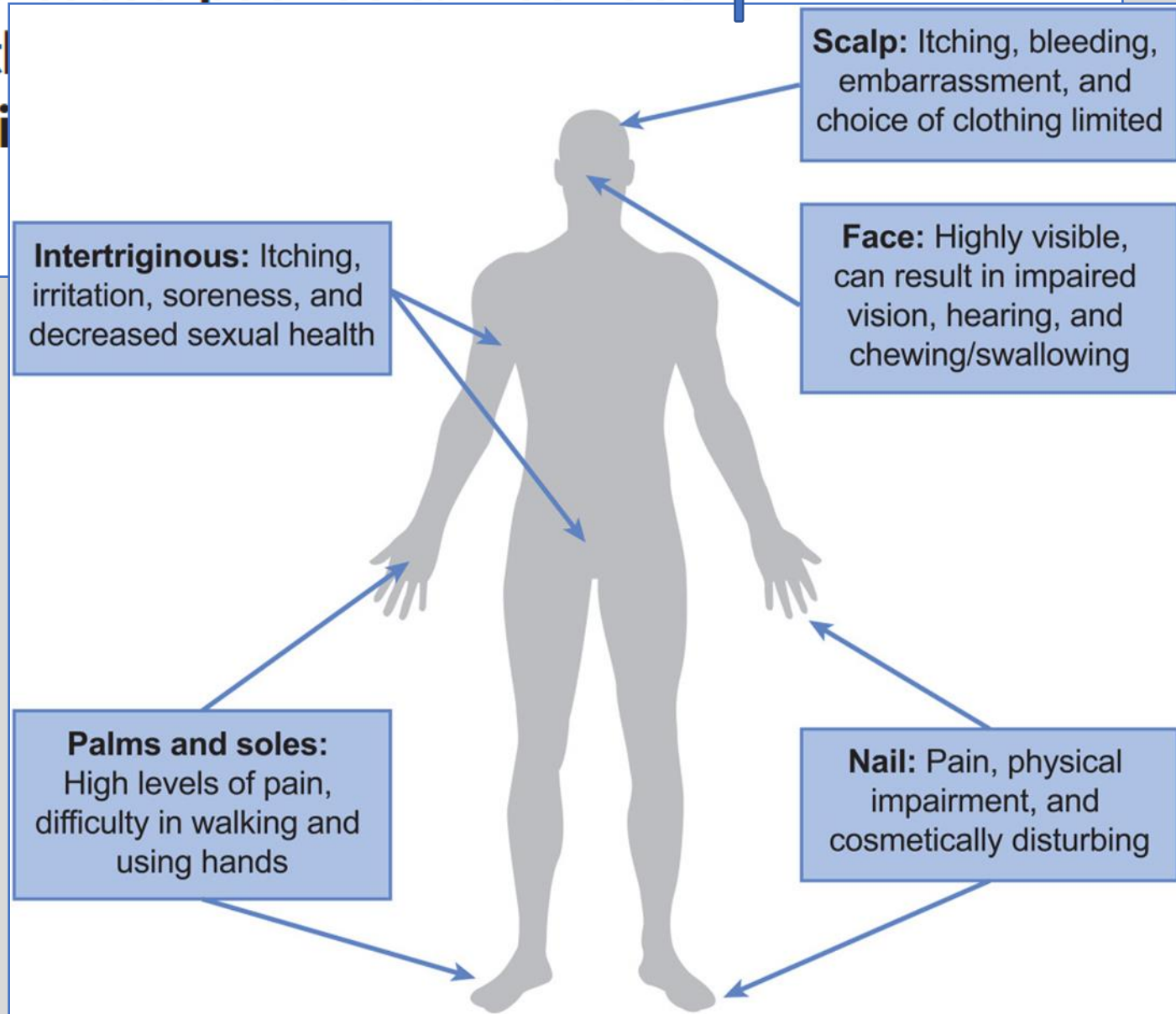


# Psoriasisste özel bölgeler Tedavide biyolojikler

Doç. Dr. Aslı Hapa  
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Dermatoloji Anabilim Dalı

# Underdiagnosed and undertreated psoriasis: Nuances of treating psoriasis affecting the genitals, hands, feet, and nails



