Wrap up of 2024
&
Future Upcomings in Dermatology

By

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Conflict of Interest

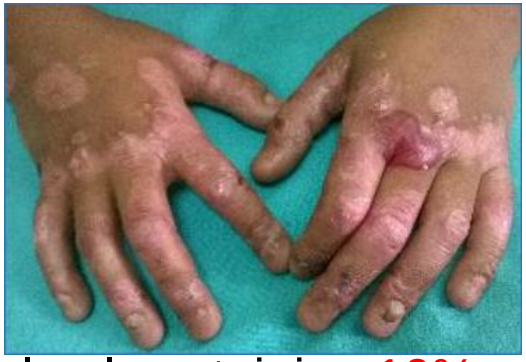
None

Objectives

- Highlight approvals in Dermatology in 2024
- Announce upcomings & Speculate further future studies in Dermatology
- Focus on novel approaches in Dermatology in 2024
- Present alerting reports in Dermatology
- Spotlight updated guidelines in Dermatology in 2024

Approvals in Dermatology 2024

Topical birch bark triterpenes for dystrophic & junctional EB



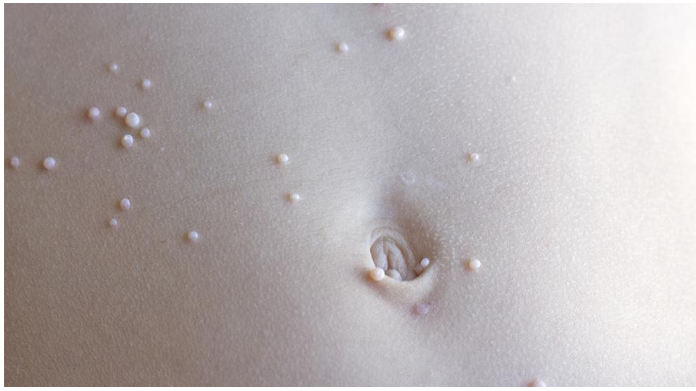
- Previous studies have shown that Oleogel-S10, a topical gel containing 10% birch bark triterpenes (Filsuvez), promotes wound healing by modulating inflammation & keratinocyte migration & differentiation.
- In an international phase 3 trial of 223 patients with DEB or JED who had chronic, large, partial-thickness wounds, more patients assigned to Oleogel-S10 achieved complete healing of target wound at 45 days compared with those assigned to vehicle only (41 versus 29 percent).
- Oleogel-S10 was approved in Europe & UK, for wound treatment of patients with DEB or JED.

Kern et al., 2023

- In Jan 2024, FDA approved Filsuvez for patients aged 6 months+ with both junctional & dystrophic EB.

https://www.fda.gov/drugs/development-approval-process-drugs

Berdazimer Gel for Molluscum Contagiosum



- Berdazimer, a topical **nitric oxide–releasing agent (R/ Zelsuvmi)**, was based largely on a 12-week pivotal phase 3 trial known as B-SIMPLE4, in which 891 patients with a mean age of 6.6 years (range, 0.9-47.5 years) were randomly assigned to treatment with berdazimer gel 10.3% or a vehicle gel applied in a thin layer to all lesions once daily.
- At 12 weeks, **32.4%** of patients in the berdazimer group achieved **complete clearance** of MC lesions compared with 19.7% of those in the vehicle group ($P < .001$).
- Common adverse effects include application site reaction.
- **Zelsuvmi** was FDA approved on 5/1/2024.

Sugarman et al., 2023

https://www.fda.gov/drugs/development-approval-process-drugs

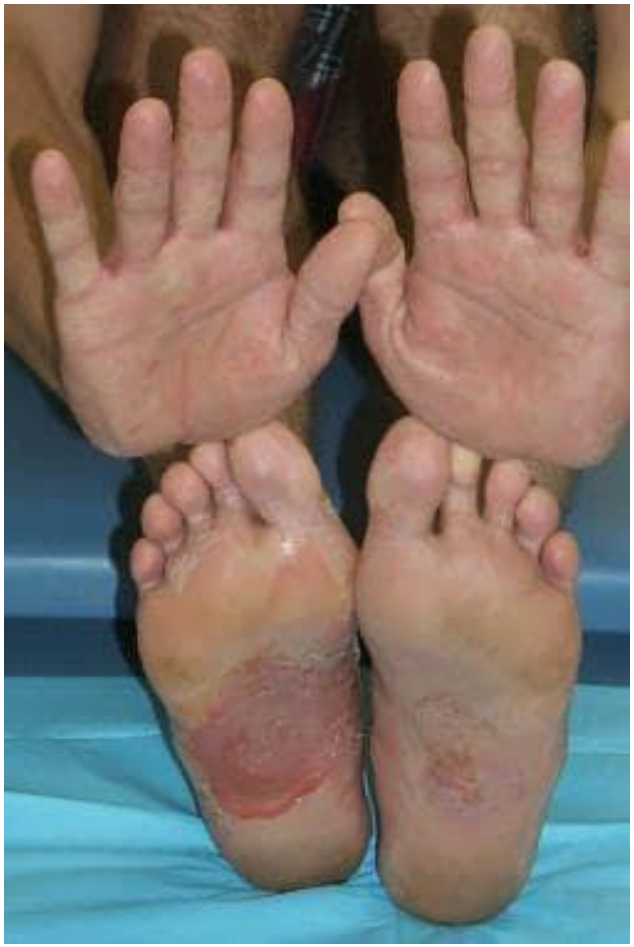
DermaSensor for Skin Cancer Detection

- A software-aided adjunctive diagnostic device for use by physicians on lesions suspicious for skin cancer is a prescription device that uses a software algorithm to analyze optical or other physical properties of a skin lesion & returns a classification of skin lesions.
- The device is intended for use by a physician not trained in clinical diagnosis & management of skin cancer as an adjunctive second-read device following identification of a suspicious skin lesion.
- It is not for use as a standalone diagnostic and is not for use to confirm a clinical diagnosis. (12/1/2024)

https://www.fda.gov/drugs/development-approval-process-drugs

Dupilumab for difficult-to-treat AD

- FDA has updated the label for Dupixent® (dupilumab) in AD, adding efficacy & safety data for patients aged 12 years & older with AD with uncontrolled moderate-to-severe hand &/or foot involvement (16/1/2024).



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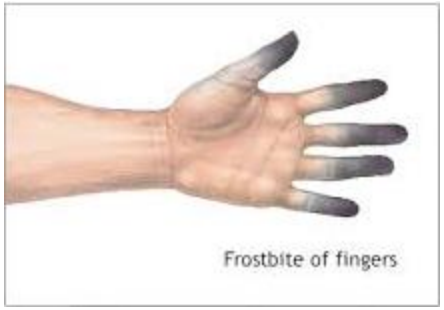
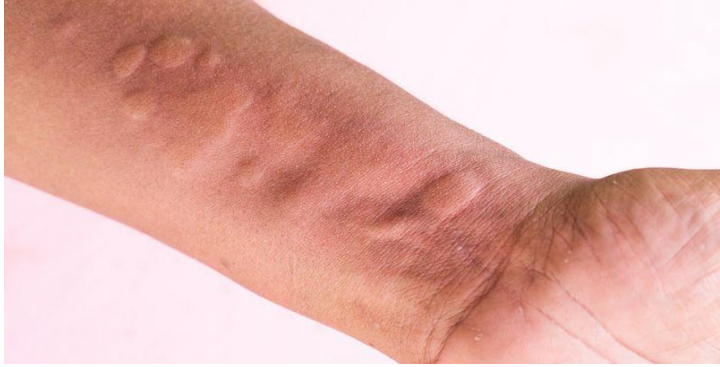
Iloprost for Frostbite



- FDA on 14/2/2024, approved 1st treatment for severe frostbite to reduce risk of finger or toe amputation in adults.
- Iloprost injection (a prostacyclin mimetic), marketed under brand name Aurlumyn, is a vasodilator & prevents blood clotting.
- The most common side effects of Aurlumyn include headache, flushing, palpitations, nausea, vomiting, dizziness & hypotension.

https://www.fda.gov/drugs/development-approval-process-drugs

Omalizumab for Food Allergy



- On 16/2/2024, FDA approved Xolair (omalizumab) injection for IgE-mediated food allergy in certain adults & children 1 year or older for the reduction of allergic reactions (Type I), including reducing the risk of anaphylaxis, that may occur with accidental exposure to one or more foods.
- Patients who take Xolair must continue to avoid foods they are allergic to.
- Xolair is intended for repeated use to reduce the risk of allergic reactions & is not approved for the immediate emergency treatment of allergic reactions, including anaphylaxis.

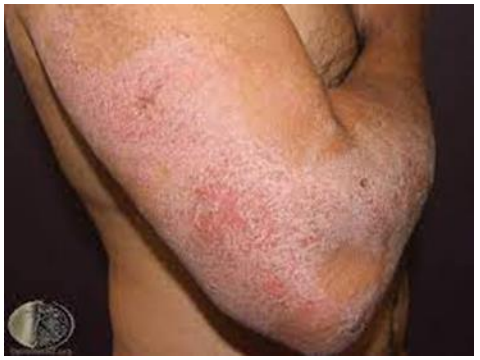
https://www.fda.gov/drugs/development-approval-process-drugs

Juvéderm Voluma XC for Temple Hollows

- FDA has approved the first hyaluronic acid dermal filler for use in the upper face, on 5/3/2024.
- Allergan Aesthetics' Juvéderm Voluma XC is now approved for improvement of moderate to severe temple hollows in adult patients aged 21 years & older.
- Juvéderm Voluma XC is also currently indicated for use in deep injection for cheek augmentation (for the correction of age-related volume loss in the mid-face) & for augmentation of chin region (for improvement of chin profile).

https://www.fda.gov/drugs/development-approval-process-drugs

Tapinarof Cream for AD



- In data that was announced by Dermavant Sciences, from the phase 3 ‘ADORING 2’ trial, investigators explored the efficacy and safety of topical tapinarof (VTAMA) cream, 1% for pediatric patients—as young as 2 years of age—and adults with AD.
- Almost 50% of AD patients given tapinarof, 1% achieved improvement on the Validated Investigator Global Assessment for Atopic Dermatitis (vIGA-ADTM).

https://www.hcplive.com/view/positive-phase-3-trial-results-tapinarof-cream-atopic-dermatitis

- FDA accepted Supplemental New Drug Application (sNDA) for VTAMA® (tapinarof) Cream, 1% for the Treatment of AD in Adults & Children 2 Years of Age & Older on April 29, 2024, & was approved on December 16, 2024.

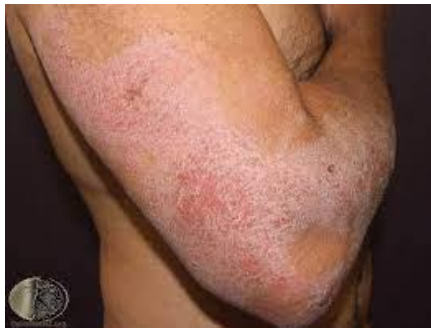
https://www.fda.gov/drugs/development-approval-process-drugs

Sofpironium (Sofdra) for 1ry Axillary Hyperhidrosis

- On 21/6/2024, FDA has approved Botanix Pharmaceutical's sofpironium (Sofdra) topical gel, 12.45% for adults & children ages 9 y & older with 1ry axillary hyperhidrosis.
- Sofpironium is intended for once-daily use with an applicator to avoid hand contact.
- Patients often avoid systemic oral anticholinergics due to unpleasant side effects, which are less frequent with the topical form.

https://www.fda.gov/drugs/development-approval-process-drugs

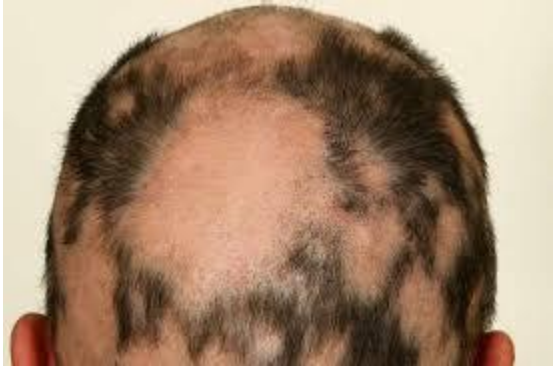
Roflumilast for AD



- ZORYVE (roflumilast) is a steroid-free topical PDE4 inhibitor.
- On 9/7/2024, ZORYVE (roflumilast) cream 0.15% is approved by FDA for mild to moderate AD in individuals 6y+.
- ZORVYE cream 0.3% is approved for plaque psoriasis in individuals 6y+.
- Another formulation, ZORYVE foam 0.3%, is available for seborrheic dermatitis in adults & children ages 9y+.
- Roflumilast cream for AD is currently being evaluated at a lower dose of 0.05% for children aged 2 to 5y. In addition, Arcutis has completed its clinical development program for ZORYVE foam 0.3% for scalp & body psoriasis to submit an sNDA.

https://www.fda.gov/drugs/development-approval-process-drugs

Deuruxolitinib for AA



- On 26/7/2024, FDA has approved the oral JAK inhibitor deuruxolitinib for the treatment of adults with severe AA.
- Deuruxolitinib, which comes in 8-mg tablets, is an oral selective inhibitor of JAK1 & JAK2 and is administered twice a day.
- Deuruxolitinib is 3rd JAK inhibitor approved by FDA for severe AA. Baricitinib (Olumiant) (JAK1 & JAK2 inhibitor) was approved in June 2022 for adults with AA, followed by ritlecitinib (Litfulo) (JAK3 inhibitor) approved in June 2023 for patients ages 12 y+.

https://www.fda.gov/drugs/development-approval-process-drugs

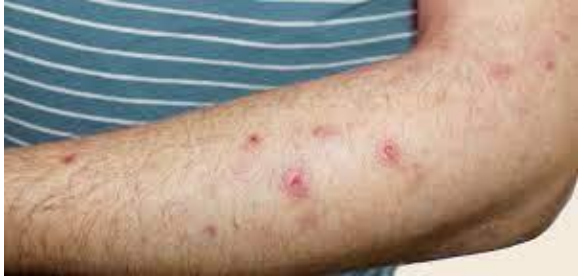
Neffy for Anaphylaxis

neffy® (epinephrine nasal spray) 2 mg

- On 9/8/2024, FDA approved neffy (epinephrine nasal spray) for the emergency treatment of allergic reactions (Type I), including those that are life-threatening (anaphylaxis), in adult and pediatric patients who weigh at least 30 kilograms (about 66 pounds).

https://www.fda.gov/drugs/development-approval-process-drugs

Nemolizumab for PN & AD



- In a phase 3, randomized trial that included 274 adults with moderate-to-severe PN, improvement in itch & skin appearance at 16 weeks, as measured by validated scoring systems, was greater for patients assigned to subcutaneous nemolizumab (an antagonist of IL-31, a cytokine linked to pruritus) than those assigned to placebo.
- Adverse events in the nemolizumab group included exacerbation/new onset of AD & peripheral or facial edema. Müller et al., 2023
- On August 13, 2024, FDA approved nemolizumab for treatment of adults with PN. On December 14, 2024, FDA approved nemolizumab for the treatment of patients 12 years & older with moderate-to-severe AD, in combination with TCS &/or TCI when the disease is not adequately controlled with topical prescription therapies.

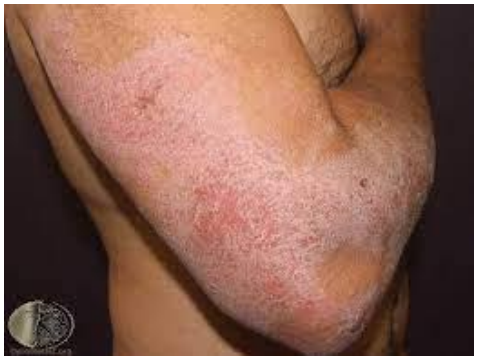
https://www.fda.gov/drugs/development-approval-process-drugs

Apremilast for Psoriasis

- Otezla® (apremilast) is an oral small-molecule inhibitor of PDE4. PDE4 inhibition results in increased intracellular cAMP levels, which is thought to indirectly modulate the production of inflammatory mediators.
- Since its initial FDA approval in 2014, Otezla has been prescribed to more than 1 million patients worldwide.
- On 20/8/2024, FDA approved Otezla for the treatment of moderate to severe plaque psoriasis in children & adolescents ages 6y+, who weigh at least 20 kg (44 lb) & are candidates for phototherapy or systemic therapy.

https://www.fda.gov/drugs/development-approval-process-drugs

Lebrikizumab for Moderate-to-Severe AD



- The phase II and phase III trials seem to corroborate efficacy of lebrikizumab (IL-13 inhibitor) in treatment of moderate-to-severe AD, as shown by significant improvement of Eczema Area & Severity Index, body surface area, & pruritus scores.
- Also, lebrikizumab demonstrated favorable safety & tolerability profiles, with the majority of patients experiencing no significant adverse events.

  Bernardo et al., 2023
- Lebrikizumab (Ebglyss) was FDA approved on 13/9/2024, for adults and children 12 years and above who weigh at least 40 kg with moderate-to-severe AD.

https://www.fda.gov/drugs/development-approval-process-drugs

Delgocitinib for Hand Dermatitis

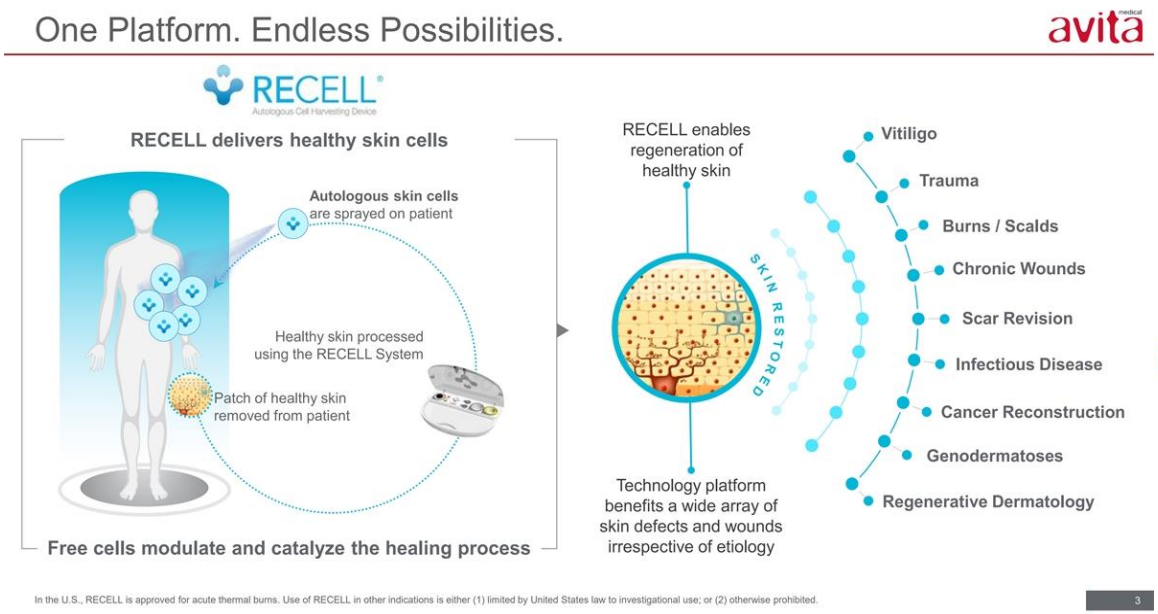
- Delgocitinib is approved to treat adult patients with moderate to severe chronic hand eczema by European Medicines Agency (EMA) on 23/9/2024, The Medicines and Healthcare products Regulatory Agency (MHRA) in the UK on 10/12/2024.

