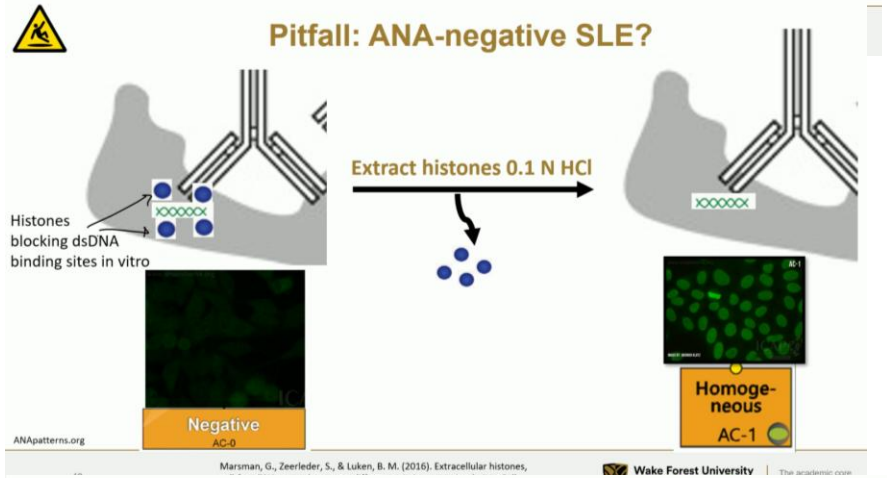
🔬 **Limitaciones del HEp-2 IFA**
Detecta unión visible en célula
Depende de accesibilidad del antígeno
Puede dar **falsos negativos**

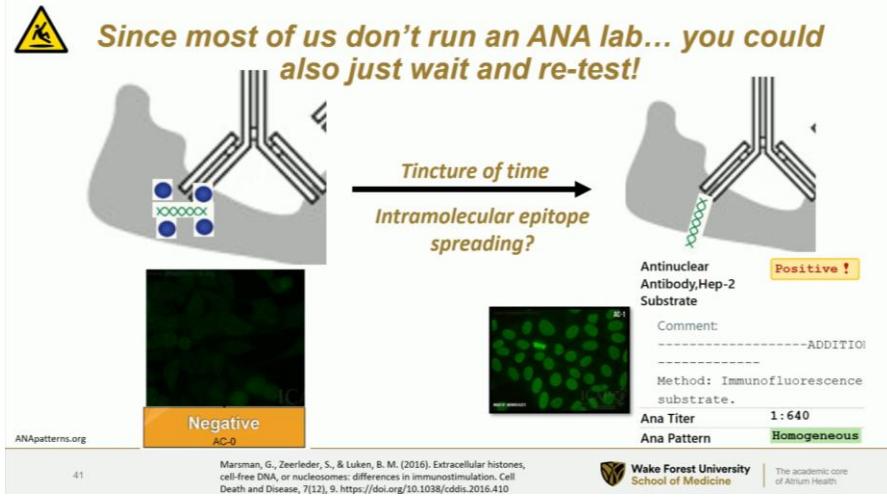
🧬 **¿Por qué puede ser negativo?**
Antígenos “ocultos” (dsDNA en nucleosomas/histonas)
Baja exposición en HEp-2
Fase precoz de enfermedad
Epitope spreading → ANA puede positivizarse con el tiempo

🩺 **Qué hacer en la práctica**
Repetir ANA (tiempo)
Usar técnicas complementarias:
- Anti-dsDNA (ELISA, Crithidia)
- Otros autoanticuerpos

Priorizar **clínica sobre laboratorio**





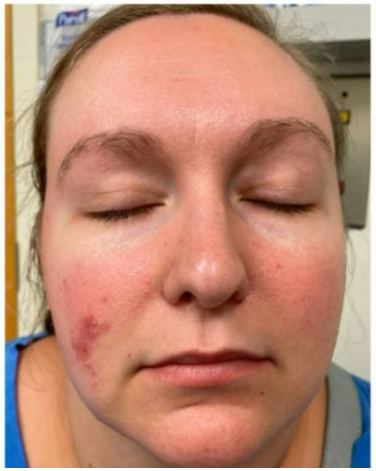


⚠️ No todo ANA positivo significa autoinmunidad relevante

30-year-old female, currently 7 weeks pregnant

- Recurrent mid-facial erythema, flushing, papules/pustules
- Clinician impression: erythematotelangiectatic rosacea; however, still checked HEp-2 IFA:

Antinuclear Antibody,Hep-2 Substrate	Positive 1:160 !
Ana Pattern	Dense Fine Speckled



Pearl: De-escalate from +ANA using the AC-2 pattern!

The **AC-2 DFS pattern** should always give the clinician **immediate pause**

→ Consider if this represents "healthy" ANA

→ Should prompt **reflexively ordering anti-DFS70 Ab** plus the typical SLE antibodies

- **Monospecific anti-DFS70+ antibody status** (e.g. negative for dsDNA, Smith, Ro, La, etc…)
  - Found in 2-22% of healthy individuals, **< 1% of patients with AICTD**
  - confer a **10.9 likelihood ratio for the absence of AICTD**

👩‍⚕️ **Caso clínico**

Mujer 30 años, embarazo

Eritema facial → sospecha rosácea

ANA + (1:160)

🔬 **El patrón importa → AC-2 (moteado fino denso)**

Sugiere **anti-DFS70**

- Frecuente en población sana
- Raro en enfermedades autoinmunes sistémicas
- Si es **monoespecífico** → ↓ probabilidad de LES/AICTD

🧪 **Confirmación**

Solicitar **anti-DFS70**

Si aislado → tranquilizador

Pitfall: anti-dsDNA is *highly specific*, but < 100%

Table 1: Autoantibodies Associated With Viral Infections

ANA	Cardiolipin	RF	DNA	Cryoglobulins	LKM
Epstein-Barr	Adenovirus	Epstein-Barr	Coxsackie	Hepatitis A, B, C	Hepatitis C
Coxsackie	Chickenpox	Exanthem subitem	Influenza	HIV-1	
Hepatitis A, B, C	Epstein-Barr	Hepatitis A, B, C	Measles		
HIV-1	Hepatitis A	Herpes zoster	Parvovirus B19		
Influenza	HIV-1	Influenza	Varicella		
Measles	Mumps	Measles			
Parvovirus B19	Parvovirus B19	Mumps			
Varicella	Rubella	Parvovirus B19			
		Varicella			

Abbreviations: HIV, human immunodeficiency virus; ANA, antinuclear antibody; LKM, liver-kidney microsomal; ANCA, antineutrophil cytoplasmic antibody; RF, rheumatoid factor.

⚠️ No pedir “SSA” como un único test

Next case: Overlap myositis with SLE

- ACLE malar rash
- + Smith, + dsDNA
- Weakness, elevated CK, elevated AST
- **“SSA” negative….**

Component Ref Range & Units (hover)	1 yr ago
SS-A/Ro Antibodies IgG	0.3

- **but SSA-Ro52 is positive!**

Anti-SS-A 52kD Ab, IgG (RDL)	36 ^

🧬 **Diferencia clave**
SSA-Ro52 → miositis, ILD
SSA-Ro60 → LES
Ro52 + Ro60 → Sjögren

❗ **Problema del “SSA combinado”**
Mezcla antígenos
↓ sensibilidad diagnóstica
Puede dar **falsos negativos clínicamente relevantes**

Observational Study > Front Immunol. 2019 Mar 12:10:444. doi: 10.3389/fimmu.2019.00444. eCollection 2019.

Diagnostic Utility of Separate Anti-Ro60 and Anti-Ro52/TRIM21 Antibody Detection in Autoimmune Diseases

Ailsa Robbins [1], Maxime Hentzien [1], Segolene Toquet [2], Kevin Didier [1 3], Amelie Servettaz [1 3], Bach-Nga Pham [3 4], Delphine Giusti [3 4]

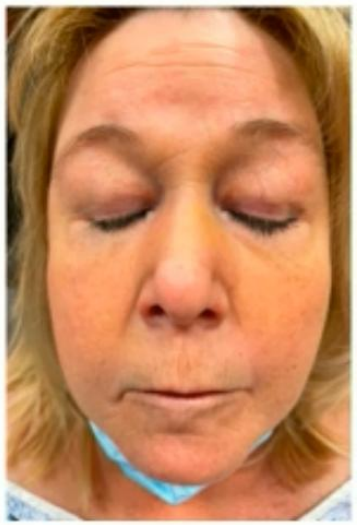
Affiliations + expand

PMID: 30915082 PMCID: PMC6423153 DOI: 10.3389/fimmu.2019.00444

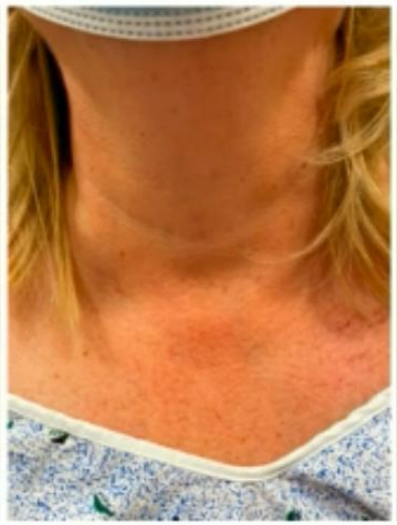
* The combined “SSA” ELISA test is a mixture of both antigens, and this results in less sensitivity of detecting either autoantibody

DERMATOMIOSITIS

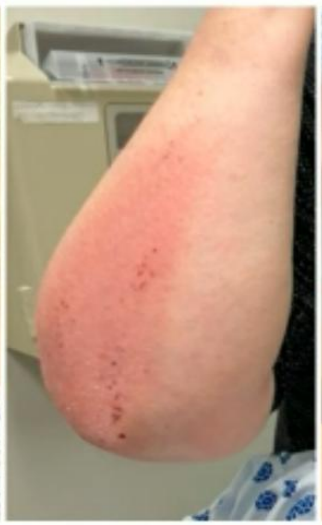
Wong-type DM

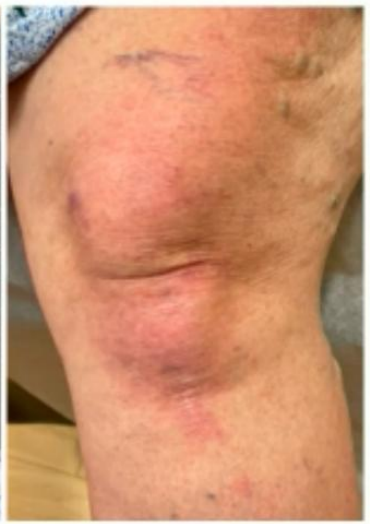


Heliotrope rash

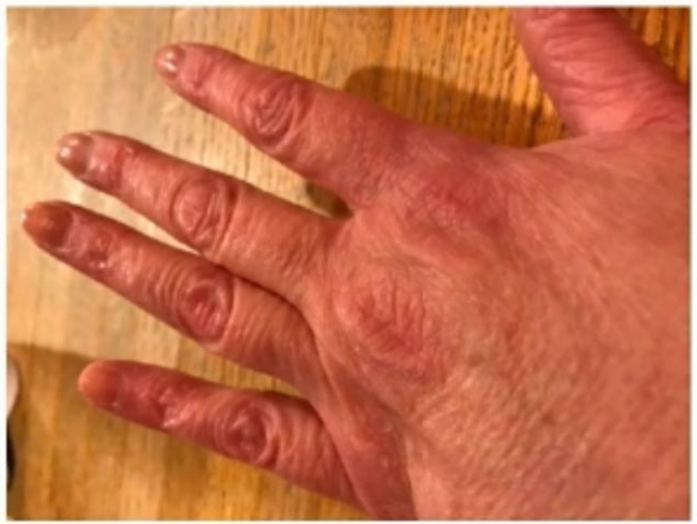


V-sign





Gottron sign/Extensor dermatitis



Gottron papules

- Long history of pityriasis rubra pilaris (unsuccessfully treated)
- ANA 1:320
- Myositis panel: weak positive anti-SRP and -PM/Scl antibodies
- H&E: c/w PRP
- DIF: intravascular c5b-9 & negative lupus band c/w DM

Kowalski EH … Richardson CT. JAAD Case Rep. 2023 Sep 9;41:26-29.

TIF1γ (p155/140)

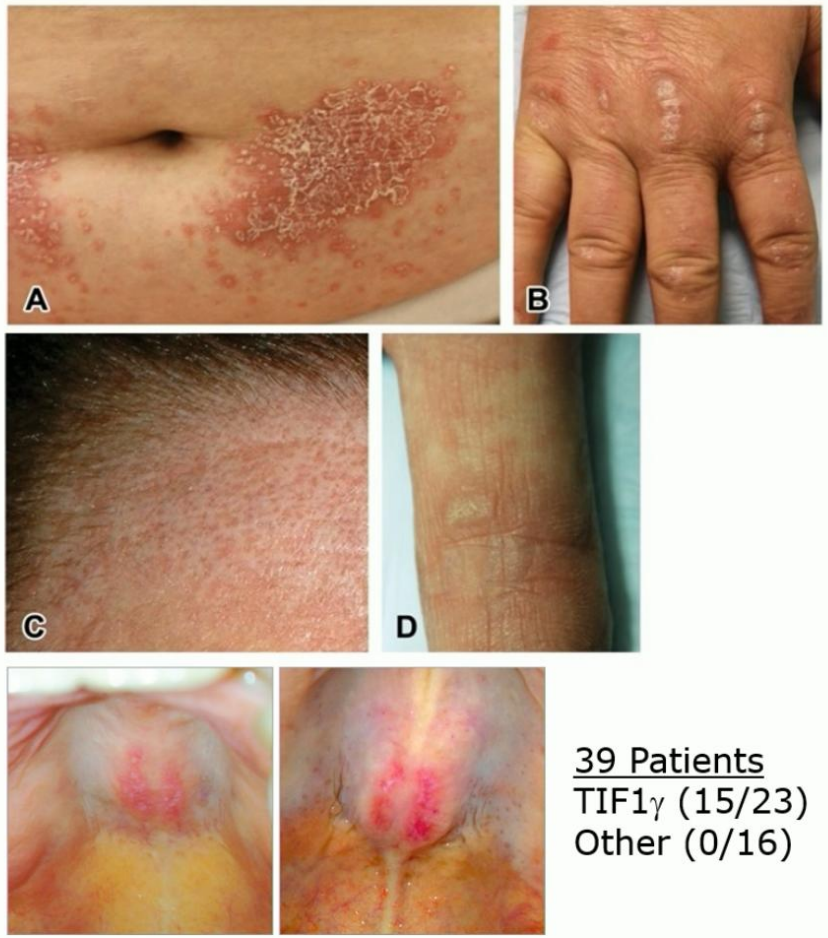
Most common myositis-specific autoantibody

Mucocutaneous:

- extensive skin disease
- psoriasiform lesions
- "red on white" patches
- palmar hyperkeratosis
- ovoid palatal patch

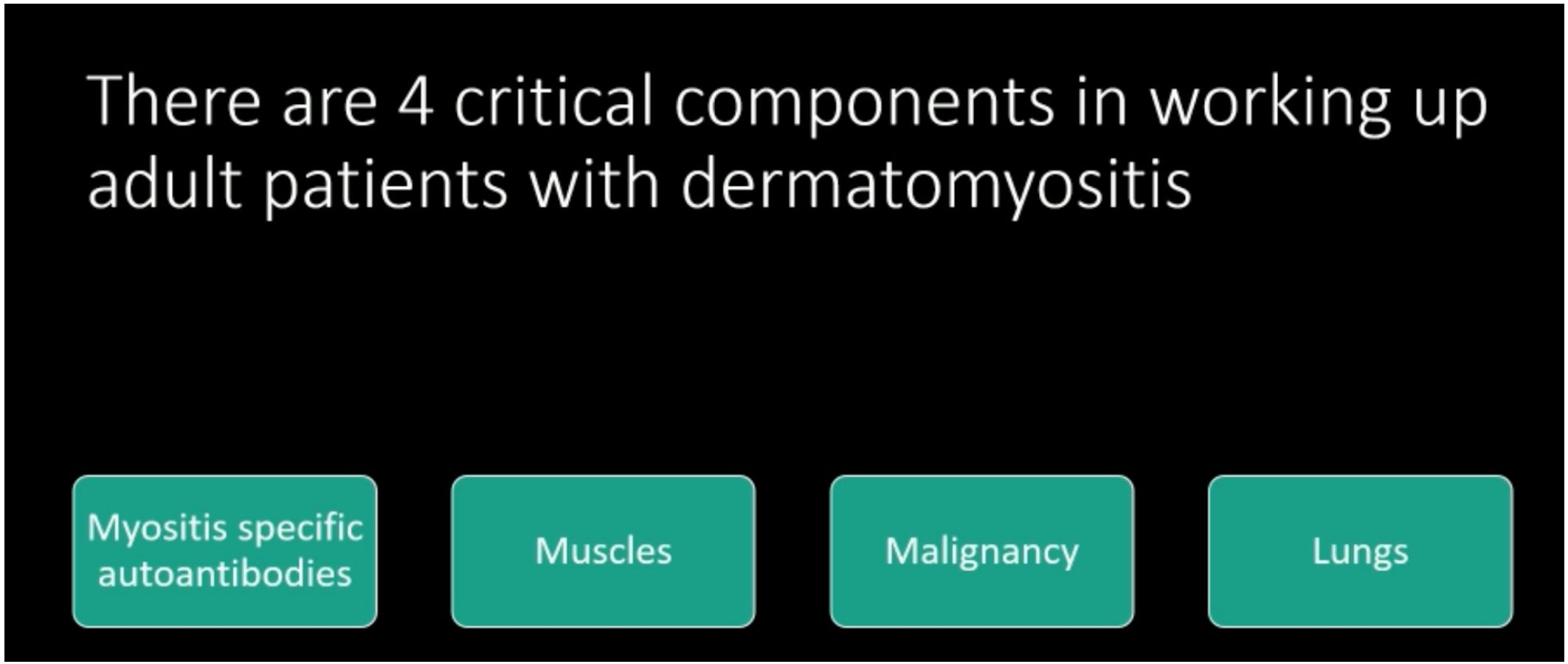
Systemic:

- highest malignancy risk
- less ILD



39 Patients
TIF1γ (15/23)
Other (0/16)

JAMA Dermatol. 2016;152(9):1049-1051.


