

**Vitiligo Cases**  
ODAC 2023  
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Director of Clinical Trials  
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**Disclosures**

- consultant for AbbVie, Abcuro, AltruBio, Arena, Boehringer-Ingelheim, Bristol Meyers Squibb, Celgene, Concert, CSL Behring, Dermavant, Dermira, Incyte, Janssen, Kyowa Kirin, Lilly, Novartis, Pfizer, Regeneron, Sanofi, Sun Pharmaceuticals, UCB, VielaBio;
- research support from AbbVie, Amgen, Bristol Meyers Squibb, Celgene, Dermira, Galderma, Incyte, Janssen, Lilly, Merck, Novartis, Pfizer, and Regeneron Pharmaceuticals Inc
- paid speaker for AbbVie, Amgen, Celgene, Incyte, Janssen, Lilly, Novartis, Pfizer, Regeneron Pharmaceuticals Inc., and Sanofi.

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**Case 1**

- 48-year-old man who presented to Tufts Dermatology in January 2022 with rapidly progressing depigmented patches on his arms, abdomen, back and shoulders. The patient noticed the patches a few months after he received the second dose of the Moderna COVID vaccine (Spikevax) in in his right arm. The patient had not received a booster, nor did the patient have a history of COVID infection prior to the onset of rash.



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First treatment from PCP

- Ketoconazole cream
- Fluconazole orally

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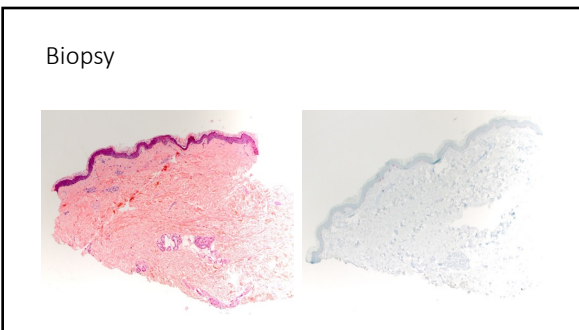
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COVID and vitiligo

Reports of Vitiligo After COVID Vaccination (April 2022)			
Authors	Journal	Vaccine	Summary
Altas and Ertegel	Clin Exp Dermatol	Pfizer 1st	58 y/o M w new onset vitiligo 1 wk s/p vax; No family hx of vitiligo. Diagnosis of ulcerative colitis 2 yrs prior treated w azathioprine and sulfasalazine. Vitiligo treated with topical calcineurin inhibitors. Lost to follow up.
Bukhari	JAAD	Pfizer 1st	33 y/o healthy F w new onset vitiligo 2 wks s/p vax; 5/6 SSc affected. Family hx of vitiligo. Treated w/ topical calcineurin inhibitors, topical steroids, and phototherapy. 1 & 3 mo. f/u showed gradual improvement.
CCalisse et al.	Dermatol Therapy	Pfizer 1st	33 y/o healthy F w new onset vitiligo 1 mo. s/p vax; Family hx of vitiligo. Treated with systemic antioxidants and phototherapy. No new macules after receiving 2nd dose 1 mo. later.
Kamintsky and Rudikoff	Clin Case Reports	Moderna 2nd	61 y/o F w new onset vitiligo 3 days s/p vax; No personal or family hx of vitiligo or autoimmune disease. Treated w/ topical calcineurin inhibitors and phototherapy.
Koç Yildirim	J Cosmet Dermatol	Biotech Sinovac 2nd	49 y/o M w new onset vitiligo 2 wks s/p vax; No personal or family hx of vitiligo or autoimmune disease. Infected with COVID 8 mo. prior to vax. Treated with Evgravir; Vitiligo treated with topical calcineurin inhibitors.
Ugurur et al.	J Cosmet Dermatol	Pfizer 1st	47 y/o M w new onset vitiligo 1 wk s/p vax; 40-yr hx of ankylosing spondylitis. Treated w topical calcineurin inhibitors. Slight repigmentation at 1 mo. f/u.

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What treatment would you give?

- A) Topical Corticosteroids
- B) Oral Corticosteroids
- C) Topical Tacrolimus
- D) Phototherapy
- E) Ruxolitinib cream
- F) oral JAK inhibitor

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Progressive vitiligo

- Dexamethasone 2mg tablet PO every Sat/Sun for 12 weeks.
- At follow up 2 weeks later, the patient reported stabilization of his rash.
- Oral minipulses of betamethasone or dexamethasone (5 mg in single dose) on 2 consecutive days per week for several months led to the halt of vitiligo progression in 32 of 36 patients with active disease after 1–3 months of treatment
  - Side effects in 12 to 69% included weight gain, insomnia, acne, agitation, menstrual disturbance, and hypertrichosis.
- Dexamethasone 2.5 mg
  - 92% halted activity

Patricha JS et al Int J Derm 1998; 32:753-757.

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Treatment

- Ruxolitinib 1.5% cream twice a day
- Patient declined Phototherapy

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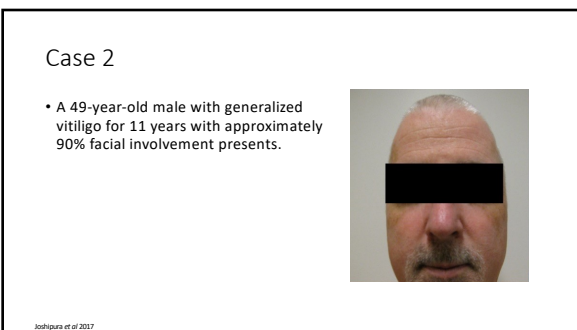
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Hats are in fashion



A B C

Joshipura et al 2017

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Natural sunlight

- When not repigmenting, patients should avoid the sun
  - Sun enhances contrast
  - Patients can get burned
- Vitiligo patients are not at increased risk of skin cancer

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Importance of incidental light: Topical Ruxolitinib



A B C D

- Hair Density per Region
  - Nose: 1300 hairs/cm<sup>2</sup>
  - Mid forehead: 900 hairs/cm<sup>2</sup>
  - Lateral forehead: 450 hairs/cm<sup>2</sup>

Joshipura et al 2017

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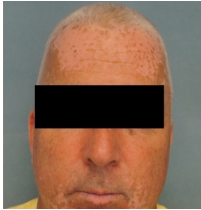
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Follicular density of face

- Follicular density of face
  - Nose ~1100 hairs/cm<sup>2</sup>
  - Mid forehead: ~900 hairs/cm<sup>2</sup>
  - Lateral forehead: 450 hairs/cm<sup>2</sup>



Joshigawa et al 2017, Pagnoni

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Patient fully repigmented. Now what?

- A) Tacrolimus 0.1% twice a week
- B) no treatment
- C) continue ruxolitinib cream BID
- D) ruxolitinib cream twice a week

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Maintenance

- Tacrolimus 0.1% twice a week
- reduced the rate of recurrent depigmentation to 10%, compared to 40% with placebo



Croyle M et al. JID 2016; 137(9): 970-974

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