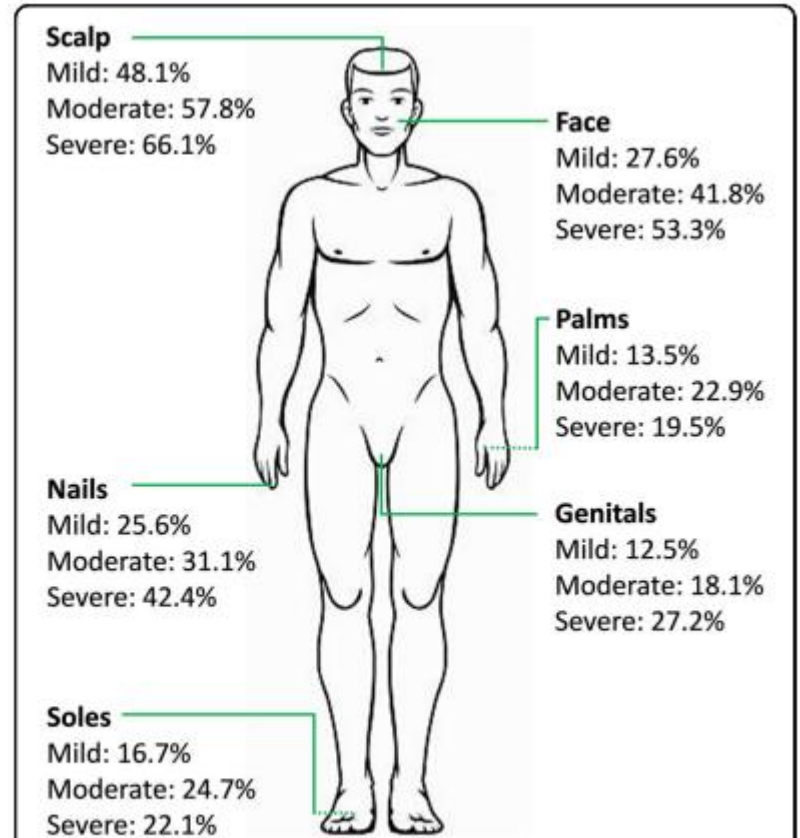
RESEARCH ARTICLE

Open Access

# Epidemiology of psoriasis in hard-to-treat body locations: data from the Danish skin cohort

Alexander Egeberg<sup>1\*</sup>, Kyoungah See<sup>2</sup>, Alyssa Garrelts<sup>2</sup> and Russel Burge<sup>2,3</sup>

4016 hasta  
%68 en az bir zor bölge tutulumu











**Fig. 1** Prevalence of psoriasis in hard-to-treat areas across psoriasis severity



*Review*

## **Psoriasis Management Challenges Regarding Difficult-to-Treat Areas: Therapeutic Decision and Effectiveness**

Alin Codrut Nicolescu <sup>1</sup>, Marius-Anton Ionescu <sup>2</sup>, Maria Magdalena Constantin <sup>3</sup>, Ioan Ancuta <sup>4,5,\*</sup>,  
Sinziانا Ionescu <sup>6,7,†</sup>, Elena Niculet <sup>8,9,\*</sup>, Alin Laurentiu Tatu <sup>10,11,†</sup>, Henner Zirpel <sup>12</sup>,  
and Diamant Thaçi <sup>13</sup>

Güncel skörlama sistemleri uygun deęil!

# Saçlı deri

**TABLE 1** Selected clinical trials of approved agents for psoriasis in difficult-to-treat areas<sup>a</sup>

Study	Study design	Primary location evaluated	Size, n	Treatment	Duration	Results/remarks
<b>Scalp</b>						
<i>Etanercept (TNF-<math>\alpha</math> inhibitor)</i>						
Moore et al. (2007)	Randomized, dose-interruption study	Whole body	2546	Etanercept (50 mg) twice weekly for 12 weeks followed by etanercept once weekly for 12 weeks or discontinuation; the discontinuation group received etanercept once weekly after relapse at week 16 or 20	24 weeks	Discontinuation of etanercept resulted in loss of improvements in PGA of scalp psoriasis. Limited reporting of scalp results
Bagel et al. (2012) and Tyring et al. (2013)	Randomized, double-blind, placebo-controlled trial	Scalp; moderate-to-severe plaque psoriasis with scalp involvement	124	Etanercept (50 mg) twice weekly for 12 weeks followed by once weekly for 12 weeks or placebo	24 weeks	Etanercept improved PSSI scores at week 12 (mean percent change: etanercept, 87% vs. placebo, 28%; $p < .001$ )