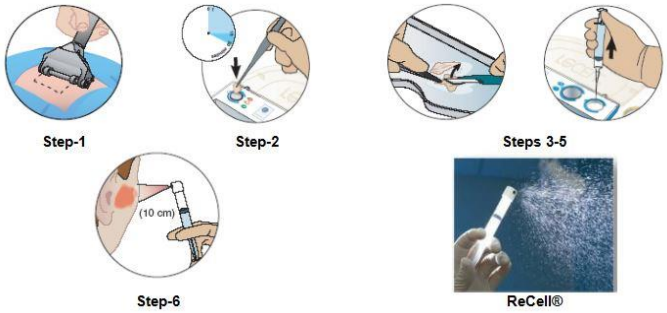
https://www.gov.uk/government/news/delgocitinib-approved-to-treat-adult-patients-with-severe-chronic-hand-eczema

- On 23/9/2024, FDA Accepts LEO Pharma's Filing of Delgocitinib Cream 2% New Drug Application for the Treatment of moderate to severe Chronic Hand Eczema in adults, who have had an inadequate response to, or for whom topical corticosteroids are not advisable.

https://www.fda.gov/drugs/development-approval-process-drugs

RECELL Autologous Cell Harvesting Device

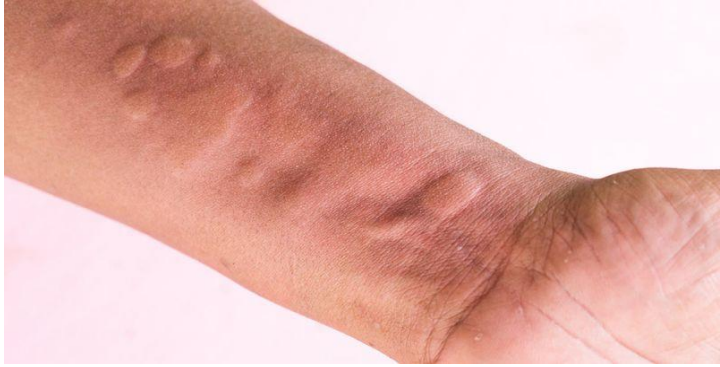




- On 1/10/2024, FDA approved the RECELL Autologous Cell Harvesting Device for repigmentation of stable depigmented vitiligo in patients 18 y+. The RECELL Device used for safe & rapid preparation of Spray-On Skin Cells from a small sample of a patient's own skin. The suspension of Spray-On Skin Cells is suitable for application to skin resurfaced by an ablative laser.

https://www.fda.gov/drugs/development-approval-process-drugs

Dupilumab for CSU



- In 2023, FDA requested more efficacy data for the monoclonal antibody to treat CSU.
- Dupixent has been approved for CSU in Japan, **UAE** on 24/10/2024 & is also under regulatory review in European Union based on earlier trial readouts.
- On 15/11/2024, FDA has accepted for review resubmission of supplemental biologics license application (sBLA) for Dupilumab to treat adults & pediatric patients aged 12 years & older with CSU whose disease is not adequately controlled with H1 antihistamine treatment. The target action date for the FDA decision is April 18, 2025.

https://www.fda.gov/drugs/development-approval-process-drugs

Bimekizumab for HS

- On 22 April 2024, UCB, a global biopharmaceutical company, announced that the European Commission (EC) has granted marketing authorization for BIMZELX® (bimekizumab) for the treatment of active moderate to severe HS in adults with an inadequate response to conventional systemic HS therapy.

https://www.ucb.com/newsroom/press-releases/article/ucb-announces-eu-regulatory-filing-for-bimekizumab-for-the-treatment-of-moderate-to-severe-hidradenitis-suppurativa

- On Nov. 20, 2024, FDA has approved BIMZELX® (bimekizumab-bkzx) for the treatment of adults with moderate-to-severe HS.
- BIMZELX is the first and only approved medicine designed to selectively inhibit IL-17F in addition to IL-17A.

https://www.fda.gov/drugs/development-approval-process-drugs

Upcomings in Dermatology

Orismilast

- Orismilast is a next-generation, high potency PDE4 inhibitor targeting the PDE4B/D subtypes linked to inflammation, demonstrating potent inhibition of Th1, Th2 and Th17 pathways.
- It acts early in the inflammation cascade, inducing a broad range of anti-inflammatory effects across multiple cytokines involved in many dermatological and immunological diseases.

The current development status of oral orismilast is the following:

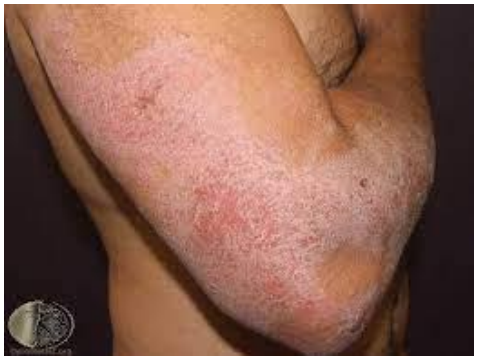
- AD: FDA has granted Fast Track designation to oral orismilast for the treatment of moderate to severe AD. Successful completion of the ADESOS Phase 2b dose finding study was reported in June 2024.

- HS: FDA has granted Fast Track designation to oral orismilast for the treatment of moderate to severe HS. In a phase 2a study, investigators found that oral orismilast demonstrated dose-dependent tolerability in patients. Furthermore, the results of this study may also be indicative of the PDE4 inhibitor's ability to contribute to meaningful clinical improvements of HS.

- Psoriasis: FDA approved UNION's Investigational New Drug Program (IND) for advancing oral orismilast into a Phase 2b trial in patients with moderate to severe psoriasis. Orismilast demonstrated greater efficacy vs placebo & a safety profile in line with PDE4 inhibition in moderate-to-severe psoriasis.

https://uniontherapeutics.com/orismilast/

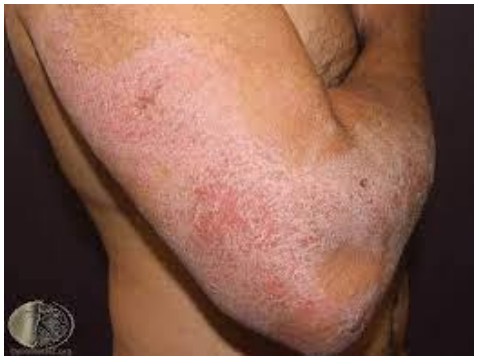
Zabalafin for AD



- Zabalafin hydrogel (topical sulfur) is a novel, first-in-class complex single-source botanical agent with “multiple bioactive compounds that provides multiple mechanisms of action, including anti-pruritic, antibacterial & anti-inflammatory activity,” according to Alphyn.
- Zabalafin hydrogel would be the first AD therapeutic to treat the bacterial complications of AD, specifically Staphylococcus aureus & methicillin-resistant Staphylococcus.

https://www.prnewswire.com/news-releases/alphyn-announces-positive-results-from-second-cohort-of-phase-2a-clinical-trial-in-atopic-dermatitis-302082303.html

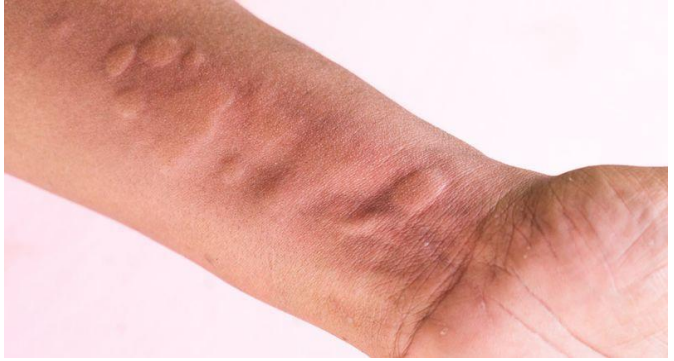
Tozorakimab for AD



- Tozorakimab is a high-affinity human monoclonal antibody that neutralizes IL-33, a broad-acting alarmin cytokine that is over-expressed in the keratinocytes of patients with AD.
- An exploratory phase 2a study evaluated the safety & efficacy of tozorakimab in patients with moderate to severe AD.
- Improvements in response rates and a reduction in pruritus were observed in the FRONTIER-2 study, specifically in patients taking 600 mg of tozorakimab SC injection Q4wks .

Silverberg et al., 2024

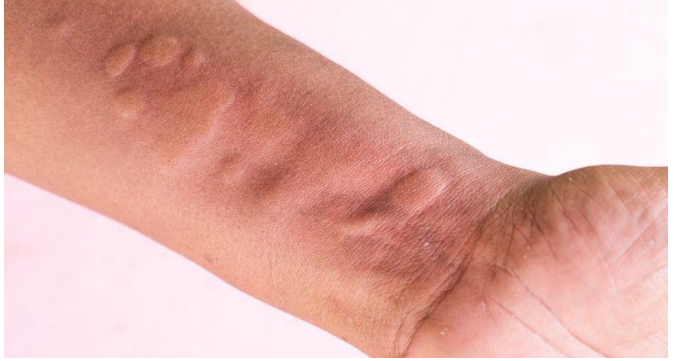
Barzolvolimab for CSU



- Barzolvolimab (anti-KIT monoclonal antibody) demonstrated encouraging clinical activity in a Phase 1b CSU study.
- Barzolvolimab at 150mg Q4W & 300mg Q8W demonstrated clinically meaningful and statistically significant improvement in UAS7 compared with placebo at 12 weeks in patients with antihistamine refractory CSU.
- Barzolvolimab was also well tolerated with a favorable safety profile.

Maurer et al., 2024

EVO756 for CSU



- EVO756 is a novel orally administered, highly selective MRGPRX2 inhibitor, targeting non IgE pathway for mast cell activation being developed for patients with CSU.
- Phase 1 clinical trial, evaluated the safety/tolerability and preliminary activity of EVO756 & Phase 2 Trial of EVO756 in CIU is ongoing.
- EVO756-CIU001 is a multi-center, Phase 2a study evaluating the safety, tolerability, and efficacy of EVO756 in adults with CIU (either cold urticaria or symptomatic dermographism).
- All participants received open-label treatment with EVO756, once daily, for a 4-week treatment period.

https://www.dermatologytimes.com/journals/dermatology-times

Picankibart for psoriasis

- Existing evidences show that IL-23p19 targeted antibodies have advantages in maintaining long-term efficacy & medication convenience.
- Picankibart, the first anti-IL-23p19 antibody independently developed by a Chinese company, demonstrated significant short-term onset & long-term maintenance of efficacy; every-12-week administration, improving convenience & adherence, & bringing patients with significant clinical benefits & QoL improvements with favorable safety.
- Results showed a significantly higher efficacy of picankibart compared to the placebo, with 80.3% of treated subjects achieving PASI 90 & 93.5% reaching an sPGA score of 0 or 1, compared to 2.0% and 13.1% respectively for the placebo group.
- The study also demonstrated sustained results, with 84.9% of patients on the 200 mg dose maintaining PASI 90 and 85.9% maintaining an sPGA score of 0 or 1 at week 52.

https://www.dermatologytimes.com/journals/dermatology-times

SFA-002 for Psoriasis

- SFA Therapeutics recently announced the completion of enrollment in a phase 1b clinical trial (NCT05642182) evaluating SFA-002, an oral therapeutic for the treatment of mild to moderate plaque psoriasis.
- Anti-inflammatories, Antipsoriatics, Antirheumatics, Skin disorder therapies; Small molecules.
- Mechanism of Action: IFN-gamma inhibitors; IL-12 inhibitors; IL-17 inhibitors; IL-23 inhibitors; TNF-alpha inhibitors.

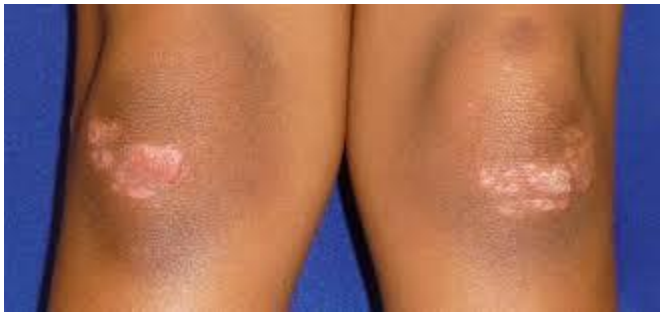
https://www.dermatologytimes.com/journals/dermatology-times

Oral IL-23-Receptor Antagonist Peptide for Psoriasis

- JNJ-77242113 is a novel, orally administered IL-23-receptor antagonist peptide that selectively blocks IL-23 signaling and downstream cytokine production.
- After 16 weeks of once- or twice-daily oral administration, treatment with the IL-23-receptor antagonist peptide JNJ-77242113 showed greater efficacy than placebo in patients with moderate-to-severe plaque psoriasis. (Funded by Janssen Research and Development; FRONTIER 1 ClinicalTrials.gov number, NCT05223868.).

Bissonnette et al., 2024

Guselkumab for Pediatric Psoriasis



- On December 2, 2024– Johnson & Johnson announced the submission of supplemental Biologics License Applications (sBLAs) to FDA seeking approval of TREMFYA® (guselkumab) for the treatment of children 6 y+ with moderate-to-severe plaque psoriasis.

https://www.fda.gov/drugs/development-approval-process-drugs

VYN201 for Vitiligo

- In June 2024, Vyne Therapeutics Inc announced dosing the first subject in its phase 2 b clinical trial for VYN201 topical gel for 24 weeks, a novel BET (Bromodomain & Extra-Terminal domain proteins, which play a pivotal role in the transcriptional regulation of the inflammatory response) inhibitor aiming at treating non segmental vitiligo.

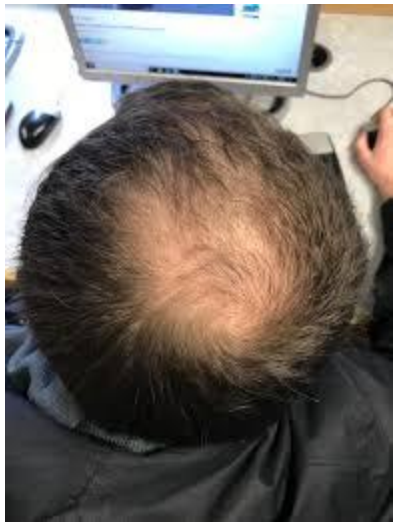
https://www.dermatologytimes.com/journals/dermatology-times

Afamelanotide for Vitiligo

- Phase 3 CUV 105 trial assesses the efficacy & safety of afamelanotide (Scenesse) in combination with phototherapy for the treatment of vitiligo in skin types IV-VI.
- Afamelanotide is a synthetic form of α-MSH. Afamelanotide works in a way similar to the natural hormone, by making skin cells produce eumelanin which is a brown-black type of melanin pigment in the skin.
- Afamelanotide is used to increase tolerance to the sun & light in adults with a confirmed diagnosis of erythropoietic protoporphyria (EPP).

https://www.dermatologytimes.com/journals/dermatology-times

PP405 for AGA



- Pelage Pharmaceuticals recently announced its novel topical agent, PP405, has advanced to a phase 2a study for AGA.
- The drug is an inhibitor mitochondrial pyruvate carrier (MPC). It is a membrane transporter on mitochondria that is able to shift the aerobic, anaerobic metabolism of the cell.
- Essentially, it modulates the levels of LDH within the cell & shift metabolism so that it activates stem cells that are otherwise dormant within the hair follicle, within 7 days of application.

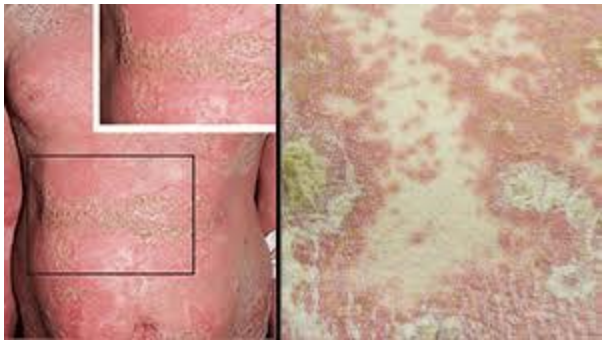
https://www.dermatologytimes.com/journals/dermatology-times

Sonelokimab for HS

- After positive results from the phase 2 MIRA trial, Sonelokimab advances into phase 3 VELA, which is expected to enroll 800 patients across VELA-1 (NCT06411899) and VELA-2 (NCT06411379).
- Sonelokimab effectively inhibits IL-17F in addition to IL-17A in deep tissue inflammation showing promising outcomes, placing HS at the forefront of dermatological innovation.
- Sonelokimab has been evaluated in a randomized, placebo-controlled phase 2b trial (NCT03384745) in 313 patients with moderate to severe plaque-type psoriasis as well.

https://www.biospace.com/article/releases/moonlake-immunotherapeutics-starts-phase-3-vela-program-of-the-nanobody-sonelokimab-in-patients-with-moderate-to-severe-hidradenitis-suppurativa/

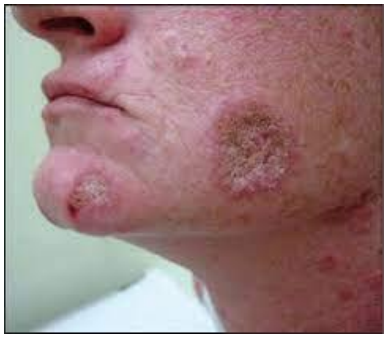
Imsidolimab for GPP

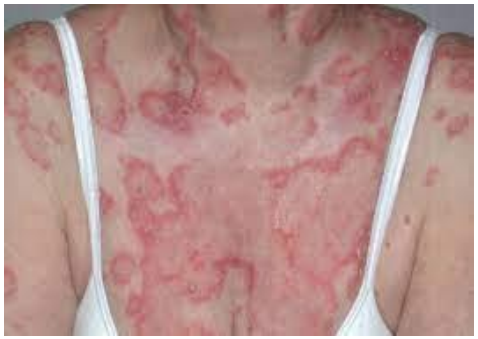


- GEMINI-1 and GEMINI-2 phase 3 clinical trials evaluating the safety & efficacy of investigational imsidolimab (IL-36R mAb) in patients with GPP.
- Out of the patients who received a single dose of 750mg IV imsidolimab, 53% achieved a GPP Physician Global Assessment (GPPPGA) score of 0/1 (clear or almost clear skin) at week 4.

https://ir.anaptysbio.com/news-releases/news-release-details/anaptys-announces-positive-top-line-gemini-2-phase-3-clinical

Iberdomide for CLE

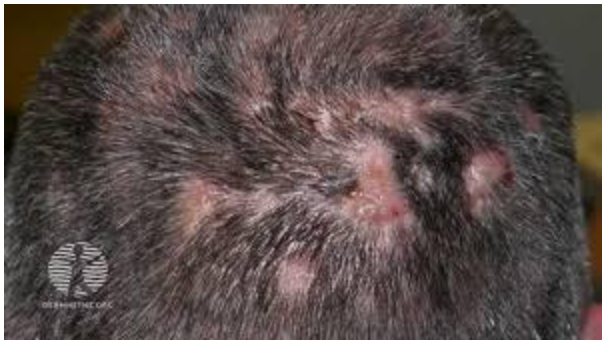




- Iberdomide is a thalidomide analogue, currently under investigation for CLE.

