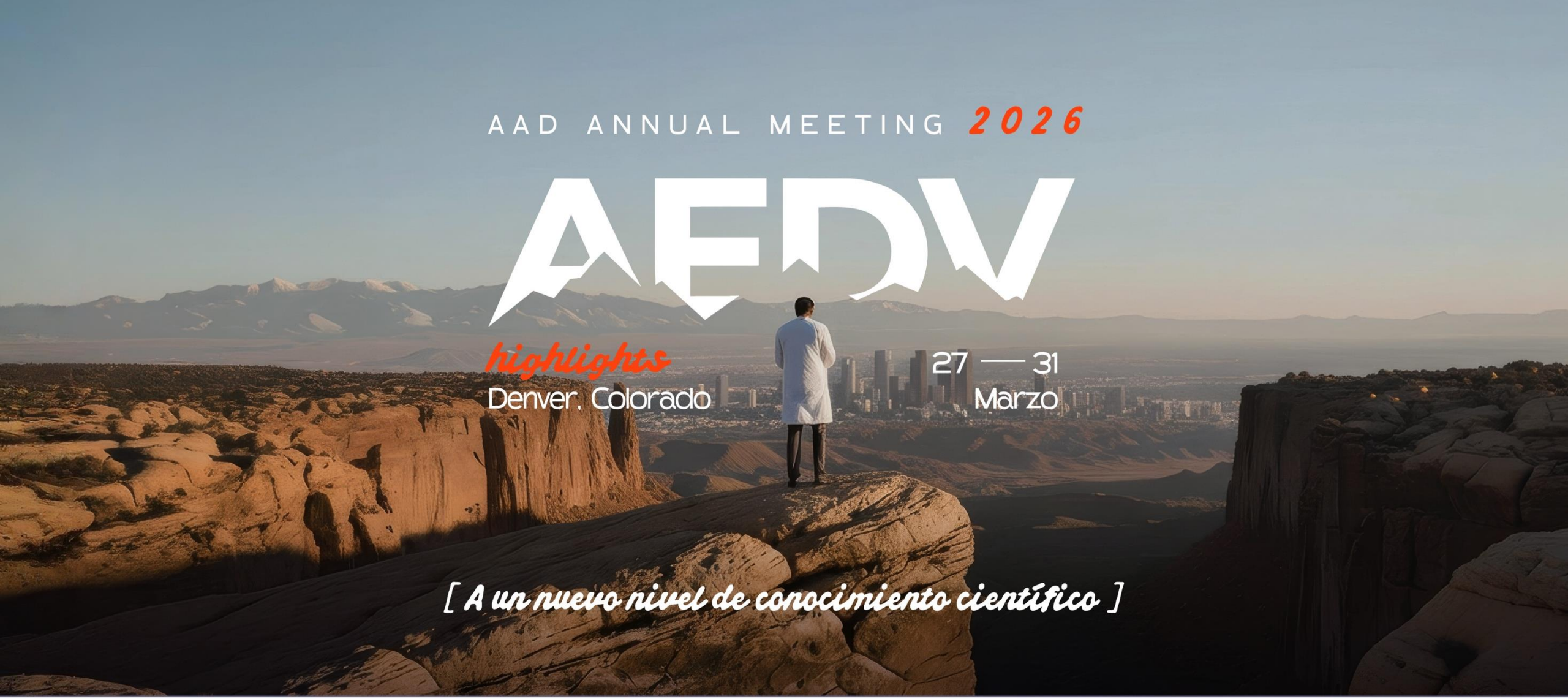


Una iniciativa de:

AEDV 1909 ACADEMIA ESPAÑOLA DE DERMATOLOGÍA Y VENEREOLOGÍA

FUNDACIÓN AEDV PIEL SANA ACADEMIA ESPAÑOLA DE DERMATOLOGÍA Y VENEREOLOGÍA

Con el patrocinio de:

ucb

ITS y otras enfermedades infecciosas (parte I)

"Infecciones emergentes que resaltan el valor de la dermatología infecciosa"

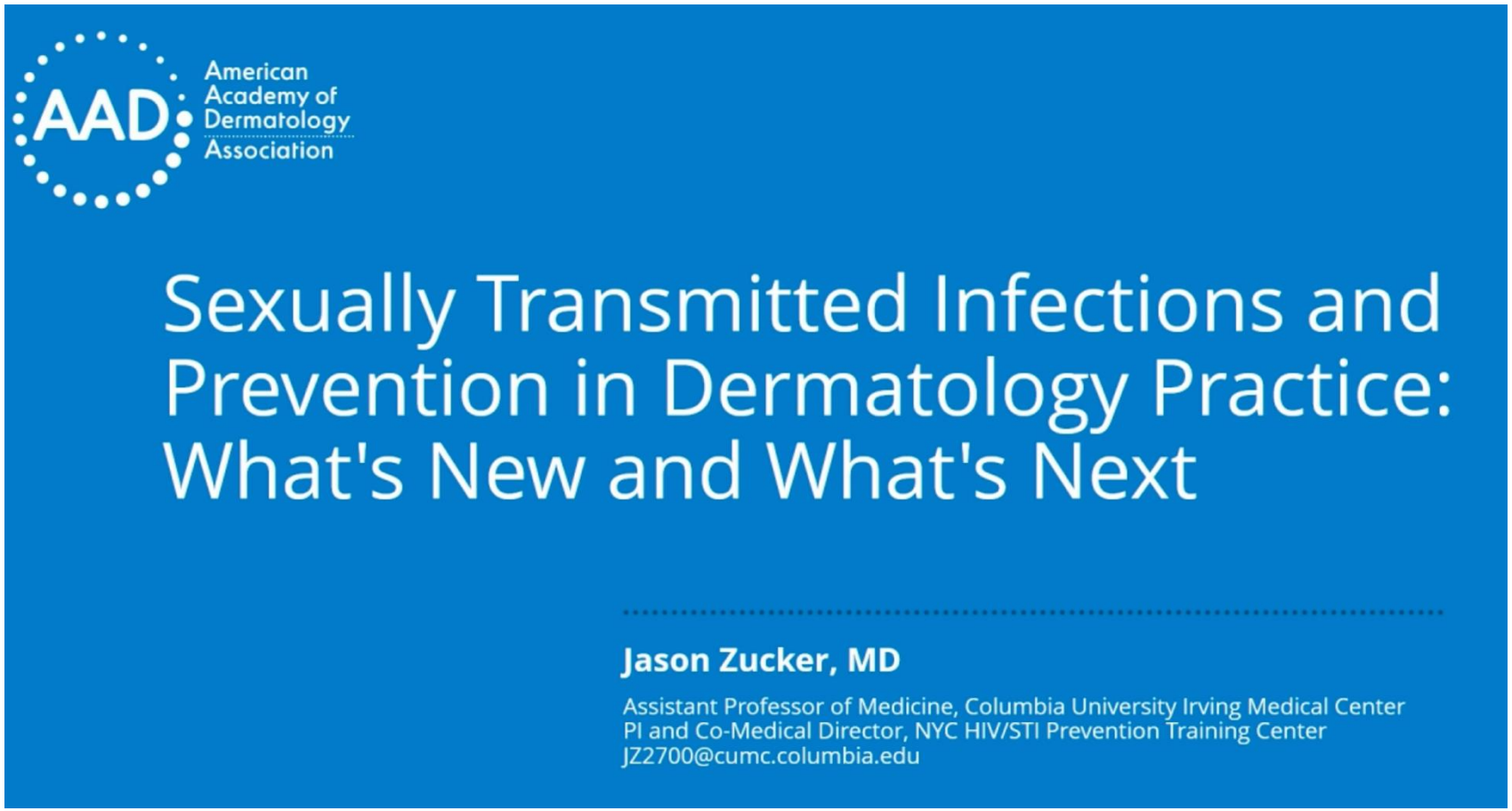
Miguel Mansilla Polo

Hospital Universitario y Politécnico La Fe

UCB

SÍ TENGO CONFLICTOS DE INTERÉS

1. VIH e ITS emergentes


American Academy of Dermatology Association
Sexually Transmitted Infections and Prevention in Dermatology Practice: What's New and What's Next
Jason Zucker, MD
Assistant Professor of Medicine, Columbia University Irving Medical Center
PI and Co-Medical Director, NYC HIV/STI Prevention Training Center
JZ2700@cumc.columbia.edu

Injectable Antiretroviral Therapy and Dermatology

Feature	Cabotegravir (CAB-LA)	Lenacapavir (LEN)
Route	IM gluteal	SQ abdominal
Frequency	Every 2 months	Every 6 months
Injection Site Reaction (ISR) Rate	82% (HPTN 083 — MSM/TGW) 38% (HPTN 084 — cisgender women)	63% (CAPELLA) 69% (PURPOSE-1), 83% (PURPOSE-2)
ISR Duration	Median: 4 days **Rarely persistent**	**Acute erythema**: Days **Nodules**: Median of 288 days (CAPELLA); 350 days (PURPOSE 1), 297 days (PURPOSE 2)
ISR Morphology	Erythema, induration, pain	Acute: Erythematous plaque Persistent: subcutaneous nodule, 1–4 cm
Biopsy Finding	Rarely biopsied	Chronic granulomatous inflammation
When would they be referred to Dermatology?	Rarely, only if persistent abscess or unusual presentation	**Nodule persisting >6-12 months** **Suspected necrosis or ulceration (intradermal injection error)**

⚠ **Lenacapavir nodules can be normal and expected**

Nódulos por lenacapavir (sc) – muy frecuentes, persistentes


Biologic and Targeted Therapies for Inflammatory Skin Disease in People with HIV
Philip Doiron, BSc(Pharm), MSc HSEd, MD, FRCPC, DABD
Assistant Professor, University of Toronto
Division of Dermatology
Women's College Hospital
University Health Network

People with HIV Have an Increased Risk of Inflammatory Dermatologic Conditions: A Large Propensity-Matched Retrospective Cohort Study

Amanda Gong, BS[1]; Rebecca Goldberg, MD[2]; Geethika Ameneni, BS[1]; Diego Garcia, BS[1]; Jonathan Sayegh, BS[1]; Dathan Hamann, MD[2,3]; Carsten R. Hamann, MD PhD[2,3,4]