**TABLE 1** (Continued)

Study	Study design	Primary location evaluated	Size, n	Treatment	Duration	Results/remarks
<i>Ixekizumab (IL-17 inhibitor)</i>						
Langley et al. (2015)	Randomized, double-blind, placebo-controlled trial	Subanalysis of phase 2 trial that evaluated scalp psoriasis in patients with moderate-to-severe psoriasis	105	Ixekizumab (10 mg, 25 mg, 75 mg, or 150 mg) or placebo at weeks 0, 2, 4, 8, 12, and 16 with an open-label extension of ixekizumab (120 mg) Q4W for 48 weeks	20 weeks with a 48-week open-label extension	At week 20, mean percent improvement from baseline PSSI of 75% for ixekizumab 25 mg, 84% for ixekizumab 75 mg, and 82% for ixekizumab 150 mg compared with 19% with placebo (all $p < .001$ ). At week 48, 78% of patients receiving ixekizumab achieved a PSSI score of 0
Reich et al. (2017)	Randomized, double-blind, placebo- and active-controlled trials	Subanalysis of 3 phase 3 trials that evaluated scalp psoriasis in patients with moderate-to-severe psoriasis	3524	Ixekizumab (80 mg) or placebo Q2W or Q4W after 160 mg starting dose or etanercept (50 mg) twice weekly	60 weeks	At week 12, PSSI 90 was achieved by 76%–82% of patients receiving ixekizumab, 56% receiving etanercept ( $p < .001$ ), and 8% receiving placebo ( $p < .001$ ) and PSSI 100 was achieved by 69%–75% of patients receiving ixekizumab, 48% receiving etanercept ( $p < .001$ ), and 7% receiving placebo ( $p < .001$ ). Responses were maintained to week 60
<i>Apremilast (PDE4 inhibitor)</i>						
Rich et al. (2016)	Randomized, double-blind, placebo-controlled trial	Subanalysis of 2 phase 3 trials that evaluated moderate-to-severe scalp psoriasis in patients with moderate-to-severe psoriasis	832	Apremilast (30 mg) or placebo	52 weeks	At week 16, a ScPGA score of 0 or 1 was achieved by 41%–47% of patients receiving apremilast ( $p < .0001$ vs. placebo for both studies)

were maintained to week 24

(Continues)



# Yüz

## Facial

### *Adalimumab (TNF- $\alpha$ inhibitor)*

Navarini et al. (2014) (CHAMPION)	Randomized, double-blind, placebo-controlled study	Subanalysis of phase 3 trial that evaluated PASI subcomponents	271	Adalimumab (80 mg at week 0, followed by 40 mg every other week for 15 weeks) or methotrexate (7.5 mg at weeks 0 and 1, 10 mg at weeks 2 and 3, and 15-25 mg until week 15)	16 weeks	More patients achieved PASI 75, 90, and 100 with adalimumab at week 16. Results include entire head (mean percent improvement in PASI at week 16: adalimumab, 81%; methotrexate, 57%; placebo, 27%)
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### *Non-targeted agents*





# inverse bölge

JOURNAL OF DERMATOLOGICAL TREATMENT  
<https://doi.org/10.1080/09546634.2019.1620912>




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REVIEW ARTICLE



## Treatments for inverse psoriasis: a systematic review

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<sup>c</sup>University of Hawaii, John A. Burns School of Medicine, Honolulu, HI, USA; <sup>d</sup>Dermatology Research and Education Foundation, Irvine, CA, USA

**Table 2.** Treatment recommendations summary.

	Quality of evidence <sup>a</sup>
Topical corticosteroids of medium-to-high potency should be recommended first-line for short-term relief of intertriginous psoriasis symptoms (2–4 weeks).	Moderate
Topical immunomodulators or vitamin D are effective in reducing inverse psoriasis symptoms, although less effective than topical corticosteroids and may have more side effects in the short-term.	Moderate
Ixekizumab may be indicated in patients with moderate-to-severe psoriasis plus genital involvement.	Moderate

Çalışma yok  
Olgu sunumları şeklinde

# Genital psoriasis

American Journal of Clinical Dermatology  
<https://doi.org/10.1007/s40257-019-00447-5>