Werth et al., 2024

Brepocitinib for Cicatricial Alopecia



- Th1/IFNγ signaling & JAK dysregulation has shown involvement in cicatricial alopecia, providing rationale for this phase 2a trial with TYK2/JAK1 inhibitor brepocitinib.
- Adults (≥18 years of age) with LPP, FFA, or CCCA diagnosis were randomized to brepocitinib 45 mg daily or placebo for 24 weeks.
- Patients receiving brepocitinib showed significant downregulation in CCL5 expression & fibrosis markers at week 24.

David et al., 2024

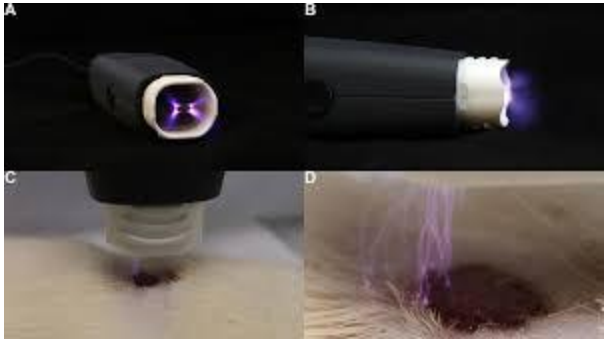
Adapinoid for photoaging

- Adapinoid, commonly known as oleyl adapalenate (OA) is a novel 3rd-generation, over-the-counter retinoid that is a precursor to adapalene.
- Adapinoid 0.5% showed superior improvement in wrinkle severity & pigment intensity compared to retinol 0.5% over 12 weeks.
- Adapinoid reduced facial erythema & TEWL significantly, unlike retinol, which showed no significant changes.
- These findings have important implications for the skincare industry, suggesting that OA may offer a more effective solution for addressing common cosmetic & photoaging concerns with a novel & emerging over-the-counter ingredient.

Nguyen et al., 2024

Non thermal Atmospheric Plasma in Pediatric VV & MC

- Non thermal atmospheric plasma using a floating electrode-dielectric barrier device is as effective & safe as standard-of-care treatments such as cryotherapy & cantharidin, with better tolerability & less erythema and pain.



Waggett et al., 2024

Zoliflodacin for resistant Nisseria gonorrhoeae

- Zoliflodacin (a novel bacterial ligase inhibitor), given as a single dose for uncomplicated urogenital gonorrhoea, recently demonstrated non-inferiority to ceftriaxone +azithromycin & safety in a phase 3 RCT.
- Following regulatory approval, zoliflodacin could improve STI management & help address the threat of untreatable gonorrhoea, as levels of resistance to current first-line treatments increase.
- Forthcoming WHO global guidelines could outline recommendations for zoliflodacin based on existing evidence, & rational approaches for certain populations or use cases, while the evidence base is further strengthened.

Pascual et al., 2024

Reviewing Late-Breaking Research From AAD 2024

- **Upadacitinib for Vitiligo Achieves Skin Repigmentation Through Week 52**: with achievement of F-VASI75 in 37%/29% of UPA6 (n=14), 63%/51% of UPA11 (n=24), 38%/26% of UPA22 (n=11) and achievement of T-VASI50 in 32%/25% (n=12), 40%/32% (n=15), and 41%/28% (n=12), respectively.
- **Lutikizumab Shows Positive Results in Difficult-to-Treat HS After Failed TNF Therapy**: a novel anti–IL-1α/β dual variable domain Ig: both lutikizumab 300 mg every other week (59.5%) and 300 mg every week (48.7%) showed greater response rates over placebo (35.0%).
- **Late-Breaking Phase 2b Data Showed Efficacy of Injectable Polidocanol for Submental Fat Reduction**: a synthetic non-ionic detergent FDA-approved for sclerotherapy, demonstrating adipolytic properties and a favorable profile compared to deoxycholate. up to 6 treatments, administered four weeks apart, involving up to 50 injections of 0.2 ml each.

Reviewing Late-Breaking Research From AAD 2024 (cont.)

- **Povorcitinib Significantly Improves Itch and Lesions in Prurigo Nodularis**: a small molecule JAK1-selective inhibitor, a ≥4-point improvement in itch NRS score (NRS4) at week 16, which was achieved by significantly more patients who received povorcitinib (15mg: 36.1% [P=0.0066], 45mg: 44.4% [P=0.0006], 75mg: 54.1% [P<0.0001]) vs placebo (8.1%).
- **Amlitelimab Demonstrates Sustained Improvements in Atopic Dermatitis Signs and Symptoms:** a fully human nondepleting mAb targeting OX40 ligand on APCs: sustained improvement of signs & symptoms for 28 weeks in adults with moderate to severe AD who had previously responded to amlitelimab & continued treatment.

Reviewing Late-Breaking Research From EADV 2024

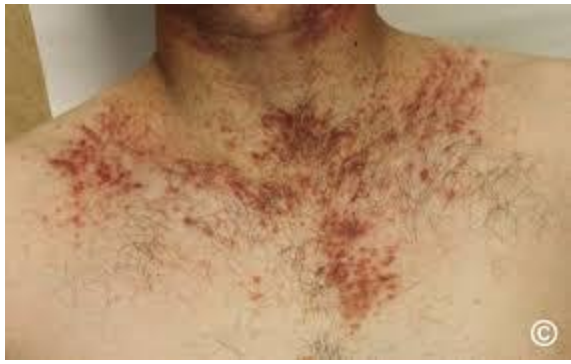
- A 16-week phase 2a mechanism of action trial evaluating the use of **temtokibart 450 mg against dupilumab (Dupixent) 300 mg**, results indicated use of temtokibart provided similar reductions in clinical disease activity as dupilumab. These data suggest that the IL-22 pathway is central to atopic dermatitis pathogenesis, demonstrating that Type 2 inflammation is not the only relevant driver of the disease.
- **Amlitelimab Demonstrates Sustained Improvements in Atopic Dermatitis Signs and Symptoms:** a fully human nondepleting mAb targeting OX40 ligand on APCs: sustained improvement of signs & symptoms for 28 weeks in adults with moderate to severe AD who had previously responded to amlitelimab & continued treatment.

Bangert et al., 2024

https://www.dermatologytimes.com/journals/dermatology-times

Novel Approaches in Dermatology in 2024

Type 2 Inflammation Inhibitors in Darier Disease



- **Darier disease (DD)** is a rare autosomal dominant genodermatosis. Onset usually occurs during puberty following a chronic course with frequent exacerbations.
- The management of moderate to severe DD remains limited due to efficacy &/or safety considerations.
- Most commonly used strategies combine trigger avoidance, topical or systemic retinoids & immunomodulatory agents arguing for the importance of skin barrier & inflammation in DD.
- Report 2 cases of safe & effective use of type 2 inflammation inhibitors (**dupilumab & tralokinumab**) in patients with **severe & recalcitrant DD** is published.

Bin Jadeed et al., 2024

Harlequin Ichthyosis Nanobubble Hydrotherapy

Figure 1. Before-therapy picture showing diffuse and scaly body rash.

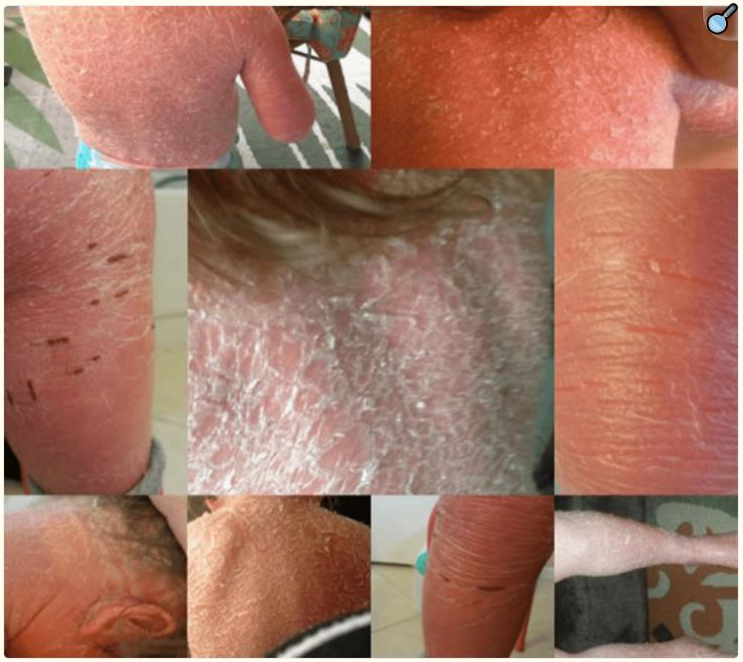
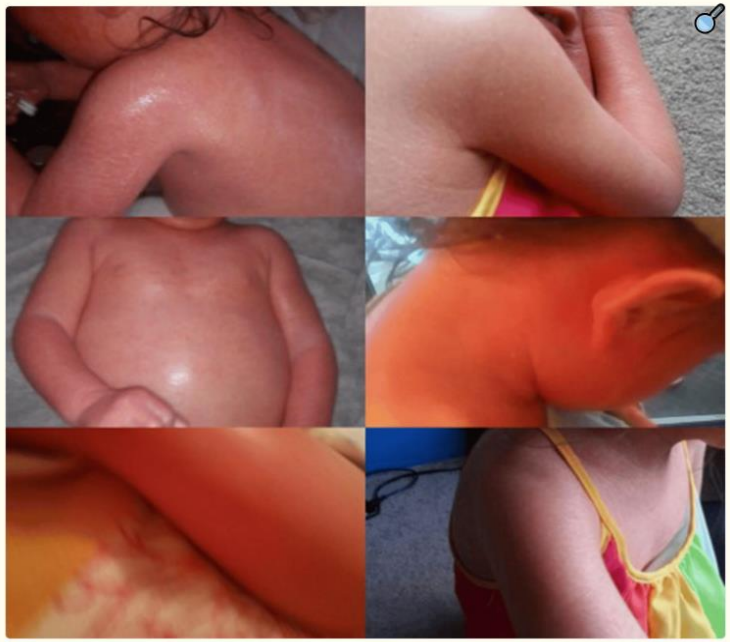


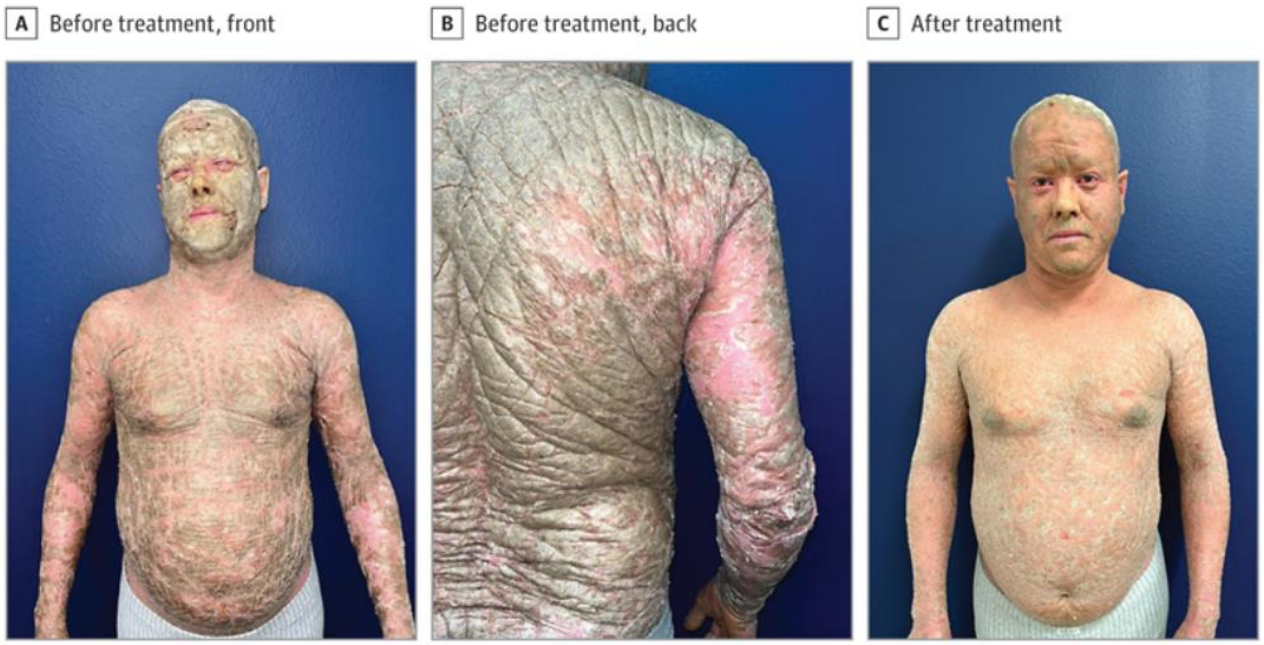
Figure 2. After-therapy picture showing resolution of the diffuse and scaly body rash.



- Intensive 100-hour medical trial conducted three days a week at the dermatologist's office.
- This revolutionary **portable system saturates bathwater** with billions of minuscule air bubbles, enriched with high levels of dissolved **oxygen & ozone** and maintains consistent heat.
- The **nanobubbles** contributed to the completion of the scratch-itch cycle by **shedding skin in the bath** & **moisturizing the skin** from the inside out.
- By enhancing skin oxygenation, nanobubbles could positively influence **collagen synthesis**, **improving the texture & elasticity of the skin**. This has the potential to reduce skin cracking & **enhance skin barrier function** through enhanced ECM.

Stark et al., 2024

Tralokinumab & acitretin for Lamellar Ichthyosis

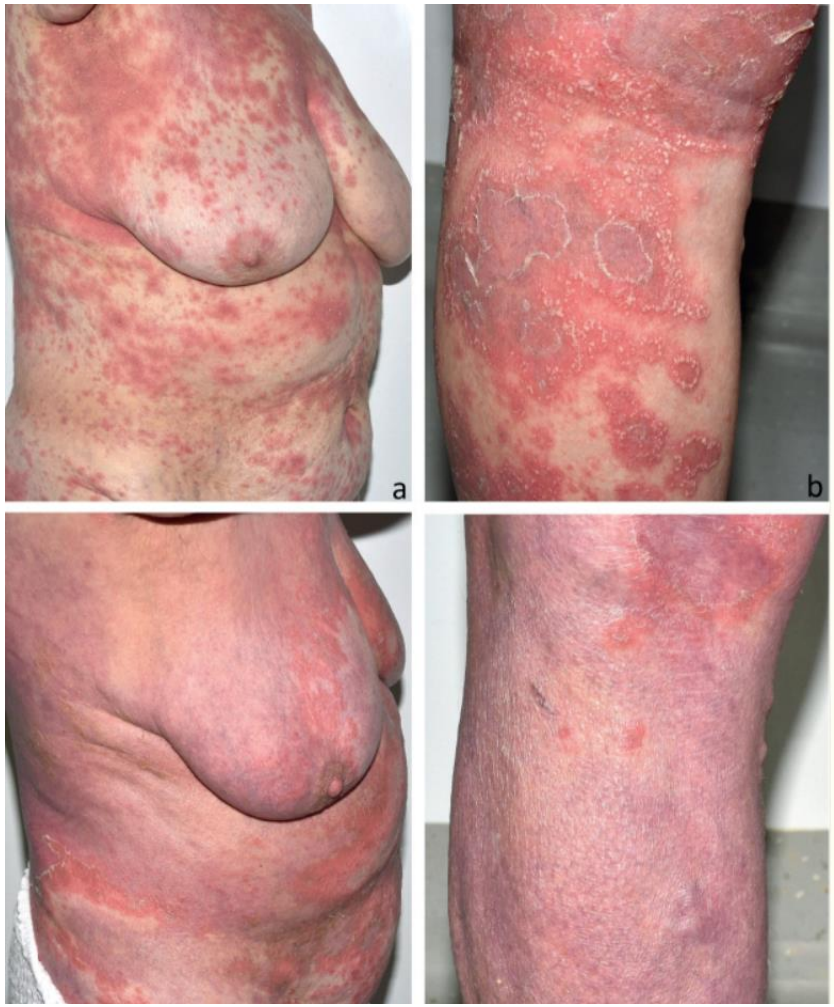


- A patient with **lamellar ichthyosis** has previously been treated with emollients and high doses (35 mg per day) of oral acitretin from childhood until age 18 years with slight and variable improvement.
- **Tralokinumab upgraded to 300 mg/week** lead to significant improvement by week 28, except for facial hyperkeratosis.
- **Acitretin 25 mg daily** was added with marked improvement, 3 months after combination therapy.