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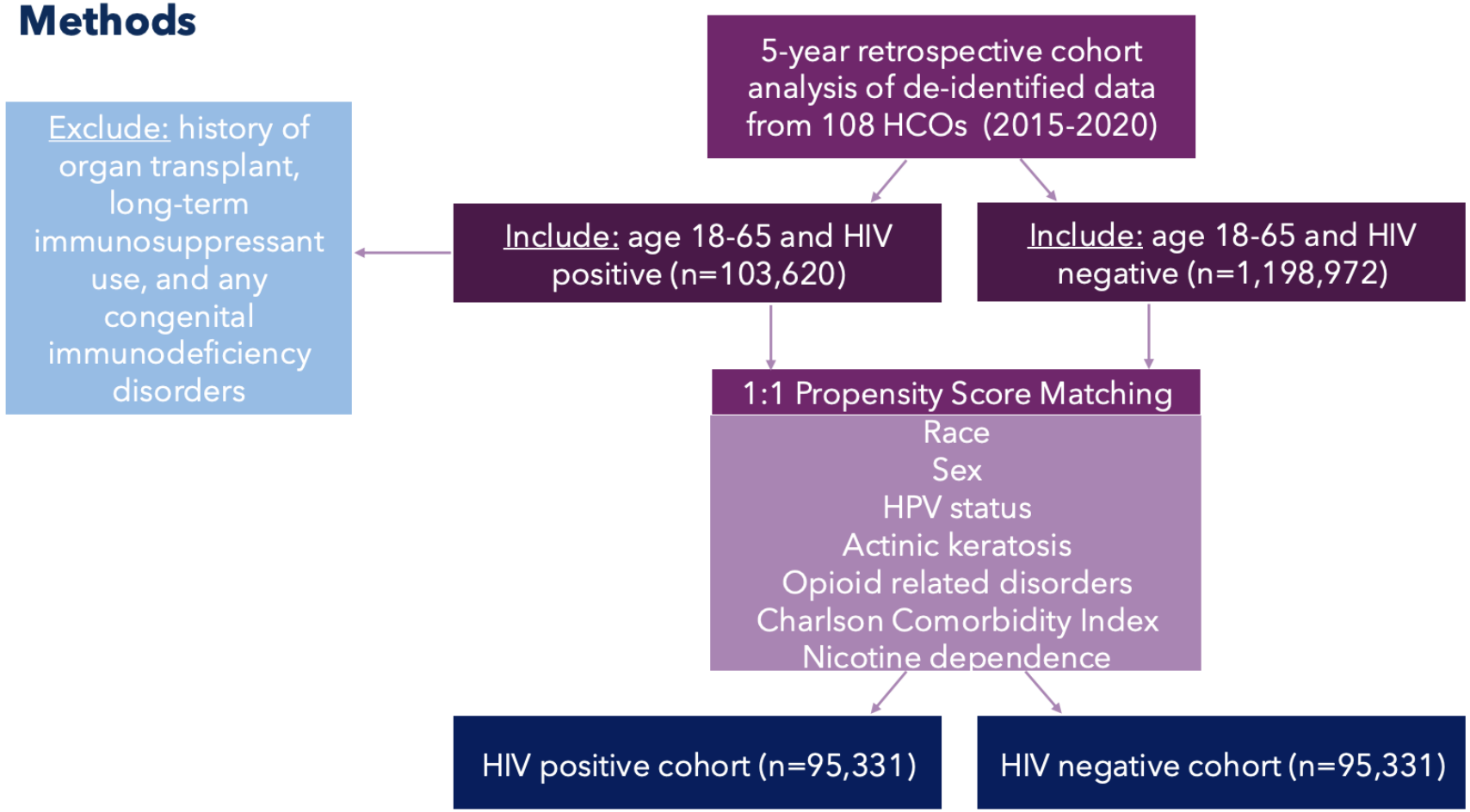
Disclosures

- The authors have no relationships to disclose.

Methods


5-year retrospective cohort analysis of de-identified data from 108 HCOs (2015-2020)
Include: age 18-65 and HIV positive (n=103,620)
Include: age 18-65 and HIV negative (n=1,198,972)
Exclude: history of organ transplant, long-term immunosuppressant use, and any congenital immunodeficiency disorders
1:1 Propensity Score Matching
Race
Sex
HPV status
Actinic keratosis
Opioid related disorders
Charlson Comorbidity Index
Nicotine dependence
HIV positive cohort (n=95,331)
HIV negative cohort (n=95,331)

Results

Cutaneous Malignancy	Risk (HIV+)	Risk (HIV-)	p-value	Risk Ratio	95% CI
Acne	0.017	0.004	<0.0001*	4.678	(4.165, 5.254)
Psoriasis	0.006	0.002	<0.0001*	3.368	(2.843, 3.990)
Hidradenitis Suppurativa	0.005	0.002	<0.0001*	2.944	(2.477, 3.500)
Alopecia Areata	0.001	0.000	<0.0001*	5.041	(3.310, 7.678)
Vitiligo	0.001	0.000	<0.0001*	5.002	(3.131, 7.990)
Chronic Spontaneous Urticaria	0.008	0.002	<0.0001*	3.415	(2.938, 3.971)
Atopic Dermatitis	0.007	0.002	<0.0001*	3.642	(3.104, 4.274)
Prurigo Nodularis	0.004	0.000	<0.0001*	9.718	(6.896, 13.694)
Seborrheic Dermatitis	0.018	0.003	<0.0001*	6.791	(5.942, 7.762)

Table 2. Five-Year Incidence of Inflammatory Conditions in HIV Patients Associations were significant at $p<0.0056$ after Bonferroni correction to reduce Type 1 error.

Conclusion

These results provide strong evidence that PWH face a markedly increased risk of several major inflammatory skin conditions.

Given these findings, routine dermatologic surveillance should be considered an integral component of comprehensive HIV care.

Psoriasis Management in HIV

- JEADV Dec 2025
- French guidelines on systemic treatments for moderate-to-severe psoriasis in adults: Update 2025

cated. For well-controlled HIV patients, we suggest using the same algorithm as non-HIV patients in collaboration with HIV specialists (except for deucravacitinib). All the recom-

TABLE 10 (Continued)

B. Recommendations for patients with HIV infection	
We recommend testing for HIV (HIV-1 and HIV-2 antibodies and HIV-1 antigen) infection in all patients before starting a systemic treatment for psoriasis	↑↑
We recommend considering ongoing screening for HIV in people who are at increased risk of infection* (e.g. annually) or retest for HIV infection in any person who has symptoms, severe worsening of the psoriasis or other conditions that might represent HIV seroconversion/infection.	↑↑
We recommend working in collaboration with a relevant specialist when prescribing systemic therapy in any psoriasis patient with HIV infection	↑↑
We recommend optimising effective antiretroviral treatment in psoriasis patients with HIV infection and ensure HIV viral load is suppressed on antiretroviral therapy before considering immunosuppressive systemic therapy.	↑↑
We suggest treating well-controlled HIV patients with the same algorithm as non-HIV patients in collaboration with HIV specialists (except for deucravacitinib)	↑
We suggest discussing treatment options in a multidisciplinary team meeting for patient with uncontrolled HIV infection	↑
We cannot make recommendations regarding the use of deucravacitinib in cases of HIV infection.	0

** Men who have sex with men, with frequent partner change or practising 'chemsex', intravenous or intranasal drug users, commercial sex workers, recipients of recent tattoos or recent blood transfusions abroad.*

Adverse Events TNFi in HIV

- Infection
  - No clear increase compared to general TNFi population
  - Likely increased risk: uncontrolled HIV, concomitant immunosuppression
- Lymphoma
  - Psoriasis, rheumatoid arthritis, HIV all have elevated risk at baseline, intersection unclear
- Cochrane Review (2011) on adverse effects of biologics specifically did not include studies in HIV

IL-12/23i

- Ustekinumab - 18 published patient cases
- Efficacy in all cases, including some TNFi failures
- No adverse effects
- No changes in CD4 count, viral load (some increased)

IL-17i

- Secukinumab – 8 published patient cases
- Ixekizumab – 25 published patient case
- Brodalumab – 1 published patient case
- Efficacy in all cases
- One patient with oropharyngeal candidiasis, responded to fluconazole
- No serious adverse events
- No changes in CD4 count, viral load (some increased)

IL-23i

- Guselkumab – 8 published patient cases
- Risankizumab – 15 published patient cases
  - 1 case risankizumab started off ART, VL detectable, CD4 12; eventually (re)started ART and VL undetectable, CD4 >300
- Tildrakizumab – 4 published patient cases
- Efficacy in all cases
- No serious adverse events
- No changes in CD4 count, viral load

Do biologics affect lab parameters?

- JEADV 2023
- 36 PWH on biologic therapy compared with 144 PWH without psoriasis, all on ART
- 12 months
- Etanercept, adalimumab, secukinumab, ustekinumab, risankizumab
- No impact on CD4 count or viral load

Atopic dermatitis management in HIV

- Topicals
- Phototherapy

- Methotrexate
  - PsO cases, none AD
- CSA
  - PsO cases, none AD
- Mycophenolate
  - No evidence in AD
  - One case in lupus-like glomerulonephritis
- Azathioprine
  - Some evidence for safe use in non-skin indications

- Biologics
- JAKi

IL-4/13i biologics

Dupilumab – 27 published patient cases, first 2019

- 22 AD, 3 PN, 1 photodermatitis, 1 asthma
- Average follow up 10 months

Mechanism

- Patients with HIV may have increased Th2 response
- Improvement/complete resolution in 96%, remainder adequate or not reported

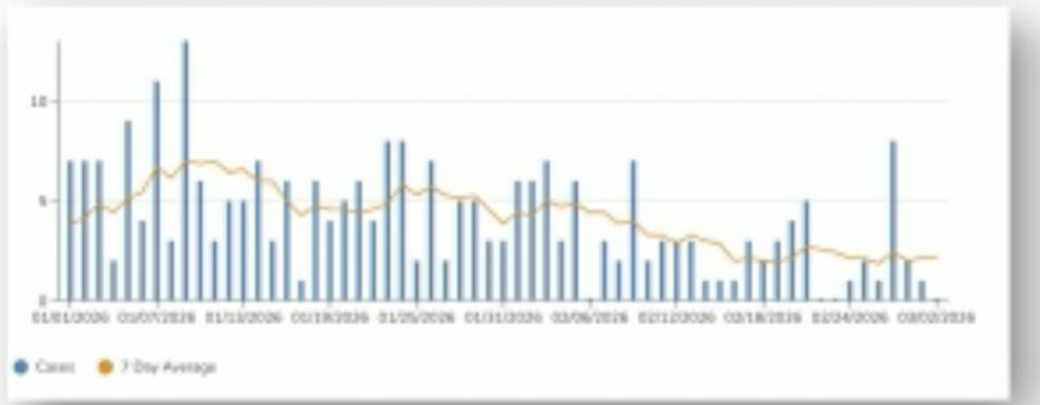
Todavía no casos con lebrikizumab o tralokinumab