REVIEW ARTICLE

## Genital Psoriasis: Impact on Quality of Life and Treatment Options

Erkek hasta  
İnverse tip  
Tırnak  
Skalp  
>20 yaş  
Şiddetli hastalık

# Genital psoriasis

**Table 1** Prevalence of genital psoriasis in clinical studies

Study, year	Study type	Number of psoriasis patients	Genital involvement
Mahajan et al. [7], 2015	Prospective study	852	11.7% prevalence
Ryan et al. [1], 2015	Prospective study	354	38% prevalence
Meeuwis et al. [26], 2011	Prospective study	487	35.3% current disease
Meeuwis et al. [14], 2010	Prospective study	1963	35.1% current disease 45% disease at some point
Lysell et al. [11], 2015	Prospective Study	109	41%
Larsabal et al. [12], 2019	Prospective study	776	43.1% prevalence at time of reporting
Fouere et al. [13], 2005	Prospective study	1281	32% prevalence
Van de Kerkhof et al. [15], 2000	Prospective study	839	29% prevalence
Meeuwis et al. [8], 2011	Systematic review (50 articles)	9082	29-40% prevalence Genital psoriasis only with no psoriasis elsewhere
Meeuwis et al. [9], 2018			Prevalence at time of reporting at any time during course of psoriasis

%33-%63 hastalığın herhangi bir noktasında

Randomized Controlled Trial

➤ Expert Opin Biol Ther. 2021 Feb;21(2):297-298.

doi: 10.1080/14712598.2021.1843629. Epub 2020 Nov 9.

## A Randomized Controlled Ixekizumab Vs Secukinumab Trial to Study the Impact on Sexual Activity in Adult Patients with Genital Psoriasis

CLINICAL TRIAL

British Journal of Dermatology

**Efficacy and safety of ixekizumab in a randomized, double-blinded, placebo-controlled phase IIIb study of patients with moderate-to-severe genital psoriasis\***



# Palmoplantar bölge

## Palmoplantar

### *Infliximab (TNF- $\alpha$ inhibitor)*

Bissonnette et al. (2011)

Randomized, double-blind, placebo-controlled trial

Palms and soles

24

Infliximab (5 mg/kg) at weeks 0, 2, 6, and then every 8 weeks; placebo group received infliximab at weeks 14, 16, and 20

22 weeks

Primary endpoint of m-PPASI 75 at week 14 not met (infliximab, 33% vs. placebo, 8%;  $p=.317$ ). PPSA and m-PPASI 50 were improved at week 14 with infliximab

### *Ustekinumab (IL-12/23 inhibitor)*

Au et al. (2013)

Open-label trial

Palms and soles

20

Ustekinumab (45 mg for patients <100 kg and 90 mg for patients  $\geq$ 100 kg) at weeks 0, 4, and 16

16 weeks

At week 16, 35% of patients achieved a Palm-Sole PGA score  $\leq$ 1 (67% of patients receiving ustekinumab 90 mg vs. 9% of patients receiving ustekinumab 45 mg;  $p=.02$ ). An improvement of  $\geq$ 2 on the Palm-Sole PGA scale was achieved by 60% of patients

### *Secukinumab (IL-17 inhibitor)*

Paul et al. (2014)

Randomized, double-blind, placebo-controlled

Subanalysis of phase 2 trial that evaluated palm and/or sole psoriasis in patients with moderate-to-severe psoriasis

131

Secukinumab (150 mg): single (week 0), monthly (weeks 0, 4, and 8), early (weeks 0, 1, 2, and 4); or placebo

12 weeks

At week 12, more patients receiving the early regimen of secukinumab achieved a hand/foot IGA response of 0/1 than patients receiving placebo (54% vs. 19%;  $p=.005$ )

Gottlieb et al. (2017)

Randomized, double-blind, placebo-controlled trial

Palms and soles

205

Secukinumab (300 mg or 150 mg) or placebo at baseline, weeks 1, 2 and 3 and then every 4 weeks from week 4

16 weeks

At week 16, ppIGA 0/1 was achieved by 33.3% of patients receiving secukinumab 300 mg and 22.1% of patients receiving secukinumab 150 mg compared with 1.5% of patients receiving placebo ( $p<.001$  for both)

### *Ixekizumab (IL-17 inhibitor)*

Menter et al. (2017)

Randomized, double-blind, placebo- and active-controlled trials

Subanalysis of 3 phase 3 trials that evaluated palm and/or sole psoriasis in patients with moderate-to-severe psoriasis