De Greef & Baeck, 2024

Spesolimab for AGEP

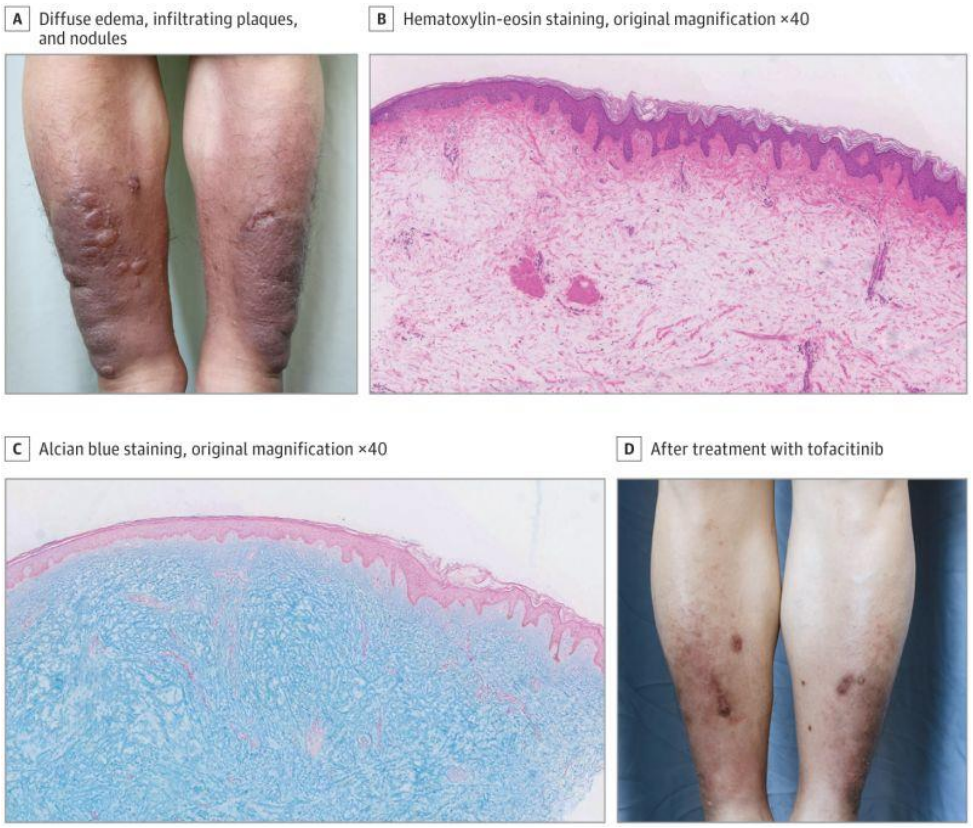
- Clinically, **AGEP & GPP** share similarities, making their distinction challenging.
- **IL-36 signaling** dysregulation is involved in the physiopathology of both pustular diseases.
- This is the first case of **AGEP** successfully treated with **spesolimab**.



Russo et al., 2024

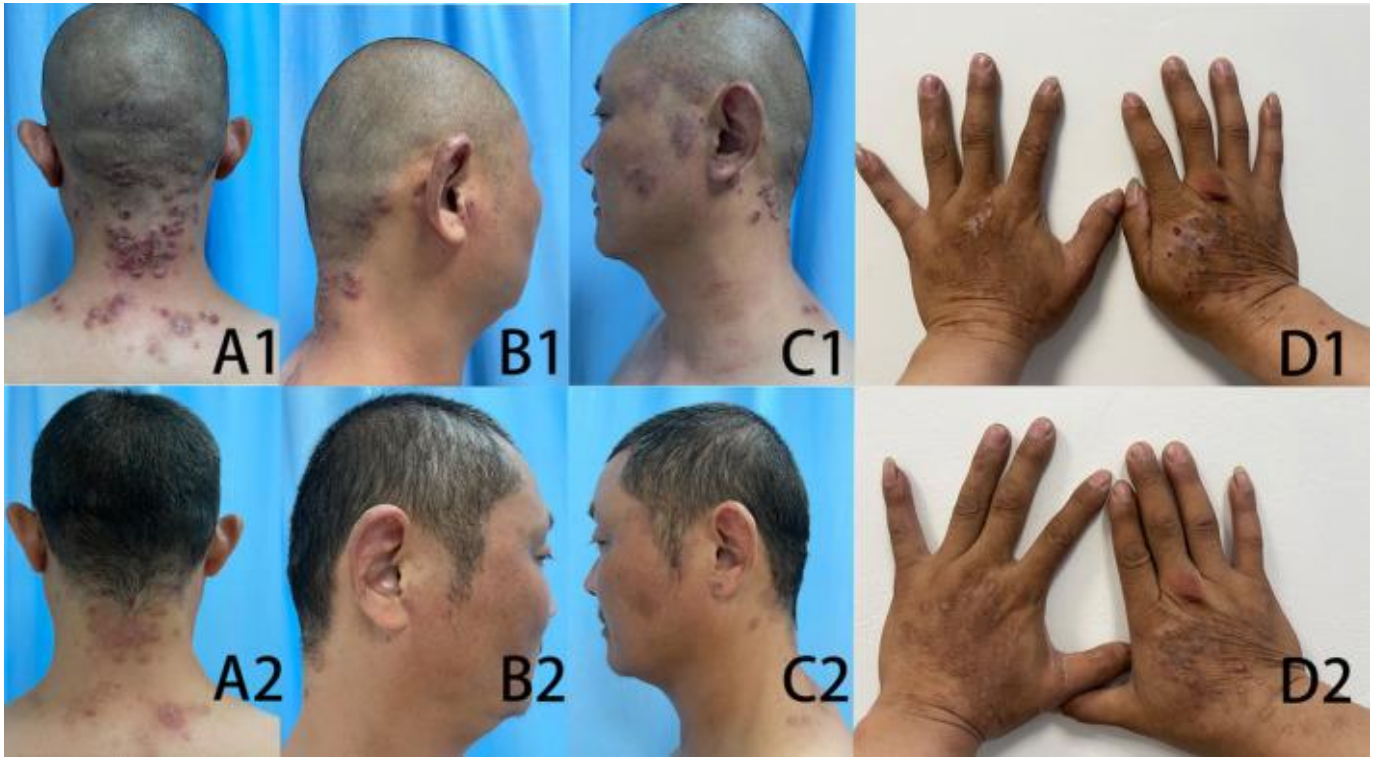
Tofacitinib Treatment for Pretibial Myxedema

- JAK-STAT signaling pathway is pivotal for T-cell activation, differentiation & function.
- Fibroblasts stimulated by T-cell cytokines promote secretion of **GAGs** in **PTM** lesions.
- **JAK inhibitors** may be beneficial for treating PTM.
- Favorable responses were reported in 2 patients with PTM treated with **tofacitinib**, a **JAK1/JAK3 inhibitor**.



Wang et al., 2024

Abrocitinib for PN



- **PN** is frequently difficult to manage with conventional therapy.
- Given the pathogenesis and refractory nature, a case in which inhibition of JAK-STAT signaling significantly improved PN.
- Based on the results, **abrocitinib** is a promising choice for treatment of **PN**.

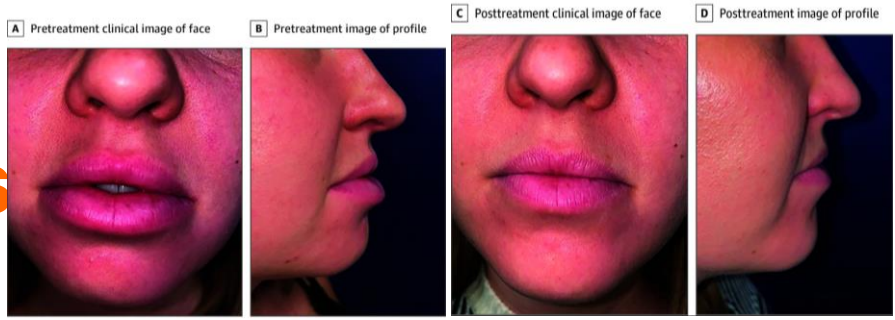
Sun & Wu, 2024

Upadacitinib for EB Pruriginosa

- **EB pruriginosa** is a rare, distinct clinical subtype of **DEB** caused by mutations in the **COL7A1 gene**.
- It is characterized by skin fragility, blistering, intense pruritus, prurigo-like lichenified lesions & hypertrophic scarring mainly distributed on the extensor extremities.
- Traditional treatment, including topical steroids or tacrolimus, antihistamines, thalidomide & immunosuppressants, often yields high rates of therapeutic failure or disease recurrence.
- **Upadacitinib**, an **oral selective JAK-1 inhibitor**, has shown great efficacy for the treatment of **moderate or severe** recalcitrant cases of **EB pruriginosa**.

Zhang & Lin, 2024

Upadacitinib for Granulomatous Cheilitis



- **JAK inhibitors** have emerged as promising therapeutic options for various inflammatory disorders, including granulomatous diseases.
- **Granulomatous cheilitis** is a rare debilitating granulomatous disorder that often represents a therapeutic challenge.
- 5 patients in this study with longstanding recalcitrant GC showed meaningful clinical response within a median follow-up of 7.2 months when treated with high-dose (30 mg/d) **upadacitinib**.
- **Crohn's disease** remained quiescent in 3 of 3 patients with concomitant GC & CD, despite discontinuing biologic treatment in 2 patients & despite a lower-dose regimen of upadacitinib than the recommended for CD.

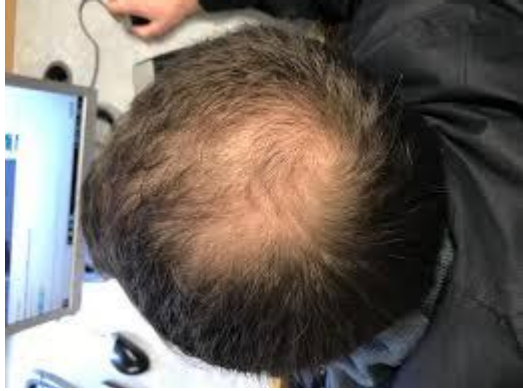
De Greef et al., 2024

Efficacy of Topical Isoniazid in Melasma

- Researchers have proposed that **isoniazid**, a substance that is a **peroxidase substrate,** could be metabolized by melanocyte peroxidase, potentially reducing hyperactive melanocytes in the skin.
- researchers noted significant **reductions in melanin index**, with an initial average score of 63.77 ± 6.27 among patients in the isoniazid treatment group at baseline to 55.92 ± 5.79 at the treatment period's conclusion, with gradual decreases observed every 4 weeks.
- Further clinical trials are necessary to confirm results and determine the safety of the long-term use of isoniazid in treating melasma.

Ahramiyanpour et al., 2024

"Sugar" gel for AGA



- Surprise findings from a study on a naturally occurring sugar in the body, **2-deoxy-D-Ribose (2dDR)**, may provide hope for those facing alopecia & baldness.
- Results showed “an increase in length, diameter, hair follicle density, anagen/telogen ratio, diameter of hair follicles, area of the hair bulb covered in melanin, and an increase in the number of blood vessels in mice after **20 days**.
- This can be explained by 2dDR promoting increased blood supply to the hair bulb, which in turn **stimulates hair growth**.

McCallum, 2024

Alerting Reports 2024

Benzene Concerns in Benzoyl Peroxide Spark Calls for Safer Acne Treatment Standards

- **High levels of benzene** found in certain **BPO-containing acne products** was announced on March 6, 2024.
- The new study reports that "111 BPO drug products tested from major US retailers appear to be substantially contaminated with benzene when tested shortly after being acquired off the shelf."
- Results demonstrated that 34% of the products, equivalent to 38 products, contained benzene levels above the FDA's 2 parts per million (ppm) limit, with concentrations ranging from 0.16 ppm to 35.30 ppm.
- Applying BPO products before sun exposure added another layer of risk, as **UV exposure** could exacerbate the degradation of BPO into benzene, further increasing **carcinogenic potential**.
- These findings suggest that simply storing BPO products in cool conditions is not sufficient to eliminate the risk of benzene formation.
- Options such as salicylic acid, glycolic acid & topical or even oral antibiotics can be effective for **managing acne without benzene risk**.

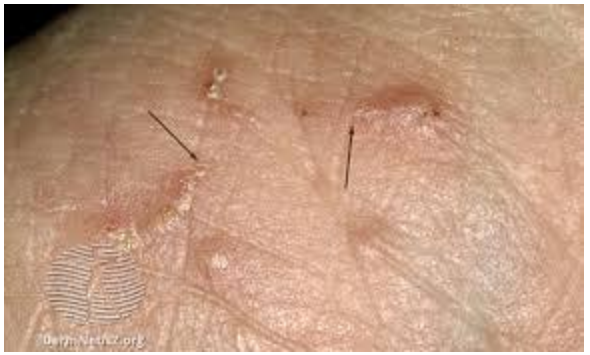
Kucera et al., 2024

Retinopathy Associated With Hair Dye

- **Retinopathy associated with the use of hair dye aromatic amines (RAHDAA)** was recently reported in 3 middle-aged women following exposure to hair dyes containing aromatic amines.
- It was described as multiple **bilateral serous retinal detachments (SRDs)**, involving the **mitogen-activated protein kinases kinase enzymes MEK1, MEK2, or both**.
- The retinopathy **resolved** within months **after discontinuing the hair dye**.

Chirpaz et al., 2024

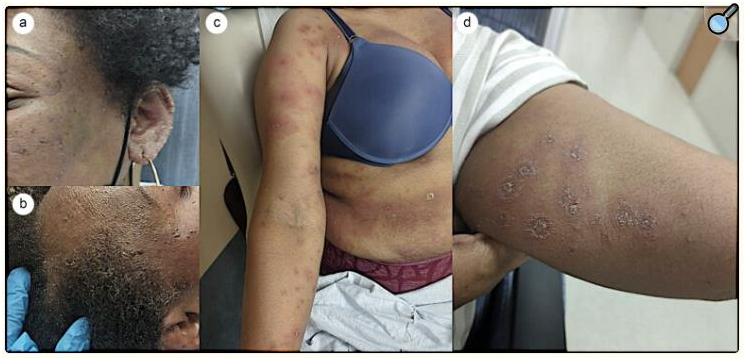
Topical Permethrin vs Benzyl Benzoate in Scabies



- **benzyl benzoate 25%** (BB) demonstrated **superior efficacy** & cure rates in cases of scabies, while topical **permethrin 5%** exhibited a lack of efficacy in most patient cases.
- Participants in the BB treatment group exhibited a significantly higher cure rate (**87%**) compared to participants in the permethrin group (**27%**).
- Mild adverse events were reported in both groups, with BB showing slightly more **burning or stinging sensations**.

Meyersburg et al., 2024

AGEP secondary to dose-related turmeric supplementation



- **AGEP**, a severe cutaneous adverse reaction, is associated most often with **antibiotics**; however, many other medications, including **herbal supplements**, have been documented as triggers.
- This is only the second reported case of potential **turmeric-induced AGEP** & **the first reported case** establishing **a dose-related association between turmeric and AGEP**.
- It is important to consider **herbal supplements** as part of the medical history to guide proper management when assessing a patient with **AGEP**.

Riva et al., 2024

Warning against "Baby BTX"

- **“Baby Botox”** is a term that originated on social media for smaller-than-usual doses of the botulinum neurotoxin. This procedure has become a hit among **younger patients** for preventative anti-aging or regular touch-ups.
- Its use among those under 19 has risen, potentially leading to more frequent treatments over their lifetime.
- While the effects are temporary, long-term use may result in **permanent changes**, including **muscle atrophy** & reduced strength.
- Serial injections of botulinum toxin in the facial muscles may cause **permanent chemical denervation**.

Mohta, 2024

OC and FFA risk

- **OC** use has been considered a possible factor behind increased incidence of **FFA** because it was first documented in 1994, and a recent genome-wide association study of FFA identified a signal for an association with a variant in **CYP1B1**.
- **OCs** was associated with a **1.9 times greater risk** for **FFA** in individuals with the specific **CYP1B1 genetic variant**, but there was no association among those with no history of OC use.
- The study suggests a significant **gene-environment interaction**, indicating that **OC** use may influence **FFA** risk in **genetically predisposed** individuals.

Rayinda et al., 2024

Sulfites: 2024 American Contact Dermatitis Society Allergen of the Year

- Sodium **disulfite**, also known as sodium metabisulfite or sodium pyrosulfite, is an inorganic compound, which may cause **allergic contact dermatitis**.
- Sulfites act as **antioxidants** & **preservatives**; common sources include **food/beverages, pharmaceuticals & personal care products**.
- Importantly, sulfites are **not** included in most screening **patch test series** & thus may be missed as a relevant contact allergen.
- The **American Contact Dermatitis Society** chose **sulfites** as the **Allergen of the Year for 2024** to raise awareness about this significant allergen.

Ekstein & Warshaw, 2024

Early Predictors of AD in Infants

- Skin biomarkers, notably **S100A8/9 and IL-36γ**, sampled at **2 months**, emerged as potential **signals of AD development**, particularly in infants with **wild-type filaggrin (FLGwt) genes**.
- A new, **noninvasive technique** that detects an abnormal inflammatory cytokine profile in the skin of asymptomatic infants who subsequently progress to development of AD.
- **Presymptomatic cytokine profile** of **carriers of FLGmut** is different from that of children with **FLGwt** who subsequently develop AD, illuminating the diverse molecular pathways that can lead to AD.

Stamatas et al., 2024

Review > J Paediatr Child Health. 2024 Apr-May;60(4-5):87-93. doi: 10.1111/jpc.16561.
Epub 2024 May 7.