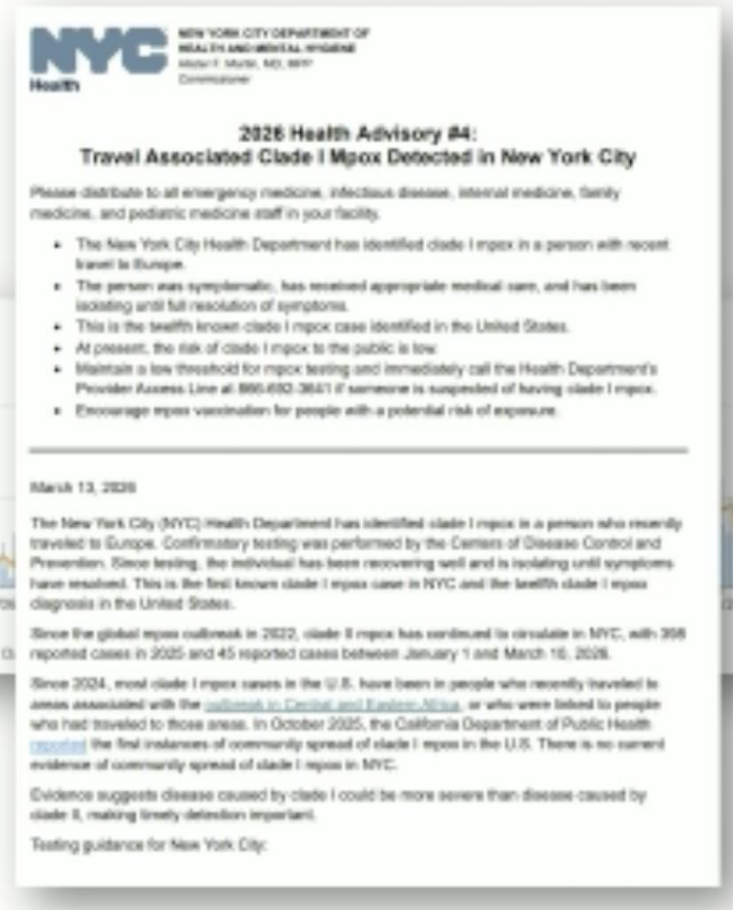
JAKi

- Upadacitinib – 1 published patient case, March 2025
  - Biktarvy
  - Failed dupilumab and tralokinumab
  - 15 mg po daily
- Efficacy - week 6 IGA 1, EASI 1.2, BSA 1, persisted to week 52
- No adverse events
- Stable CD4 count around 610
- Had persistent low-level viremia on ART, when upadacitinib started, viral load became undetectable, remained
- IL-4 may increase CXCR4, mediates HIV cell entry
- Ph2 study looking at ruxolitinib to decrease latent HIV reservoir by blocking the reservoir that allows it to persist

MPox

Mpox Is Still Here





NYC Health
NEW YORK CITY DEPARTMENT OF HEALTH AND MENTAL HYGIENE

2026 Health Advisory #4:
Travel Associated Clade I Mpox Detected in New York City

Please distribute to all emergency medicine, infectious disease, internal medicine, family medicine, and pediatric medicine staff in your facility.

- The New York City Health Department has identified clade I mpox in a person with recent travel to Europe.
- The person was symptomatic, has received appropriate medical care, and has been isolating until full resolution of symptoms.
- This is the twelfth known clade I mpox case identified in the United States.
- At present, the risk of clade I mpox to the public is low.
- Maintain a low threshold for mpox testing and immediately call the Health Department's Provider Access Line at 866-692-3641 if someone is suspected of having clade I mpox.
- Encourage mpox vaccination for people with a potential risk of exposure.

March 13, 2026

The New York City (NYC) Health Department has identified clade I mpox in a person who recently traveled to Europe. Confirmatory testing was performed by the Centers of Disease Control and Prevention. Since testing, the individual has been recovering well and is isolating until symptoms have resolved. This is the first known clade I mpox case in NYC and the twelfth clade I mpox diagnosis in the United States.

Since the global mpox outbreak in 2022, clade II mpox has continued to circulate in NYC, with 358 reported cases in 2025 and 45 reported cases between January 1 and March 10, 2026.

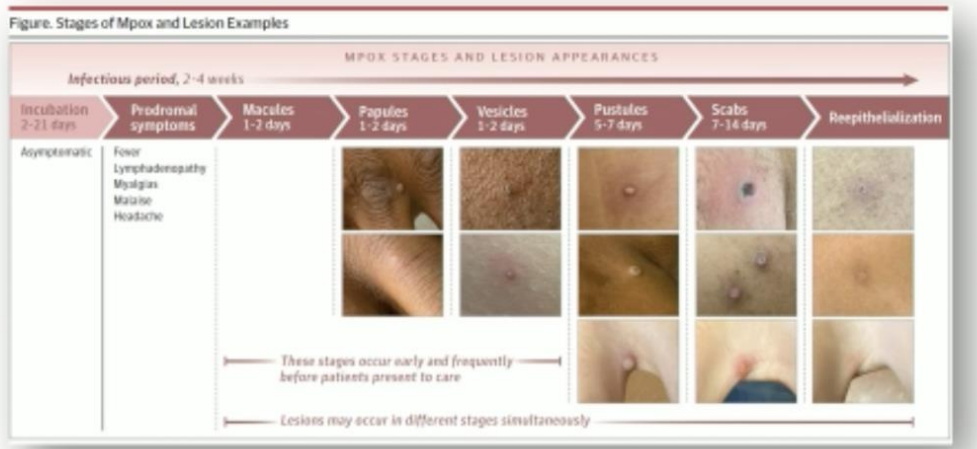
Since 2024, most clade I mpox cases in the U.S. have been in people who recently traveled to areas associated with the outbreak in Central and Eastern Africa, or who were linked to people who had traveled to those areas. In October 2025, the California Department of Public Health reported the first instances of community spread of clade I mpox in the U.S. There is no current evidence of community spread of clade I mpox in NYC.

Evidence suggests disease caused by clade I could be more severe than disease caused by clade II, making timely detection important.

Testing guidance for New York City:

Mpox May be More Subtle Post Vaccination

Classic Presentation



Post vaccination:

- **Less severe:** lesions may not progress through the full classic stages
- **Fewer confluent lesions:** Single or fewer lesions
- **Diminished mucosal involvement:** genital ulcer may be the only finding
- **Reduced analgesia requirement:** Painless does not rule out mpox
- **Fewer admissions:** These patients are seen outpatient

⚠ **Vaccination history does not rule out mpox. Have a low threshold to test**

Management of Mpox in 2026

1. Supportive care
2. Optimize the immune system
3. **Medical countermeasures**

Tecovirimat monotherapy does not work for Mpox

- **PALM007 (Clade I, DRC)**
  - Lesion resolution HR 1.13 (95% CI 0.97 – 1.31)
- **STOMP (Clade II, US, Central America, Asia)**
  - Clinical resolution sHR 0.98 (98% CI 0.74 – 1.31)
  - Time weighted change in pain (3.2 vs 3.1 days)
- **Unity (Clade II, Europe, Central America)**
  - Time to full lesion resolution time ratio 1.02

⚠ For severely immunocompromised people consider a combination of Tecovirimat, Brincidofovir, and VIGIV (if available)

No IS

Cidofovir (Topical and Intralesional)

- Patient: HIV, CD4 <100, failed multiple standard courses
- Weekly intralesional injections × 3 weeks led to dramatic lesion resolution
- Remained in remission at 2 months

DoxiPEP

EC

What We Know About Doxy-PEP From Trials

Trial	Population	Chlamydia	Syphilis	Gonorrhea
IPERGAY Molina Lancet ID 2018	N=232 MSM on on-demand PrEP	↓ 70% (p=0.006)	↓ 73% (p=0.047)	NS
DoxyPEP Trial Luetkemeyer et al. NEJM 2023	N=501 MSM/TGW on PrEP or PLWH	↓ 88%	↓ 87%	↓ 55%
DoxyVac Molina et al. Lancet ID 2024	N=502 MSM on PrEP (±4CMenB vaccine)	↓ CT/syph combined primary endpoint 83%		↓ 33%
dPEP (Kenya) Stewart et al. NEJM 2023	N=449 Cisgender women on PrEP	NS RR 0.73 (0.47–1.13)	Insufficient events	NS RR 1.64 (0.78–3.47)

- Doxycycline post-exposure prophylaxis (PEP) was generally **safe and well tolerated in trials.**
- Doxy-PEP **reduced bacterial STIs in MSM and transgender women**, with strongest effects for **chlamydia and syphilis**
- **Doxy-PEP did not show efficacy in cisgender women** in the dPEP study; low adherence may have contributed

Vida real

The Real World - Males

Study	Setting / N	Chlamydia	Syphilis	Gonorrhea	Time
Sankaran et al. *JAMA Intern Med 2025*	SF citywide (ITS) MSM & TGW	↓ 50%	↓ 51%	↑ significantly (+1.77%/mo, p<0.001)	13 mo
Traeger et al. *JAMA Intern Med 2025*	Kaiser Permanente N. California N=11,551 PrEP users; 2,253 on doxy-PEP	↓ 79% (9.6%→2.0%, RR 0.21)	↓ 82% (1.7%→0.3%, RR 0.20)	↓ 12% (10.2%→9.0%, RR 0.88)	2022–2023
Spinelli et al. *Clin Infect Dis 2025*	San Francisco (96 wk) N=4,592 PrEP pts incl PLWH/TGW	↓ (AOR 0.17)	↓ (AOR 0.17)	↓ then ↑ (AOR 1.28)	96 wk
Luc et al. *Sex Transm Dis 2026*	Chicago CDPH Clinics N=219 young MSM	↓ 78%	0 cases post-provision (too few to assess)	↓ 54%	2024
Lewis et al. *Sex Transm Dis 2025*	Philadelphia STI Clinic N=508 MSM on PrEP	↓ 72% (IRR 0.28, crossover)	Too few cases (n=2 each period)	↓ 51% (IRR 0.49, crossover)	2019–23
Raccagni et al. *Lancet Infect Dis 2025*	Infectious Diseases Unit, San Raffaele Hospital, Milan, Italy N=222 MSM (HIV+ or PrEP users) who took DoxyPEP	↓ 87% (aIRR 0.13, 95% CI 0.09–0.19)	↓ 80% (aIRR 0.20, 95% CI 0.13–0.32)	↓ 74% (aIRR 0.26, 95% CI 0.20–0.33, p<0.0001)	Aug 2022 – Jul 2024; median 15.8 mo pre- / 10.8 mo post
Huang et al. *AJPH 2025*	Northern Manhattan, NYC N=100 EADP cohort (propensity-matched 3.7:1 to non-EADP comparators); gbMSM and transgender women	↓ significant reduction in overall & rectal chlamydia incidence	Not reported	Modest, non-significant reduction (did not reach statistical significance)	April 26, 2023 – February 26, 2024
Osmundson et al. *OFID 2025*	Los Angeles LGBT Center (FQHC) N=2083 MSM/TGW	↓ 89.7%	↓ 86.4%	↓ 54.7%	2019–June 2024