There are 4 critical components in working up adult patients with dermatomyositis
Myositis specific autoantibodies
Muscles
Malignancy
Lungs

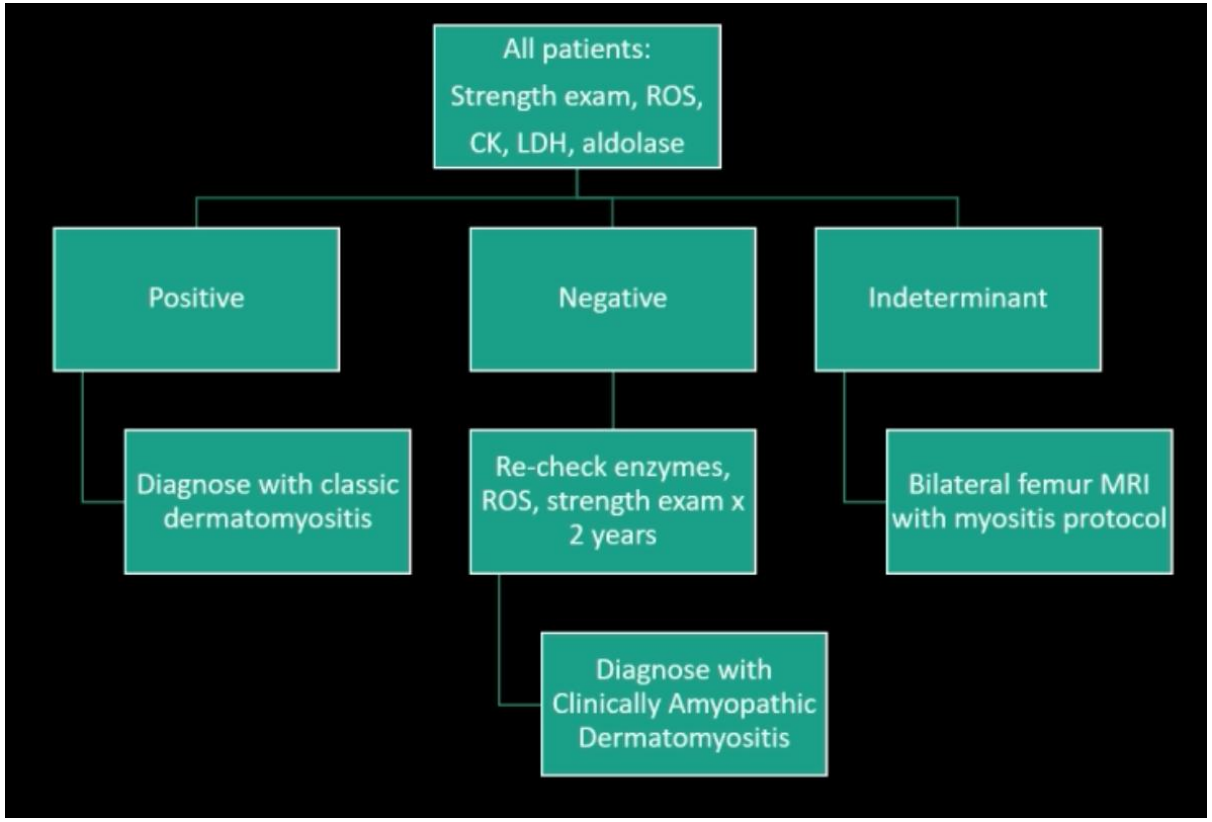
Anticuerpos específicos de miositis

- No son imprescindibles para el diagnóstico
- Ayudan al pronóstico

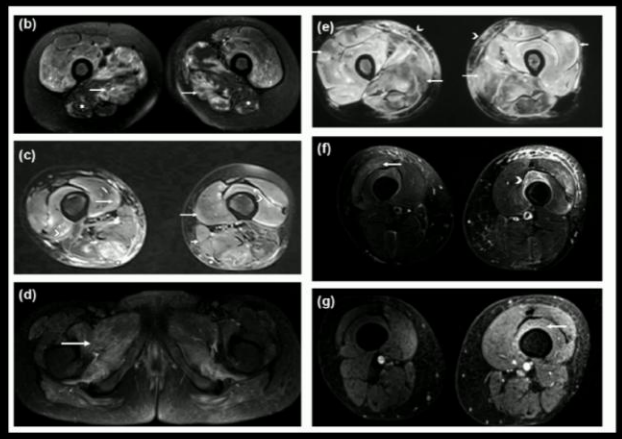
MSA	Incidence in adult DM	Systemic associations
Anti-Mi2	4-35%	**+Muscle involvement**
Anti-TIF1-y	18-23%	**Malignancy** Often hypomyopathic GI involvement
Anti-MDA5	10-30%	**Rapidly progressive interstitial lung disease** Often amyopathic
Anti-NXP2	25%	**Malignancy** **Muscles** Calcinosis
Anti-SAE	8%	**Progressive muscle disease** Fever, weight loss
Anti-synthetase	? Lumper or splitter	**Interstitial lung disease** Raynaud phenomenon Polyarthritis

Afectación muscular

- Debe evaluarse durante al menos 2 años
- Papel de la RMN



MRI is a non-invasive tool with high sensitivity and specificity for detecting muscle involvement in dermatomyositis



- Sensitivity 72-81% specificity 89-92%
- Non-contrast fat saturated T2-weighted images
- Muscle biopsy and EMG can be used in select cases

D: 30997152; PMID: 34118766

Guías IMACS para cribado de cáncer

Pacientes estratificados en 3 grupos:

- **Alto riesgo** = ≥ 2 factores de "alto riesgo"
- **Riesgo moderado** = ≥ 2 factores de "riesgo intermedio" o 1 factor de "alto riesgo"
- **Bajo riesgo** = ninguno de los anteriores

IIM diagnosis (within 3 years of symptom onset)

- Juvenile-onset IIM → Cancer screening not routinely required
- Adult-onset IIM → Cancer risk stratification based on risk factors
- IBM → Cancer screening not routinely required

	'High risk' factors	'Intermediate risk' factors	'Low risk' factors
IIM subtype	☐ Dermatomyositis	☐ CADM ☐ Polymyositis ☐ IMNM	☐ ASSD ☐ CTD-associated IIM
MSA and MAA	☐ Anti-TIF1-γ antibodies ☐ Anti-NXP2 antibodies	☐ Anti-SAE1 antibodies ☐ Anti-HMGCR antibodies ☐ Anti-Mi2 antibodies ☐ Anti-MDA5 antibodies	☐ Anti-SRP antibodies ☐ Anti-Jo1 antibodies ☐ Non-Jo1 ASSD antibodies ☐ MAA[a]
Clinical features	☐ Age >40 years at IIM onset ☐ Persistent high disease activity despite therapy ☐ Dysphagia (moderate to severe) ☐ Cutaneous necrosis	☐ Male sex	☐ Raynaud phenomenon ☐ Inflammatory arthropathy ☐ Interstitial lung disease

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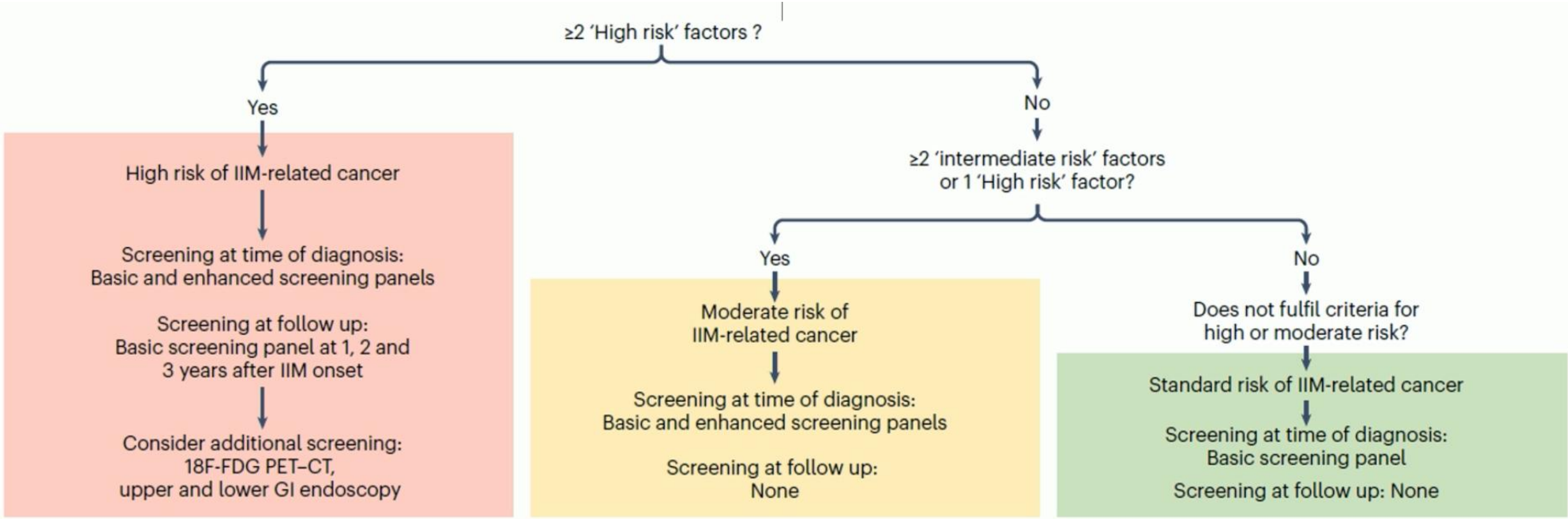


Basic screening panel
- Comprehensive history
- Comprehensive physical examination
- Complete blood count
- Serum liver function tests
- Serum ESR and/or plasma viscosity
- Serum CRP
- Serum protein electrophoresis
- Urinalysis
- Plain chest X-ray radiograph

Enhanced screening panel:
- CT scan of the neck, thorax, abdomen and pelvis
- Cervical screening[b]
- Mammography[b]
- Prostate-specific antigen[b]
- CA-125
- Pelvic or transvaginal ultrasonography for ovarian cancer
- Faecal occult blood[b]

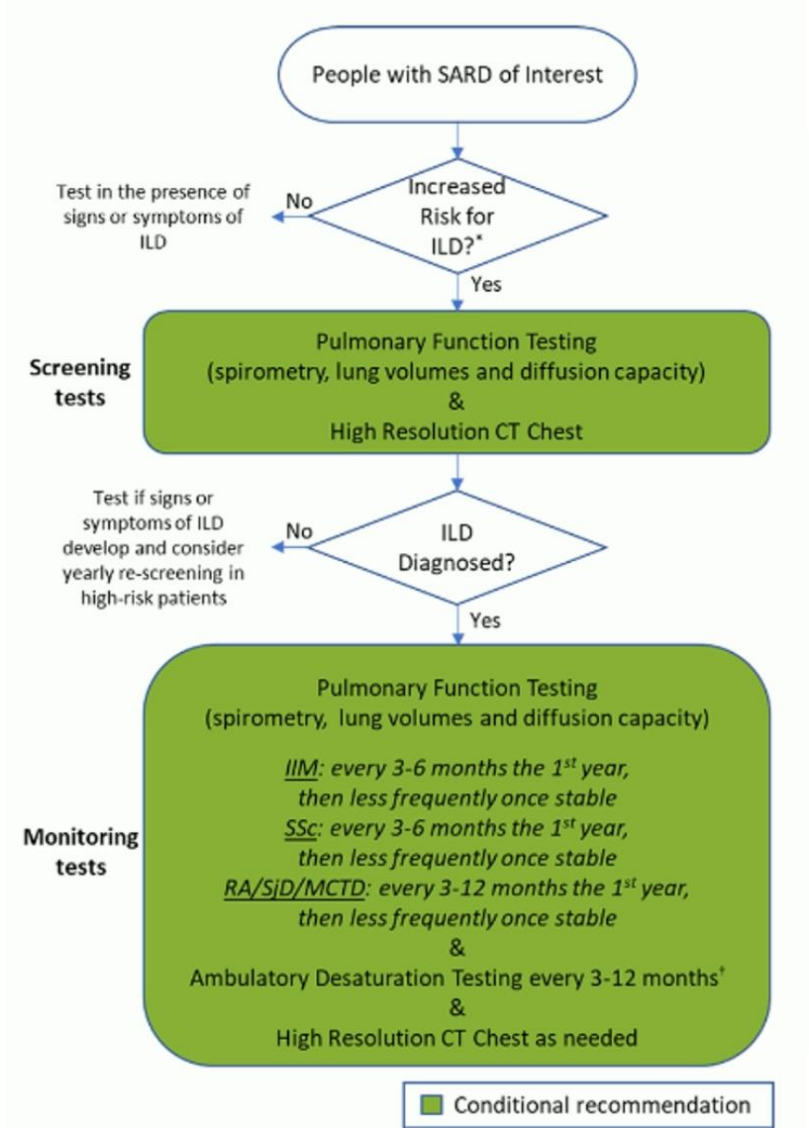
Screening for nasopharyngeal carcinoma:
- Consider nasoendoscopy at the time of diagnosis of adult-onset IIM in geographical regions where the risk of nasopharyngeal carcinoma is increased

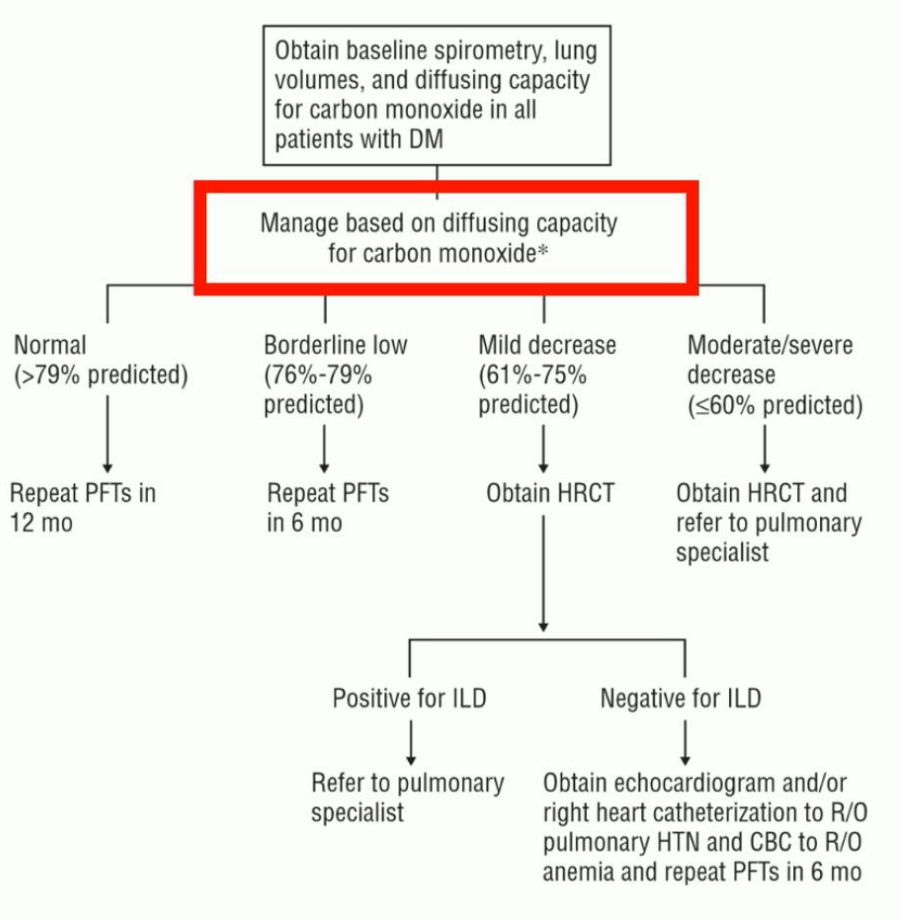
#AEDVenAAD2026

Guías ACR/CHEST 2023 cribado y seguimiento de EPI

High Risk features for ILD in DM:

- Anti-synthetase (Jo-1, PL7, PL12, EJ, OJ, KS, Ha, Zo)
- Anti-MDA-5
- Anti-Ku
- Anti-Pm/Scl
- Anti-Ro52
- Mechanic's hands
- Arthritis/arthralgia
- Ulcerating lesions



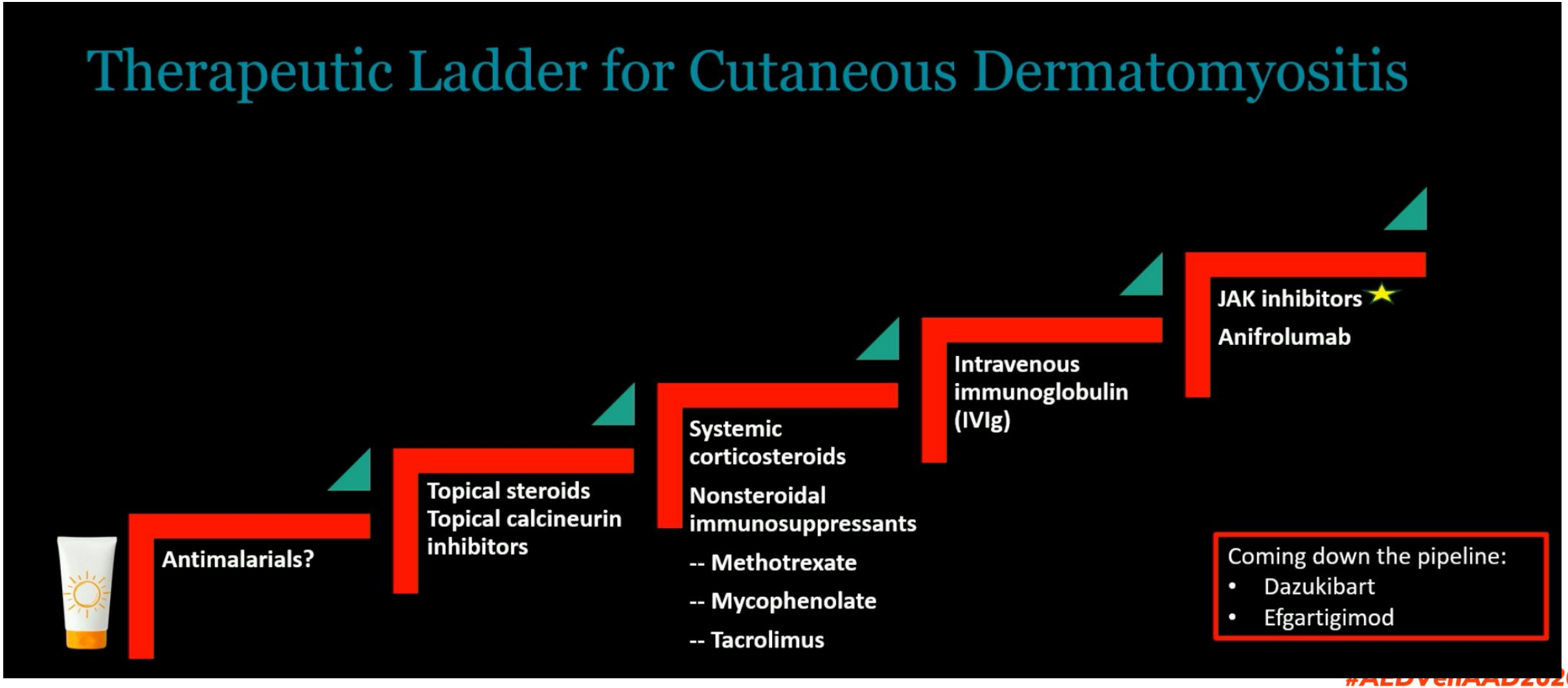


Work up summary

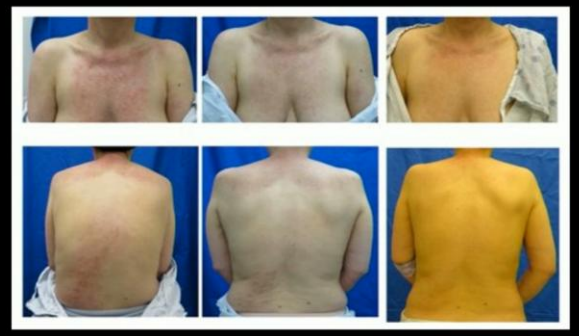
- **Labs:**
  - Myositis specific autoantibodies
- **Muscles:**
  - CK, LDH, aldolase x 2 years
  - If unclear → bilateral thigh MRI with myositis protocol
- **Malignancy Screening:**
  - IMACS guidelines → Based on disease specific risk factors or localizing symptoms
- **Lungs:**
  - Assess risk of ILD
  - All patients → baseline PFTs
  - High risk patients → PFTs + HR CT Chest

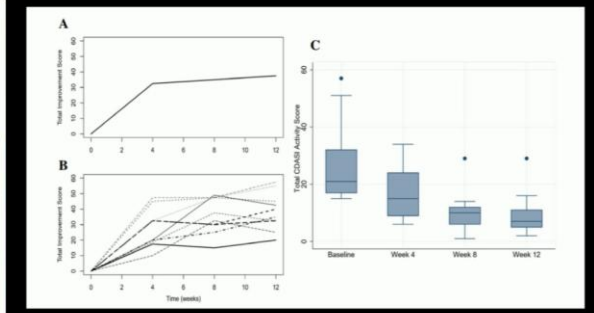
Skin biopsy is not necessary for patients with pathognomonic skin disease. If taken, findings are identical to cutaneous lupus.

TRATAMIENTO



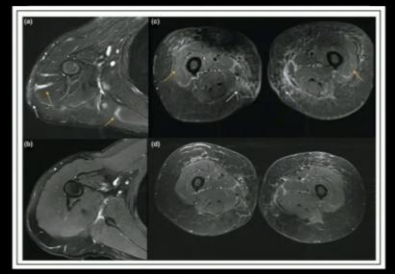
JAK inhibitors are beneficial for refractory skin and muscle disease in dermatomyositis





PMID: 33258553. Study of Tofacitinib in Refractory Dermatomyositis: An open-label pilot study of ten patients. Arthritis Rheumatol. 2021.