Pubertal retroareolar cysts presenting as bluish lumps: New cases and literature review

Mioso Guido [1], Gnesotto Laura [1], Cutrone Mario [2], Parlangeli Antonella [3], Naldi Luigi [4], Sechi Andrea [4]

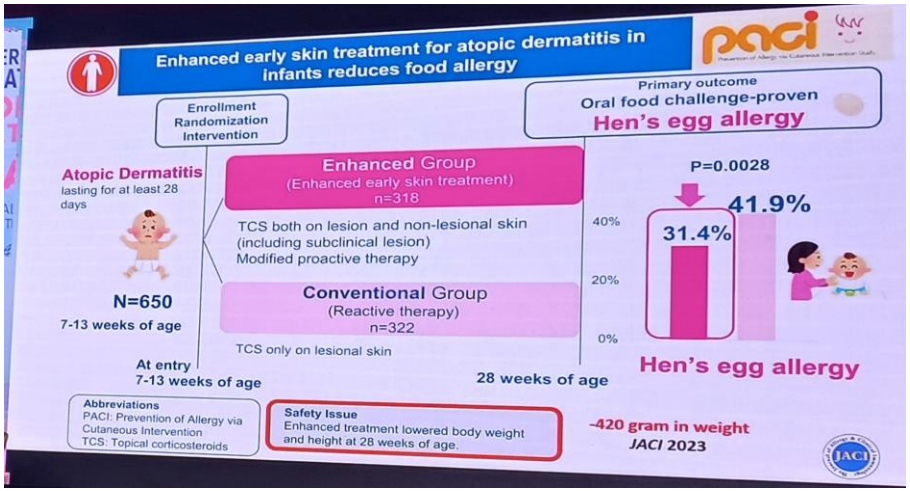
Affiliations + expand

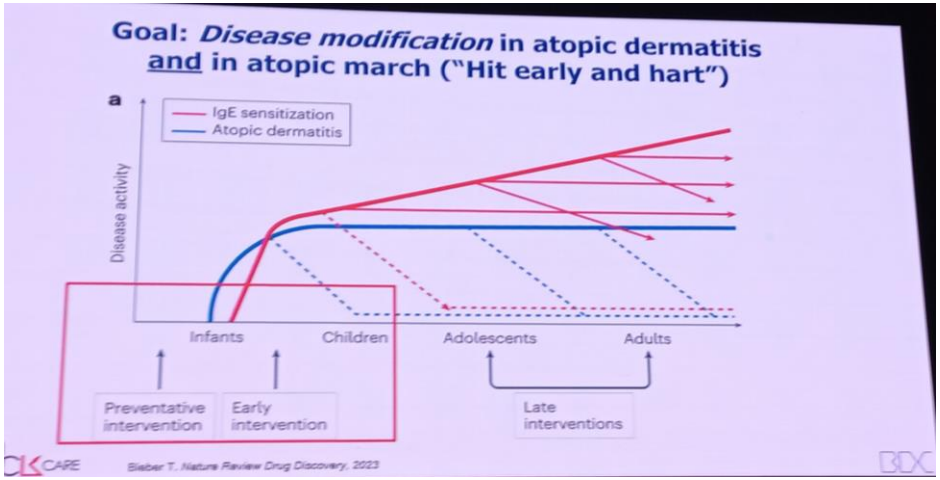
PMID: 38712575 DOI: 10.1111/jpc.16561

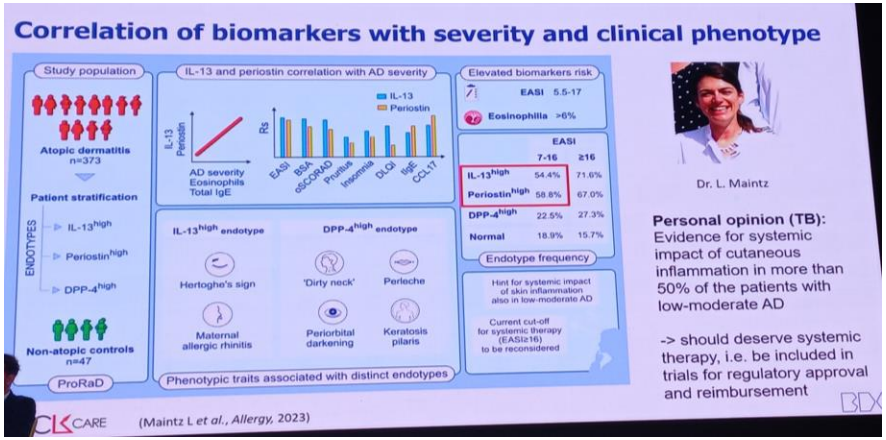
Abstract

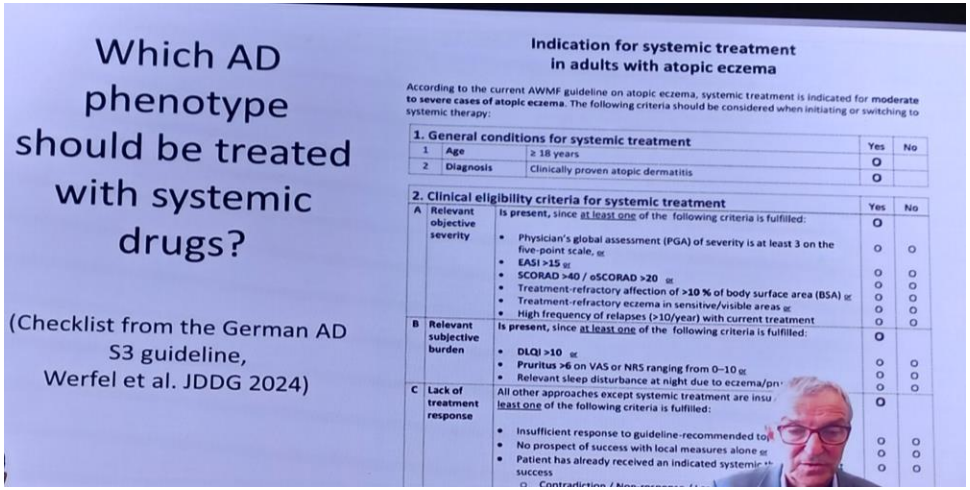
Retroareolar cysts (RCs) are a benign self-resolving condition primarily affecting pubertal individuals. However, their presentation as asymptomatic bluish areolar lumps remains underreported in the literature, with only six cases previously documented. This lack of awareness may lead to the oversight of RCs during diagnosis. To address this, we conducted a comprehensive literature review using PUBMED, and we further added three more cases. The mean time for clinical resolution was found to be 2.3 years. In light of these findings, we proposed a diagnostic and management algorithm to guide clinicians in their approach to RCs in pediatric patients. The algorithm involves thorough clinical examination, medical history assessment, and echographic investigation with color Doppler analysis. Regular follow-up visits are recommended until resolution of the lesions. Notably, due to the consistently favorable outcome of RCs, aggressive diagnostic interventions can be avoided, providing reassurance to patients and their families. It is crucial for paediatricians to stay updated on this underreported condition to ensure timely recognition and appropriate management. Dermatologists should be the first specialists to be consulted in cases of suspected RCs. Increasing awareness among healthcare professionals will contribute to improved diagnosis and management of this benign condition. In conclusion, RCs are a benign self-resolving condition commonly observed during puberty. Their presentation as asymptomatic bluish areolar lumps may often be overlooked. Through this study, we highlighted the importance of early recognition, proposed a diagnostic and management algorithm, and emphasized the favorable prognosis of RCs, which allows for a conservative approach to their management.

ISAD 2024

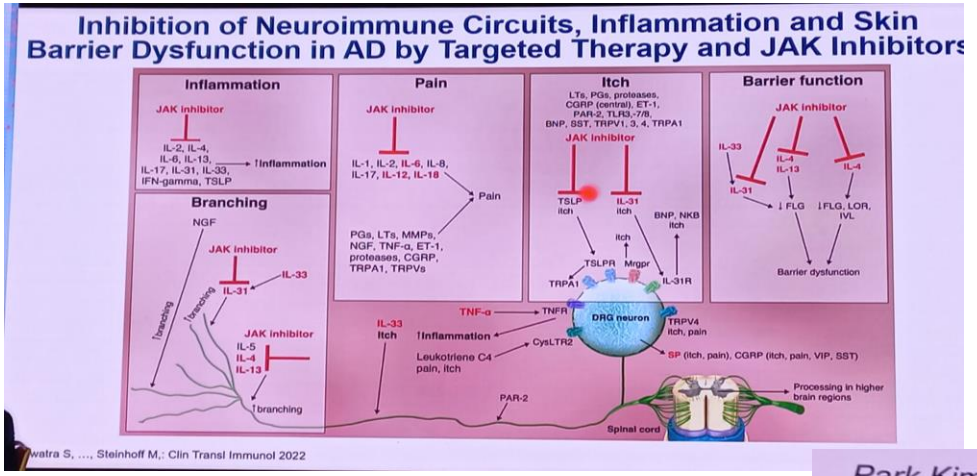

Enhanced early skin treatment for atopic dermatitis in infants reduces food allergy
pacl
Enrollment
Randomization
Intervention
Primary outcome
Oral food challenge-proven
Hen's egg allergy
Atopic Dermatitis
lasting for at least 28 days
N=650
7-13 weeks of age
Enhanced Group
(Enhanced early skin treatment)
n=318
TCS both on lesion and non-lesional skin
(including subclinical lesion)
Modified proactive therapy
Conventional Group
(Reactive therapy)
n=322
TCS only on lesional skin
At entry
7-13 weeks of age
28 weeks of age
P=0.0028
41.9%
31.4%
40%
20%
0%
Hen's egg allergy
Abbreviations
PACI: Prevention of Allergy via Cutaneous Intervention
TCS: Topical corticosteroids
Safety Issue
Enhanced treatment lowered body weight and height at 28 weeks of age.
-420 gram in weight
JACI 2023


Goal: Disease modification in atopic dermatitis and in atopic march ("Hit early and hart")
a
IgE sensitization
Atopic dermatitis
Disease activity
Infants
Children
Adolescents
Adults
Preventative intervention
Early intervention
Late interventions
CK CARE
Bieber T. Nature Review Drug Discovery, 2023


Correlation of biomarkers with severity and clinical phenotype
Study population
Atopic dermatitis n=373
Patient stratification
IL-13high
Periostinhigh
DPP-4high
Non-atopic controls n=47
ProRaD
IL-13 and periostin correlation with AD severity
IL-13
Periostin
AD severity
Eosinophils
Total IgE
EASI
BSA
oSCORAD
Pruritus
Insomnia
DLQI
IgE
CCL17
Elevated biomarkers risk
EASI 5.5-17
Eosinophilia >6%
EASI
7-16
≥16
IL-13high 54.4% 71.6%
Periostinhigh 58.8% 67.0%
DPP-4high 22.5% 27.3%
Normal 18.9% 15.7%
Endotype frequency
IL-13high endotype
DPP-4high endotype
Hertoghe's sign
'Dirty neck'
Perleche
Maternal allergic rhinitis
Periorbital darkening
Keratosis pilaris
Hint for systemic impact of skin inflammation also in low-moderate AD
Current cut-off for systemic therapy (EASI≥16) to be reconsidered
Phenotypic traits associated with distinct endotypes
Dr. L. Maintz
Personal opinion (TB):
Evidence for systemic impact of cutaneous inflammation in more than 50% of the patients with low-moderate AD
-> should deserve systemic therapy, i.e. be included in trials for regulatory approval and reimbursement
CK CARE
(Maintz L et al., Allergy, 2023)

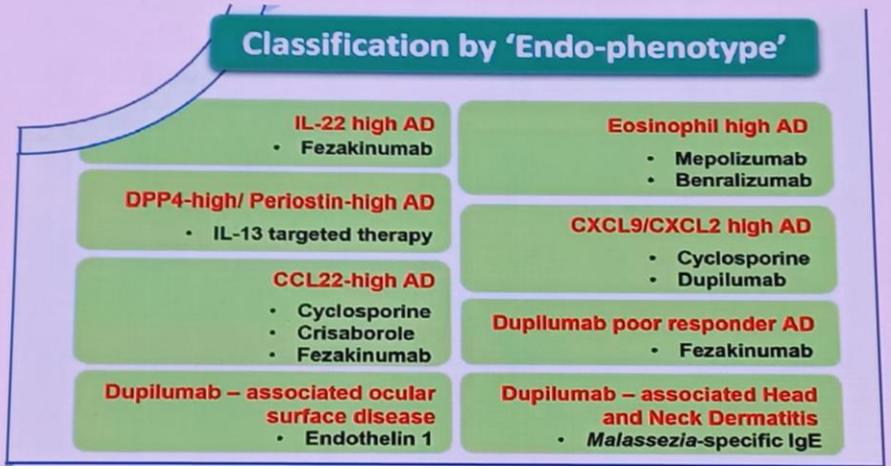

Which AD phenotype should be treated with systemic drugs?
(Checklist from the German AD S3 guideline, Werfel et al. JDDG 2024)
Indication for systemic treatment in adults with atopic eczema
According to the current AWMF guideline on atopic eczema, systemic treatment is indicated for moderate to severe cases of atopic eczema. The following criteria should be considered when initiating or switching to systemic therapy:
1. General conditions for systemic treatment
Yes
No
1 Age ≥ 18 years
2 Diagnosis Clinically proven atopic dermatitis
2. Clinical eligibility criteria for systemic treatment
A Relevant objective severity
Is present, since at least one of the following criteria is fulfilled:
Physician's global assessment (PGA) of severity is at least 3 on the five-point scale, or
EASI >15 or
SCORAD >40 / oSCORAD >20 or
Treatment-refractory affection of >10 % of body surface area (BSA) or
Treatment-refractory eczema in sensitive/visible areas or
High frequency of relapses (>10/year) with current treatment
B Relevant subjective burden
Is present, since at least one of the following criteria is fulfilled:
DLQI >10 or
Pruritus >6 on VAS or NRS ranging from 0–10 or
Relevant sleep disturbance at night due to eczema/pr
C Lack of treatment response
All other approaches except systemic treatment are insu
least one of the following criteria is fulfilled:
Insufficient response to guideline-recommended to
No prospect of success with local measures alone or
Patient has already received an indicated systemic th
success

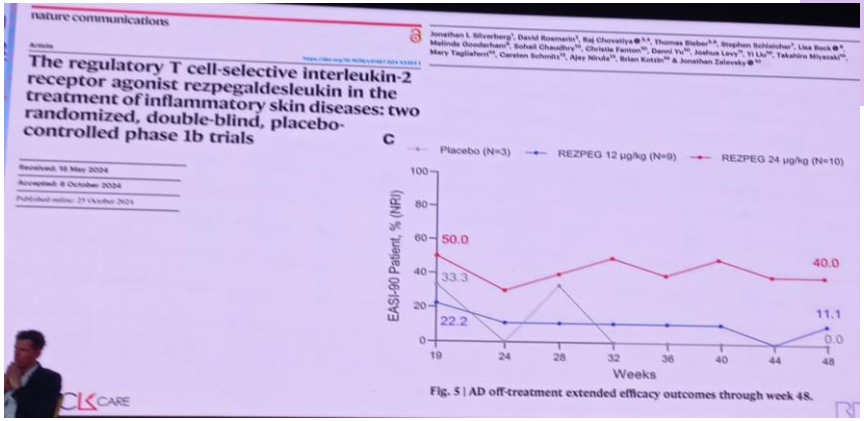
ISAD 2024



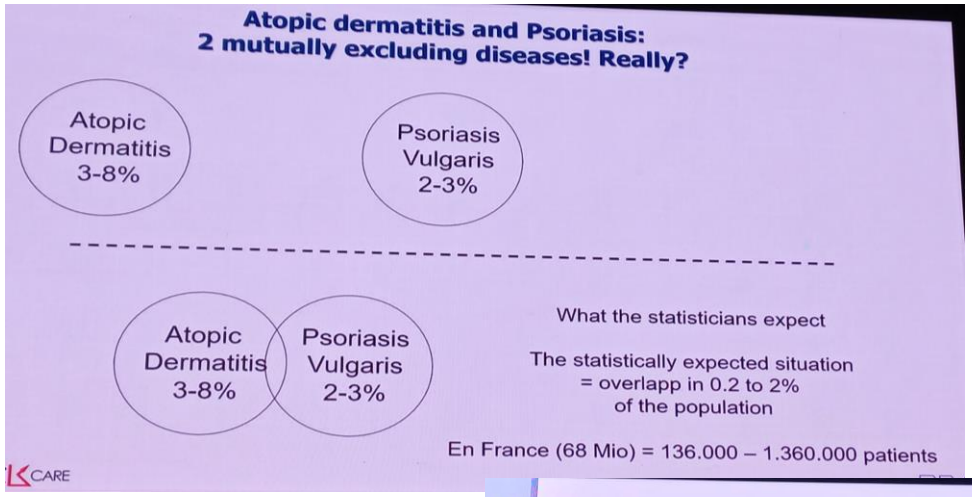
watra S, ..., Steinhoff M,: Clin Transl Immunol 2022

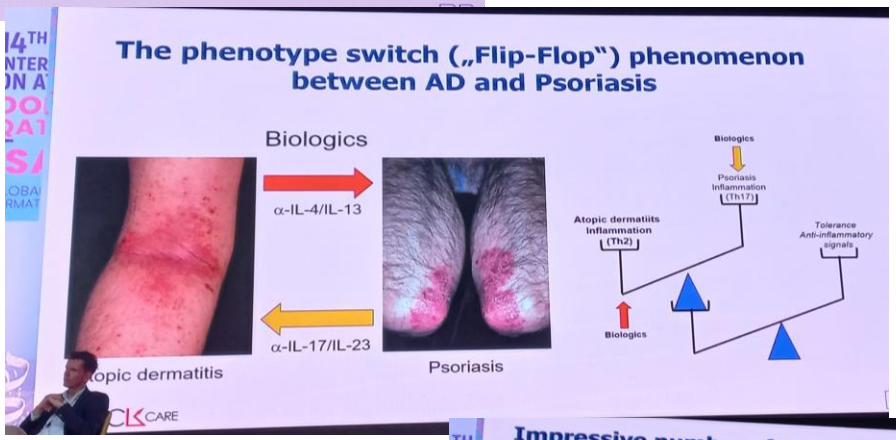
Park,Kim, Lee and Bieber; eBio Medicine 2024;103: 105121

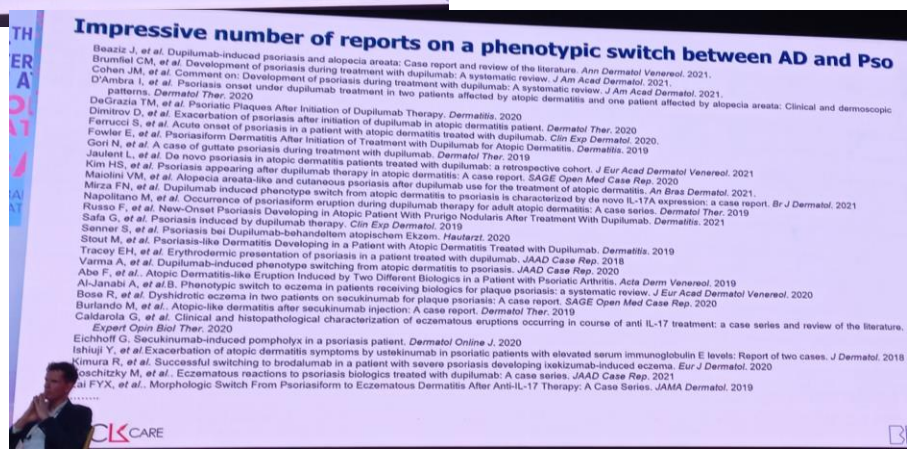




ISAD 2024


Atopic dermatitis and Psoriasis:
2 mutually excluding diseases! Really?
Atopic Dermatitis 3-8%
Psoriasis Vulgaris 2-3%
Atopic Dermatitis 3-8%
Psoriasis Vulgaris 2-3%
What the statisticians expect
The statistically expected situation = overlapp in 0.2 to 2% of the population
En France (68 Mio) = 136.000 – 1.360.000 patients
CARE