Dermatologic Adverse Events With Doxy-PEP

Meta Analysis Results

- 18 placebo-controlled trials, 100-200mg doxycycline daily
- Dermatologic AEs: 5.52x increased risk (95% CI: 1.75-17.42, p<0.01)
  - Highest relative risk of all adverse event categories

Specific Dermatologic Findings

- Rash: most commonly reported
- Photosensitivity reactions: dose-dependent
- Fixed drug eruptions: recurrent at same sites
- Acne-like reactions: paradoxical
- Severity varied: mild to severe requiring discontinuation

Antimicrobial Resistance in Commensals

Study	Organism / Compartment	Key Finding	Implication
Luetkemeyer et al. *NEJM 2023*	*S. aureus* *(DoxyPEP RCT)*	↓ S. aureus colonization overall ↑ doxy-R S. aureus in remaining carriers (p=0.0008) No Δ MRSA [CROI 2023, abstr. 120]	**Doxy reduces overall S. aureus carriage but selects for resistant strains; net stewardship risk unclear**
Bell et al. *MJA 2024*	*Commensals (S. aureus, Neisseria spp., K. pneumoniae)*	↑ tet-R cross S. aureus, GAS & gut flora in multiple RCT Broad off-target mucosal pressure	**Off-target commensal resistance is a consistent cross-trial finding; stewardship programs essential.**
Mittelstaedt et al. *J Infect Dis 2025*	*S. aureus* *(HIV/PrEP clinic N=410)*	Baseline tet-R: 13.2% Co-resistance: **4.52×** TMP/SMX, **3.62×** clindamycin (p<0.001)	**Pre-existing co-resistance in doxy-PEP–eligible populations; doxy will amplify**
Soge et al. *Clin Infect Dis 2025*	*S. aureus & GAS* *(King County MSM, N=2,312)*	↑ tet-R S. aureus: 18% vs 8% (p<0.001) ↑ GAS colonization: 9% vs 4% (p=0.008) Both dose-dependent	**Doxy-PEP selects for resistance in off-target commensal pathogens; S. aureus and GAS surveillance warranted**
Chu et al. *Nat Med 2024*	*Gut resistome* *(DoxyPEP RCT, N=150)*	↑ tet ARGs: 46%→51% metagenome; 4%→15% metatranscriptome Reversible post-stop; no Δ microbial diversity	**Reversible but clinically significant during use; tetracycline ARG burden rises substantially**
Robinson et al. *Sci Rep 2025*	*Commensal Neisseria* *(oropharyngeal)*	**46%** commensal Neisseria carry doxy-R ↑ with recent doxy use	**Commensal Neisseria are active resistance reservoirs; doxy-PEP drives selection and cross-species HGT to pathogenic GC**
Molina et al. (DoxyVac) *Lancet Infect Dis 2024*	*MRSA (pharyngeal)* *ESBL E. coli (rectal)*	**No sig. Δ MRSA** (pharyngeal) or **ESBL E. coli** (rectal) vs control in RCT	**Reassuring: no doxy-PEP–driven increase in MRSA or ESBL E. coli in this RCT.**

⚠ Doxy-PEP may increase tetracycline resistance in bystander bacteria and the gut resistome.
Need to account for this when providing empiric antibiotics

Impact of Antibiotics on the Skin

1. Microbiome disruption associated with antibiotic exposure
2. Nasal carriage/reservoir can lead to local dissemination

Doxy and Derm: Does Doxy-PEP Drive the Emergence of Tetracycline-Class Resistant *Staphylococcus aureus*? A Review

Tyler Huynh, BS[1]; Loren Miller, MD, MPH[2]; Raul Macias-Gil, MD[2]
[1]Kaiser Permanente Bernard J. Tyson School of Medicine [2]Harbor-UCLA Division of Infectious Diseases

Authors TH, LM, and RMG report no disclosures or conflicts of interest.

Objective

We examined the current evidence on tetracycline-class resistance in *Staphylococcus aureus*, evaluating whether increased use of doxycycline, driven in part by implementation of doxy-PEP, might contribute to the emergence of resistant *S. aureus* on the skin microbiome and in skin and soft tissue infections. Surveillance data, clinical trials, and retrospective studies were reviewed.

Doxycycline Surveillance Data Trends

Organism	1997 to 2000	2013 to 2016	Tetracycline-class susceptibility
MSSA	98%	99%	↑
MRSA	71%	96%	↑

Data on Doxycycline Non-STI Prophylaxis

Study	Setting	Tetracycline-class susceptibility
Fanelli et al. (2011) Retrospective observational	Acne	No significant difference
Mende et al. (2016) Retrospective observational	Malaria	No significant difference
Spiro et al. (2024) Retrospective observational	Skin and soft tissue infection	No significant difference

Data on Doxycycline Prophylaxis for STIs in MSM/TGW

Study	Tetracycline-class susceptibility
Luetkemyer et al. (2023) Randomized controlled trial, Doxy-PEP	No significant difference
Soge et al. (2025) Retrospective observational, Doxy-PEP	↑ resistant isolates in doxy-PEP users, but possible confounding
Grennan et al. (2025) Randomized controlled trial, Doxy-PrEP	No significant difference

References

Findings & Discussion

- Most doxycycline prophylaxis studies show no difference in *S. aureus* tetracycline-class resistance, despite ↑ing doxy use over the last 2 decades
- Perceived increase in resistance possibly due to high-risk sexual practices --> spread of resistant *S. aureus* through sexual networks
- Doxy-PEP use may cause misleading proportional ↑ in resistant *S. aureus* isolates by killing tetracycline-susceptible *S. aureus* leaving resistant isolates behind

Conclusions and Clinical Implications

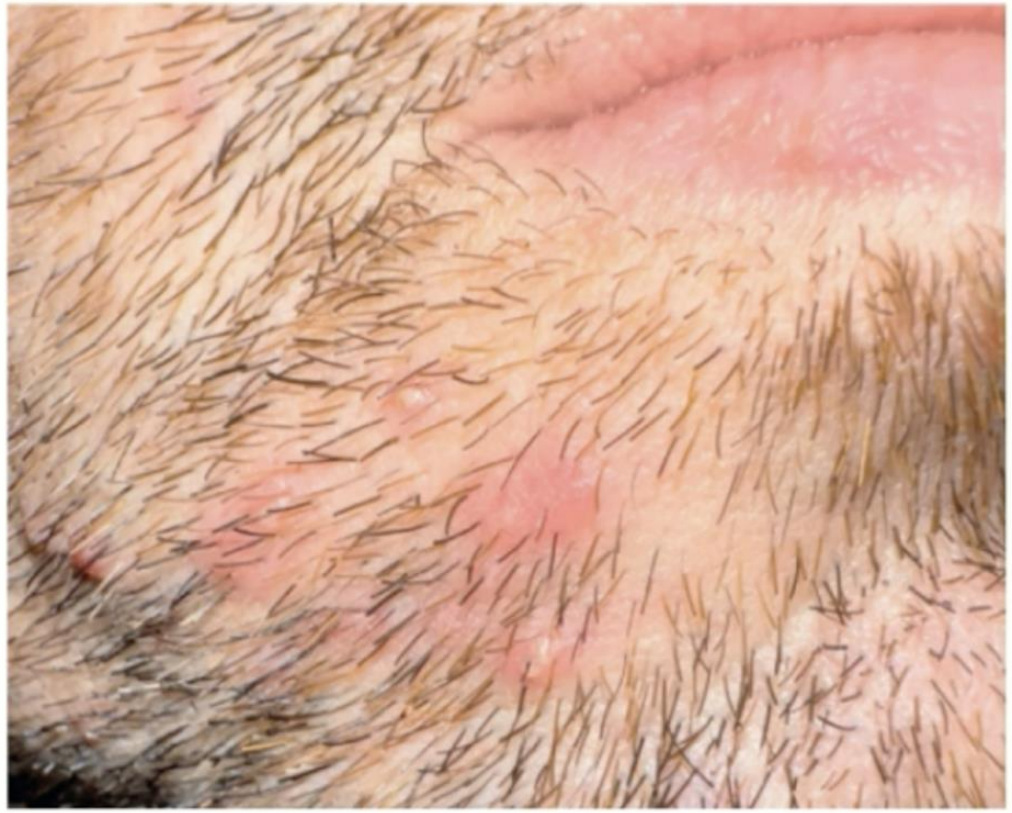
- The proven benefits of Doxy-PEP in reducing STI transmission likely outweighs theoretical concerns about the emergence of tetracycline-class resistance among *S. aureus*
- Dermatologists concerned about resistance may consider reducing use of doxycycline for conditions that are less life-threatening or infectious such as acne and rosacea
- Clinicians should be not be discouraged to prescribe Doxy-PEP but should remain vigilant about resistant *S. aureus* through continued surveillance

Abbreviations

STI: Sexually transmitted Infections
MSSA: Methicillin Susceptible *Staph aureus*
MSSA: Methicillin Resistant *Staph aureus*
MSM: Men who have sex with men
TGW: Transgender women

Klebsiella aerogenes

Emerging Evidence: *Klebsiella aerogenes* Folliculitis



Brussels Dermatology Clinic

- 4 MSM patients, ages 25-50
- All infected with **identical K. aerogenes sequence type ST117**
- Clinical pattern:
  - Pustular, nodular beard lesions
  - Painful and recurrent
- Shared exposure:
  - Community hot tubs for "leisure and meeting sexual partners“
- Standard antibiotics failed; required prolonged courses for cure
- First documented outbreak of this specific strain

DD Trichophyton mentagrohpytes VII
Historia sexual – placas eritematosas / pústulas barba

2. Otras infecciones víricas

- **Incidencia creciente VVZ**, a pesar de vacunación sistemática y en grupos de riesgo