Anifrolumab has demonstrated benefit in patients with refractory skin and muscle disease



November 11, 2023

Rapid Improvement in Recalcitrant Cutaneous Juvenile Dermatomyositis With Anifrolumab Treatment

Katharina S. Shaw, MD[1]; Diana B. Reusch, MD[2]; Rochelle L. Castillo, MD, MS[2,3]; Kimberly B. Hashemi, MD[2,3]; Robert Sundel, MD[4]; Fatma Dedeoglu, MD[4]; Ruth Ann Vleugels, MD, MPH, MBA[2,3]

JAMA Dermatology

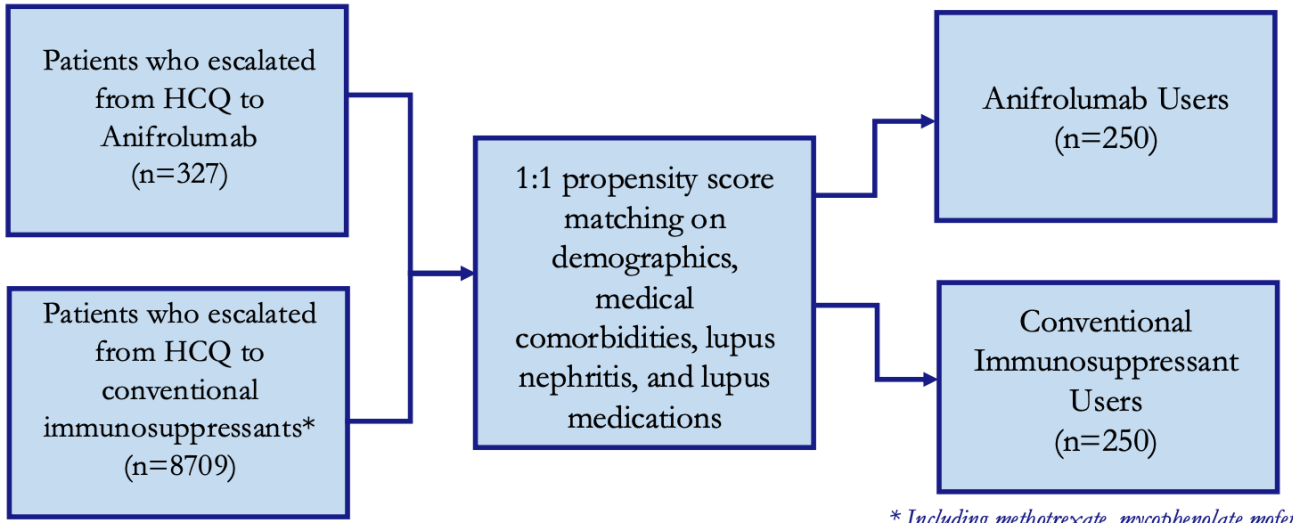
Leila H Shayegan,[1,2] Katharina S Shaw,[3] Ged G Wieschhoff,[4] Nnenna Ezeh,[1] Yoo Jung Kim,[1,2] Neda Shahriari,[1] Ellen E. Anshelevich,[1,5] Lorena A Acevedo,[1,6] Avery LaChance,[1] Fatma Dedeoglu,[2] Rochelle L Castillo,[1] Allen W Ho[1] and Ruth Ann Vleugels[1,2]

Br J Dermatol 2025; **00**:1–3
https://doi.org/10.1093/bjd/ljaf064
Advance access publication date: 27 February 2025

Infection Risk Associated With Anifrolumab Versus Traditional Immunosuppressants in Cutaneous Lupus Erythematosus

Anjana Srikumar[1], Jun Kang[1]

1. Department of Dermatology, Johns Hopkins University School of Medicine, Baltimore, Maryland..



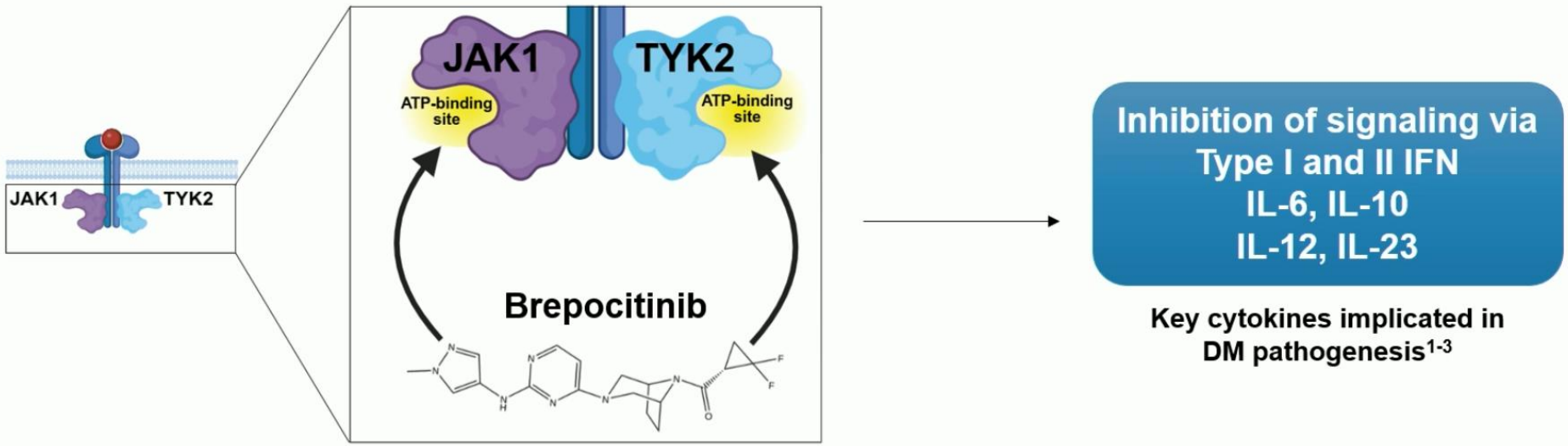
** Including methotrexate, mycophenolate mofetil, and azathioprine*

Risk Ratios for 2-Year Infectious Outcomes in Matched CLE Cohorts for Anifrolumab Versus Conventional Immunosuppressant Users

	Risk Ratio	95% CI	P-value
All-cause hospitalizations	1.09	0.82-1.44	0.552
Any infection	1.08	0.88-1.31	0.472
Pneumonia	**0.50**	**0.27-0.93**	**0.024**
Skin and soft tissue infection	**0.53**	**0.30-0.93**	**0.024**
Upper respiratory infection	0.91	0.57-1.45	0.682
Urinary tract infection	0.86	0.60-1.24	0.421
Herpes simplex virus infection	1.10	0.48-2.54	0.824
Varicella-zoster virus infection	1.27	0.59-2.75	0.538
Viral infection	0.86	0.41-1.82	0.687

Brepocitinib Is A First-In-Class, Oral, Selective TYK2/JAK1 Inhibitor

- **Oral, once-daily, selective inhibitor** of the catalytic domains of Tyrosine Kinase 2 (**TYK2**) and Janus Kinase 1 (**JAK1**)
- **Dual TYK2/JAK1 inhibition** uniquely disrupts key cytokine pathways including **Type I and II IFN, IL-6, IL-10, IL-12, and IL-23**
- **Mechanistically distinct** from **nonselective JAK inhibitors**, **JAK1-selective agents**, and **TYK2-selective agents**
- Designed for **complex inflammatory diseases requiring coordinated pathway inhibition** such as dermatomyositis (DM)[1-3]

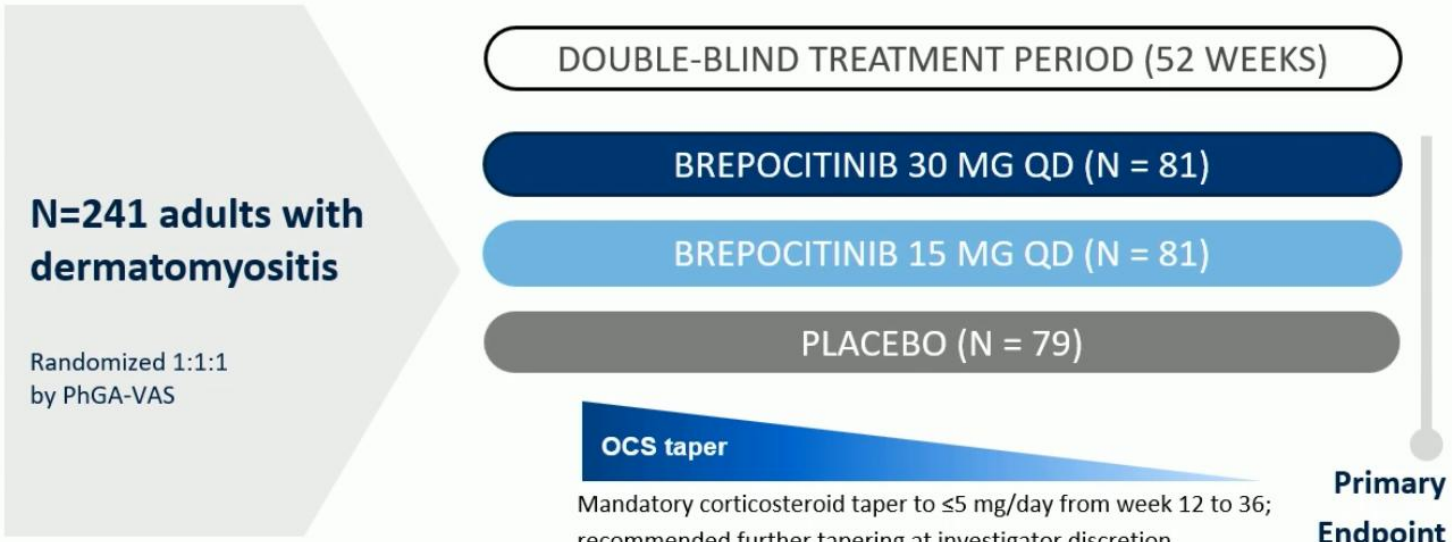


Note: Brepocitinib has not been approved by the FDA and the FDA has not determined that brepocitinib is safe and effective.

1) Paik, J. J., et al. Clinical and Experimental Rheumatology, 43, 2 (2025)
2) Aggarwal et al, Arthritis Rheumatol (2022)
3) Vencovsky et al, Arthritis Rheumatol (2025)

Efficacy and Safety of Brepocitinib in DM Were Assessed in VALOR, a Phase 3, Randomized, Placebo-Controlled Trial

Distinguished by a 52-week endpoint, protocol-defined steroid tapering, and inclusive eligibility*



Eligible Patients

- Definite or probable dermatomyositis (2017 EULAR/ACR criteria)
- Skin and muscle disease activity
- Refractory or intolerant to SOC therapy

Permitted Background Therapy

Oral IST, antimalarial, and/or OCS

Primary Endpoint

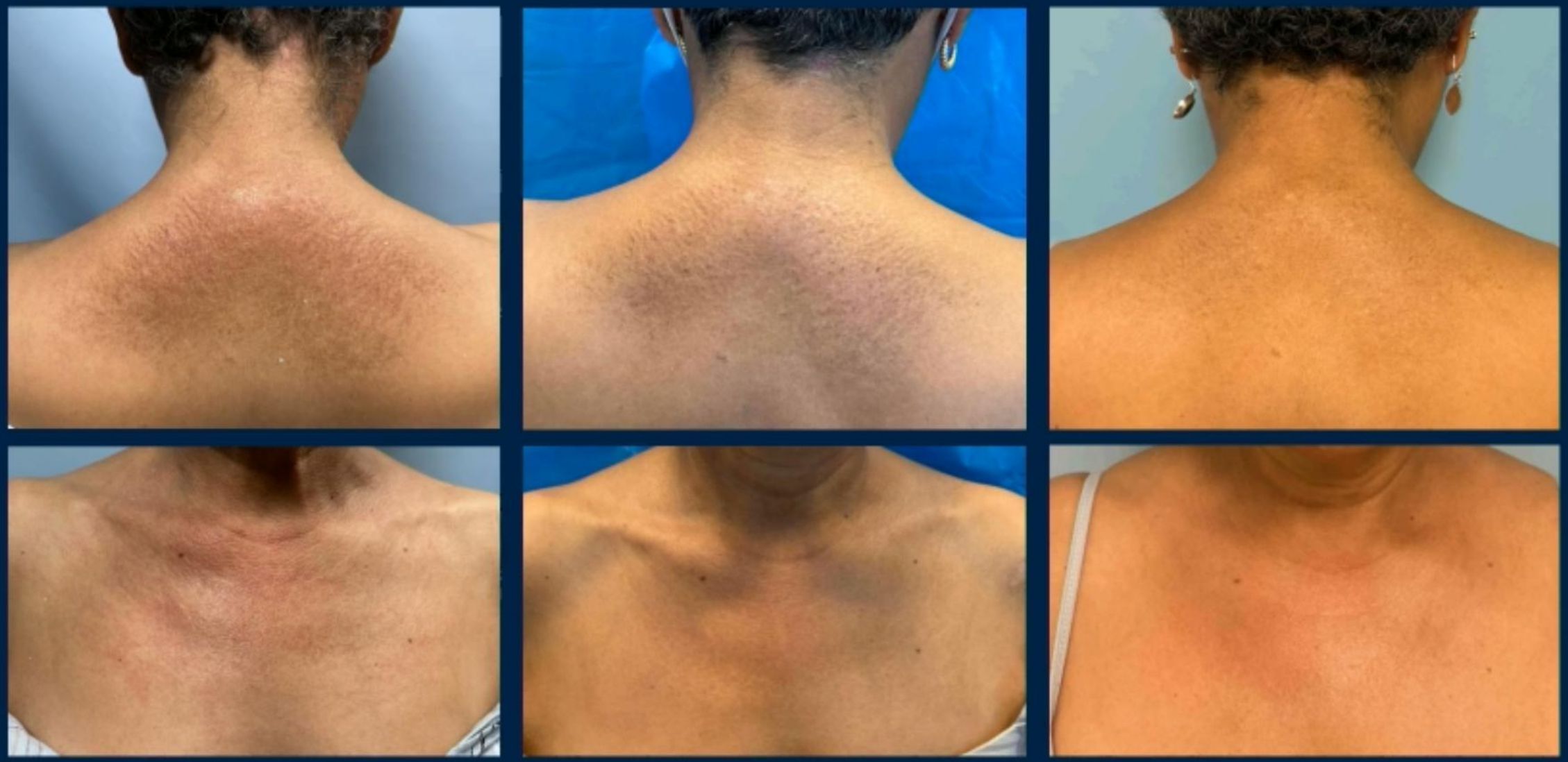
Mean Total Improvement Score at Week 52 (brepocitinib 30mg versus placebo)

***Eligibility criteria designed to reflect real-world DM population, including patients with advanced age, ILD, prior malignancy, VTE risk, and cardiometabolic factors**

Brepocitinib 30 mg Achieved Statistically Significant Benefit On All Ten Ranked Endpoints

Robust, statistically significant, and clinically meaningful improvements across key domains – including skin disease activity, muscle weakness, global disease, speed of onset, and steroid reduction

Key Endpoint	Important Features	P-Value
Mean TIS (Primary)	Composite endpoint, focus on **muscle disease** and **global** benefit	**0.0006**
CDASI-A change from baseline at Week 52	Improvement in **skin disease** activity	**0.0006**
DMOMS at Week 52	DM-specific **muscle and skin** composite measure of benefit	**0.0014**
TIS40 Response at Week 52	Moderate TIS response (focus on **global benefit / muscle**)	**0.0040**
Time to Consecutive TIS40 Response by Week 52	**Time to onset of sustained benefit** (particularly high bar)	**0.0155**
Patients achieving TIS40 Response + ≤2.5 mg OCS at Week 52	Achievement of clinical response and **steroid reduction**	**0.0006**
CDASI-A 40% Response with ≥4-point improvement at Week 52	Clinically meaningful **skin response**	**0.0357**
TIS60 Response at Week 52	Major TIS response – **Highest TIS response threshold**	**0.0126**
Change from baseline in HAQ-DI at Week 52	Improvement in physical and functional disability and daily living activities related to **muscle** strength	**0.0035**
Change from baseline in CDASI-A at Week 4	**Rapid onset** of skin response	**0.0003**


Baseline
Week 12*
Week 52*
* Patient received brepocitinib 15 mg daily

Safety: Brepocitinib Was Generally Well-Tolerated

Cardiovascular events, malignancies, thromboembolic events, and AEs leading to treatment discontinuation were most common in the placebo group
Consistent with JAK and TYK2 inhibitors, infections were more common with brepocitinib

	Brepocitinib 30 mg QD (N=81)	Brepocitinib 15 mg QD (N=81)	Placebo (N=79)
Participants with:			
AEs	73 (90%)	70 (86%)	72 (91%)
Death	0	0	0
SAEs	13 (16%)	7 (9%)	10 (13%)
Infection SAEs	8 (10%)	2 (3%)	1 (1%)
AEs leading to treatment discontinuation	5 (6%)	6 (7%)	9 (11%)
AEs leading to study discontinuation	3 (4%)	4 (5%)	3 (4%)
Adverse Events of Special Interest:			
Cardiovascular events	1 (1%)	0	2 (3%)
Thromboembolic events	0	0	1 (1%)
Viral reactivation	4 (5%)	2 (2%)	4 (5%)
Opportunistic infections	0	0	0
New or recurrent diagnoses of malignancy	0	0	2 (3%)
Increase in ALT or AST	1 (1%)	2 (2%)	1 (1%)

Abbreviations: AE=adverse event, ALT=alanine aminotransferase, AST=aspartate aminotransferase, SAE=serious adverse event.
Note: Percentages are based on the number of unique participants with an event out of the column total. Treatment-emergent AEs are reported.

Dazukibart is a monoclonal antibody directed against IFN-beta

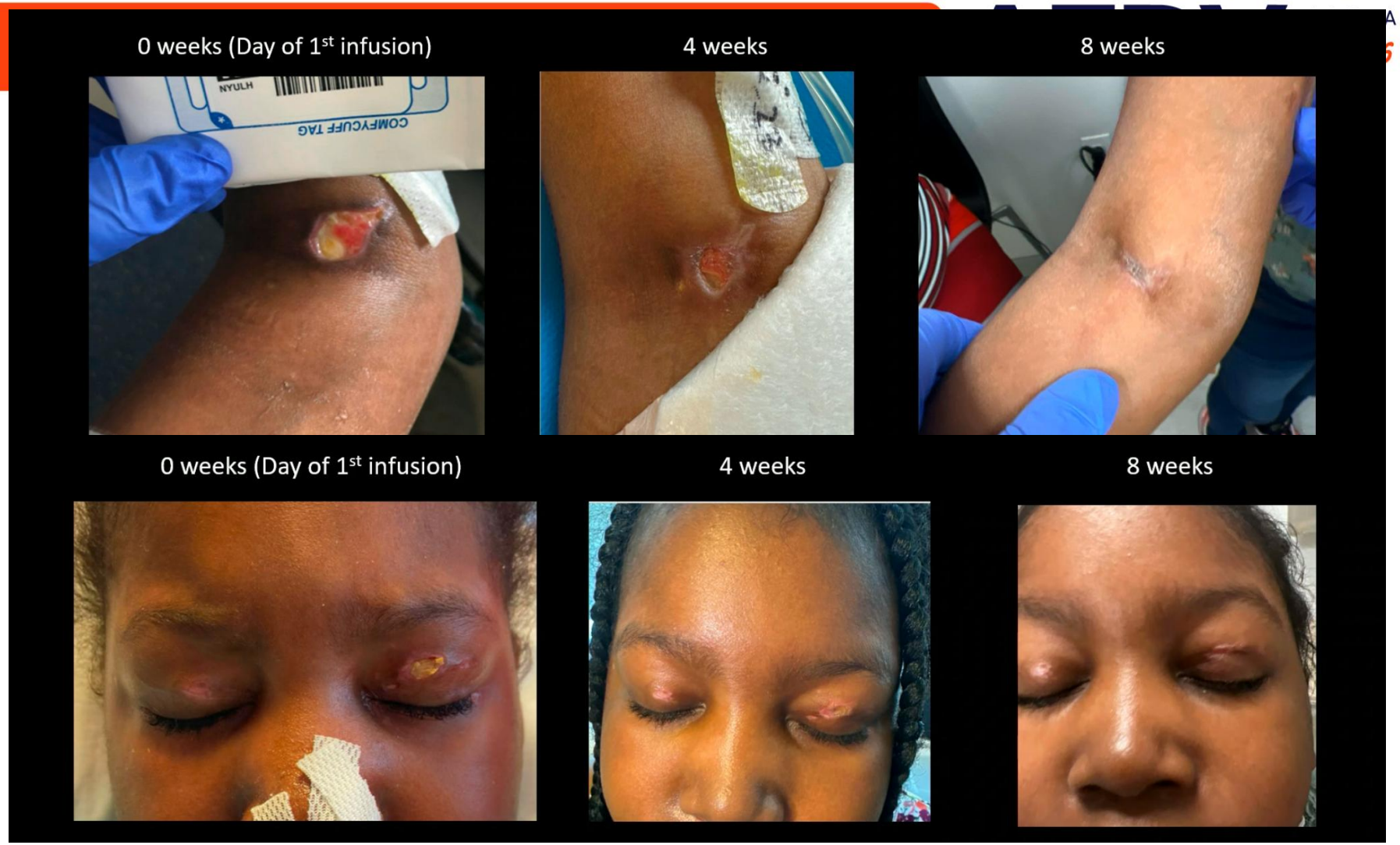
- **CDASI reduction > 5 points** achieved by **100%, 96%,** and 35.7% in the 150mg, 600mg and placebo arms, respectively
- Global Phase III trial actively enrolling