350

Ixekizumab (80 mg) or placebo Q2W or Q4W after 160 mg starting dose or etanercept (50 mg) twice weekly

60 weeks

At week 12, PPPASI 75 was achieved by 70%–74% of patients receiving ixekizumab, 44% receiving etanercept, and 19% receiving placebo ( $p<.05$  for all) and PPPASI 100 was achieved by 49%–52% of patients receiving ixekizumab, 32% receiving etanercept ( $p<.05$ ), and 8% receiving placebo ( $p<.001$ ). Responses were maintained to week 60

### *Apremilast (PDE4 inhibitor)*

Bissonnette et al. (2016)

A single randomized, placebo-controlled study and 2 randomized, double-blind, placebo-controlled studies

Subanalysis of 1 phase 2b trial (PSOR-005) and 2 phase 3 trials (ESTEEM 1 and 2) that evaluated palm and/or sole psoriasis in patients with moderate-to-severe psoriasis

427

Apremilast (30 mg), twice daily or placebo

16 weeks

At week 16, more patients receiving apremilast than placebo achieved a PPPGA score of 0 or 1 (48% vs. 27%;  $p=.021$ ), and had a PPPGA score of 0 or 1 with a  $\geq$ 1 point improvement (59% vs. 39%;  $p<.001$ )

(Continues)