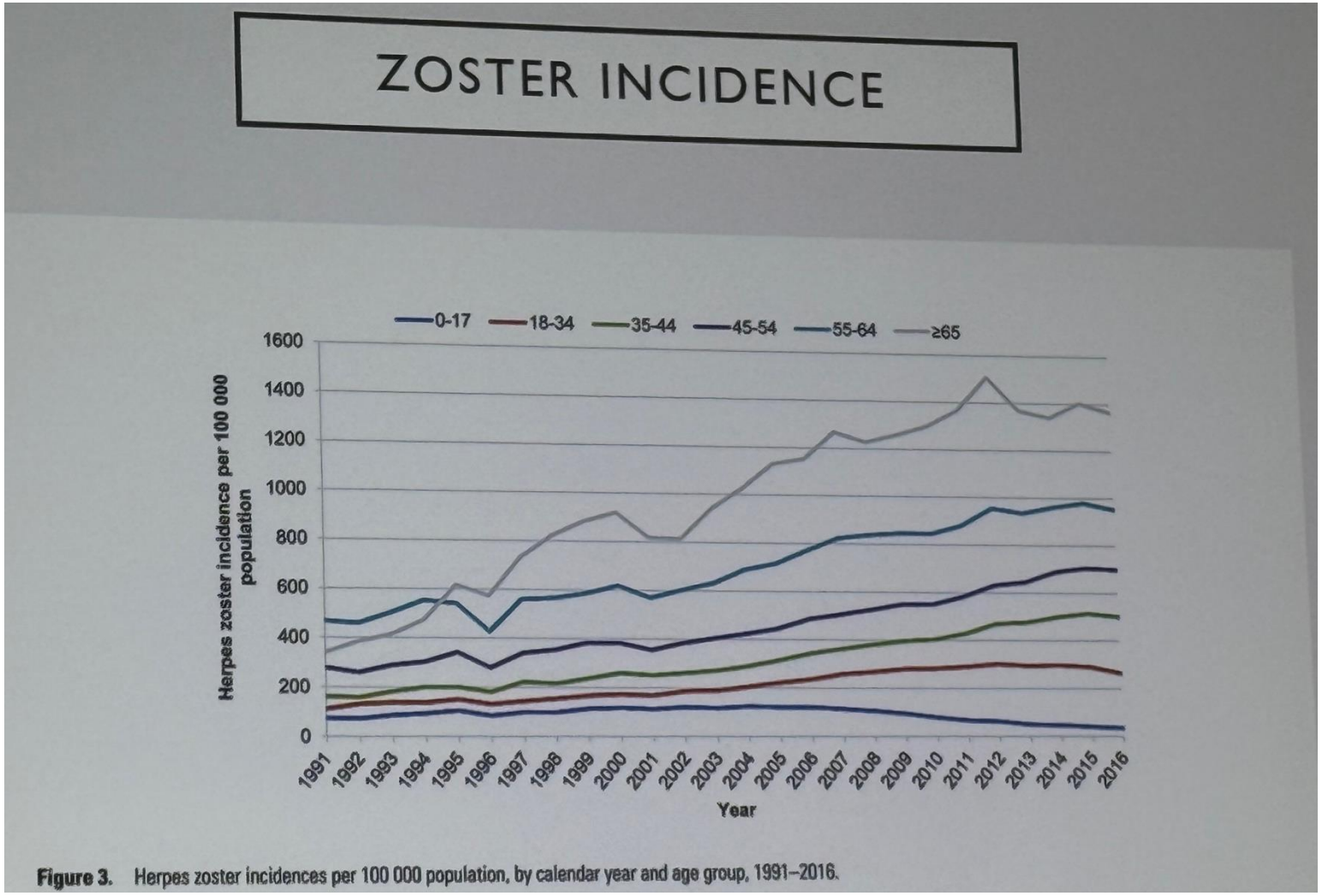
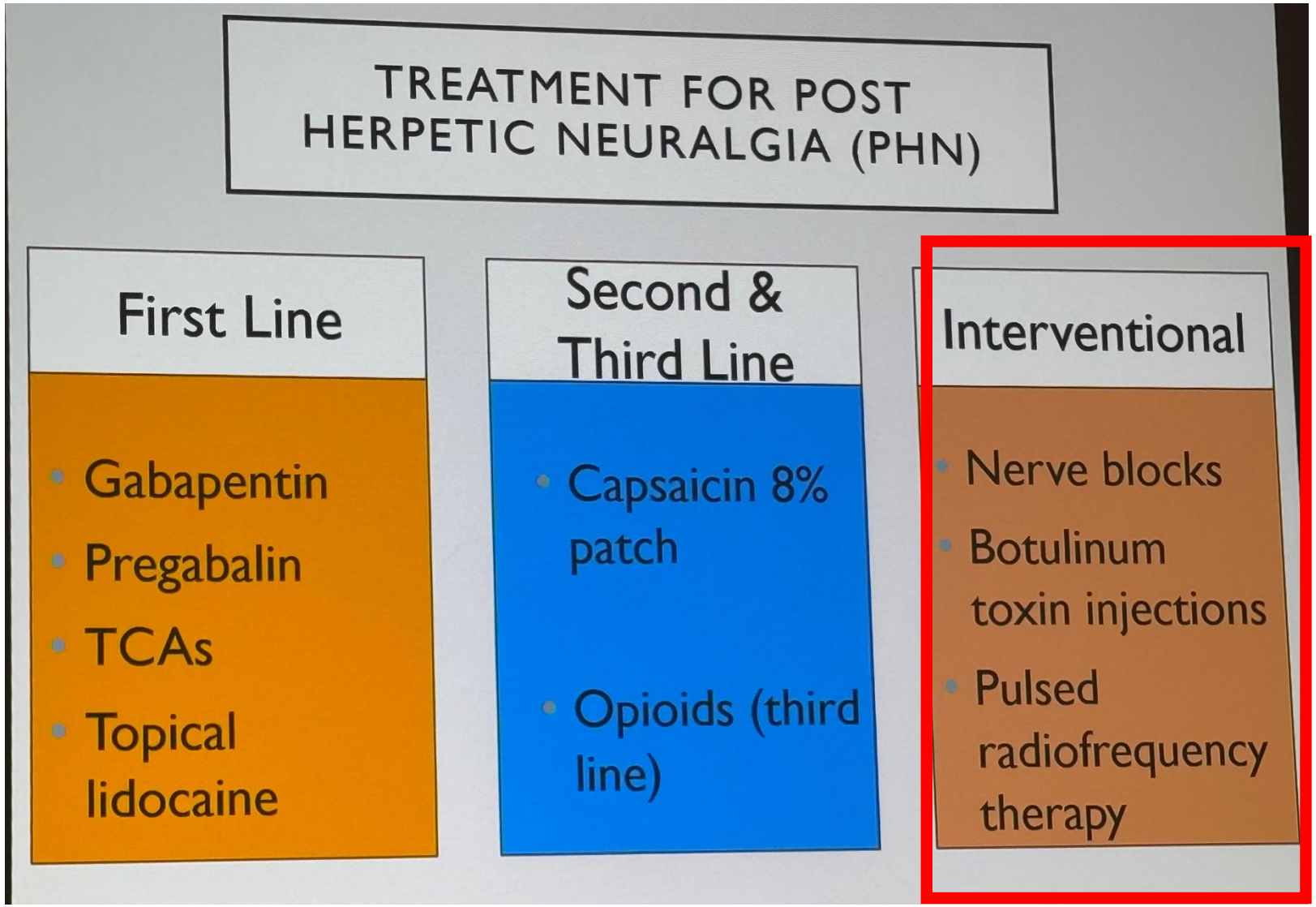
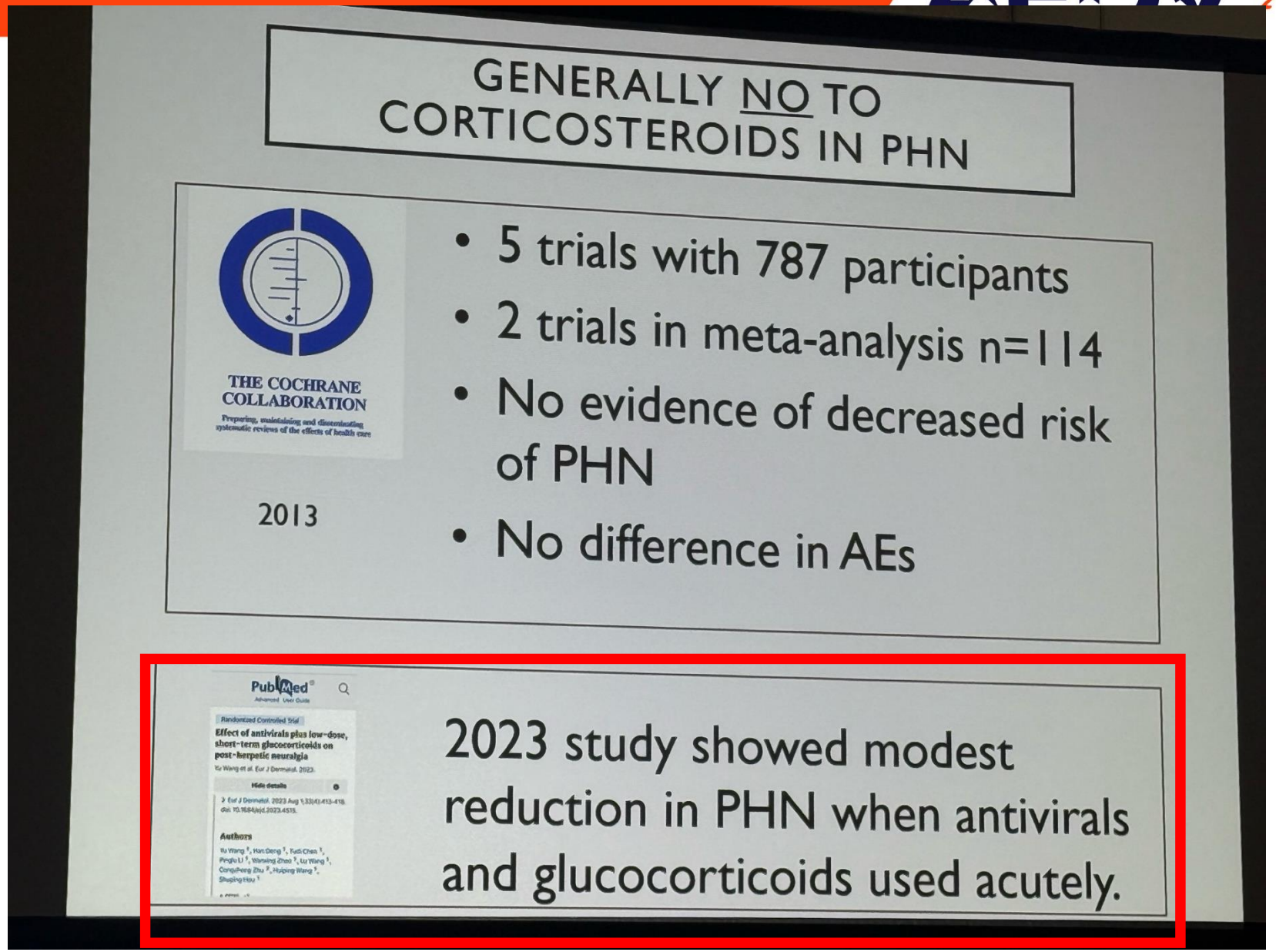


Figure 3. Herpes zoster incidences per 100 000 population, by calendar year and age group, 1991–2016.