ELSEVIER

The Lancet
Volume 405, Issue 10473, 11–17 January 2025, Pages 137-146

Articles

Efficacy, safety, and target engagement of dazukibart, an IFNβ specific monoclonal antibody, in adults with dermatomyositis: a multicentre, double-blind, randomised, placebo-controlled, phase 2 trial

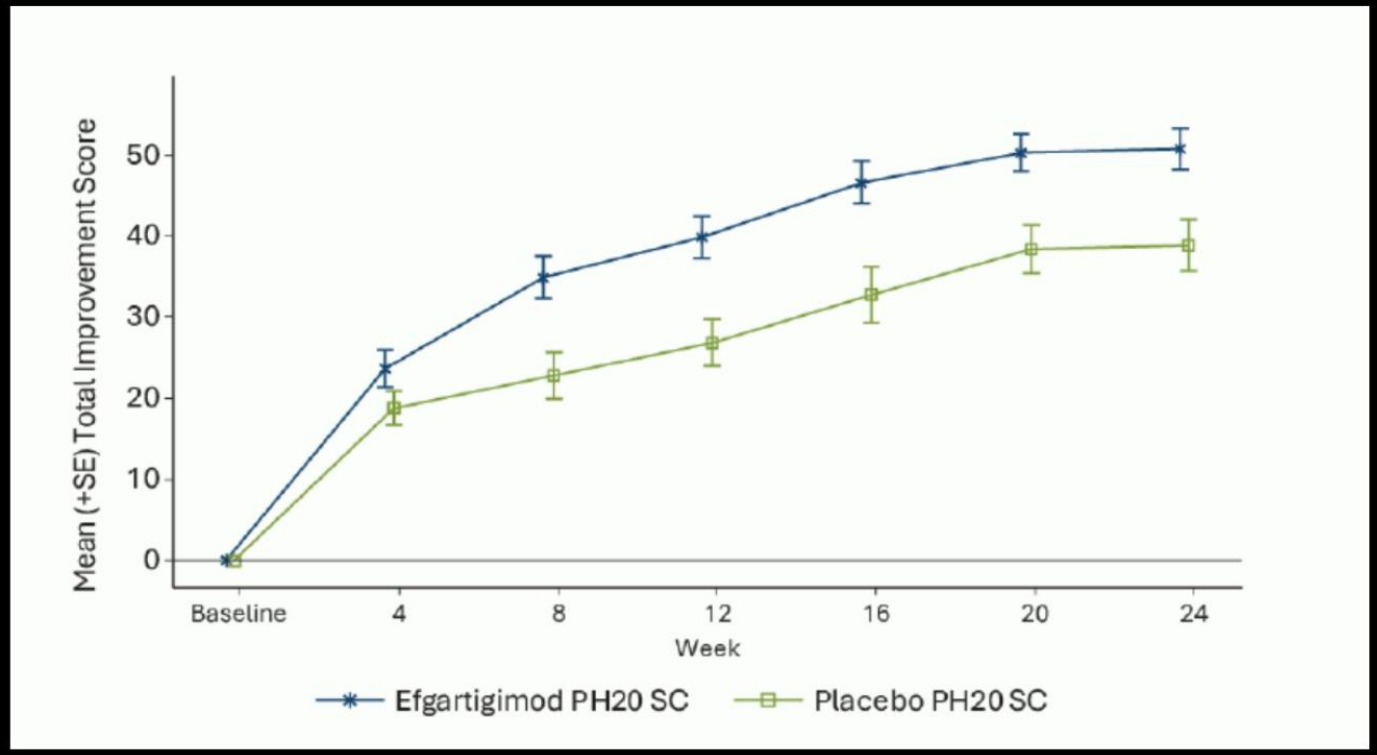


Monoclonal antibody targeting IFNβ for the treatment of NXP2-positive ulcerative juvenile dermatomyositis

Justina Guirguis, MD,[1,2] Vignesh Ramachandran, MD,[1] Ruth Ann Vleugels, MD, MPH, MBA,[3,4] Steven A. Greenberg, MD,[5] Hanna Kim, MD, MS,[6] Philip J. Kahn, MD,[7] Vikash Oza, MD[1]

PEDIATRICS Volume 155, Issue 4, April 2025:e2024067481

Efgartigimod demonstrated statistically significant improvement in TIS over placebo in phase 2 studies



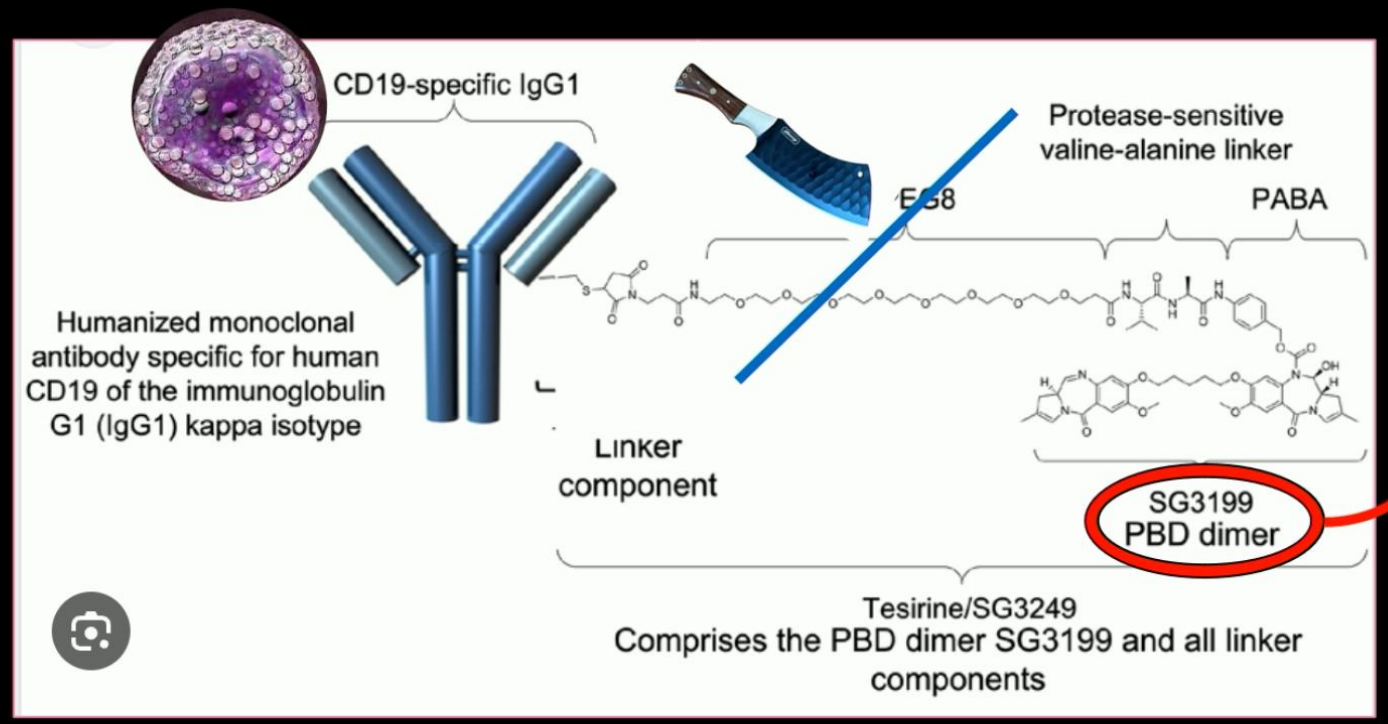
Chinoy et al EULAR 2025 Phase 2 ALKIVIA Topline Results Oral Presentation

TOXICODERMIAS

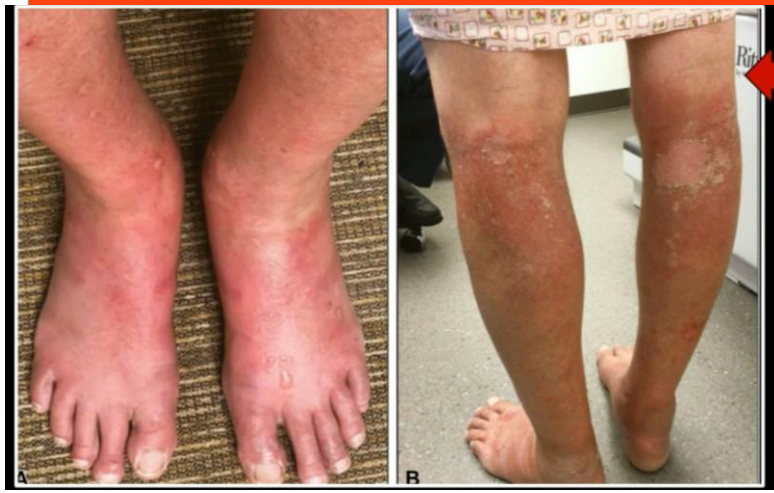
Loncastuximab tesirine

monoclonal Ab

linker + chemotherapy = tesirine



PBD, pyrrolobenzodiazepine

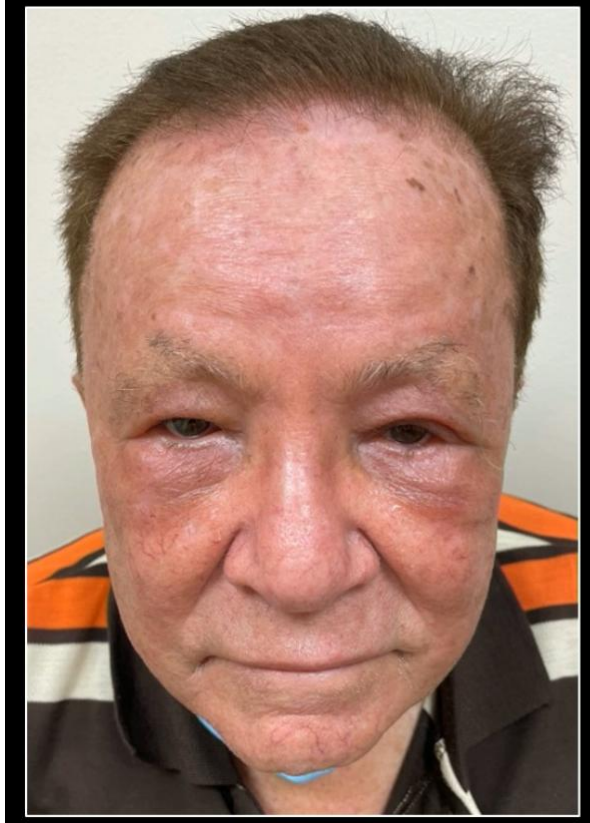


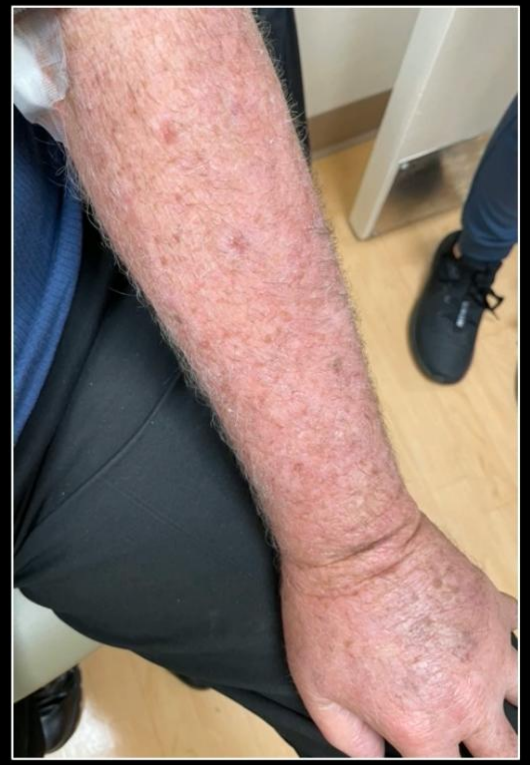
JAAD Case Reports
Volume 53, November 2024, Pages 1-5

Case report

Vesiculobullous eruption with loncastuximab tesirine in a patient with relapsed follicular lymphoma

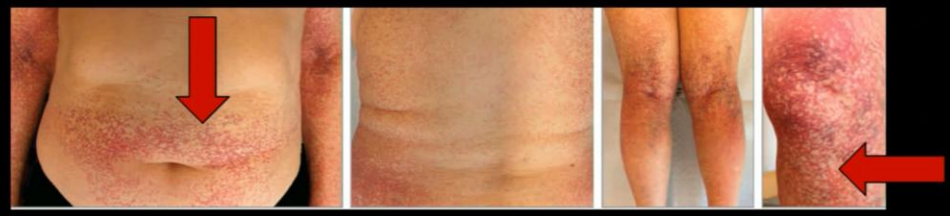
Riyad N.H. Seervai MD, PhD [a], Craig Y. Okada MD [b], Stephanie J. Mengden-Koon MD [a], Noah I. Hornick MD, PhD [a]

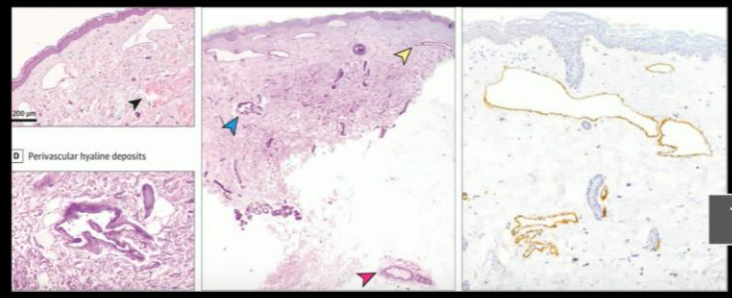




Courtesy, Dennis Cooper, MD

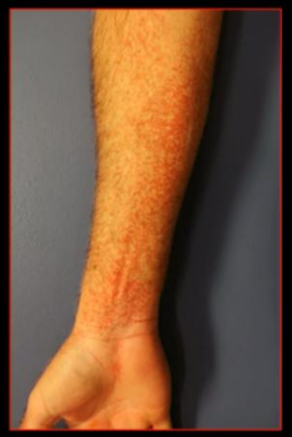
Loncastuximab tesirine – Cutaneous collagenous vasculopathy

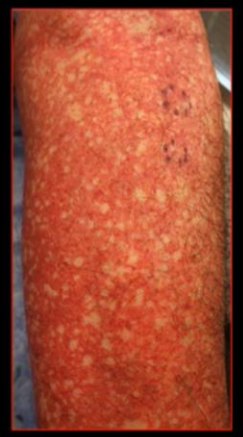




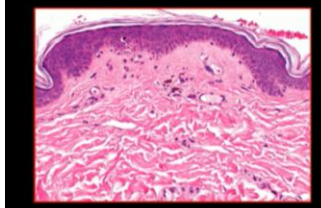
Type 4 collagen

JAMA Derm 2024;160:1130.





- 6 patients – 5 loncastuximab teserine & 1 rovalpituzumab teserine
- Skin biopsies – 2 loncastuximab teserine and 1 rovalpituzumab teserine
- In 1 skin biopsy, PAS staining was negative
- No improvement with longest follow-up = 2 years



Histopathologic features	PAS ⊖	
Telangiectasia	Prominent	Moderate
Bizarre fibroblasts	Minimal	Prominent
PIPA	None	Moderate

2 biopsies of pts receiving loncastuximab teserine

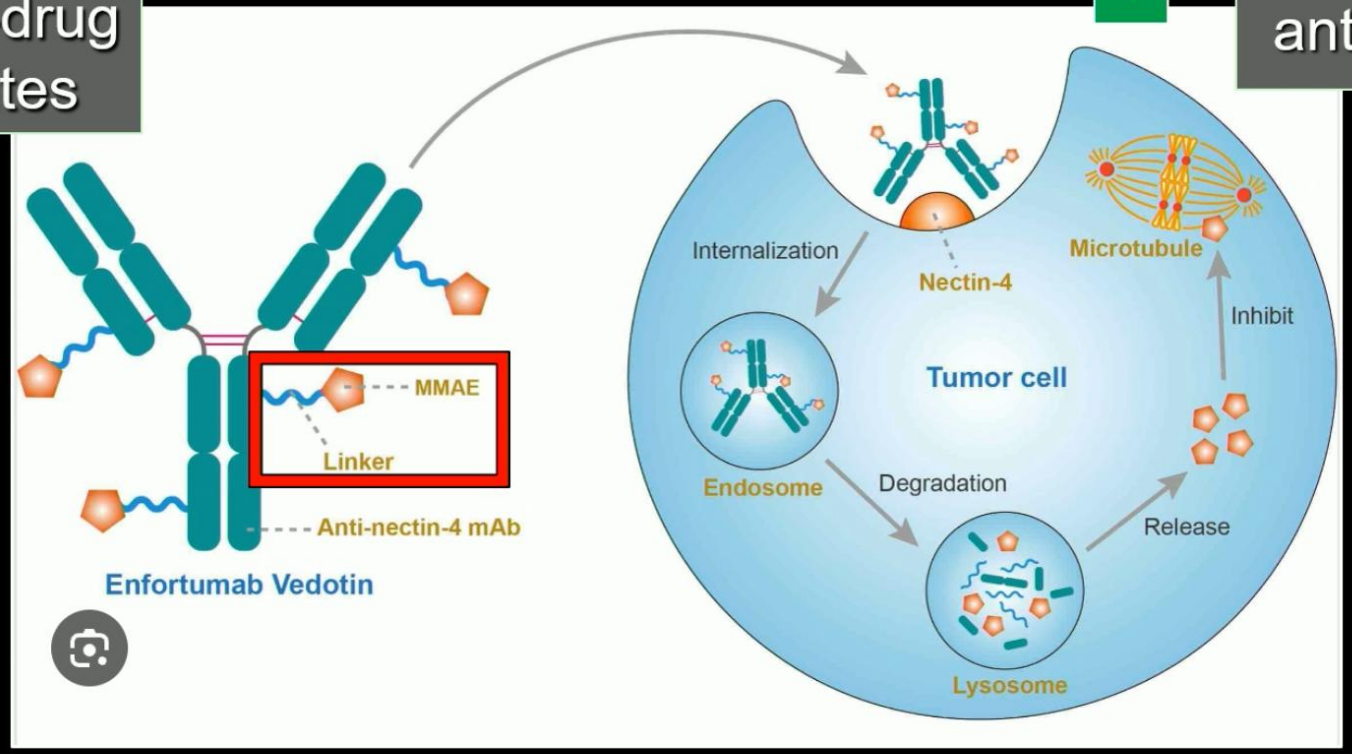
Sorensen EP, *et al. JAMA Derm* 2020;156:601.