The phenotype switch („Flip-Flop") phenomenon between AD and Psoriasis
Biologics
α-IL-4/IL-13
α-IL-17/IL-23
Psoriasis
Biologics
Psoriasis Inflammation (Th17)
Atopic dermatiits Inflammation (Th2)
Tolerance Anti-inflammatory signals
Biologics
CARE


Impressive number of reports on a phenotypic switch between AD and Pso
Beaziz J, et al. Dupilumab-induced psoriasis and alopecia areata: Case report and review of the literature. Ann Dermatol Venereol. 2021.
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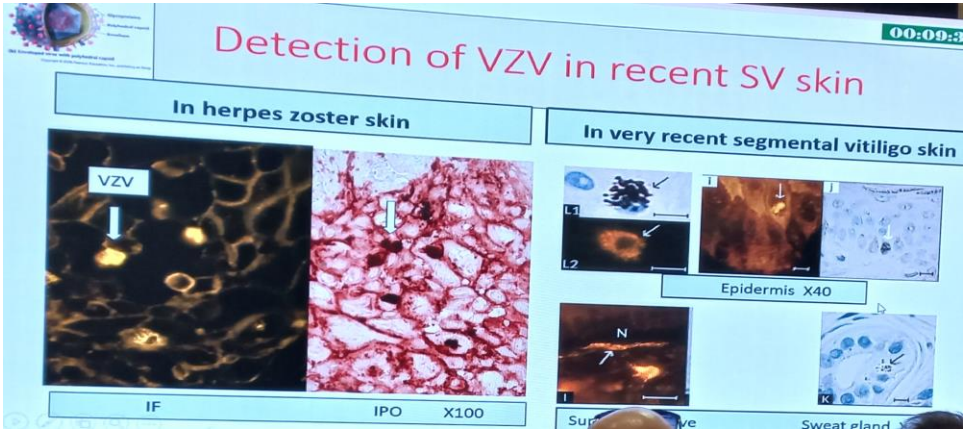
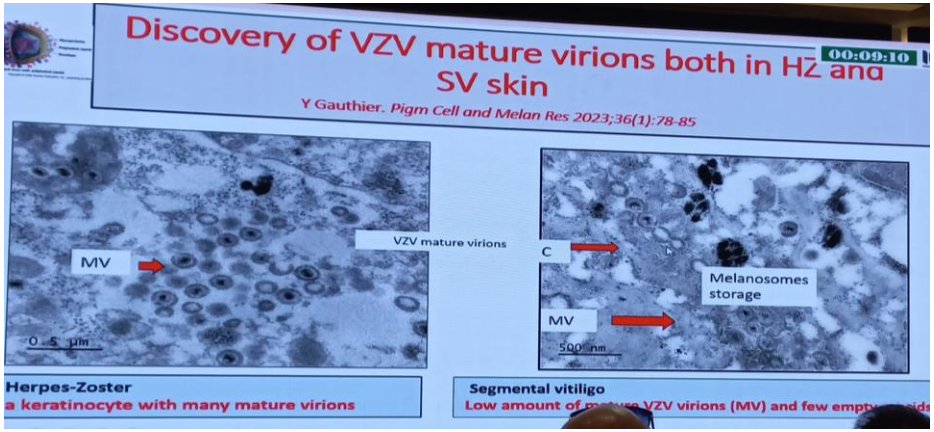
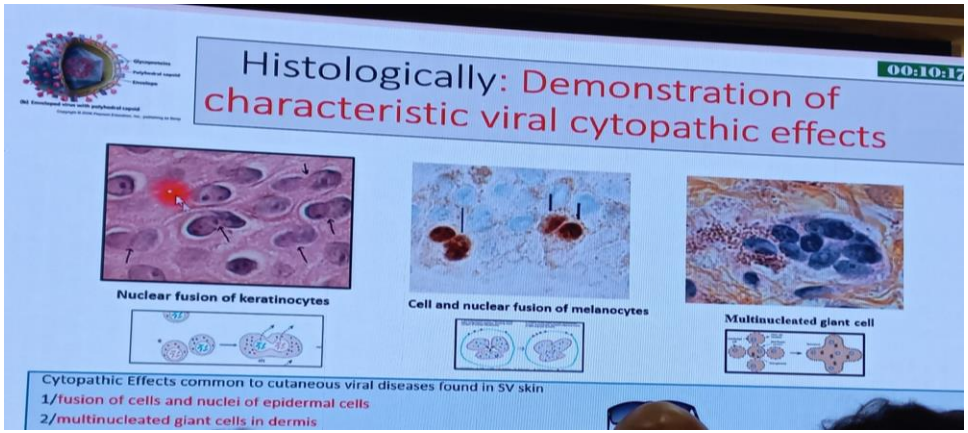
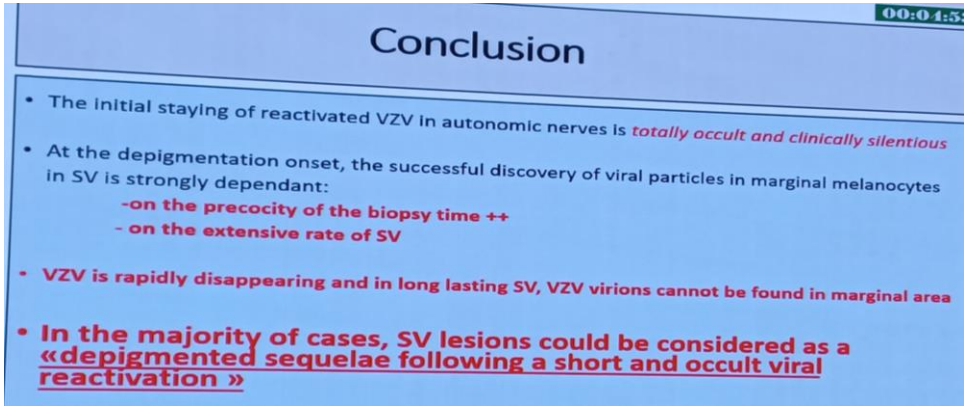
CARE

VIS 2024


Detection of VZV in recent SV skin
In herpes zoster skin
In very recent segmental vitiligo skin
VZV
IF
IPO X100
Epidermis X40
N
Sweat gland


Discovery of VZV mature virions both in HZ and SV skin
Y Gauthier. Pigm Cell and Melan Res 2023;36(1):78-85
MV
VZV mature virions
0.5 µm
C
Melanosomes storage
MV
500 nm
Herpes-Zoster
a keratinocyte with many mature virions
Segmental vitiligo


Histologically: Demonstration of characteristic viral cytopathic effects
Nuclear fusion of keratinocytes
Cell and nuclear fusion of melanocytes
Multinucleated giant cell
Cytopathic Effects common to cutaneous viral diseases found in SV skin
1/fusion of cells and nuclei of epidermal cells
2/multinucleated giant cells in dermis


Conclusion
• The initial staying of reactivated VZV in autonomic nerves is totally occult and clinically silentious
• At the depigmentation onset, the successful discovery of viral particles in marginal melanocytes in SV is strongly dependant:
-on the precocity of the biopsy time ++
- on the extensive rate of SV
• VZV is rapidly disappearing and in long lasting SV, VZV virions cannot be found in marginal area
• In the majority of cases, SV lesions could be considered as a «depigmented sequelae following a short and occult viral reactivation »

Updated guidelines/consensus in Dermatology in 2024

UAE Consensus for Acne

August 2024 653 Volume 23 • Issue 8

ORIGINAL ARTICLE
Journal of Drugs in Dermatology

United Arab Emirates Consensus Recommendations for Management of Acne Vulgaris

Ahmed Al Dhaheri MD,[a] Ahmed Ameen MD,[b] Ashraf Reda MD,[c] Ayman Alnaeem MD,[d] Khaled Al Nuaimi MD,[e] Fatima Al Marzooqi MD,[f] Fatima Albreiki MD,[g] Huda Rajab MD,[h] Hussein Abdel Dayem MD,[i] Jawaher Alnaqbi MD,[j] Mariam Al Suwaidi MD,[k] Mohamed Ahmed MD,[l] Muna Al Murrawi MD,[m] Samir Hantirah MD,[n] Jerry Tan MD[o]

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[b]NMC Specialty Hospital, Abu Dhabi
[c]Mediclinic Welcare Hospital, Dubai
[d]Ibrahim Bin Hamad Obaidullah Hospital, Ras Alkhaimah; [e]College of Medicine, Sharjah University, United Arab Emirates;
[f]Zayed Military Hospital, Abu Dhabi; [g]Tawam Hospital, Al Ain; [h]Ambulatory Healthcare Service, Abu Dhabi;
[i]Mediclinic Al Noor, Abu Dhabi; [j]Fujairah Hospital, Fujairah; [k]Burjeel Day Surgery Center, Abu Dhabi [l]DHA, Dubai;
[m]Dr Muna Al Murawi Clinic, Abu Dhabi; [n]American Hospital, Dubai; [o]Western University, Windsor, Ontario, Canada

TABLE 1.

Classification of Acne Severity (Can Be Applied to Face and Trunk)		
Severity	**Score**	**Description**
Clear	0	No lesions or very few scattered lesions
Almost clear	1	Barely visible from 2.5 m distance; few scattered non-inflammatory and inflammatory lesions
Mild	2	Easily recognizable, involving less than half of affected skin area; many acne lesions
Moderate	3	>half of affected area is involved; numerous lesions
Severe	4	Involvement of entire area; numerous lesions and nodules/cysts may be present
Very severe	5	Very inflammatory acne affecting entire skin area; nodules/cysts present

FIGURE 3. Mild acne: Approach to treatment.

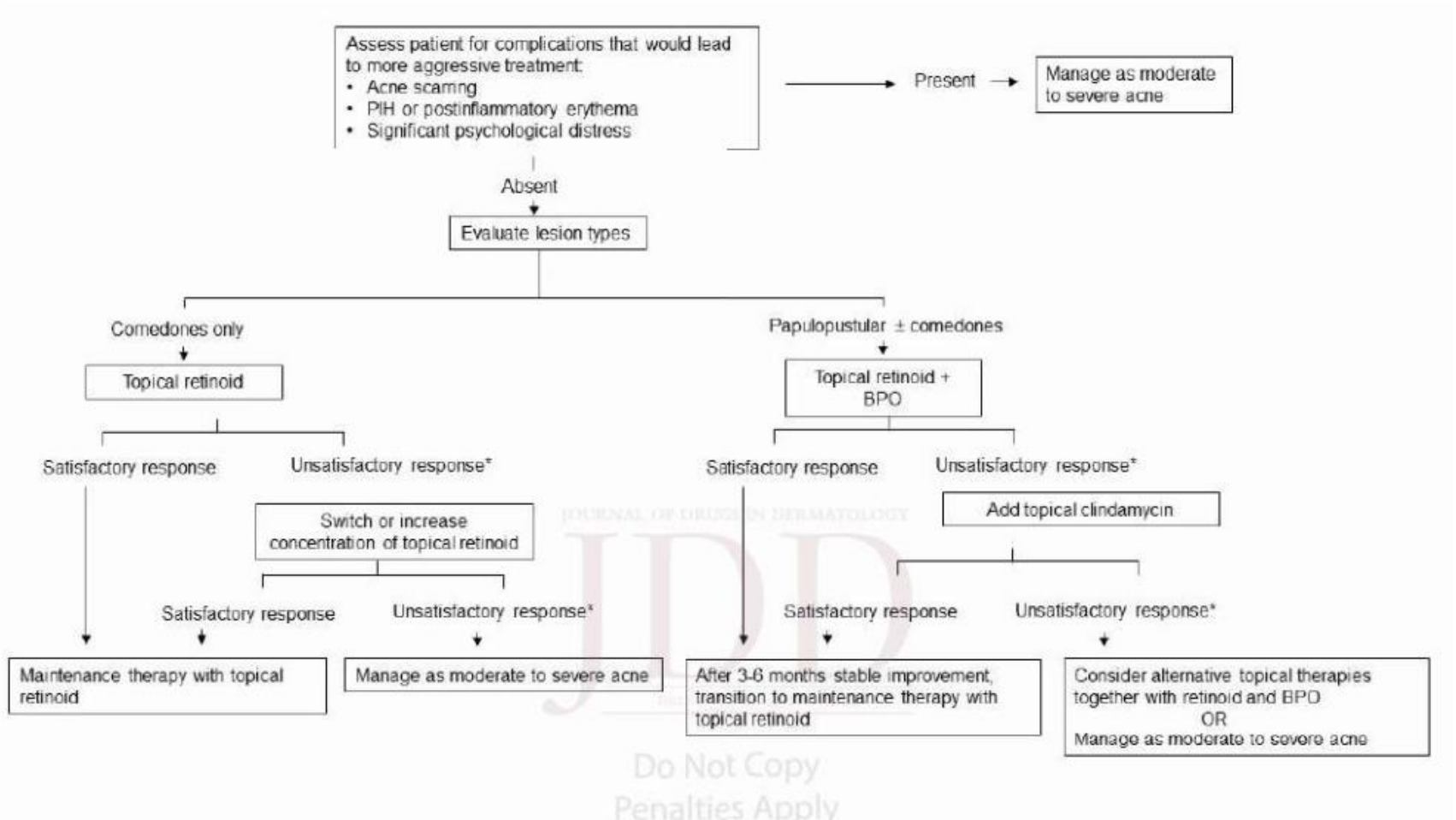


FIGURE 4. Moderate to severe acne: Approach to treatment.

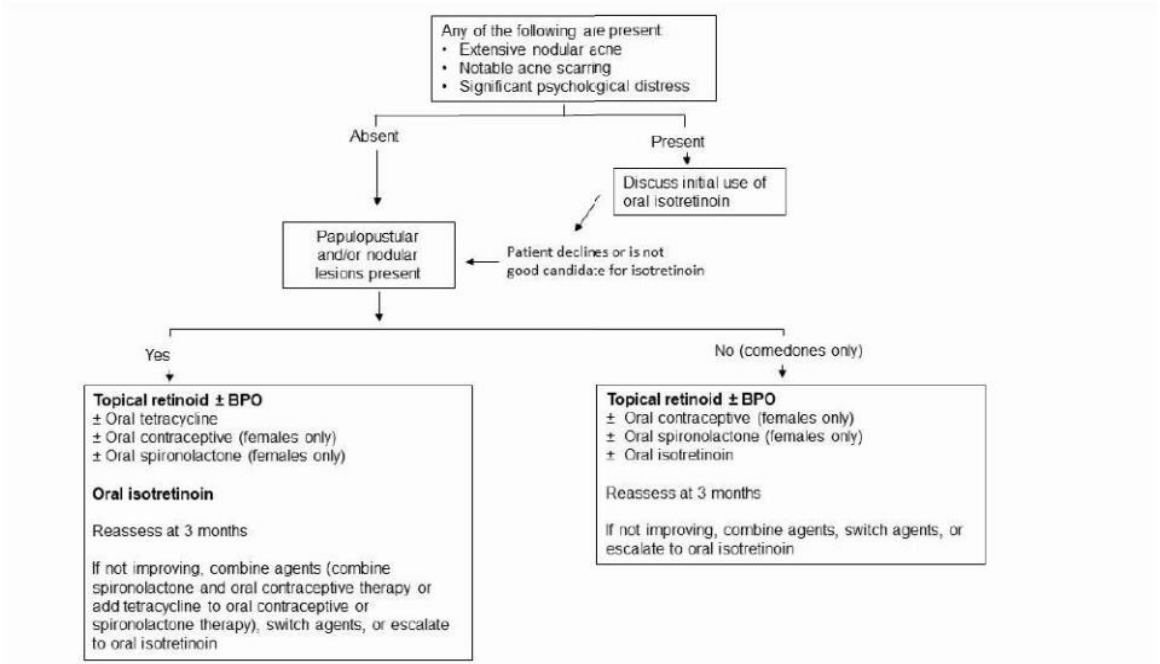


TABLE 2.

Use of Hormonal Therapies
Oral contraceptives containing estrogen are effective for treatment of inflammatory acne in women
Spironolactone may be useful for some women with acne
Patients with severe inflammatory acne may derive benefit from short term oral corticosteroid therapy while standard acne treatment is initiated
For patients with adrenal hyperandrogenism (documented), low dose oral corticosteroids may be useful to treat acne

TABLE 3.