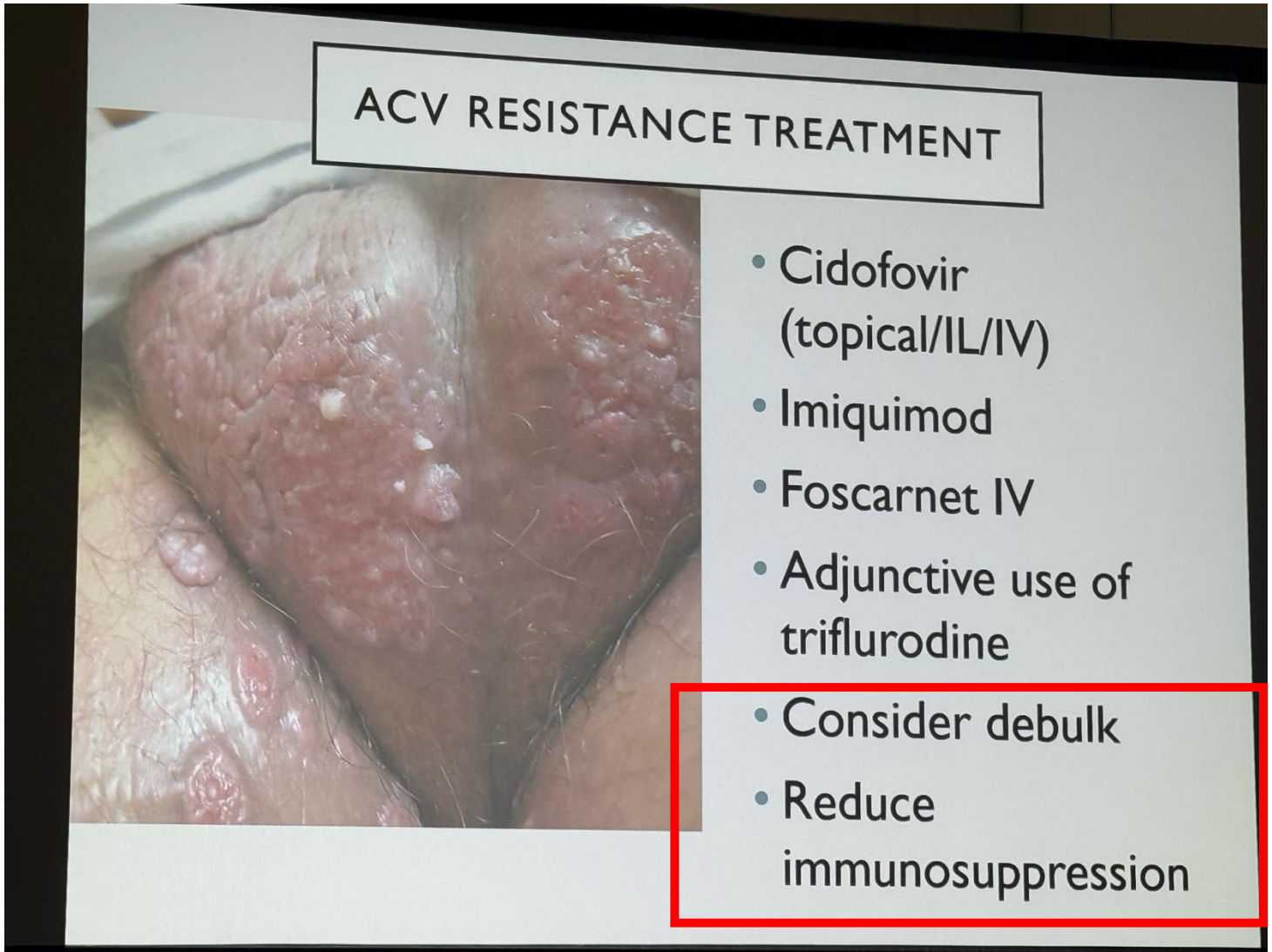

TREATMENT FOR POST HERPETIC NEURALGIA (PHN)
First Line
Gabapentin
Pregabalin
TCAs
Topical lidocaine
Second & Third Line
Capsaicin 8% patch
Opioids (third line)
Interventional
Nerve blocks
Botulinum toxin injections
Pulsed radiofrequency therapy


GENERALLY NO TO CORTICOSTEROIDS IN PHN
THE COCHRANE COLLABORATION
Preparing, maintaining and disseminating systematic reviews of the effects of health care
2013
• 5 trials with 787 participants
• 2 trials in meta-analysis n=114
• No evidence of decreased risk of PHN
• No difference in AEs
PubMed
Randomized Controlled Trial
Effect of antivirals plus low-dose, short-term glucocorticoids on post-herpetic neuralgia
Authors
2023 study showed modest reduction in PHN when antivirals and glucocorticoids used acutely.

Herpes resistente

- **UL23** = timidina quinasa viral (95% mutaciones)
- Sospechar **lesiones extensas, verrucosas y que no respondan** a tratamiento
- Cultivo + **descartar otras** infecciones / neoplasias (carcinoma verrucoso)