Enfortumab vedotin

1

Antibody-drug conjugates

"Chemo-labeled antibodies"

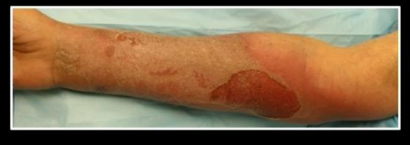


MMAE = monomethyl auristatin E; vedotin = MMAE plus linker

Enfortumab vedotin - cutaneous side effects

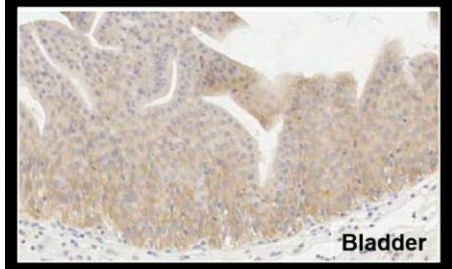
- Most common adverse reactions leading to drug interruption: peripheral neuropathy (18%) and “rash” (9%) in one series
- Expression of nectin-4 in the skin probable explanation for cutaneous side effects when compared to others in the vedotin class
- Cutaneous side effects*
  - Pruritic maculopapular eruption
  - Skin fragility
  - Toxic erythema of chemotherapy (TEC)
  - Stevens-Johnson syndrome/toxic epidermal necrolysis
  - Miliaria-like eruption

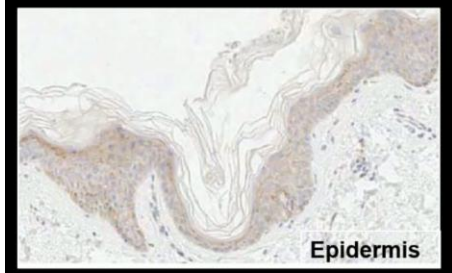
*also mucositis



YDRSC

Nectin-4



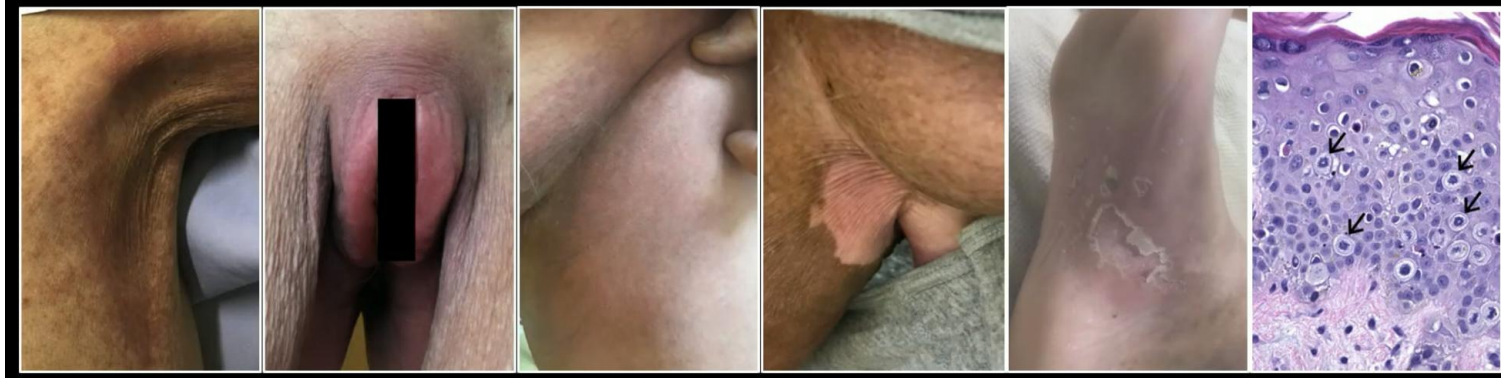


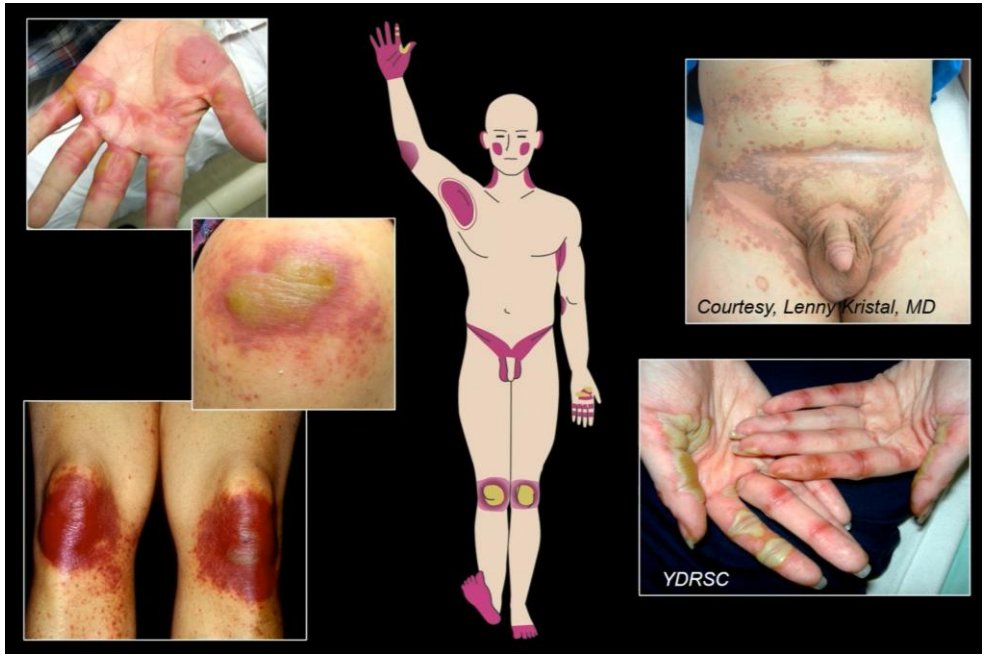
- Mediates cell-cell adhesion
- Expressed in epidermal keratinocytes and adnexae as well as transitional epithelium of the bladder
- Expressed in multiple carcinomas – urethelial, breast, ovarian, gastric, head & neck, esophageal, and lung

Lacouture ME, et al. *The Oncologist* 2022;27:e

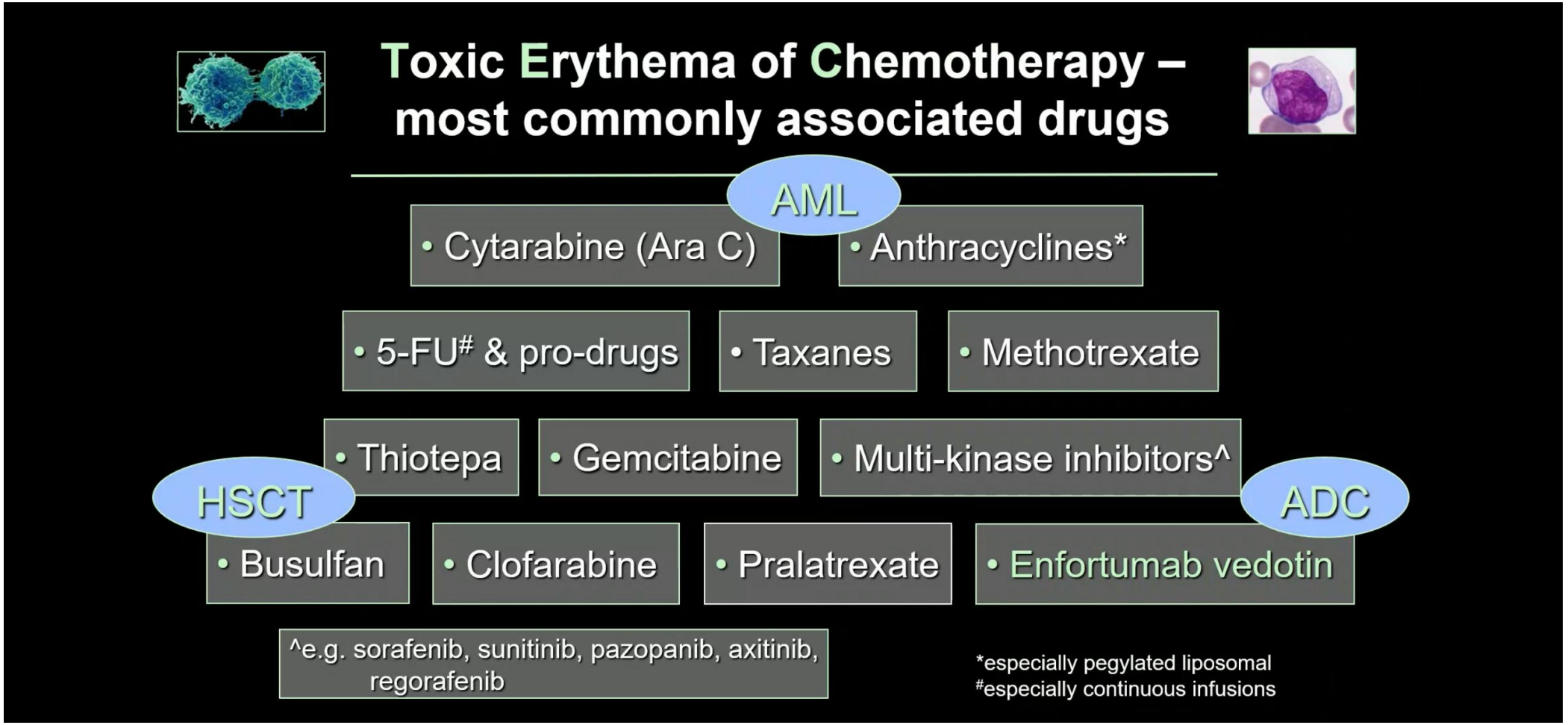
Enfortumab vedotin and TEC

- Toxic erythema of chemotherapy (TEC)
  - flexural exanthem
  - vacuolar interface dermatitis with epidermal maturation disarray
  - palmoplantar erythrodysesthesia
  - bullous dermatitis, flexural bullous dermatitis
- Clinicopathologic series of 8 patients (Hirotsu KE et al, *JAAD* 2021)

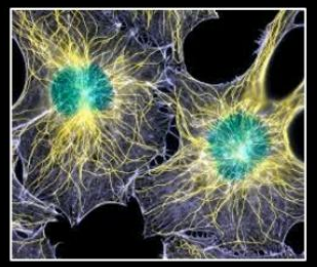




Toxic Erythema o Chemotherapy



Tel



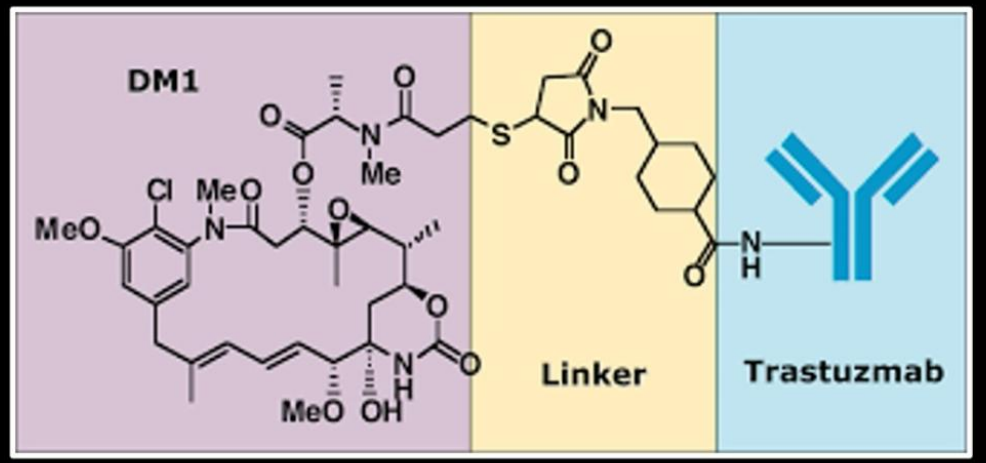
Antibody-drug conjugates

emtansine – disrupts microtubules [1]

Trastuzumab emtansine/T-DM1 | HER2 | HER2+ BC

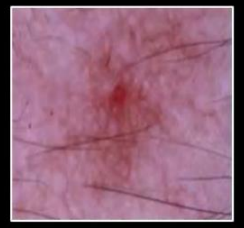
HER2
tyrosine kinase
oncogene
overexpressed
in ~20% of BCs

emtansine



Trastuzumab emtansine - cutaneous side effects

Telangiectasias, often spider-like



- Appear after 2-3 months (up to 14); resolve post D/C
- Upper trunk and palms, oral mucosa
- Dilated vessels; intimal & medial hyperplasia
- Mild transaminitis common
- Cytoskeleton disruption of endothelial cells
- May be associated with pulmonary artery HTN

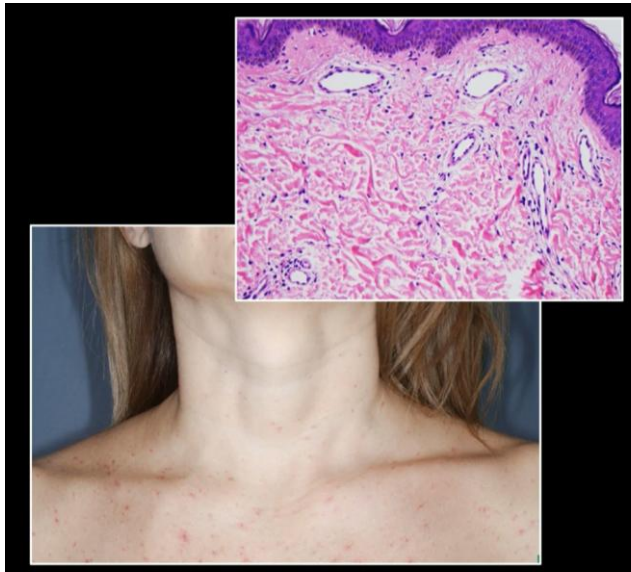
Mucosal **bleeding** (epitaxis, gingival)

- Thrombocytopenia common
- ? related to telangiectasias, as platelets can be WNL

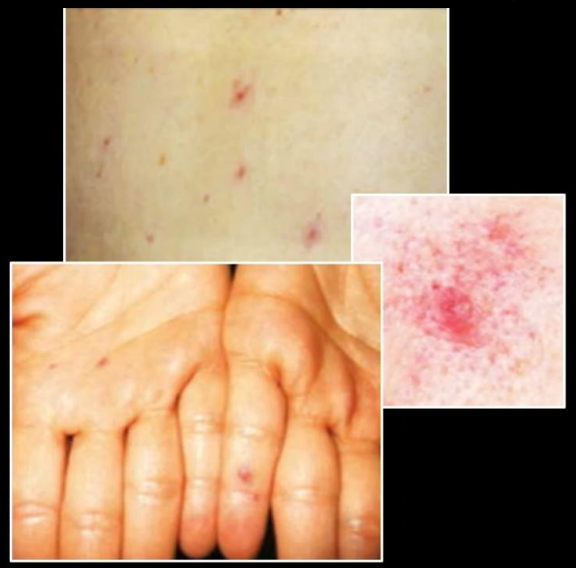
Mucositis; exaggerated radiation dermatitis when concurrent; occasionally TEC; necrosis post extravasation

Gursoy P, et al. *J Oncol Pharm Pract* 2022;28:986

Initial series: Sibaud V, et al. *Breast Cancer Res Treat* 2014;146:451.

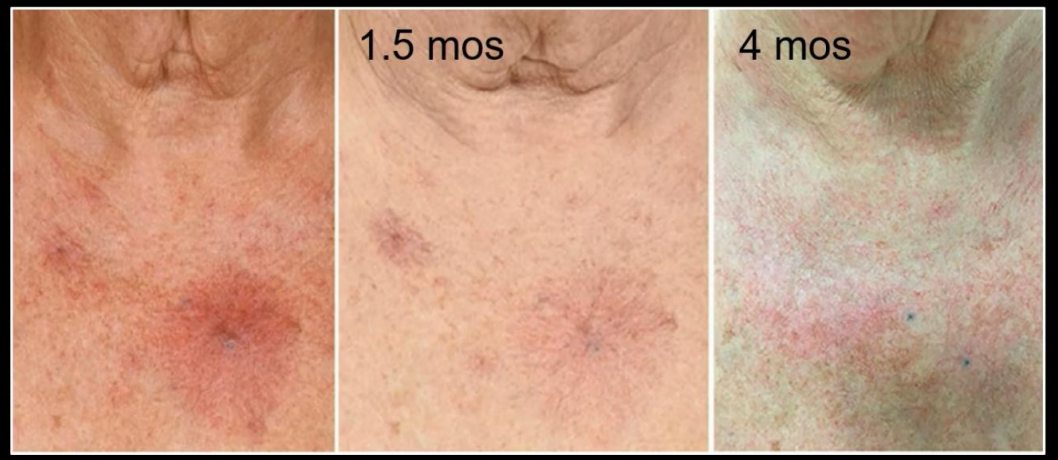


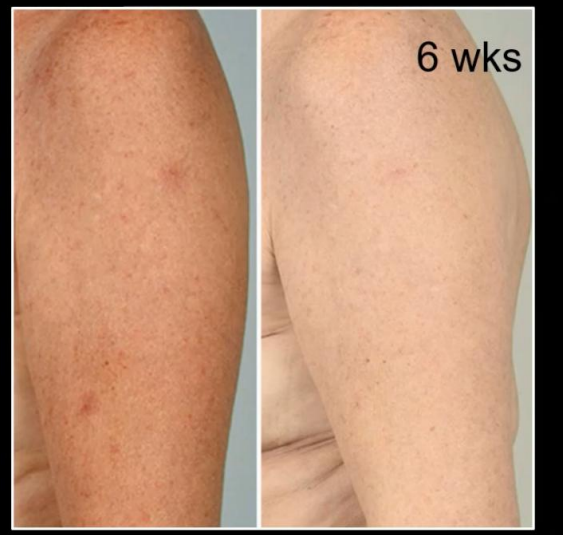
Kwon Y, et al. *Chest* 2016;149:E103-5.



Sibaud V, et al. *BCRT* 2014;146:451-6.

Trastuzumab emtansine – propranolol for telangiectasias





Dose of propranolol up to 160 mg daily

Peuvrel L, et al. *Dermatol Ther* 2019;32:e12756

Cutaneous Adverse Reactions and Antibody-Drug Conjugates: A FAERS 2019-2025 Disproportionality Analysis

Caroline M Cassidy, BS,[1,3] Evan Austin, MD, PhD,[2] Jessica Lori Feig, MD, PhD[3]

Methods

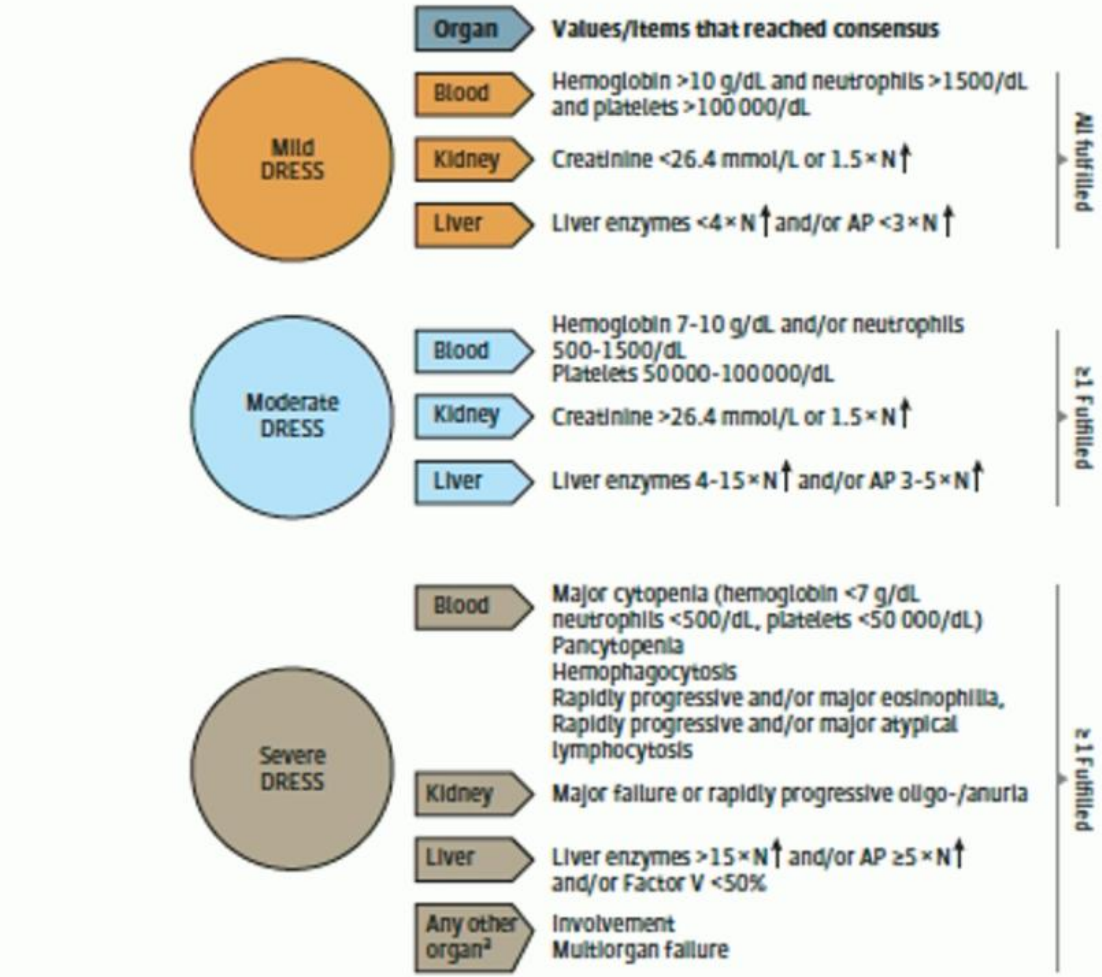
Retrospective pharmacovigilance analysis using FAERS ASCII database (2019 Q1 – 2025 Q2)

Reporting Odds Ratios (ROR) with 95% CI

- For **ANY-CAR**
  - **Enfortumab vedotin: ROR=3.92[3.84-4.0]**
    - 11,659 ANY-CAR exposures (11.6% of total enforumab exposures)
  - **Loncastuximab tesirine: ROR=2.85[2.47-3.28]**
    - 208 ANY-CAR exposures
  - **Tisotumab vedotin: ROR=1.53[1.31-1.79]**
    - 165 ANY-CAR exposures
- For **SCAR**
  - **Enfortumab vedotin: ROR=3.49[3.32-3.66]**
    - 1,560 SCAR exposures

DRESS

Figure 3. Proposed DRESS Severity Grading Based on the Delphi Consensus Statements