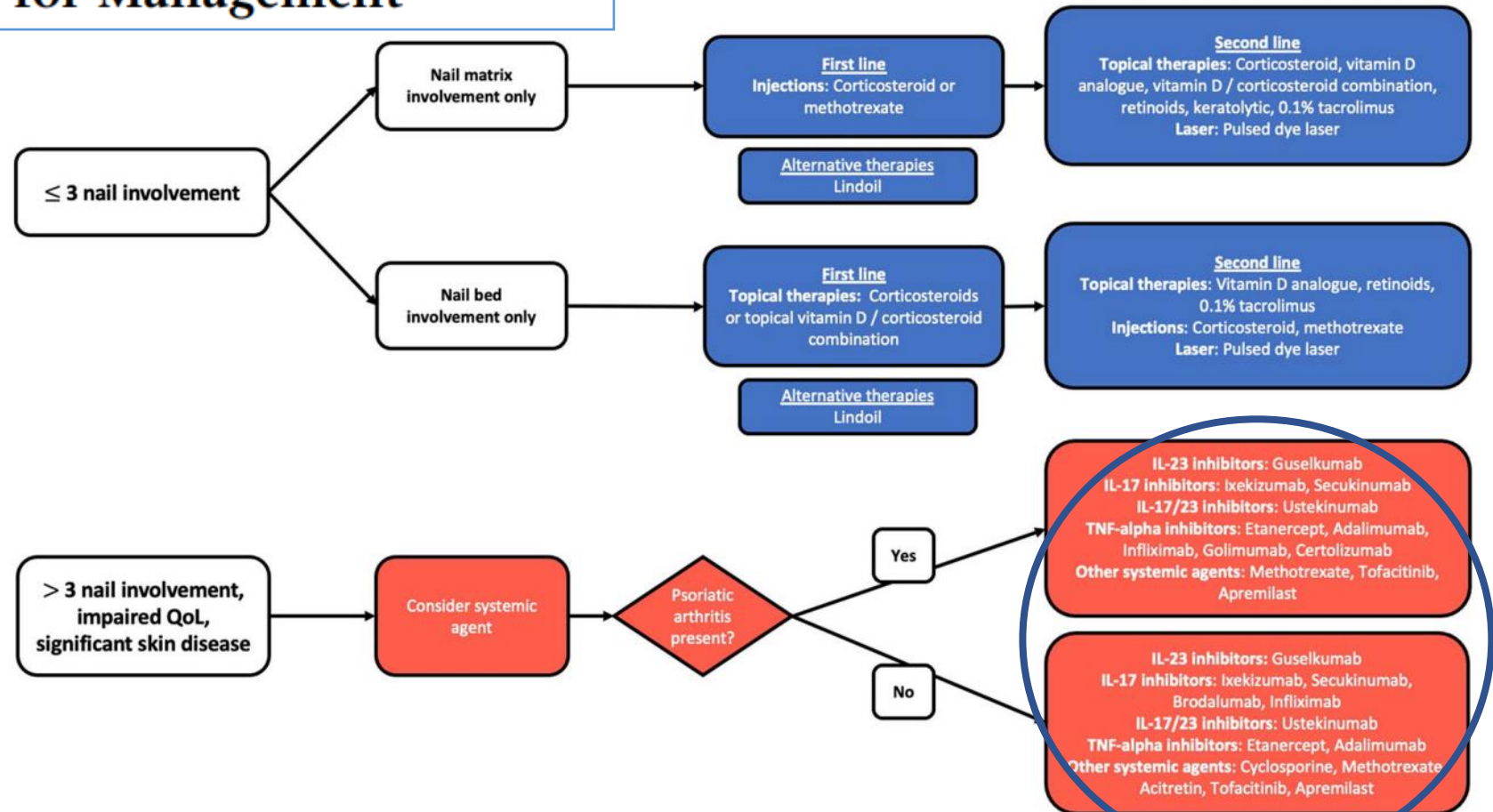


# Tırnak

## Nail


<i>Etanercept (TNF-<math>\alpha</math> inhibitor)</i>						
Ortonne et al. (2013)	Randomized, head-to-head comparison	Nails	69	Etanercept (50 mg) twice weekly for 12 weeks followed by once weekly for 12 weeks, or etanercept (50 mg) once weekly for 24 weeks	24 weeks	Both doses of etanercept showed improved NAPSI scores at weeks 12 and 24
<i>Adalimumab (TNF-<math>\alpha</math> inhibitor)</i>						
Paul et al. (2012)	Randomized, double-blind, vehicle-controlled trial	Subanalysis of phase 3 trial that evaluated nail psoriasis in patients with and without psoriatic arthritis	730	Adalimumab (80 mg) at week 0 and adalimumab (40 mg) every other week for 15 weeks with or without calcipotriol/betamethasone dipropionate (nails excluded)	16 weeks	Adalimumab improved NAPSI, pruritus, and DLQI scores at week 16
Thaci et al. (2015)	Randomized, double-blind, vehicle-controlled trial	Subanalysis of phase 3 trial that evaluated nail psoriasis in a pooled treatment group (adalimumab with or without calcipotriol plus betamethasone dipropionate) of patients with moderate-to-severe psoriasis	457	Adalimumab (80 mg at week 0; followed by 40 mg every other week from weeks 1–15) in addition to either topical calcipotriol plus betamethasone dipropionate or drug-free vehicle applied once daily for 4 weeks, and as needed thereafter	16 weeks	At week 16, there was a median decrease from baseline NAPSI of 40% with adalimumab. Improvements in DLQI and VAS pain scores were observed with adalimumab. Lower PASI 75 response rates were observed in patients with nail involvement
<i>Ustekinumab (IL-12/23 inhibitor)</i>						
Rich et al. (2014)	Randomized, double-blind, placebo-controlled trial	Subanalysis of phase 3 trial that evaluated nail psoriasis	545	Ustekinumab (45 mg or 90 mg) at weeks 0, 4, 16, and 28; placebo group received ustekinumab at weeks 12, 16, and 28	52 weeks	Both doses of ustekinumab showed improved NAPSI scores at weeks 12 and 24
<i>Secukinumab (IL-17 inhibitor)</i>						
Paul et al. (2014)	Randomized, double-blind, placebo-controlled trial	Subanalysis of phase 2 trial that evaluated nail psoriasis in patients with moderate-to-severe psoriasis	304	Secukinumab (150 mg): single (week 0), monthly (weeks 0, 4, and 8), early (weeks 0, 1, 2, and 4); or placebo	12 weeks	Percentage mean change from baseline to week 12 in composite nail score of –19% with the early regimen of secukinumab ( $p=.010$ vs. placebo) and –11% with the monthly regimen of secukinumab ( $p=.027$ vs. placebo)

# Nail Psoriasis: A Review of Effective Therapies and Recommendations for Management



REVIEW

# Nail Psoriasis: A Review of Effective Therapies and Recommendations for Management

Edward Haderl  · Megan Mosca · Julie Hong · Nicholas Brownstone ·  
Tina Bhutani · Wilson Liao

## Key Summary Points

Nail manifestations of psoriasis are detrimental to patient's quality of life (QoL) and are a prognostic factor for more severe skin disease and comorbidities, such as psoriatic arthritis

First-line treatments for few-nail disease ( $\leq 3$  nails involved) includes topicals and intralesional injections

When disease involves  $> 3$  nails, has extensive cutaneous and joint involvement, and has a significant impact on QoL, systemic therapies should be considered