Herpes resistente

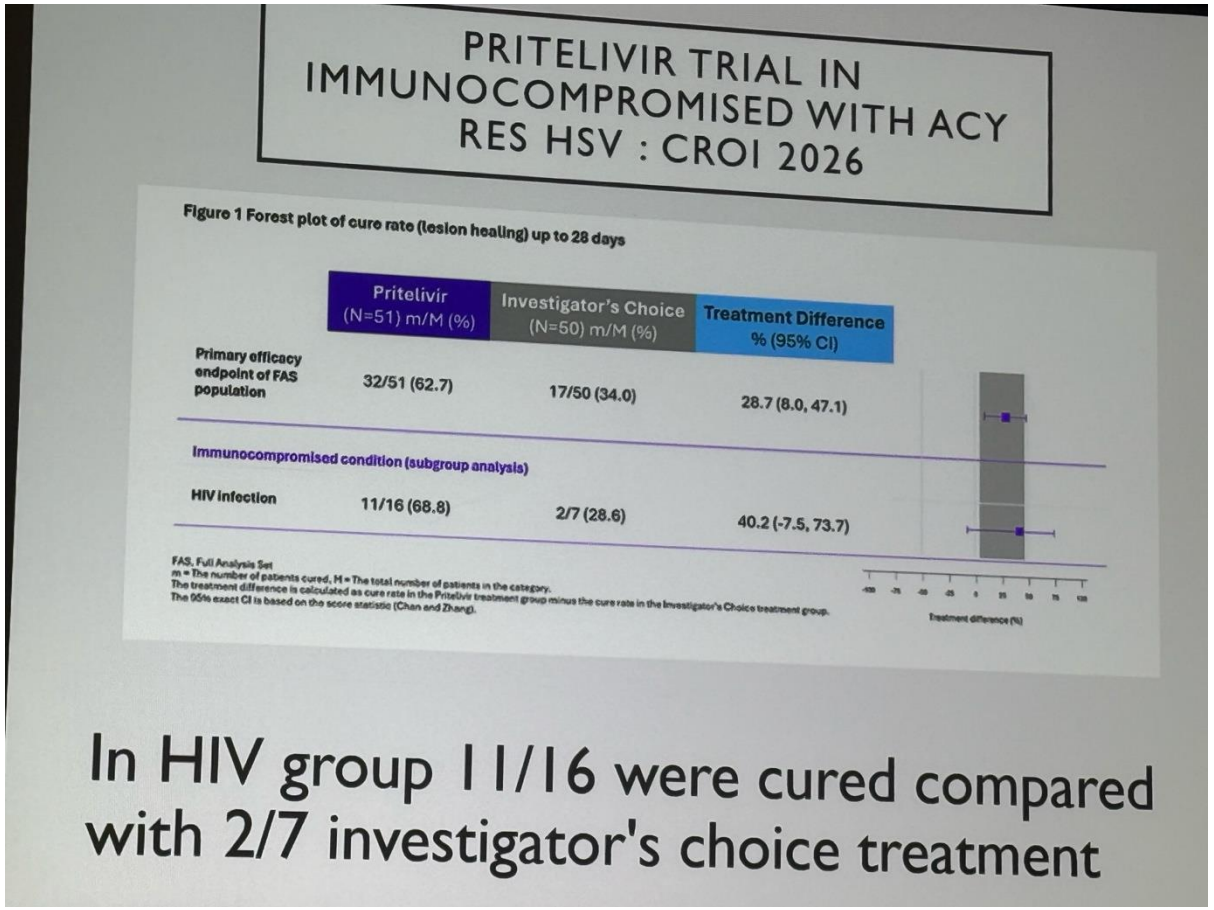


Pritelivir

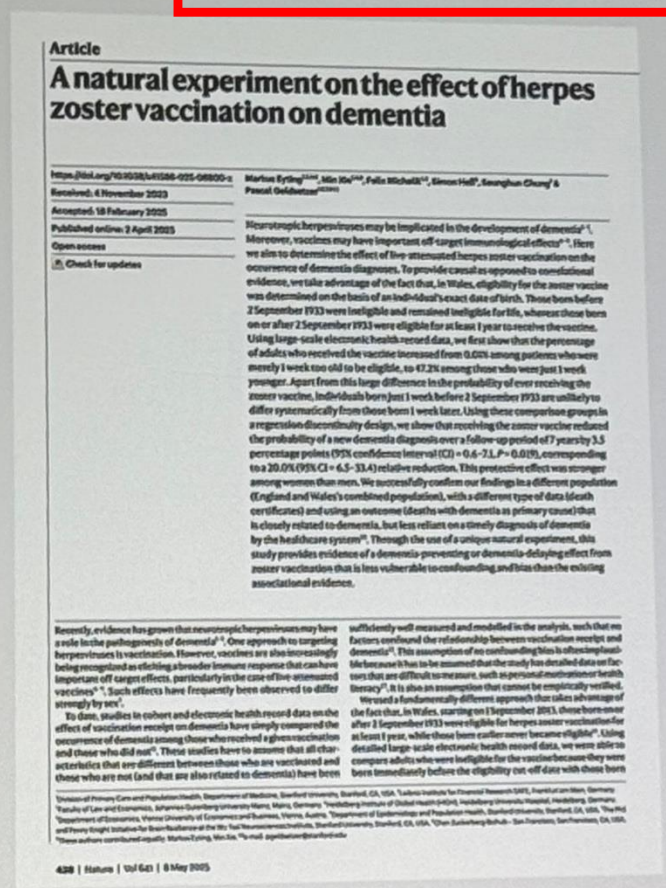
Mecanismo de acción diferente

Disponible Japón

Eficacia en **VIH / trasplantados**



VZV VACCINATION REDUCES RISK OF DEMENTIA



Article

A natural experiment on the effect of herpes zoster vaccination on dementia

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Neurotropic herpesviruses may be implicated in the development of dementia[1–3]. Moreover, vaccines may have important off-target immunological effects[4–6]. Here we aim to determine the effect of live-attenuated herpes zoster vaccination on the occurrence of dementia diagnoses. To provide causal as opposed to correlational evidence, we take advantage of the fact that, in Wales, eligibility for the zoster vaccine was determined on the basis of an individual's exact date of birth. Those born before 2 September 1933 were ineligible and remained ineligible for life, whereas those born on or after 2 September 1933 were eligible for at least 1 year to receive the vaccine. Using large-scale electronic health record data, we first show that the percentage of adults who received the vaccine increased from 0.01% among patients who were merely 1 week too old to be eligible, to 47.2% among those who were just 1 week younger. Apart from this large difference in the probability of ever receiving the zoster vaccine, individuals born just 1 week before 2 September 1933 are unlikely to differ systematically from those born 1 week later. Using these comparison groups in a regression discontinuity design, we show that receiving the zoster vaccine reduced the probability of a new dementia diagnosis over a follow-up period of 7 years by 3.5 percentage points (95% confidence interval (CI) = 0.6–7.1, $P = 0.019$), corresponding to a 20.0% (95% CI = 6.5–33.4) relative reduction. This protective effect was stronger among women than men. We successfully confirm our findings in a different population (England and Wales's combined population), with a different type of data (death certificates) and using an outcome (deaths with dementia as primary cause) that is closely related to dementia, but less reliant on a timely diagnosis of dementia by the healthcare system[20]. Through the use of a unique natural experiment, this study provides evidence of a dementia-preventing or dementia-delaying effect from zoster vaccination that is less vulnerable to confounding and bias than the existing associational evidence.

Recently, evidence has grown that neurotropic herpesviruses may have a role in the pathogenesis of dementia[1–3]. One approach to targeting herpesviruses is vaccination. However, vaccines are also increasingly being recognized as eliciting a broader immune response that can have important off-target effects, particularly in the case of live-attenuated vaccines[4–6]. Such effects have frequently been observed to differ strongly by sex[5].

To date, studies in cohort and electronic health record data on the effect of vaccination receipt on dementia have simply compared the occurrence of dementia among those who received a given vaccination and those who did not[6]. These studies have to assume that all characteristics that are different between those who are vaccinated and those who are not (and that are also related to dementia) have been sufficiently well measured and modelled in the analysis, such that no factors confound the relationship between vaccination receipt and dementia[21]. This assumption of no confounding bias is often implausible because it has to be assumed that the study has detailed data on factors that are difficult to measure, such as personal motivation or health literacy[21]. It is also an assumption that cannot be empirically verified.

We used a fundamentally different approach that takes advantage of the fact that, in Wales, starting on 1 September 2013, those born on or after 2 September 1933 were eligible for herpes zoster vaccination for at least 1 year, while those born earlier never became eligible[22]. Using detailed large-scale electronic health record data, we were able to compare adults who were ineligible for the vaccine because they were born immediately before the eligibility cut-off date with those born

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SAIL data bank in Wales: compared group unlikely to be vaccinated vs vaccinated group

Follow up over 7 yrs showed 20% relative reduction of dementia

Molluscum contagiosum and selected comorbidities in the pediatric population: A TriNetX global database study

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RESULTS

Table 1. Demographics of patients with MC and controls matched based on age, sex, race, and ethnicity

Characteristic	Before PSM (*n* %)			After PSM (*n* %)		
	MC (*n* = 236,736)	No MC (*n* = 9,554,286)	SMD	MC (*n* = 168,627)	No MC (168,627)	SMD
Age at index, mean (SD)	9.6 (11.4)	47.2 (19.7)	2.342	11.3 (13.1)	11.0 (13.3)	0.026
Sex						
Female	116,608 (49.3)	5,354,709 (56.0)	0.136	82,468 (48.9)	81,537 (48.4)	0.011
Male	120,047 (50.7)	4,104,818 (43.0)	0.156	86,078 (51.0)	87,000 (51.6)	0.011
Race						
Asian	7141 (3.0)	447,317 (4.7)	0.087	5407 (3.2)	7731 (4.6)	0.071
Black or African American	22,293 (9.4)	1,264,410 (13.2)	0.121	17,203 (10.2)	29,621 (17.6)	0.214
White	149,363 (63.1)	6,389,337 (66.9)	0.079	104,884 (62.2)	95,348 (56.5)	0.115
Native Hawaiian or Other Pacific Islander	2657 (1.1)	36,491 (0.4)	0.086	1956 (1.2)	1309 (0.8)	0.039
Ethnicity						
Hispanic or Latino	36,395 (15.4)	656,270 (6.9)	0.273	25,522 (15.1)	25,257 (15.0)	0.004
Not Hispanic or Latino	158,445 (66.9)	6,951,205 (72.8)	0.002	112,943 (67.0)	118,854 (70.5)	0.076

MC, Molluscum contagiosum; *PSM*, propensity score matching; *SD*, standard deviation; *SMD*, standardized mean difference.

Table 2. Odds ratios of MC in patients with comorbidities and lifestyle risk factors for disease

Comorbidity or lifestyle factor	Controls (*n* = 144,816)	MC (*n* = 158,569)	OR (95% CI)
Atopic dermatitis	5334	6526	1.36 (1.31, 1.41)
Basal cell carcinoma of the skin	71	110	1.55 (1.15, 2.09)
Chlamydial infection	3179	2595	0.822 (0.780, 0.866)
Condyloma acuminata	162	813	5.09 (4.30, 6.02)
Crohn's disease	223	220	0.987 (0.820, 1.19)
Genital herpes simplex	212	521	2.47 (2.10, 2.90)
Gonorrhea	30	48	1.60 (1.01, 2.53)
Human immunodeficiency virus infection	45	117	2.61 (1.85, 3.68)
Inflammatory bowel disease	6675	5847	0.895 (0.863, 0.928)
Malignant melanoma of skin	48	88	1.84 (1.29, 2.61)
Psoriasis	634	665	1.05 (0.944, 1.17)
Squamous cell carcinoma of the skin	285	461	1.63 (1.40, 1.89)
Syphilis	71	159	2.24 (1.70, 2.97)
Systemic lupus erythematosus	77	80	1.04 (0.761, 1.42)
Type 1 diabetes mellitus	533	326	0.611 (0.532, 0.701)
Type 2 diabetes mellitus	1585	886	0.556 (0.512, 0.603)
Ulcerative colitis	209	217	1.04 (0.859, 1.26)
Adalimumab	226	258	1.14 (0.956, 1.37)
Bevacizumab	57	36	0.631 (0.416, 0.958)
Infliximab	134	113	0.844 (0.657, 1.08)
Insulin glargine	849	472	0.554 (0.495, 0.620)
Methotrexate	322	374	1.16 (1.00, 1.35)
Rituximab	129	127	0.985 (0.771, 1.26)
Trastuzumab	10	13	1.30 (0.570, 2.97)

CI, Confidence interval; *MC*, molluscum contagiosum; *OR*, odds ratio.

DISCUSSION

- In this large, global pediatric cohort, MCV was significantly associated with atopic dermatitis, multiple sexually transmitted infections, and cutaneous malignancies.
- The strong STI associations observed in adolescents suggest MCV may serve as a marker of high-risk behaviors in older pediatric populations.
- The association with atopic dermatitis supports an underlying immunologic susceptibility.
- The observed protective association with dupilumab warrants further investigation into its potential impact on viral susceptibility.
- These findings highlight the importance of clinical vigilance and appropriate screening in adolescents presenting with MCV.

CONCLUSION

- In this large, propensity-matched pediatric cohort, MCV was associated with atopic dermatitis, sexually transmitted infections, and cutaneous malignancies.
- Adolescents demonstrated the highest STI risk.
- These findings support consideration of STI screening in adolescents presenting with MCV.

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DEPARTMENT OF DERMATOLOGY

Prevalence, Clinical Characteristics, and Course of Herpes Zoster Ophthalmicus with and without Ocular Involvement: A Retrospective Study

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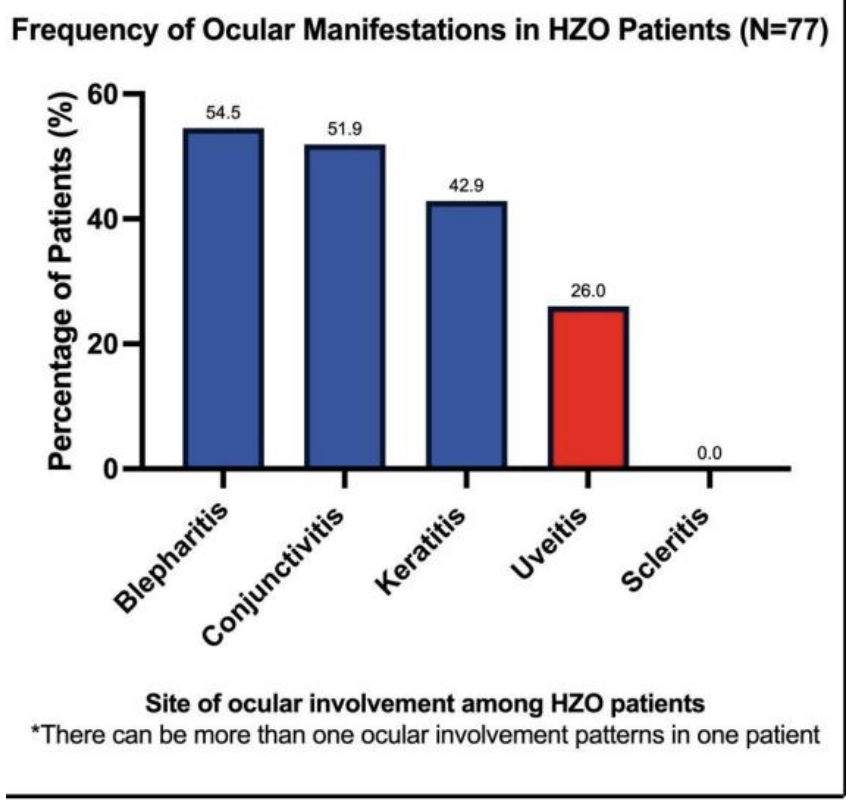
Figure 1. Ocular involvement patterns among HZO patients



- **Ocular involvement is common** (74%) among HZO patients.
- **Hutchinson's sign** is **not a reliable screening tool** for ocular involvement, but may indicate **severe disease, such as uveitis**; therefore, **early ophthalmologic referral** for all HZO patients is warranted.
- **Ocular involvement**, particularly **uveitis**, is associated with **greater treatment burden and recurrence**, supporting closer follow-up and tailored antiviral strategies.