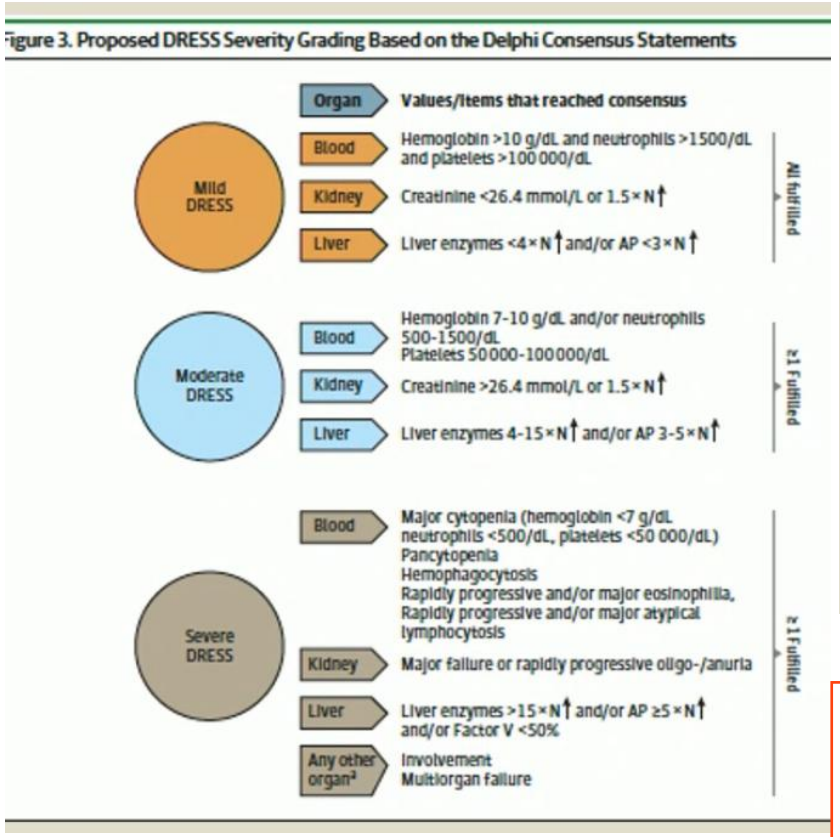
DDS– DRESS/DIHS Severity Scale

DIHS/DRESS severity score (DDS score).[17]

Parameters	Grade/extent	Score
Fixed		
1 age (yr)	≤40	−1
	41–74	0
	75≤	2
2 duration of drug exposure after onset (days)	0–6	0
	7≤	1
3 allopurinol exposure	Yes	1
Variable		
1 pulsed prednisone[1]	Yes	2
2 skin involvement (% BSA)		
Erythema	<70	0
	70≤	1
	Erythroderma	2
Erosion	<10	0
	10–29	1
	30≤	3
3 fever 38.5 °C ≤ (duration, days)	0 or 1	0
	2–6	1
	7≤	2
4 Appetite loss (≤70 % of regular food intake, days)	0–4	0
	5≤	1
5 renal dysfunction (creatinine, mg/dl)	<1.0	0
	1.0–2.0	1
	2.1≤ or HD	3
6 liver dysfunction (ALT, IU/l)	<400	0
	400–1000	1
	1000<	2
7 C-reactive protein (mg/dl)	≤2	−1
	<2–<10	0
	10–<15	1
	15≤	2

- Scored within 3 days of initial presentation then again after 2-4 weeks
- Mild (<1), moderate (1-3), severe (>/= 4)
- A score of 4 or greater predicts higher risk of DRESS complications
- Patients with DDS of 0 rarely develop complications
- A 50% reduction between early and late DDS scores can indicate successful treatment.

Uso de escalas de gravedad para guiar tratamiento



Summary of treatment in DIHS/DRESS depend on disease severity.

Severity (early DDS score)	Mild <1	Moderate 1–3	Severe ≥4
CMV reactivation	No	~20 %	~30 %
iDACs	No	~5 %	~20 %
aDACs	No	~5 %	~15 %
Treatment	Supportive therapy involving topical corticosteroids is administered	• Supportive therapy involving topical corticosteroids is administered. • Systemic corticosteroids (0.5–1.0 mg/kg/day) are continued for 1–2 weeks. • Corticosteroids are tapered gradually over a period of 6–8 weeks.	• Systemic corticosteroids (1.0 mg/kg/day) are continued for 1–2 weeks. • Corticosteroids are tapered gradually over a period of 6–8 weeks.
Anti-CMV treatment	Not necessary	• Immediate initiation of treatment with ganciclovir or valganciclovir is recommended. • Adequate administration of anti-CMV therapy is ensured.	• Immediate initiation of treatment with ganciclovir or valganciclovir is recommended. • Adequate administration of anti-CMV therapy is ensured. • Thorough investigation for CMV reactivation is conducted.

Journal of Investigative Dermatology (2022) **142**, 960–968;

Leves → CC tópicos
Graves → CC 1mg/kg/d hasta mejoría clínica y analítica, descenso a partir de las 8-12 semanas
Evitar pulsos de CC. Igiv controvertido (aumenta el riesgo de complicaciones autoinmunes)
Valorar ahorradores de CC → Cya, inh IL5, iJAK…

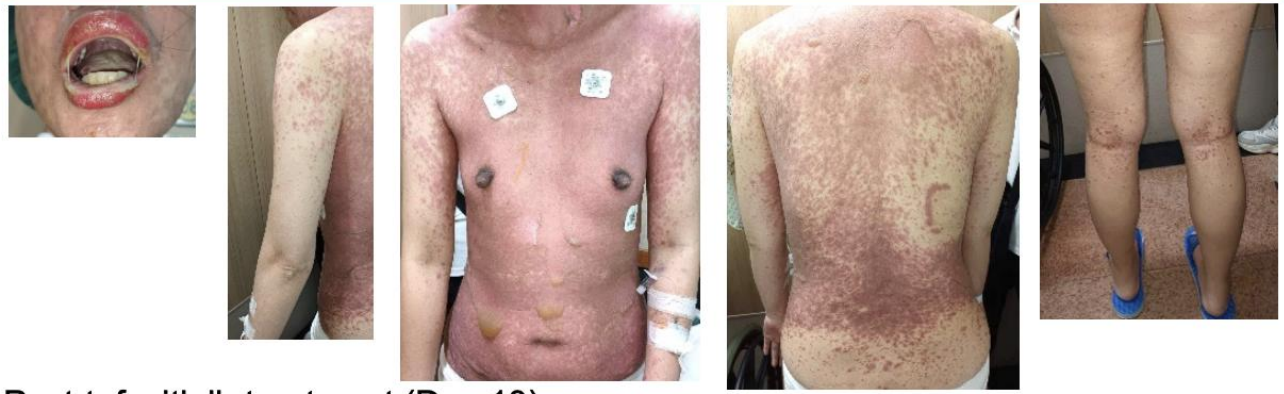
Treatment	Mechanism	Clinical indication	Reported dose[¶]	Evidence (study design)
Topical corticosteroids alone	Inhibitory effects on a broad range of immune responses	Non-severe DRESS (absence of life-threatening organ involvement)	Potent or very potent TCS (betamethasone or clobetasol) 1–2 times/day	Case series (162, 176, 177)
Cyclosporin	Calcineurin inhibitor: inhibition of production and release of IL-2 and downstream activation of resting T-lymphocytes.	1. First-line therapy in early DRESS or patients contraindicated to corticosteroid 2. Second-line therapy in corticosteroid-refractory or recurrent relapsing DRESS	3–5 mg/kg/day for 3–7 days (first-line therapy) or longer A lower dose (1–3 mg/kg/day) has also been reported	Case reports (178–180) Case series (181, 182) Retrospective case–control study (183)
IVIG	1. Replacement therapy for harmful autoantibodies 2. Provides passive immunity by increasing the antibody titer with antigen–antibody reaction potential	1. Monotherapy in patients contraindicated to corticosteroids 2. Add-on therapy as salvage therapy or steroid-sparing agent	0.2–2 g/kg/day for 2–5 days or monthly for 8 months as a steroid-sparing agent	Case reports (184–188) Case series (one prospective study) (189–191)
Cyclophosphamide	Alkylating agent: prevents cell division by cross-linking DNA strands and decreasing DNA synthesis	DRESS with severe internal organ (renal) involvement	750 mg/m² once and relayed by oral cyclophosphamide (100 mg/day) for 6 months	Case reports (192, 193)
Plasmapheresis	Rapid removal of disease-causing autoantibodies or cells	Recurrent, relapsing, or corticosteroid-refractory DRESS with life-threatening organ involvement	4 sessions	Case reports (194–196)
Mycophenolate mofetil	IMPDH inhibitor which inhibits *de novo* guanosine nucleotide synthesis and blocks DNA synthesis	Corticosteroid-refractory DRESS with severe myocarditis (one fatal outcome)	Not specified in studies	Case reports (194, 197)
Mepolizumab	Anti-IL-5 monoclonal antibody	Recurrent, relapsing, or corticosteroid-refractory DRESS	100–300 mg monthly with single or multiple doses	Case reports (198–202)
Benralizumab	Anti-IL-5 receptor monoclonal antibody	Recurrent, relapsing, or corticosteroid-refractory DRESS	30 mg once or monthly	Case reports (198, 202–205)
Reslizumab	Anti-IL-5 monoclonal antibody	For continued use of the culprit drug	100 mg once followed by 200 mg once	Case report (only one case) (206)
Tofacitinib	Pan-JAK inhibitor	Recurrent, relapsing, life-threatening, or corticosteroid-refractory DRESS	5–10 mg/day for more than 1–10 months[§]	Case reports (207–209)

SSJ-NET

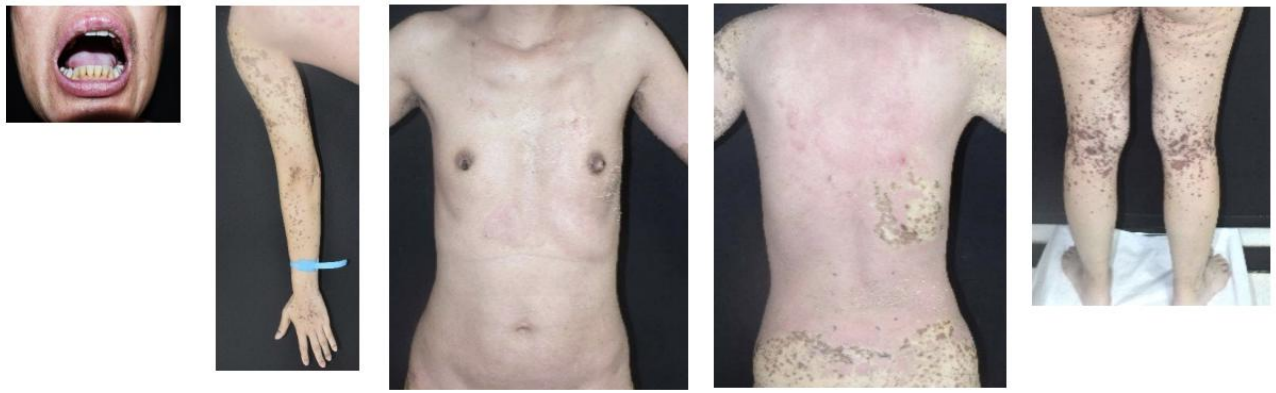

2026 AAD Annual Meeting
長庚紀念醫院
Chang Gung Memorial Hospital
Modulating the JAK–STAT pathway reduces cytotoxic T-lymphocyte activation in the treatment of Stevens–Johnson syndrome and toxic epidermal necrolysis
Wan-Chen Lin, Wen-Hung Chung, Chun-Bing Chen
Drug Hypersensitivity Clinical and Research Center, Department of Dermatology, Chang Gung Memorial Hospital, Linkou, Taipei and Keelung, Taiwan

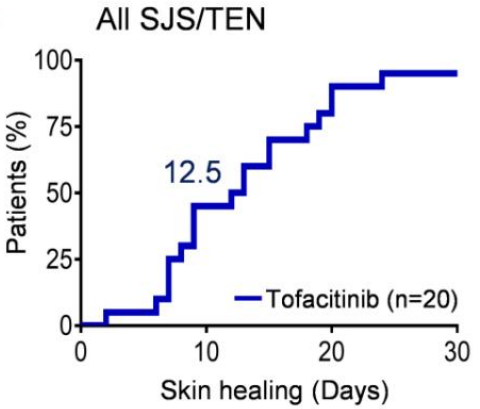
長庚紀念醫院 Chang Gung Memorial Hospital

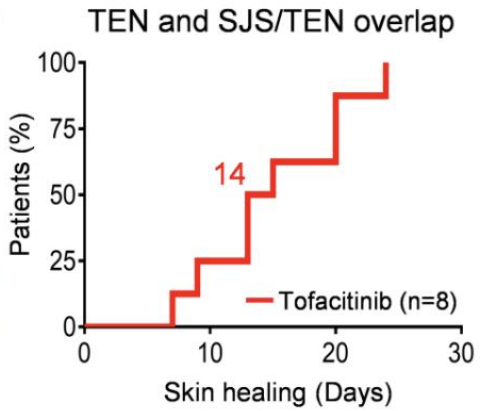
Pre-tofacitinib treatment (Day 0)



Post-tofacitinib treatment (Day 10)







- Our findings establish **JAK1/3-STAT1 signaling** as a pivotal mediator in the immunopathogenesis of SJS/TEN, underscoring targeted pathway inhibition as a promising therapeutic strategy.
- Clinical data strongly support tofacitinib's efficacy in reducing disease severity and accelerating skin recovery, advocating further investigation of **JAK1/3 inhibitors** as viable treatments for severe cutaneous adverse drug reactions.

Long-term cardiovascular morbidity in Stevens-Johnson syndrome: A retrospective TriNetX matched- cohort analysis

Dev Patel, BA[1], Sach Thakker, BS[2], David Wang, BA[3], Joanna Harp, MD [4]

[1] Department of Dermatology, Icahn School of Medicine at Mount Sinai, New York, New York. [2] Department of Dermatology, Georgetown University School of Medicine, Washington, District of Columbia, [3.] Department of Dermatology, Boston University Chobanian & Avedisian School of Medicine, Boston, Massachusetts.

INTRODUCTION

- **Importance**: Stevens-Johnson syndrome (SJS) and toxic epidermal necrolysis (TEN) are severe mucocutaneous reactions characterized by widespread epidermal necrosis. While acute complications are well recognized, long-term cardiovascular risk remains incompletely defined.
- **Objective**: To evaluate long-term cardiovascular morbidity in patients with SJS/TEN compared with propensity-matched controls using a global database.

METHODS

- Adult patients with SJS/TEN (n=2,739) were identified in the TriNetX Global Research Network using ICD-10 coding. Patients with preexisting cardiovascular disease were excluded.
- Controls without SJS/TEN (n=6,998,024) were identified.
- One-to-one propensity score matching was performed on age, sex, race/ethnicity, hypertension, and type 2 diabetes. After matching, 2,737 patients remained in each cohort.
- Cardiovascular outcomes—including myocardial infarction, stroke, pulmonary embolism, venous thromboembolism, and atrial fibrillation—were assessed at 6 months, 3 years, and 5 years post-index date.
- Risk differences and risk ratios were calculated. Bonferroni adjustment was applied for multiple comparisons (P < .00625).

RESULTS

Table 1. Baseline characteristics in SJS vs controls before and after propensity score matching.

	Before PSM, *n* (%)			After PSM *n* (%)		
Characteristic	SJS (*n* = 2739)	Control (*n* = 6,998,024)	SMD	SJS (*n* = 2737)	Control (*n* = 2737)	SMD
Age at index, mean (SD)	56.9 (18.2)	49.3 (17.6)	0.425	56.9 (18.2)	56.8 (18.3)	0.006
Sex						
Female	1593 (58.2)	3,591,191 (52.6)	0.114	1593 (58.2)	1601 (58.5)	0.006
Male	1070 (39.1)	2,855,521 (41.8)	0.055	1070 (39.1)	1066 (39.9%)	0.003
Race						
Asian	198 (7.2)	363,062 (5.3)	0.079	198 (7.2)	198 (7.2)	<0.001
Black or African American	775 (28.3)	909,281 (13.3)	0.376	775 (28.3)	778 (28.4)	0.002
White	1236 (45.2)	3,948,705 (57.8)	0.255	1236 (45.2)	1217 (44.5)	0.014
Native Hawaiian or Other Pacific Islander	23 (0.8)	30,666 (0.4)	0.049	23 (0.8)	24 (0.9)	0.004
Comorbidities						
Essential hypertension	720 (26.3)	919,793 (13.5)	0.326	720 (26.3)	717 (26.2)	0.002
Hyperlipidemia	446 (16.3)	551,026 (8.1)	0.254	446 (16.3)	447 (16.3)	0.001
Type 2 diabetes	358 (13.1)	314,678 (4.6)	0.302	358 (13.1)	349 (12.8)	0.010

PSM, Propensity score matching; *SMD*, standardized mean difference.

Table 2. Incidence and risk of cardiovascular outcomes in SJS vs controls at 6 months, 3 years, and 5 years

			6-mo risk				3-y risk				5-y risk			
Outcome	*N*, SJS cohort	*N*, Control cohort	Cases, SJS cohort (%)	RD, % (95% CI)	RR (95% CI)	*P*	Cases, SJS cohort (%)	RD, % (95% CI)	RR (95% CI)	*P*	Cases, SJS cohort (%)	RD,% (95% CI)	RR (95% CI)	*P*
Myocardial infarction	2737	2737	42 (1.5)	1.2 (0.7, 1.7)	4.200 (2.112, 8.354)	<.001	72 (2.6)	1.8 (1.1, 2.5)	3.273 (2.036, 5.260)	<.001	80 (2.9)	1.9 (1.2, 2.6)	2.857 (1.864, 4.379)	<.001
Pulmonary embolism	2737	2737	64 (2.3)	2.0 (1.4, 2.6)	6.400 (3.293, 12.437)	<.001	83 (3.0)	2.7 (2.0, 3.4)	8.300 (4.316, 15.962)	<.001	88 (3.2)	2.9 (2.2, 3.6)	8.800 (4.585, 16.889)	<.001
Stroke	2737	2737	58 (2.1)	1.7 (1.1, 2.3)	4.833 (2.602, 8.979)	<.001	82 (3.0)	2.3 (1.6, 3.0)	4.100 (2.522, 6.665)	<.001	87 (3.2)	2.4 (1.6, 3.1)	3.955 (2.485, 6.294)	<.001
Venous thrombo-embolism	2737	2737	78 (2.8)	2.5 (1.8, 3.1)	7.800 (4.047, 15.034)	<.001	101 (3.7)	3.3 (2.6, 4.1)	10.100 (5.285, 19.300)	<.001	109 (4.0)	3.4 (2.7, 4.2)	7.267 (4.247, 12.434)	<.001
Atrial fibrillation	2737	2737	243 (8.9)	7.9 (6.7, 9.0)	8.679 (5.890, 12.787)	<.001	278 (10.2)	7.6 (6.3, 8.9)	3.915 (3.034, 5.054)	<.001	290 (10.6)	7.7 (6.3, 9.0)	3.580 (2.815, 4.554)	<.001
Troponin	2812	2812	152 (5.4)	5.1 (4.2, 5.9)	15.2 (8.033, 28.761)	<.001	180 (6.4)	5.9 (5.0, 6.8)	12.857 (7.483, 22.092)	<.001	188 (6.7)	6.2 (5.2, 7.1)	12.533 (7.427, 21.150)	<.001
BNP	2812	2812	184 (6.5)	6.2 (5.2, 7.1)	18.4 (9.758, 34.696)	<.001	224 (8.0)	7.4 (6.3, 8.4)	13.176 (8.070, 21.515)	<.001	233 (8.3)	7.5 (6.4, 8.6)	10.591 (6.862, 16.347)	<.001

CI, Confidence interval; *RD*, risk difference; *RR*, risk ratio; *SJS*, Stevens-Johnson syndrome.

DISCUSSION

- SJS/TEN survivors demonstrated elevated long-term cardiovascular risk across multiple endpoints, including myocardial infarction, stroke, venous thromboembolism, and atrial fibrillation.
- The persistence of risk at 3 and 5 years suggests sustained systemic inflammation, endothelial injury, and prothrombotic mechanisms beyond the acute phase of disease.
- Given that other inflammatory dermatologic conditions are recognized cardiovascular risk factors, SJS/TEN may warrant similar long-term surveillance considerations.

CONCLUSION

- In this large, propensity-matched cohort, SJS/TEN was associated with significantly increased long-term cardiovascular morbidity.
- Risk elevations were observed across arterial and venous thrombotic events and persisted up to 5 years.
- These findings support heightened clinical awareness and consideration of cardiovascular risk assessment and preventive strategies in SJS/TEN survivors.