Oral Isotretinoin in UAE				
	Dosing Strategies	Endpoints of Treatment	Changes to Therapy	Duration of Prescription
Moderate to severe acne	Treatment initiated at 0.25-0.5 mg/kg to minimize risk for acne flare After 1 month, dose may be titrated upward to 1 mg/kg per day as tolerated Once daily isotretinoin may be considered to improve adherence	Acne clearance + 2 months	Dose of isotretinoin should be titrated if abnormalities in lipid profile or liver enzymes are detected	--

UAE Consensus for Atopic Dermatitis

Dermatol Ther (Heidelb)
https://doi.org/10.1007/s13555-024-01247-4

GUIDELINES

Consensus Recommendations for the Management of Atopic Dermatitis in the United Arab Emirates

Ahmed Ameen · Ahmed Al Dhaheri · Ashraf M. Reda · Ayman Alnaeem · Fatima Al Marzooqi · Fatima Albreiki · Huda Rajab Ali · Hussein Abdel Dayem · Jawaher Alnaqbi · Mariam Al Zaabi · Mohammed Ahmed · Georg Stingl · Muna Al Murrawi

Received: June 7, 2024 / Accepted: July 26, 2024

Mild atopic dermatitis	Moderate-to-severe atopic dermatitis
Patient whose condition responds adequately[a] to optimized outpatient emollient use, avoidance of irritants and disease triggers, and standard topical anti-inflammatory therapies	Patient whose condition does not respond adequately to optimized outpatient emollient use, avoidance of irritants and disease triggers, and standard topical anti-inflammatory therapies

[a]Adequate response can be defined as significant periods of controlled disease

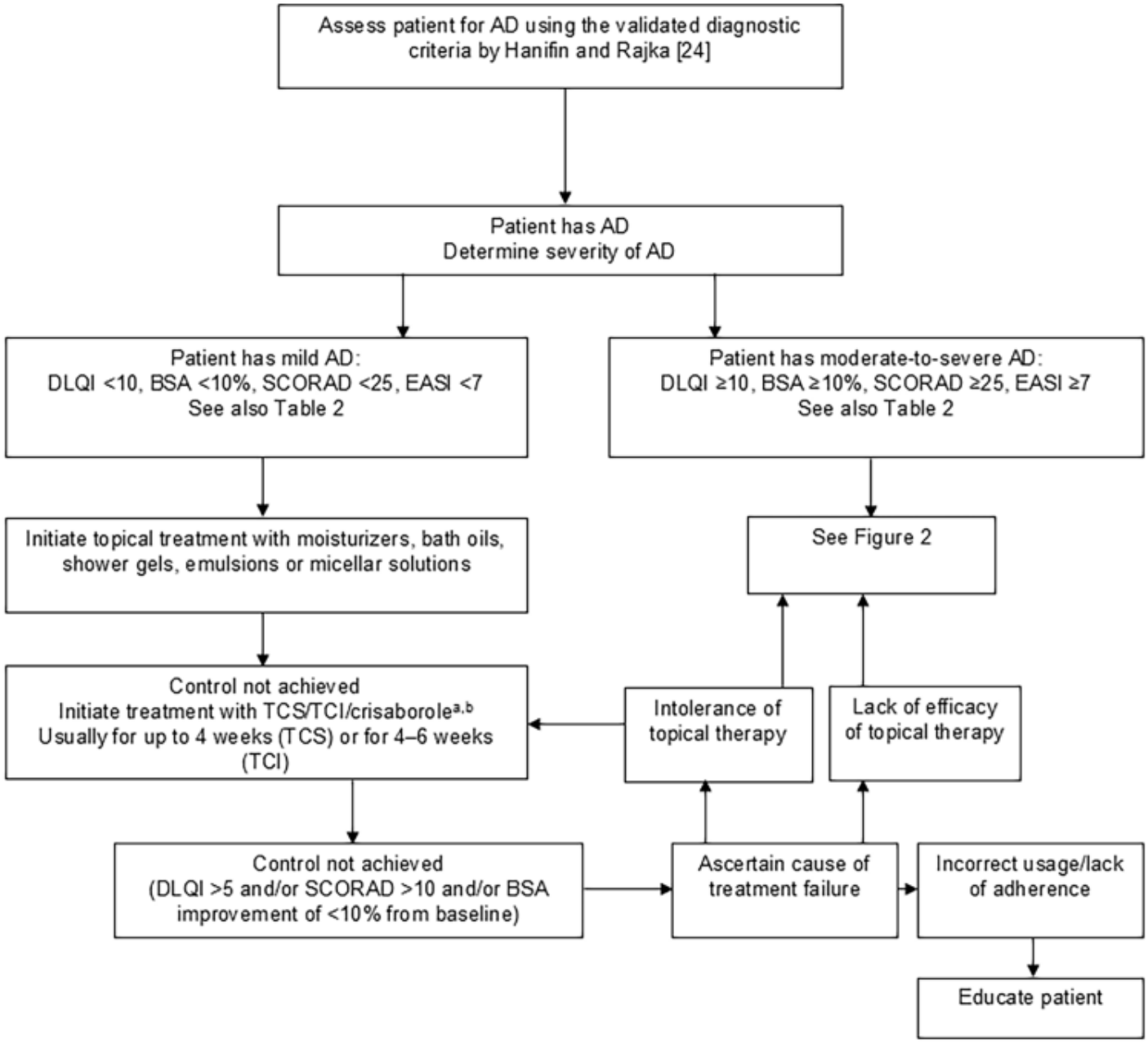
There are no validated biomarkers, including serum IgE, recommended for routine assessment of disease severity.

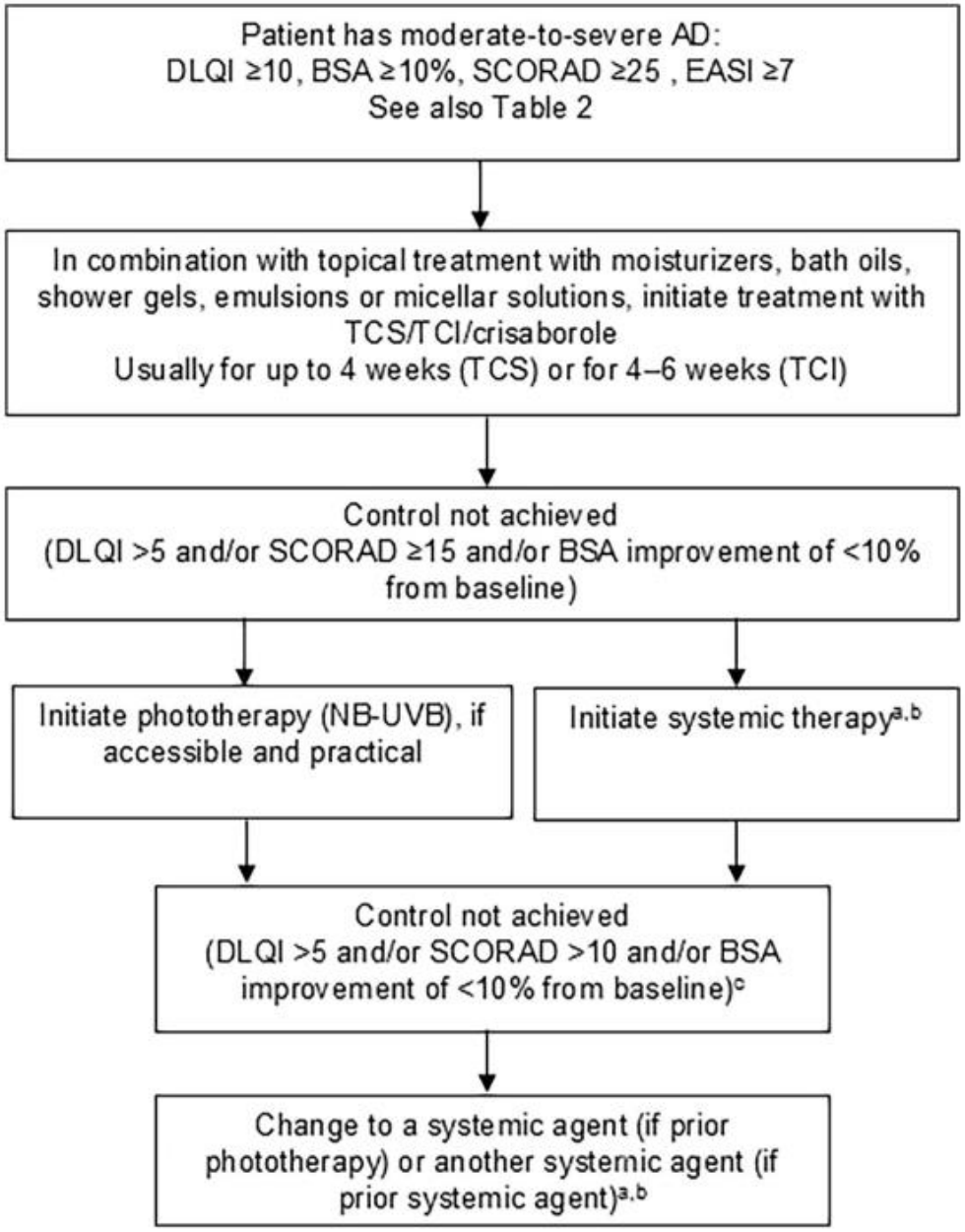
Scores on the following scales are deemed to be representative of moderate-to-severe disease: DLQI ≥10, BSA >10%, SCORAD ≥25, EASI ≥7.

The vIGA-AD is another useful scale to categorize the severity of AD based on the overall appearance of the lesions at a given time point, with scores of 3 or 4 indicating moderate and severe AD, respectively.

If patient-reported outcomes are to be used, DLQI, and the pediatric version, the CDLQI, is of most value in routine clinical practice.

VAS and NRS are suitable for evaluating pruritus severity but do not measure the impact of AD on QoL.


Assess patient for AD using the validated diagnostic criteria by Hanifin and Rajka [24]
Patient has AD
Determine severity of AD
Patient has mild AD:
DLQI <10, BSA <10%, SCORAD <25, EASI <7
See also Table 2
Patient has moderate-to-severe AD:
DLQI ≥10, BSA ≥10%, SCORAD ≥25, EASI ≥7
See also Table 2
Initiate topical treatment with moisturizers, bath oils, shower gels, emulsions or micellar solutions
See Figure 2
Control not achieved
Initiate treatment with TCS/TCI/crisaborole[a,b]
Usually for up to 4 weeks (TCS) or for 4–6 weeks (TCI)
Intolerance of topical therapy
Lack of efficacy of topical therapy
Control not achieved
(DLQI >5 and/or SCORAD >10 and/or BSA improvement of <10% from baseline)
Ascertain cause of treatment failure
Incorrect usage/lack of adherence
Educate patient


Patient has moderate-to-severe AD:
DLQI ≥10, BSA ≥10%, SCORAD ≥25 , EASI ≥7
See also Table 2
In combination with topical treatment with moisturizers, bath oils, shower gels, emulsions or micellar solutions, initiate treatment with TCS/TCI/crisaborole
Usually for up to 4 weeks (TCS) or for 4–6 weeks (TCI)
Control not achieved
(DLQI >5 and/or SCORAD ≥15 and/or BSA improvement of <10% from baseline)
Initiate phototherapy (NB-UVB), if accessible and practical
Initiate systemic therapy[a,b]
Control not achieved
(DLQI >5 and/or SCORAD >10 and/or BSA improvement of <10% from baseline)[c]
Change to a systemic agent (if prior phototherapy) or another systemic agent (if prior systemic agent)[a,b]

- Success of systemic treatment can be defined by DLQI 0/1 and/or SCORAD ≤10 and/or BSA ≤2% and/or EASI ≤ 3, using at least one clinician-rated and one patient-reported outcome and one objective and one subjective rating per patient. If the DLQI is not used, a peak pruritis NRS score ≤1 can also be considered treatment success. Prior to achieving these goals, clinically meaningful improvement should be measured afte 6–16 weeks (depending on treatment) against baseline. When treatment success is achieved, appropriate maintenance therapy can be commenced.

- Cyclosporine: 6 weeks [40]
- Dupilumab: 16 weeks [82]
- Tralokinumab: 16 weeks [44]
- Baricitinib: 8 weeks [46]
- Upadacitinib: 12 weeks [48]
- Abrocitinib: 12 weeks [47]

JAMA Dermatol. 2024 Oct 1;160(10):1099-1106. doi: 10.1001/jamadermatol.2024.3054.

Consensus on a Patient-Centered Definition of Atopic Dermatitis Flare

Aaron M Drucker [1 2], Isabelle J C Thibau [3], Bryan Mantell [3], Katie N Dainty [4 5], Matthew Wyke [6], Wendy Smith Begolka [3]

- While various definitions of atopic dermatitis flare exist, a **patient-centered definition** may be useful for clinical practice and research.
- **<u>The 3 statements with the highest agreement were:</u>**

“when my symptoms take significantly more of my attention than normal,”

“a worsening of physical symptoms associated with AD,”

“a worsening of itching associated with AD.”

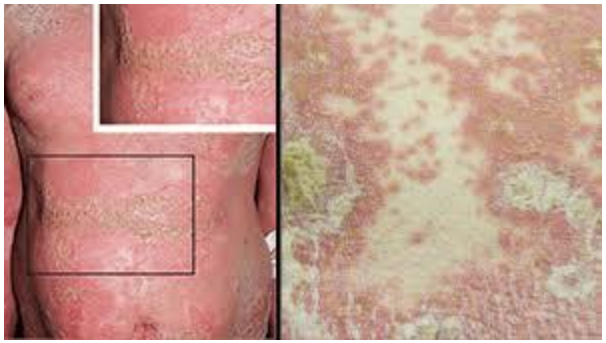
Cureus. 2024 Jul 15;16(7):e64583. doi: 10.7759/cureus.64583. eCollection 2024 Jul.

Delphi Consensus Statement on the Role of Probiotics in the Treatment of Atopic Dermatitis

Jayakar Thomas [1], Maleeka Sachdeva [2], Sandipan Dhar [3], Anil Ganjoo [4], Bela Shah [5], Deepika Pandhi [6], Koushik Lahiri [7], Rashmi Agarwal [8], Soumya Jagadeesan [9], Pradeep Mane [10], Rathish Nair [10], Krishnaprasad R Korukonda [10]

- The survey findings indicate that probiotics, particularly **Lactobacillus rhamnosus GG (LGG),** can be beneficial as an **adjuvant therapy**, helping to manage AD and associated flare-ups when used alongside traditional treatments.
- Probiotics demonstrate potential in improving nutritional status, enhancing immune responses, and benefitting gastrointestinal & skin health, which supports their use in AD management.
- Further research is needed to confirm these benefits & optimize treatment protocols.

IPC consensus on GPP



Key Takeaways from the IPC's New GPP Diagnostic Criteria:

- **Acral Distinction:** Unlike other consensuses, IPC recognizes that pustular lesions on **palms & soles** can occur during GPP flares but **should not rule out** a **GPP diagnosis** alone. This acknowledgment is crucial as it addresses the coexistence of GPP with other localized forms of pustular psoriasis, ensuring **appropriate & urgent treatment**.
- **Incorporation of Erythema**: The new criteria identify erythema as an essential feature of GPP. This addition is vital as erythema indicates the **inflammatory nature** of disease. Nearly 80% of the reviewed GPP cases involved individuals with **darker skin tones**, where erythema might be **less discernible** yet still significant.

- **Implementation of Criteria:** For dermatologists suspecting GPP, thorough patient **history & physical examination**, guided by specific steps like **a biopsy** to confirm the diagnosis, particularly when distinguishing **GPP** from other dermatoses like **AGEP** and **SPD**.
- **Role of Biopsy & Direct Immunofluorescence (DIF)**: While biopsy/histopathology remains highly recommended for confirming GPP, the role of **DIF** in diagnosis appears **limited**, with only a minor consensus supporting its utility in ruling out other skin conditions.
- **Utility Across Medical Disciplines:** These criteria are designed to be used by **dermatologists & general practitioners**. This broader applicability ensures **timely referrals** & **appropriate care**, potentially improving patient outcomes.

Choon et al., 2024

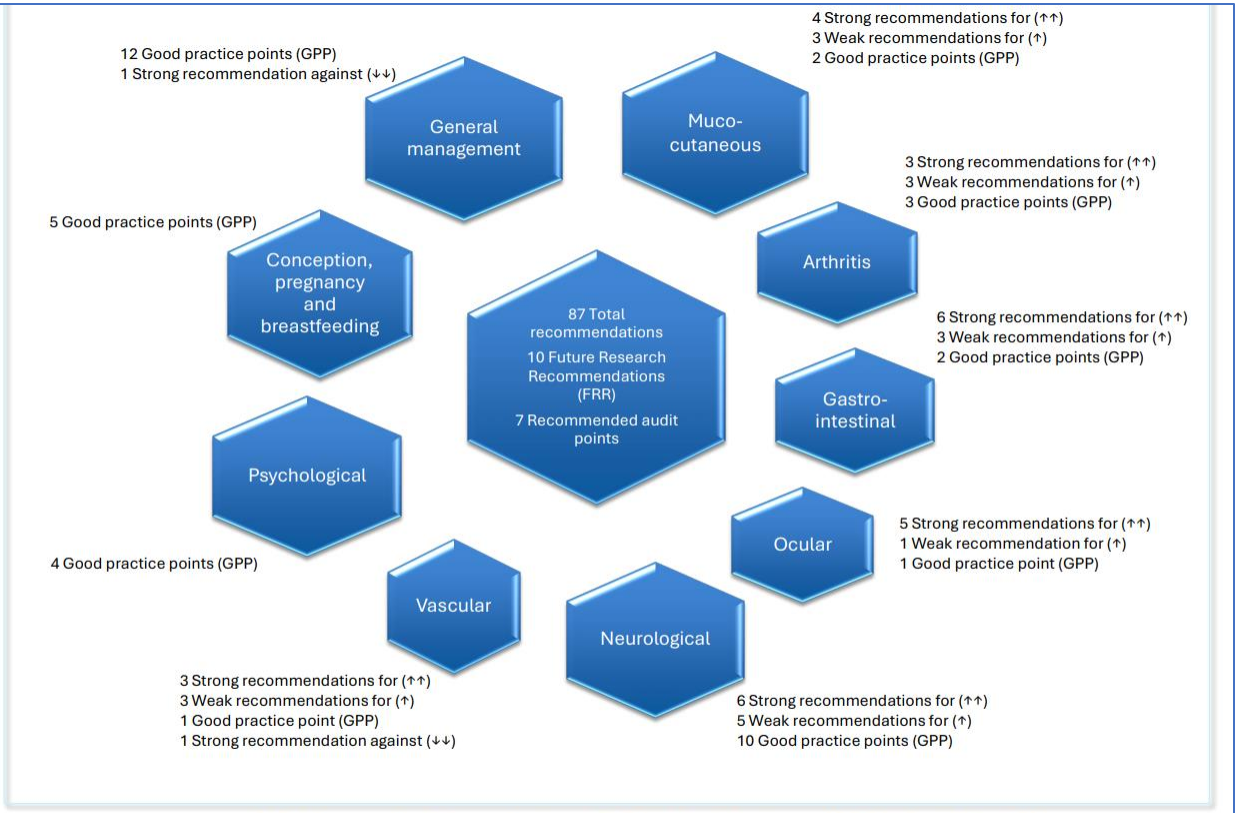
Br J Dermatol. 2024 Oct 17;191(5):e8-e25. doi: 10.1093/bjd/ljae263.