Coxsackievirus B3-Induced Atypical Hand, Foot, and Mouth Disease in an Adult

USF Health

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University of South Florida Department of Dermatology and Cutaneous Surgery, Tampa, FL

History of Presenting Illness

- A 31 y.o. male presented to the emergency department with a 1-2 week history of blistering eruption which started on his hands and feet and then generalized to trunk and genitalia
- He denied fever, chills, nausea, and vomiting, but endorsed pain at the site of the bullae and vesicles
- Per patient, he was started on a steroid cream and doxycycline by an outside provider, which he thinks worsened the eruption, and then linezolid, which he thinks improved the eruption

Social History

- Worked at a restaurant and noted a coworker with "red bumps" on their hands; denied sick contacts
- Sexually active exclusively with his female partner of 10 years
- Denied any new sexual partners
- Formerly incarcerated in 2018
- Denied illicit drug use/IVDU

Lab Workup

- Treponemal antibody negative
- Chlamydia/gonorrhea negative
- Herpes simplex virus (HSV) PCR 1 and 2 negative
- HIV 1/2 antibody screen negative
- Varicella IgG positive
- Varicella IgM negative
- Varicella Zoster (VZV) PCR negative
- Orthopoxvirus (monkeypox) PCR negative
- Acid fast bacteria (AFB), nocardia, actinomyces, aerobic, anaerobic, and fungal tissue cultures negative
- Rocky mountain spotted fever serology negative
- **Coxsackie virus B antibody type 3 (+) 1:160**

Physical Exam/Clinical Images

- Physical exam revealed tense vesicles and bullae ranging in size from 3mm to several centimeters on bilateral hands and feet, on both dorsal and ventral surfaces
- Several flaccid vesicles on the hands and hyperpigmented macules with secondary crusting
- Crusted erythematous papules studded with surrounding pustules on chest and back
- Crusted eroded plaques on bilateral lower extremities
- Oral cavity was spared

Histopathology

- Histopathological evaluation showed a pustular subcorneal dermatosis with focal ulceration and dyskeratotic keratinocytes in an acanthotic epidermis, with an accompanying superficial perivascular dermal infiltrate composed of lymphocytes, neutrophils, histiocytes, and plasma cells
- Gram, GMS, AFB, HSV, CMV and VZV stains were negative
- DIF was negative

Differential Diagnosis

- The original differential included:
  - Infectious etiologies such as syphilis, monkeypox, disseminated VZV, vs
  - Non-infectious etiologies such as pseudoporphyria vs porphyria cutanea tarda (less likely given truncal involvement) vs pustular psoriasis vs acute generalized exanthematous pustulosis (AGEP) vs bullous drug vs less likely bullous lupus or IgA dermatitis

Discussion

- The elevated Coxsackie virus (CV) B antibody type 3 titer led to a diagnosis of **atypical hand, foot, and mouth disease (HFMD)**
- In the literature, adult HFMD cases are predominantly Coxsackie virus A induced
- Coxsackie B remains a rare cause of atypical adult onset HFMD, with only four cases identified in Pubmed[1,2]
- It is important to recognize this atypical presentation of HFMD and include it in the differential for acute blistering diseases
- Due to its transmission via respiratory droplets and fecal-oral routes, prompt recognition can lead to appropriate precautions

References/Disclosures

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The authors have no relationships to disclose.

Cutaneous Cancer Incidence in HPV-Positive Patients: Insights from a Global Real-World Cohort Study

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Results

Incidence of Cutaneous Malignancies in HPV-Positive Patients

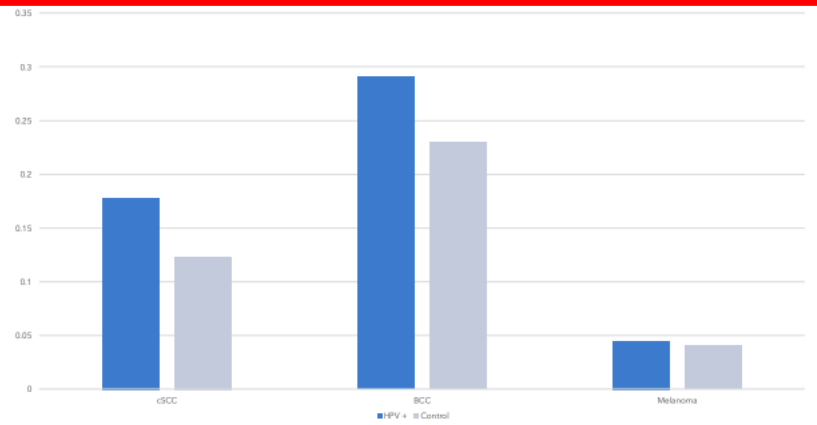
A total of **839,901 patients with HPV-related diagnoses** were identified in the TriNetX Global Collaborative Network and compared with a matched HPV-negative cohort.

Observed incidence of cutaneous malignancies:

Cancer Type	HPV-Positive	Matched Controls
cSCC	0.178%	0.123%
BCC	0.291%	0.230%
Melanoma	0.045%	0.040%

Key Findings

- HPV-positive patients demonstrated **higher observed incidence of cSCC and BCC** compared with matched controls.
- **Melanoma incidence was similar** between the two groups.
- Differences were most notable in **keratinocyte-derived cancers**.



CSCC **BCC** **Melanoma**

Discussion

HPV infects epithelial cells and has been shown to alter tumor suppressor pathways through viral oncoproteins such as E6 and E7. These mechanisms may contribute to keratinocyte carcinogenesis. The higher observed incidence of cSCC and BCC in HPV-positive patients may reflect this biological relationship. However, observational database studies cannot establish causation and may be influenced by confounding factors.

Further prospective studies are warranted.

Conclusion

HPV-positive patients demonstrated higher observed incidence of keratinocyte-derived skin cancers, including cSCC and BCC, in a large real-world cohort. These findings suggest a potential association between HPV infection and non-melanoma skin carcinogenesis. While melanoma incidence was similar between groups, the observed differences in keratinocyte-derived cancers support further investigation into HPV-related pathways in cutaneous oncogenesis.

Prospective studies are warranted to clarify causality and evaluate potential implications for cancer risk stratification and screening.

Clearance with Isotretinoin and Antiretroviral Therapy of Multiple Periungual SCC HPV Related and HIV immunosuppression

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Background

Periungual warts in immunosuppressed patients are often multifocal, recalcitrant and may hide HPV-driven HSIL/SCC; early biopsy is essential.

Systemic retinoids, especially isotretinoin, have shown benefit for recalcitrant mucocutaneous HPV, including case series and reviews supporting their use as adjuncts to procedural therapy. We present the case of conservative and succesful response of multiple periungueal HSIL/SCC HPV related in a patient with HIV infection with systemic isotretinoin

Objective

To report nail-sparing clearance of extensive periungual HSIL/SCC in situ with a single invasive focus using ART-mediated immune reconstitution plus oral isotretinoin.

Disclosures

Authors have no relationships to disclose.

Further information

Case

A 49-year-old man developed multifocal periungual verrucae in 2023.

- HIV was diagnosed in 2024 (CD4 62 cells/µL, February 2024).
- After starting bictegravir/emtricitabine/tenofovir alafenamide, CD4 rose to 179 cells/µL by October 2024.
- Persistent atypical lesions prompted biopsy in August 2024, revealing invasive, well-differentiated SCC at one periungual site and HSIL/SCCis elsewhere.
- A matrix-sparing plan was chosen: excision of the invasive focus plus oral isotretinoin 0.5 mg/kg/day for 16 weeks.
- Lesion burden fell, new wart formation slowed, and conservative resections sufficed.
- At 12 months there was no clinical recurrence. Adverse effects were limited to mild xerosis; laboratory monitoring remained acceptable.

Figure 1. Baseline (pre-ART/isotretinoin): multifocal periungual HSIL/SCCis with extensive verrucae

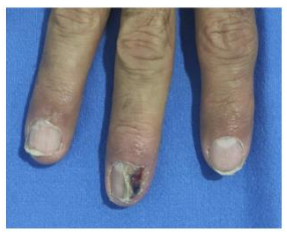

Figure 2. Month 1 on ART + oral isotretinoin: marked reduction in wart burden and periungual inflammation.

Figure 3. Month 4 (end of isotretinoin, 16 weeks): near-complete clearance with preserved nail units.

Discussion and Conclusion

Optimized ART improved HPV control while adjunctive isotretinoin produced effective periungual field reduction enabling nail-sparing, targeted surgery; collectively, a stepwise strategy, early biopsy, ART optimization, systemic retinoids, and selective surgery, preserves nail function and improves outcomes, consistent with prior evidence of isotretinoin efficacy for recalcitrant HPV-related periungual warts in immunosuppressed patients[4].

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Figure 1. Baseline (pre-ART/isotretinoin): multifocal periungual HSIL/SCCis with extensive verrucae

Figure 2. Month 1 on ART + oral isotretinoin: marked reduction in wart burden and periungual inflammation.

Conclusiones

- La innovación en VIH e inmunología está generando nuevas manifestaciones cutáneas, como los **nódulos persistentes por lenacapavir**.
- **MPox y otras ITS emergentes** confirman que la dermatología sigue siendo una puerta de entrada diagnóstica fundamental.
- Estrategias como **DoxiPEP** abren oportunidades preventivas, pero también exigen una implementación prudente y basada en evidencia.
- La historia sexual y la sospecha clínica son esenciales ante presentaciones dermatológicas atípicas, como las infecciones por ***K. Aerogenes***.
- El **aumento del VVZ y la aparición de herpes resistente** obligan a reconocer precozmente los casos complejos y conocer nuevas opciones terapéuticas como **pritelivir**

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