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2. Chiu HY, Chiu YM. Risk of cardiovascular morbidity and mortality in Stevens-Johnson syndrome/toxic epidermal necrolysis survivors. JAMA Dermatol. 2025;161:391-398.
3. Lee HY, Walsh SA, Creamer D. Long-term complications of Stevens-Johnson syndrome/toxic epidermal necrolysis: the spectrum of chronic problems in survivors necessitates multidisciplinary follow-up. Br J Dermatol. 2017;177(4):924-935.

Table 2. Incidence and risk of cardiovascular outcomes in SJS vs controls at 6 months, 3 years, and 5 years

Outcome	*N*, SJS cohort	*N*, Control cohort	6-mo risk				3-y risk				5-y risk			
			Cases, SJS cohort (%)	RD, % (95% CI)	RR (95% CI)	*P*	Cases, SJS cohort (%)	RD, % (95% CI)	RR (95% CI)	*P*	Cases, SJS cohort (%)	RD,% (95% CI)	RR (95% CI)	*P*
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CI, Confidence interval; *RD*, risk difference; *RR*, risk ratio; *SJS*, Stevens-Johnson syndrome.

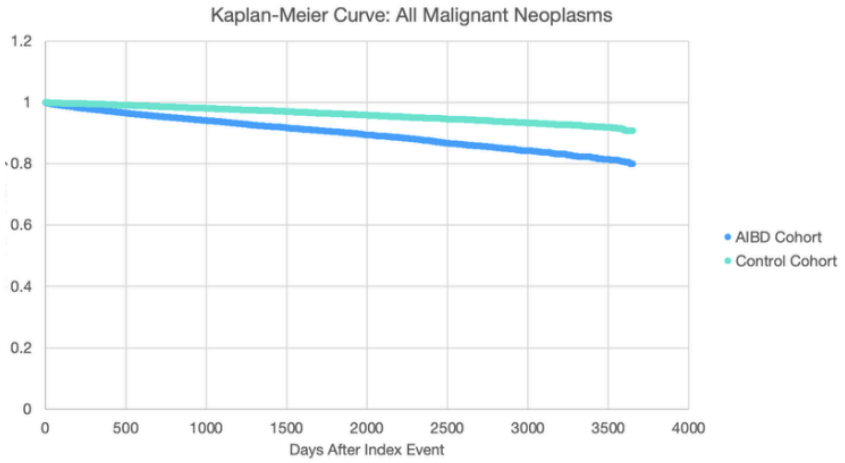
AMPOLLOSAS

BLISTERING DISEASES, LASTING RISKS:

Cancer Burden in Autoimmune Blistering Disorders

Robert Adler, BA; Lori Tsang, BA; Michael Kozlov, BA; Kaitlin Martins, BA;
Houriyah Nukaly, MD; Manan D. Mehta, MD; Emily Cowen, MD;
Katerina Svigos, MD; Justin Wu Marson, MD; Jessica Lori Feig, MD PhD

HAZARD RATIOS FOR MALIGNANCY IN AIBD VS MATCHED CONTROLS



- AIBD is associated with significantly increased malignancy risk at 1, 5, and 10 years, with the strongest risk in the first year after diagnosis.
- Curve separation begins within the first year after diagnosis and persists through 10-year follow-up, aligning with HR observed at 1 year

Malignancy	1 Year HR (95% CI)	5 Year HR (95% CI)	10 Year HR (95% CI)
Any neoplasm	5.607 (5.093, 6.174)	3.595 (3.416, 3.784)	3.275 (3.13, 3.426)
Any malignant cancer	4.478 (3.768, 5.322)	3.066 (2.808, 3.348)	2.734 (2.531, 2.953)
Any lymphoma	15.851 (5.736, 43.8)	4.376 (2.979, 6.428)	3.472 (2.51, 4.804)
Non-Hodgkin lymphoma	19.897 (6.205, 63.8)	4.314 (2.882, 6.457)	3.344 (2.389, 4.681)
Squamous cell carcinoma of skin (SCC)	16.727 (8.156, 34.304)	7.565 (5.659, 10.112)	6.523 (5.081, 8.373)
Basal cell carcinoma of skin (BCC)	12.958 (7.167, 23.427)	4.95 (3.972, 6.167)	4.909 (4.04, 5.964)
Any melanoma	15.596 (4.814, 50.529)	4.134 (2.805, 6.094)	3.793 (2.684, 5.362)
Melanoma in situ	-*	5.374 (2.925, 9.874)	4.1 (2.498, 6.727)
Malignant melanoma	11.784 (3.589, 38.691)	5.027 (3.102, 8.147)	3.905 (2.623, 5.814)
Lung cancer	2.073 (1.266, 3.394)	1.709 (1.323, 2.208)	1.586 (1.267, 1.986)
Breast cancer	3.415 (2.12, 5.5)	2.108 (1.65, 2.693)	2.035 (1.643, 2.521)
Prostate cancer	2.34 (1.494, 3.665)	1.739 (1.364, 2.218)	1.562 (1.26, 1.937)
Colorectal cancer	2.966 (1.557, 5.653)	2.358 (1.663, 3.343)	2.269 (1.677, 3.071)
Kidney cancer	6.01 (2.3, 15.706)	3.684 (2.207, 6.149)	2.886 (1.916, 4.345)
Bladder cancer	4.729 (1.925, 11.62)	2.282 (1.5, 3.473)	2.475 (1.679, 3.648)
Leukemia	6.21 (2.59, 14.889)	4.187 (2.665, 6.578)	3.024 (2.069, 4.42)
Pancreatic cancer	1.609 (0.599, 4.322)	1.246 (0.754, 2.061)	1.441 (0.916, 2.267)
Benign neoplasms*	4.559 (4.018, 5.172)	3.613 (3.382, 3.859)	3.186 (3.006, 3.377)

1. **Adults with autoimmune blistering disorders have a significantly increased risk of malignancy,** especially within the first year after diagnosis, and the risk remains elevated for at least 10 years.

2. **The strongest associations were with cutaneous and hematologic cancers** (melanoma, squamous cell carcinoma, basal cell carcinoma, and lymphoma), with bullous pemphigoid contributing most to the observed risk.

3. **These findings support heightened and ongoing cancer surveillance in patients with AIBD,** particularly regular skin examinations and attention to hematologic malignancy.

Risk of malignancies in patients with bullous pemphigoid; a case-control study

Gaurav N. Pathak, PharmD[1]; Aalia Syed, BMedc[2,3]; Shaunt Mehdikhani, MS[1] Suraj S. Pathak, MS[1]; Brandon Tan, BMed, MD[2,3] ; Dedee F. Murrell, MD[2,3]

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RUTGERS Robert Wood Johnson Medical School

Introduction

- Bullous pemphigoid (BP) is the most common autoimmune blistering disease, predominantly affecting the elderly, caused by autoantibody production against hemidesmosomal proteins BP180 and BP230
- BP has been linked to several comorbidities, yet its relationship with malignancies remains controversial, with conflicting studies reporting both increased and no increased incidence
- A leading proposed mechanism involves cross-reactivity between tumor-specific antibodies and basement membrane zone proteins such as laminin-332, which is also expressed by certain cancers including lung neoplasms
- BP shares key pathophysiological features with atopic dermatitis and prurigo nodularis, conditions themselves associated with increased NMSC risk
- Immunosenescence and chronic immune dysregulation in BP may further predispose affected skin to tumorigenesis

Purpose

- To investigate the association between bullous pemphigoid and malignancy risk, with the goal of informing dermatologist vigilance and cancer surveillance practices in BP patients

Methods

- A case-control study was conducted utilizing the NIH All of Us controlled tier dataset 8 (600,000+ patients, 2018–2024); pemphigoid cases (concept ID 139899) were matched 1:5 to controls via nearest neighbor propensity score matching, controlling for demographics, immunosuppressive use, and insurance status
- A total of 249 BP patients were identified and matched to 1,238 controls; the majority were White (65.46%), older than 65 (67.47%), female (58.23%), and had health insurance (96.39%)
- Comorbid malignancy conditions of interest were evaluated and compared between cases and controls using chi-squared tests, with odds ratios (ORs) and corresponding 95% confidence intervals (CIs) and p-values calculated

Results

Table 1: Association of malignancy and bullous pemphigoid

Parameter	Bullous pemphigoid, n=249 (%)	Matched controls, n=1238 (%)	P values for Chi-squared analysis	Odds Ratio, 95% CI
Squamous cell carcinoma	≤20*	38 (3.07)	0.0116	2.17 (1.19-3.95)
Basal cell carcinoma	28 (11.24)	71 (5.74)	0.0018	2.09 (1.31-3.30)
Melanoma	≤20*	≤20*	0.6385	1.36 (0.37-4.91)
Lung cancer	≤20*	23 (1.86)	0.0396	2.21 (1.04-4.70)
Bladder cancer	≤20*	≤20*	0.0455	2.38 (1.02-5.59)
Colon/rectal cancer	≤20*	26 (2.10)	0.0956	1.75 (0.81-3.78)
Prostate cancer	≤20*	56 (4.52)	0.0433	1.74 (1.02-2.99)
Breast cancer	≤20*	64 (5.17)	0.8189	0.93 (0.49-1.74)
Ovarian cancer	≤20*	≤20*	0.5722	0.55 (0.07-4.37)
Cervical cancer	0 (0.00)	≤20*	0.4472	0.33 (0.02-5.78)
Leukemia	≤20*	≤20*	0.0639	2.36 (0.95-5.85)
Lymphoma	≤20*	27 (2.18)	0.0949	1.87 (0.89-3.92)
Esophageal cancer	0 (0.00)	≤20*	0.8191	0.71 (0.04-13.74)
Liver Cancer	≤20*	≤20*	0.3952	0.41 (0.05-3.18)

Results (Continued)

Table 2: Demographic characteristics of bullous pemphigoid and matched controls

Parameter	Bullous pemphigoid, n=249 (%)	Matched controls, n=1238 (%)	P values for Chi-squared analysis
Race/ethnicity White Asian Black/African American Hispanic only Other Skip	163 (65.46) ≤20* 29 (11.65) 20 (8.03) ≤20* ≤20*	815 (65.83) 45 (3.63) 147 (11.87) 102 (8.24) 90 (7.27) 39 (3.15)	P = 0.9976
Ethnicity Hispanic or Latino Not Hispanic/Latino Not reported	25 (10.04) 214 (85.94) ≤20*	126 (10.18) 1058 (85.46) 39 (3.15)	P =0.9957
Age ≤ 65 >65	81 (32.53) 168 (67.47)	406 (32.79) 832 (67.21)	P = 0.9353
Sex at birth Male Female Other/unknown	101 (40.56) 145 (58.23) ≤20*	498 (40.23) 725 (58.56) ≤20*	P = 0.9951
Education College grade Grade 12/GED + College 1-3 year Less than HS Other	128 (51.41) 101 (40.56) ≤20* ≤20*	632 (51.05) 506 (40.87) 79 (6.38) 21 (1.70)	P = 0.9992
Income <$25,000 <$25,000 Unknown	164 (65.86) 37 (14.86) 48 (19.28)	815 (65.38) 185 (14.94) 238 (19.22)	P = 0.9993
Health insurance Yes No Other	240 (96.39) ≤20* ≤20*	1207 (97.50) ≤20* 20 (1.62)	P = 0.9942
Taking immunosuppressive? Yes No	91 (36.55) 158 (63.45)	445 (35.95) 793 (64.05)	P = 0.857
Geographic region Atlantic Central Southern Western pacific Not reported	84 (33.73) 85 (34.14) 25 (10.04) 48 (19.28) ≤20*	416 (33.60) 423 (34.17) 124 (10.02) 240 (19.39) 35 (2.83)	P =0.9999

Discussion/Conclusion

- BP patients had significantly higher odds of NMSC (SCC: OR 2.17, BCC: OR 2.09), lung (OR 2.21), bladder (OR 2.38), and prostate cancer (OR 1.74); no association was found with gastric, renal, breast, or other assessed cancers
- Proposed mechanisms include immunosenescence, cross-reactive tumor antibodies targeting basement membrane zone proteins, chronic inflammation/pruritus facilitating carcinogenesis, and IST-associated NMSC risk, paralleling findings in atopic dermatitis and prurigo nodularis
- Dermatologists should maintain NMSC vigilance in BP patients on long-term IST, with consideration of regular skin surveillance, photoprotection counseling, and targeted therapies such as dupilumab
- Limitations include small sample size, volunteer/survivor bias, and potential surveillance bias from increased dermatology visits; future studies should assess NMSC risk in larger cohorts and evaluate the cost-benefit of routine skin cancer screening in BP

References

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Cervical cancer	0 (0.00)	≤20*	0.4472	0.33 (0.02-5.78)
Leukemia	≤20*	≤20*	0.0639	2.36 (0.95-5.85)
Lymphoma	≤20*	27 (2.18)	0.0949	1.87 (0.89-3.92)
Esophageal cancer	0 (0.00)	≤20*	0.8191	0.71 (0.04-13.74)
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- Proposed mechanisms include immunosenescence, cross reactive tumor antibodies targeting basement membrane zone proteins, chronic inflammation/pruritus facilitating carcinogenesis, and IST-associated NMSC risk, paralleling findings in atopic dermatitis and prurigo nodularis
- Dermatologists should maintain NMSC vigilance in BP patients on long-term IST, with consideration of regular skin surveillance, photoprotection counseling, and targeted therapies such as dupilumab

GLP-1 Receptor Agonists Are Not Associated With Increased Risk of Bullous Pemphigoid

Analysis of 627,047 Patients in a Real-World Database

Catherine Z. Shen · Thomas Vazquez, MD · Aaron T. Zhao · Christoph T. Ellebrecht, MD

Department of Dermatology, University of Pennsylvania Perelman School of Medicine, Philadelphia, PA

Objective

Compare 2-year BP risk, incidence rates, and post-diagnosis treatment patterns among users of three antidiabetic drug classes:

DPP-4 Inhibitors:
n = 61,899 patients

GLP-1 Receptor Agonists
n = 337,596 patients

Other Antidiabetic Medications
n = 157,081 patients

Bullous Pemphigoid Incidence

per 100,000 person-years

DPP-4 Inhibitors

31–36

per 100,000 PY

GLP-1 Receptor Agonists

9–12

per 100,000 PY

Other Antidiabetic Meds

8–12

per 100,000 PY

Adjusted 2-Year BP Risk

Propensity-matched hazard ratios

GLP-1 RA vs. Other Diabetes Meds

HR 1.12

95% CI 0.65–1.95 · p = 0.68

DPP4i vs. GLP-1 RA

HR 2.41

95% CI 1.32–4.39 · p = 0.003

DPP4i vs. Other Diabetes Meds

HR 3.20

95% CI 1.72–5.96 · p < 0.0001

Post-BP Diagnosis Treatment

% of patients within 2 years of diagnosis

Medication	DPP4i	GLP-1 RA	Other
Prednisone	63%	39%	63%
Methylprednisolone	40%	28%	29%
Mycophenolate mofetil	**20%**	**9%**	**14%**
Doxycycline	53%	35%	49%
Clobetasol (topical)	44%	26%	41%

Discussion & Clinical Implications

Mechanistic Insight

- GLP-1 receptor agonists were not associated with increased BP risk
- Findings argue against GLP-1 signaling as the primary driver
- DPP4i-associated BP likely reflects effects of other DPP4 substrates (eotaxin, substance P)

Limitations

- Retrospective EHR-based design
- ICD-10 case identification
- Limited serologic confirmation

Clinical Implications

- DPP4i users demonstrated higher BP incidence and earlier onset
- Greater need for steroid-sparing therapy, including mycophenolate (20% vs 9%)
- Suggests a more inflammatory or treatment-refractory phenotype
- In patients at elevated BP risk, GLP-1 receptor agonists may represent a safer incretin-based alternative

DPP-4 inhibitor–associated BP appears GLP-1–independent and may represent a more severe inflammatory phenotype.

BP Therapeutic Ladder (Cont'd)

Treatment-recalcitrant BP (resistant to 0.75 mg/kg/day of prednisone)

- **Combination with and/or introduction of conventional immunosuppressants *may be considered***
  - Methotrexate
  - Azathioprine
  - Mycophenolate mofetil
- **Other therapeutic options, which have not been validated in this setting, *may be considered* (without any prioritization)**
  - B-cell depletion therapy with anti-CD20 mAb (rituximab)
  - Omalizumab
  - Dupilumab
  - Intravenous immunoglobulins
  - Immunoadsorption

[†]For details, see specific sections in the text; [‡]BPDAI, Bullous Pemphigoid Disease Activity Index; [§]Syntax for specific recommendations: recommendations from large randomized prospective multicentre studies: 'is recommended'; recommendations from small randomized or non-randomized prospective multicentre or large retrospective multi-centre studies: 'may be recommended'; recommendation pending from case series, or small retrospective single-centre studies: 'may be considered'; We have also used: 'may be considered' when a consensus could not be reached among experts.

Multiple Biologics are Being Evaluated for the Treatment of BP[1-4]

Intervention	Target	Clinical Trial Status	Additional Details
Avdoralimab	C5aR1	Ph2 study completed Results not published yet	
Benralizumab	IL-5	Ph3 FJORD study Study terminated Oct 2023	Efficacy failed to reach futility guidelines
Dupilumab	IL-4/IL-13	Ph3 LIBERTY-BP ADEPT study Primary completion date: wk 36 -Press release Sept 2024	Multiple additional publications support use; week 52 results awaited
Efgartigimod PH20, VyvgarT, Argenx	FcRn	Ph2/3 BALLAD study closed	Approved for generalized myasthenia gravis.Was being evaluated for the treatment of patients with autoimmune diseases with pathogenic IgG autoantibodies.
Nipocalimab	FcRn	Ph2/3 MARIGOLD-BP study	Study design published at ISID 2023; no further updates have been provided and the study is not listed on clinicaltrials.gov
Ustekinumab	IL-12/23	Ph 2 study completed	Some instances of ustekinumab inducing

1. Clinicaltrials.gov. Last accessed September 2024. 2. Karakioulaki M, et al. *Am J Clin Derm.* 2024;25:195-212. 3. ... J Clin Med. 2022;11(10):2950; 4. Kong L, et al. *Front. Med.* 10:1171802.

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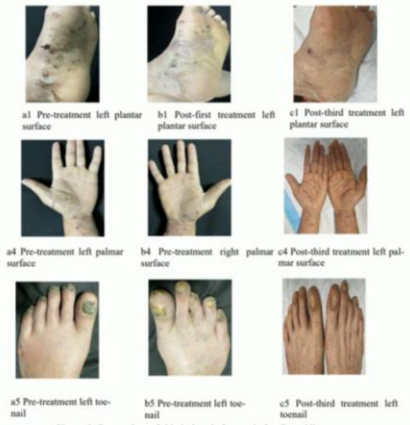
Stakopibart- anti-IL-4α



a1 Pre-treatment left plantar surface | b1 Post-first treatment left plantar surface | c1 Post-third treatment left plantar surface
a4 Pre-treatment left palmar surface | b4 Pre-treatment right palmar surface | c4 Post-third treatment left palmar surface
a5 Pre-treatment left toe-nail | b5 Pre-treatment left toe-nail | c5 Post-third treatment left toenail

Figure 1. Comparison of skin lesions before and after Stapokibart treatment.

59yo M refractory BP
Nail dystrophy
6mo gen pruritus VAS 8/10
High BP180 & BP230 abs
Inadeq response to Methyl pres 20mg/d
& clobetasol 4 wks- 30% reduction in BSA
In 4wks 600mg; 300mg sc q 2w: 8mg pred
BPDAI 32 to 2- BSA red by 60%
Itch VAS 8 to 3

Zhang & Sun, Int J Clin Exp Med Res 2025

JAK inhibitors & BP

SKIN

BRIEF ARTICLE

Remission of Bullous Pemphigoid in a Patient Treated with Upadacitinib: A Case Report

Sydney Martin, BA[1], Joshua Burshtein, MD[1], Sheryl Hoyer, MD[1]

[1] Department of Dermatology, University of Illinois Chicago College of Medicine, Chicago, IL, USA

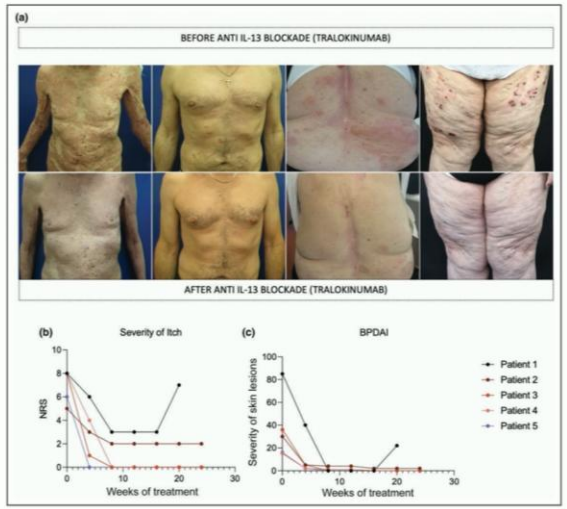
ABSTRACT

Bullous pemphigoid (BP) is a chronic autoimmune blistering disorder that often requires complex medical management. Cases of recalcitrant BP that do not respond to first line agents pose a therapeutic dilemma. Herein, we present a case of recalcitrant BP successfully treated with an oral janus kinase inhibitor, upadacitinib, after limited response with prednisone tapering, doxycycline, dupilumab and omalizumab. We observed substantial improvement following the initiation of upadacitinib after two months, complete remission after six months, and sustained remission one-year post-therapy. This case highlights the emerging potential of JAK inhibitors in managing refractory BP.