British Association of Dermatologists and British Society for Rheumatology living guideline for managing people with Behçets 2024

Ruth Murphy [1], Robert J Moots [2 3], Paul Brogan [4], Aykut F Çelik [5], Mark Clement-Jones [6], Ian Coulson [7], Adam P Croft [8], Suzanne Crozier [9], Laura Forrest [10], Jonathan Harrold [11], Steve Higgins [12], Ali S M Jawad [12], Seema Kalra [13], Sidra S Khan [14], Hilary McKee [15], Clare E Pain [16], Harry Petrushkin [17], Ana Poveda-Gallego [8], Jane Setterfield [18], Poonam Sharma [19], Richard West [10], Christina Wlodek [20], Maria Hashme [21], Lina Manounah [21], M Firouz Mohd Mustapa [21], Alina M Constantin [21]

BJD

Recommendations: analysis

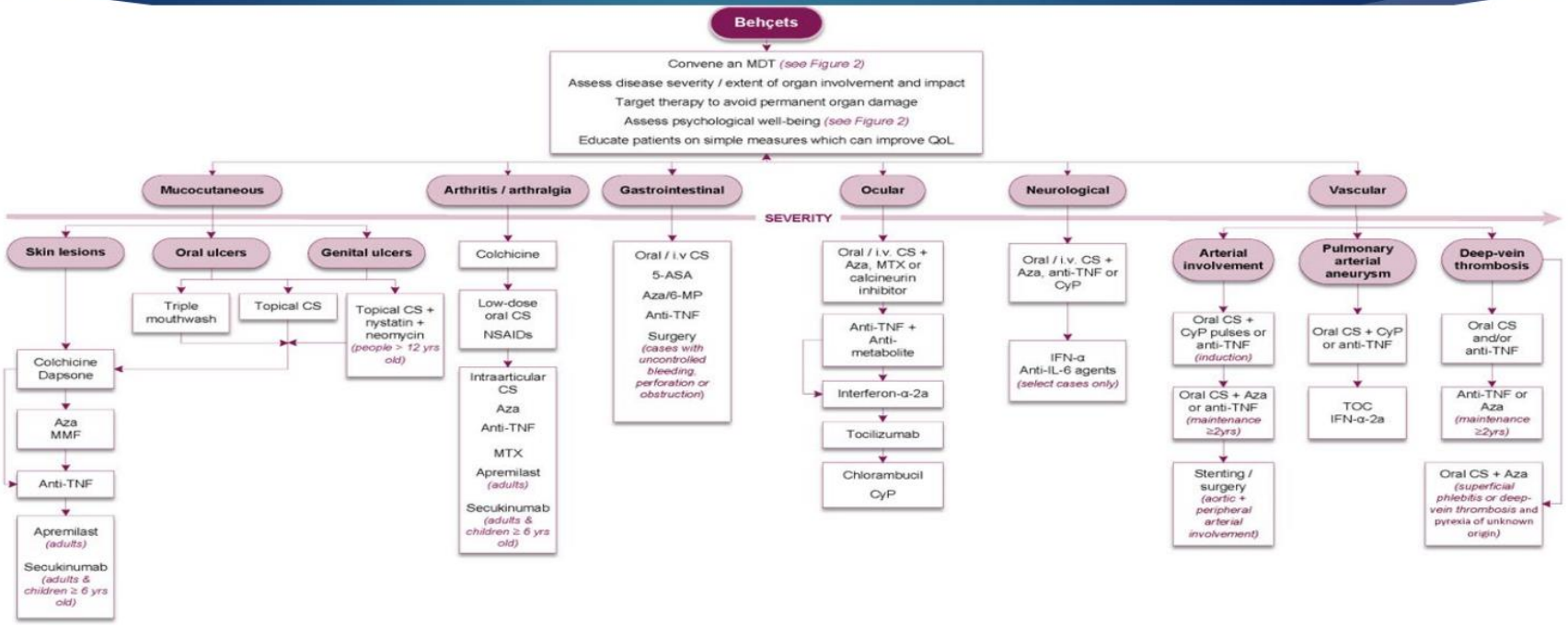


British Journal of Dermatology. DOI: https://doi.org/10.1093/bjd/ljae263

Algorithm
Patient Management Pathway

BJD

Please use in conjunction with the summary of recommendations and discussions in the guideline and supporting information document



British Journal of Dermatology. DOI: https://doi.org/10.1093/bjd/ljae263

Key recommendations: Mucocutaneous involvement (1)

BJD

- Offer* potent or super-potent topical corticosteroids to treat oral and genital ulcers in people with Behçets if the symptoms are mild or as adjunctive therapy with systemic immunosuppression for more severe disease.
- Consider the triple mouth wash§ for oral ulceration in people with Behçets.
- Consider potent and super-potent corticosteroids, as treatment for anogenital ulceration in people with Behçets above 12 years of age.
- Offer* colchicine as a second-line option in people with Behçets, where topical corticosteroids therapy alone provides inadequate disease control.
- Offer* azathioprine or mycophenolate mofetil as a third-line monotherapy option or as adjunctive therapy to people with Behçets.

British Journal of Dermatology. DOI: https://doi.org/10.1093/bjd/ljae263

₹betamethasone 0.5 mg soluble tablets + doxycycline 100 mg + 1 mL nystatin oral suspension

Key recommendations: Mucocutaneous involvement (2)

BJD

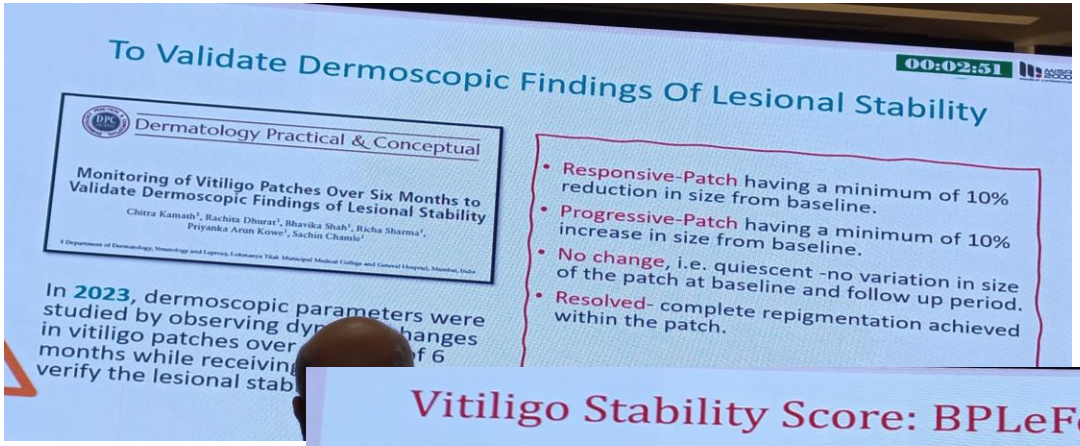
- Offer anti-TNF therapy as a third-line option to people with Behçets who have poorly controlled symptoms and/or with other organ involvement refractory to conventional systemic therapies.
- Consider apremilast, where available, as a fourth-line option in adults with Behçets in whom conventional systemic therapies have failed.
- Consider secukinumab as a fourth-line option in the absence of gastrointestinal and/or ocular involvement in adults and children aged ≥6 years with Behçets who have poorly controlled symptoms and/or with other organ involvement refractory to conventional systemic therapies and in whom anti-TNF therapy has failed or is contraindicated.
- Consider dapsone as a treatment option in people with Behçets.

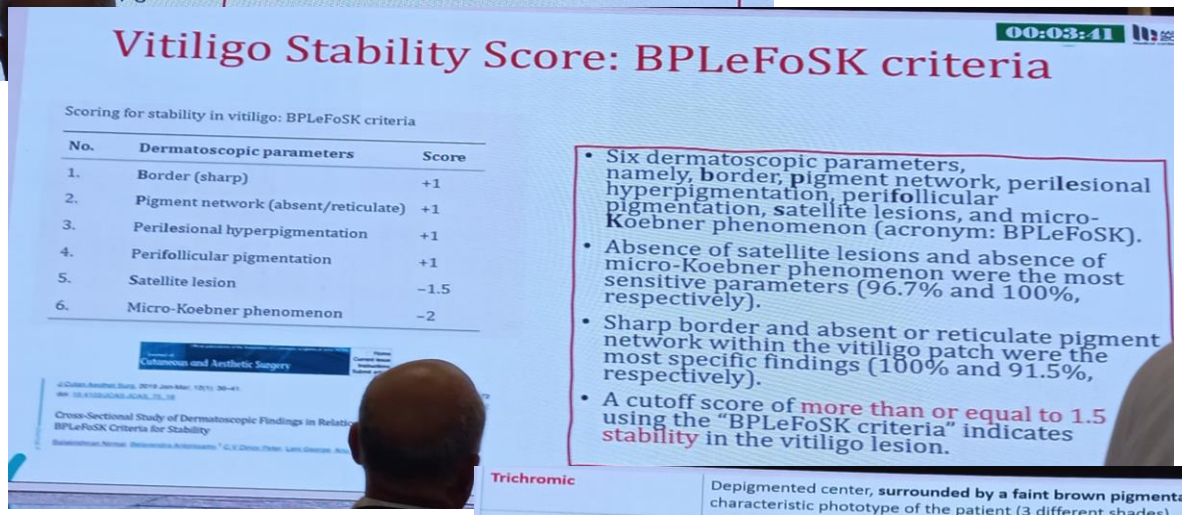
British Journal of Dermatology. DOI: https://doi.org/10.1093/bjd/ljae263

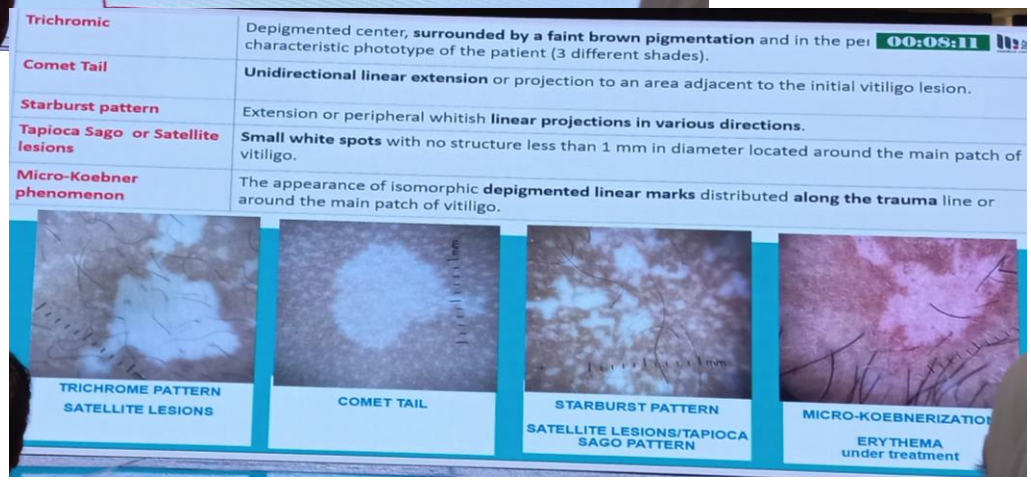
EAACI guidelines on the management of IgE-mediated food allergy

- **Allergen avoidance & dietary advice** (with support of a specialised dietitian, if possible) together with the provision of a **written treatment plan**, **education** on the recognition of allergic symptoms & prescription of medication including **adrenaline** using an auto-injector are essential.
- Patients with significant anxiety & requirement for **coping strategies** may benefit from support from a clinical psychologist.
- **Omalizumab** is suggested for treatment of IgE-mediated food allergy in children from the age of 1 and adults.
- **Oral allergen-specific immunotherapy** is recommended for children & adolescents with **peanut allergy** & suggested for **milk & egg** allergies (generally after 4 years of age for milk & egg). **Santos et al., 2024**

VIS 2024


To Validate Dermoscopic Findings Of Lesional Stability
00:02:51
Dermatology Practical & Conceptual
Monitoring of Vitiligo Patches Over Six Months to Validate Dermoscopic Findings of Lesional Stability
Chitra Kamath, Rachita Dhurat, Bhavika Shah, Richa Sharma, Priyanka Arun Kowe, Sachin Chamle
In 2023, dermoscopic parameters were studied by observing dy hanges in vitiligo patches over f 6 months while receiving verify the lesional stab
Responsive-Patch having a minimum of 10% reduction in size from baseline.
Progressive-Patch having a minimum of 10% increase in size from baseline.
No change, i.e. quiescent -no variation in size of the patch at baseline and follow up period.
Resolved- complete repigmentation achieved within the patch.


Vitiligo Stability Score: BPLeFoSK criteria
00:03:41
Scoring for stability in vitiligo: BPLeFoSK criteria
No. | Dermatoscopic parameters | Score
1. Border (sharp) +1
2. Pigment network (absent/reticulate) +1
3. Perilesional hyperpigmentation +1
4. Perifollicular pigmentation +1
5. Satellite lesion −1.5
6. Micro-Koebner phenomenon −2
Cutaneous and Aesthetic Surgery
Cross-Sectional Study of Dermatoscopic Findings in Relati BPLeFoSK Criteria for Stability
Six dermatoscopic parameters, namely, border, pigment network, perilesional hyperpigmentation, perifollicular pigmentation, satellite lesions, and micro-Koebner phenomenon (acronym: BPLeFoSK).
Absence of satellite lesions and absence of micro-Koebner phenomenon were the most sensitive parameters (96.7% and 100%, respectively).
Sharp border and absent or reticulate pigment network within the vitiligo patch were the most specific findings (100% and 91.5%, respectively).
A cutoff score of more than or equal to 1.5 using the "BPLeFoSK criteria" indicates stability in the vitiligo lesion.


00:08:11
Trichromic | Depigmented center, surrounded by a faint brown pigmentation and in the per characteristic phototype of the patient (3 different shades).
Comet Tail | Unidirectional linear extension or projection to an area adjacent to the initial vitiligo lesion.
Starburst pattern | Extension or peripheral whitish linear projections in various directions.
Tapioca Sago or Satellite lesions | Small white spots with no structure less than 1 mm in diameter located around the main patch of vitiligo.
Micro-Koebner phenomenon | The appearance of isomorphic depigmented linear marks distributed along the trauma line or around the main patch of vitiligo.
TRICHROME PATTERN
SATELLITE LESIONS
COMET TAIL
STARBURST PATTERN
SATELLITE LESIONS/TAPIOCA SAGO PATTERN
MICRO-KOEBNERIZATIO
ERYTHEMA
under treatment

VIS 2024

Delphi consensus

Statements - General	Consensus (%)
Every laser/IPL treatment, even in ideal circumstances, has a risk to induce vitiligo	100
To discuss the risks of inducing new vitiligo lesions with patients	100

How safe are laser and IPL treatments in vitiligo?

Recommendation

- Despite the apparently low risk
- We recommend to use
  - conservative laser settings
  - not to treat active vitiligo patients (stability for 12 months)
  - be aware of activity (pinpoint lesions, blurry borders, Koebner)
  - perform test spots

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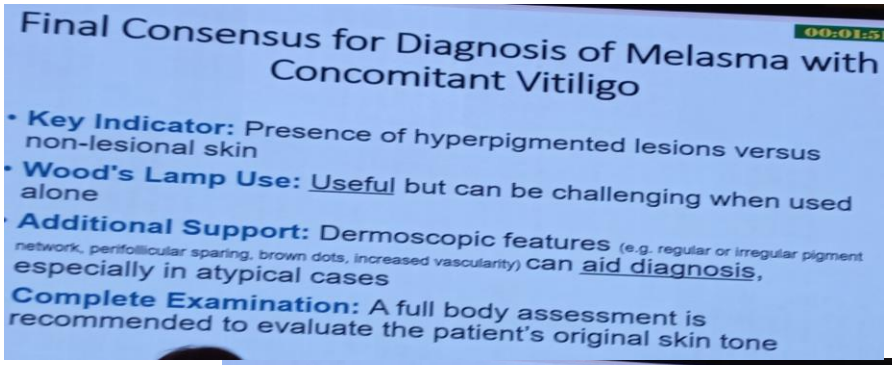
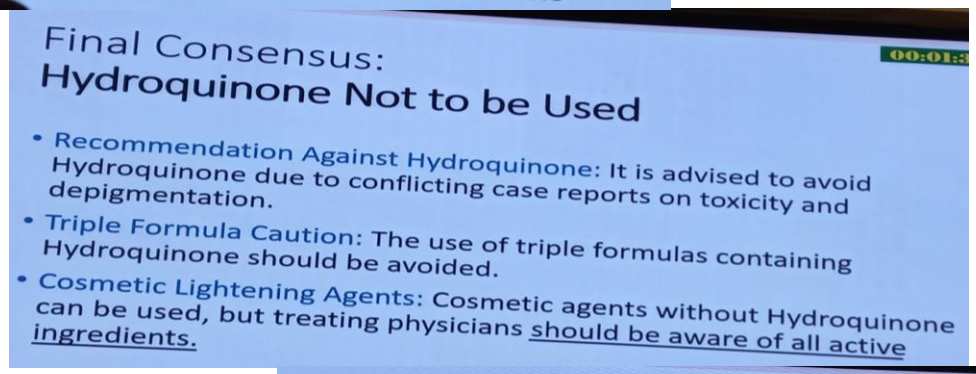
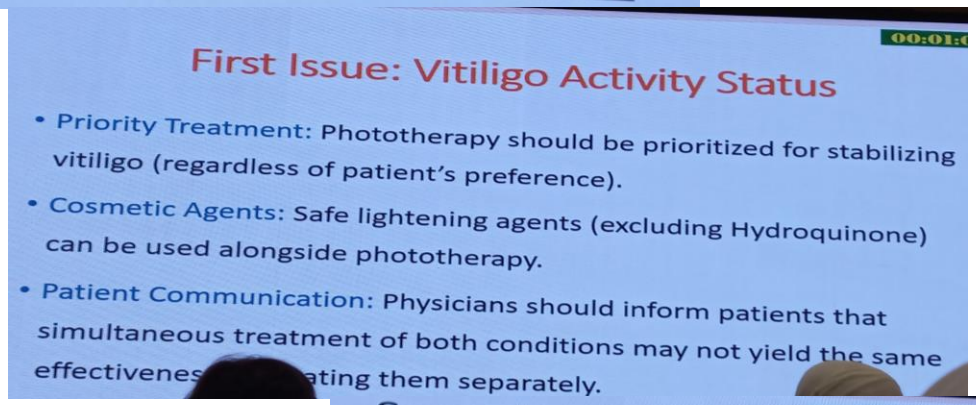

Final Consensus for Diagnosis of Melasma with Concomitant Vitiligo
• Key Indicator: Presence of hyperpigmented lesions versus non-lesional skin
• Wood's Lamp Use: Useful but can be challenging when used alone
• Additional Support: Dermoscopic features (e.g. regular or irregular pigment network, perifollicular sparing, brown dots, increased vascularity) can aid diagnosis, especially in atypical cases
Complete Examination: A full body assessment is recommended to evaluate the patient's original skin tone


Final Consensus:
Hydroquinone Not to be Used
• Recommendation Against Hydroquinone: It is advised to avoid Hydroquinone due to conflicting case reports on toxicity and depigmentation.
• Triple Formula Caution: The use of triple formulas containing Hydroquinone should be avoided.
• Cosmetic Lightening Agents: Cosmetic agents without Hydroquinone can be used, but treating physicians should be aware of all active ingredients.


First Issue: Vitiligo Activity Status
• Priority Treatment: Phototherapy should be prioritized for stabilizing vitiligo (regardless of patient's preference).
• Cosmetic Agents: Safe lightening agents (excluding Hydroquinone) can be used alongside phototherapy.
• Patient Communication: Physicians should inform patients that simultaneous treatment of both conditions may not yield the same effectiveness ating them separately.


Second Issue: Face Phototherapy For Vitiligo Lesions with Concomitant Melasma
• Consensus: Targeted phototherapy (localized narrow-band UVB or excimer light) is recommended for vitiligo lesions while sunscreen is applied to the rest of the face

Thank you

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