Refractory to prednisone, doxycycline, dupilumab,
Omalizumab -each for 6 mo
Upadacitinib 15mg/d – resolved; weaned off 6mo no recurrence

Dermsquared

Tralokinumab –anti-IL13



Case series
5 BP patients with C/I to Corticosteroids
All achieved CDA 4 wks
CR at 3mo- 3
PR at 3mo- 2

Roberto Maglie, Dario Didona, Farzan Solimani , Carlo Pipitò , Maria Efenesia Baffa
Michael Hertl and Emiliano Antiga
BJD March 2026

#AEDVenAAD2026

MISCELÁNEA

Dissecting Cellulitis Is Associated With Elevated Risk of Inflammatory Bowel and Celiac Diseases: A Propensity-Matched TriNetX Cohort Study

Dev Patel, BS[1], Sach Thakker, BS[2], Christine Olagun-Samuel, BA[3], Prince Adotama, MD[3]

[1]Department of Dermatology, Icahn School of Medicine at Mount Sinai, New York, NY, [2]Georgetown University School of Medicine, Washington, DC, [3]Ronald O. Perelman Department of Dermatology, New York University School of Medicine, New York, New York

INTRODUCTION

- **Importance**: Dissecting cellulitis of the scalp (DCS) shares inflammatory pathways with psoriasis and hidradenitis suppurativa, including IL-23/IL-17 and TNF-α signaling. Its association with gastrointestinal autoimmunity remains incompletely defined.
- **Objective**: To evaluate the risk of inflammatory bowel disease (IBD), celiac disease, and related autoimmune conditions in adults with DCS using a global propensity-matched cohort.

METHODS

- Adults with DCS (ICD-10 L66.3) were identified in the TriNetX Global Collaborative Network.
- Patients with other follicular-occlusion disorders were excluded.
- Controls without DCS undergoing routine medical examination were identified.
- One-to-one propensity score matching was performed. After matching, 124,044 patients remained in each cohort.
- Incident Crohn disease, ulcerative colitis, composite IBD, celiac disease, and pernicious anemia were assessed.
- Elevated fecal calprotectin (>200 μg/g) was evaluated as a secondary endpoint.
- Risk differences and relative risks were calculated. Bonferroni correction was applied (adjusted α = 0.01).

RESULTS

	Before PSM, n (%)			After PSM, n (%)		
Characteristics	Dissecting Cellulitis (n=124,044)	Control (n=8,197,265)	SMD	Dissecting Cellulitis (n=124,044)	Control (n=124,044)	SMD
Age at index, mean (SD)	53.6 (16.7)	52.8 (18.1)	0.048	53.6 (16.7)	53.6 (16.7)	<0.001
Race (%)						
White	76,792 (61.9)	5,133,835 (62.6)	0.015	76,792 (61.9)	76,792 (61.9)	<0.001
Hispanic or Latino	11,926 (9.6)	706,608(8.6)	0.035	11,926 (9.6)	11,926 (9.6)	<0.001
Black or African American	18,911 (15.2)	1,076,101(13.1)	0.061	18,911 (15.2)	18,911 (15.2)	<0.001
Asian	5,805 (4.7)	428,314(5.2)	0.025	5,805 (4.7)	5,805 (4.7)	<0.001
Gender (%)						
Male	63,933(51.5)	3,534,132(43.1)	0.169	63,933(51.5)	63,933(51.5)	<0.001
Female	60,095(48.4)	4,578,131(55.8)	0.149	60,095(48.4)	60,095(48.4)	<0.001

Table 1. Baseline Characteristics in Dissecting Cellulitis vs. Control Before and After Propensity Score Matching

After matching, cohorts were well balanced across age, race, and sex, with negligible standardized mean differences, indicating appropriate comparability between groups.

			Anytime after diagnosis risk (95% CI)		
Outcome	Dissecting Cellulitis Cohort, (n=124,044)	Control Cohort, (n=124,044)	Risk Difference	Relative Risk	p-value
Celiac disease	649 (0.5%)	442 (0.4%)	0.002 (0.001, 0.002)	1.468 (1.301, 1.657)	<0.001
IBD	13,620 (11.0%)	3,135 (2.5%)	0.085 (0.083, 0.086)	4.344 (4.182, 4.513)	<0.001
Crohn's Disease	1,386 (1.1%)	686 (0.6%)	0.006 (0.005, 0.006)	2.020 (1.844, 2.213)	<0.001
Ulcerative Colitis	1,471 (1.2%)	896 (0.7%)	0.005 (0.004, 0.005)	1.642 (1.511, 1.783)	<0.001
Elevated fecal calprotectin (>200 μg/g)	1,987 (1.6%)	653 (0.5%)	0.011 (0.009, 0.013)	3.21 (2.94, 3.50)	<0.001
Pernicious anemia	294 (0.2%)	267 (0.2%)	0.000 (-0.000, 0.001)	1.101(0.933, 1.299)	0.254

Table 2. Odds of Developing Autoimmune Comorbidities in Patients with Dissecting Cellulitis

Dissecting cellulitis was associated with significantly increased risk of composite IBD, Crohn disease, ulcerative colitis, celiac disease, and elevated fecal calprotectin. Pernicious anemia did not differ between cohorts.

DISCUSSION

- Adults with dissecting cellulitis demonstrated significantly higher rates of inflammatory bowel disease and celiac disease compared with matched controls.
- The consistent increase in Crohn disease, ulcerative colitis, and elevated fecal calprotectin suggests that DCS and gastrointestinal autoimmunity may share overlapping inflammatory pathways.
- These findings indicate that DCS may reflect systemic immune dysregulation rather than a condition limited to the scalp.
- Clinicians should maintain awareness of potential gastrointestinal symptoms in patients with DCS.

CONCLUSION

- In this large, propensity-matched cohort, dissecting cellulitis was associated with significantly increased risk of inflammatory bowel disease and celiac disease.
- These results support heightened clinical awareness and consideration of targeted gastrointestinal evaluation in patients with DCS.

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1.Gerlero P, Peron I, Doche I, Rodrigues EF, Macedo T, Rivitti-Machado MC. Dissecting cellulitis of the scalp: clinical characteristics and impact on quality of life of 66 Brazilian patients. Anais Brasileiros de Dermatologia.
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Quantifying Dermatological Comorbidities in Ehlers-Danlos Syndromes: A U.S. National Study on Follicular Occlusion Disorders

Dylan Wambold, B.S[1]; S. Minhaj Rahman, MD[2,3]; Omar Alani, ScB[4]; Nashwah Memon, B.S[5]; Fahad Ahmed, MD[6]; Shree Kalapatapu, MD[3]; Adel Haque, MD[7]

Drexel University College of Medicine[1]; Department of Dermatology, University of Connecticut Health Center[2]; Department of Medicine, Northwell Northern Westchester Hospital[3]; Icahn School of Medicine at Mount Sinai[4]; Lake Erie College of Osteopathic Medicine[5]; Department of Dermatology, University of Miami Health[6]; Department of Dermatology, Perelman School of Medicine at the University of Pennsylvania[7]

Introduction

- Ehlers-Danlos syndromes (EDS) are inherited connective tissue disorders characterized by collagen abnormalities.
- Although skin fragility and impaired wound healing are well recognized, the relationship between EDS and inflammatory and follicular dermatoses remains poorly defined.

Objective:

- To quantify the incidence and prevalence of acne and related follicular skin disorders in patients with EDS.

Methods

- Retrospective cohort study using the TriNetX Research Network
- **Experimental cohort: p**atients aged 12–50 years with ≥2 EDS diagnoses within 12 months
- **Control cohort:** patients aged 12-50 with no history of EDS, Marfan syndrome, or Osteogenesis imperfecta
- Patients receiving acne-inducing medications were excluded
- **Propensity-score matching:** 1:1 for age, sex, race, ethnicity, and BMI
- **Analysis:** hazard ratios (HR) with 95% confidence intervals (CI)

Results

- 44,448 EDS patients were matched to 44,448 controls.
- EDS was associated with significantly increased incidence of multiple follicular dermatoses.
- Strongest associations were observed for keratosis pilaris (HR: 1.66), hidradenitis suppurativa (HR: 1.55), and rosacea (1.50).
- Increased risk was also observed for folliculitis (HR: 1.38) and acne vulgaris (HR: 1.19).

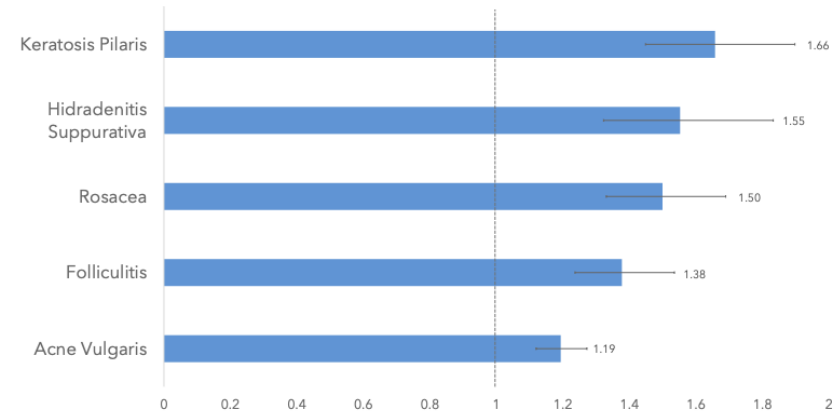


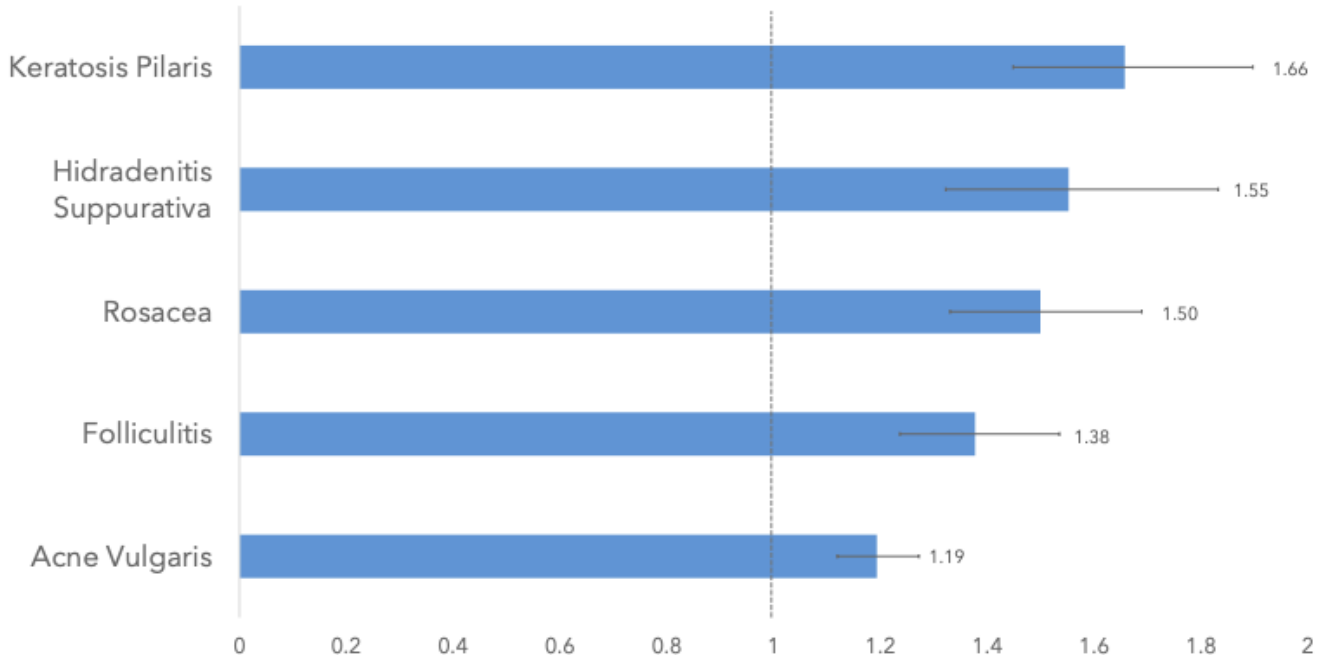
Figure 1. Hazard ratios for inflammatory and follicular dermatoses among patients with Ehlers-Danlos syndromes compared with matched controls.

Discussion

- Patients with Ehlers-Danlos syndromes demonstrated increased risk of multiple inflammatory and follicular dermatoses, including acne vulgaris, folliculitis, hidradenitis suppurativa, keratosis pilaris, and rosacea.
- These associations likely reflect the combined effects of extracellular matrix fragility and immune dysregulation, which may promote follicular inflammation and impaired cutaneous homeostasis.
- Increased prevalence of immune-mediated and wound-healing disorders further supports a broader dermatologic inflammatory phenotype in EDS.

Conclusion

- Ehlers-Danlos syndromes are associated with an increased burden of inflammatory and follicular dermatoses.
- Early recognition and proactive dermatologic management may help reduce complications related to inflammation, scarring, and impaired wound healing in this population.



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HARVARD MEDICAL SCHOOL

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Towards a Predictive Model for Systemic Disease in Small Vessel Vasculitis of the Skin

Arjun Mahajan, MS[1,2], William Song, MD[3], Andrew C. Walls, MD[1,2], Arash Mostaghimi, MD, MPH[1,2], Robert G. Micheletti, MD[*1,2], Evan W. Piette MD[1,2*]

1 – Department of Dermatology, Brigham and Women's Hospital; Boston, MA, USA
2 – Harvard Medical School; Boston, MA, USA
3 – Department of Dermatology, University of Pennsylvania, Philadelphia, PA, USA

*Denotes co-senior authorship

AM is supported by the Rheumatology Research Foundation. All other authors have no relevant disclosures.

Study aim: begin to develop a risk stratification framework/predictive model to identify systemic disease in patients presenting with SVV of the skin

Study Design

Multi-institutional case-control study of 430 adults with biopsy-proven LCV

Cases

Systemic disease (systemic vasculitis, connective tissue disease–associated, or end organ dysfunction)

Controls

Skin-limited SVV without systemic involvement

ML Models Built

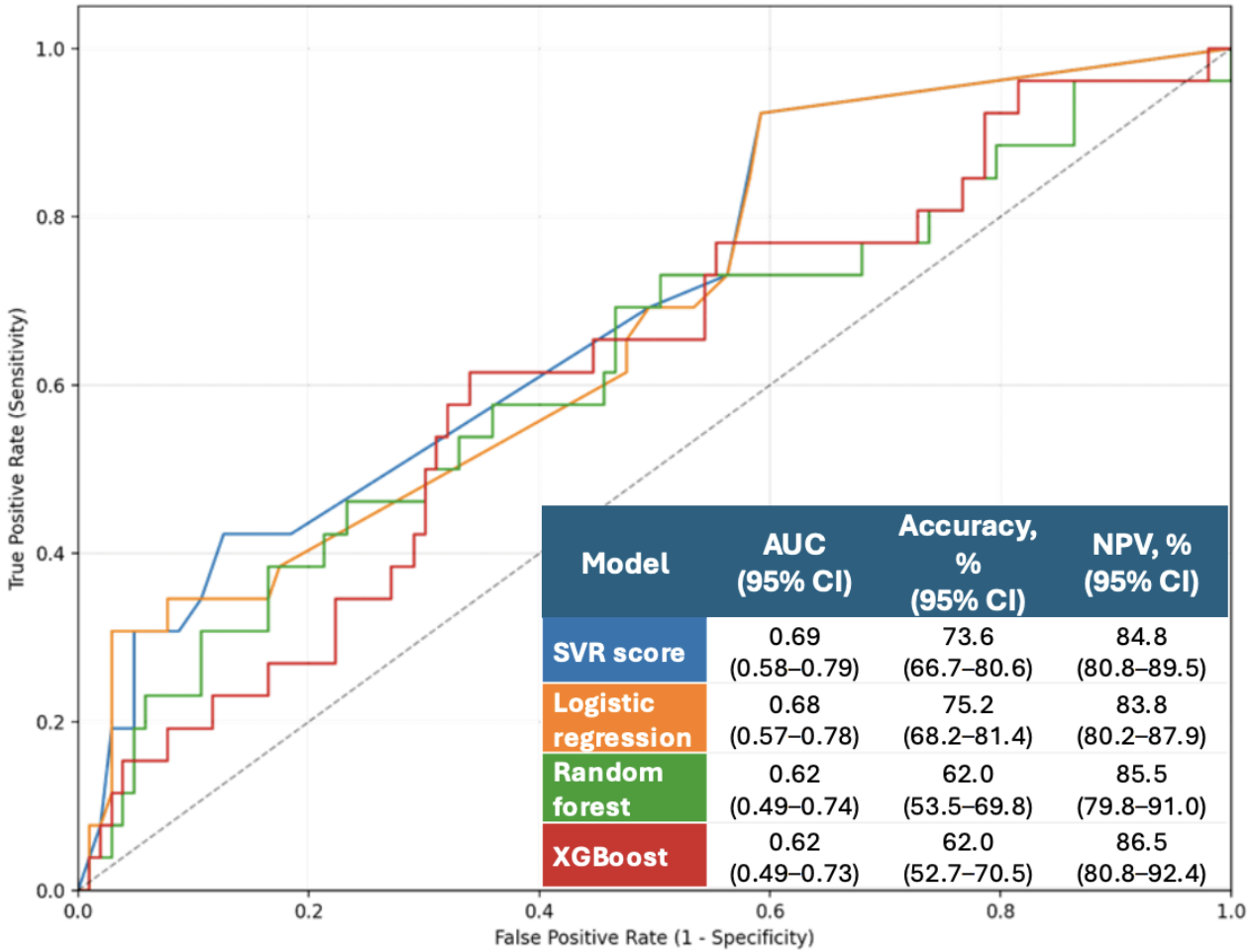
- Points-based risk score (Systemic Vasculitis Risk [SVR] score)[5]
- Random forest
- Elastic net regression
- XGBoost

Training/Validation

- 70% of dataset used for training
- Hyperparameters tuned by 5-fold cross-validation
- 30% data held out for validation

Results

Performance of Point-of-Care Models



Model	AUC (95% CI)	Accuracy, % (95% CI)	NPV, % (95% CI)
SVR score	0.69 (0.58–0.79)	73.6 (66.7–80.6)	84.8 (80.8–89.5)
Logistic regression	0.68 (0.57–0.78)	75.2 (68.2–81.4)	83.8 (80.2–87.9)
Random forest	0.62 (0.49–0.74)	62.0 (53.5–69.8)	85.5 (79.8–91.0)
XGBoost	0.62 (0.49–0.73)	62.0 (52.7–70.5)	86.5 (80.8–92.4)

Systemic Vasculitis Risk (SVR) Score Point Values

Clinical Variable	Point Value
Abdominal pain/ cramping	+7
Ulcerating or necrotic lesions	+4
Fatigue/malaise/lethargy	+2
Nausea/vomiting	+1
Joint pain (arthritis or arthralgia)	+1
Antibiotic use (up to 2 weeks preceding)	-5

Conclusiones

- La **correcta interpretación del ANA y los autoanticuerpos** sigue siendo clave en lupus y dermatomiositis para identificar enfermedad sistémica y guiar el manejo.
- La **incorporación de nuevas terapias dirigidas en lupus y dermatomiositis** está cambiando el pronóstico, permitiendo un abordaje más personalizado y basado en mecanismos.
- Las **nuevas terapias oncológicas están redefiniendo las toxicodermias**, con patrones clínicos específicos que requieren reconocimiento precoz para un manejo adecuado.
- En SCAR, la estratificación de gravedad y el desarrollo de terapias dirigidas, como los **inhibidores de JAK**, están transformando el tratamiento.
- Los **dermatólogos** deben tener un papel fundamental en el diagnóstico y tratamiento de las **enfermedades autoinmunes** y las **condiciones sistémicas con afectación** cutánea.

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27 — 31
Marzo

highlights

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