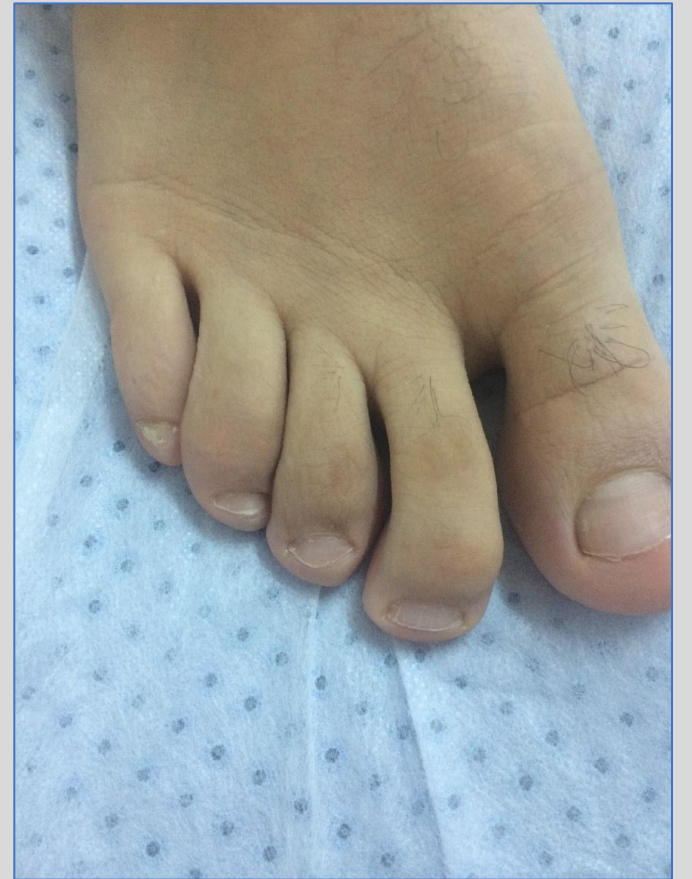
Certain interleukin (IL)-17 inhibitors have been shown to be superior to IL-12/23 inhibitors (brodalumab vs. ustekinumab) and have superior short-term efficacy in comparison to IL-23 inhibitors (ixekizumab vs. guselkumab) and tumor necrosis factor (TNF)-alpha inhibitors (ixekizumab vs. etanercept), though their long-term efficacy is similar to TNF-alpha inhibitors

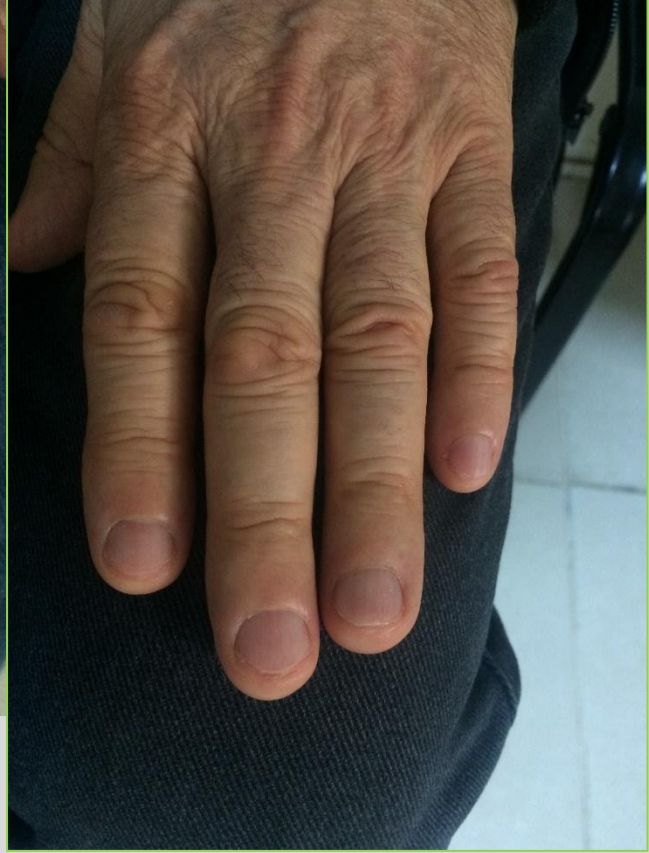
Certain TNF-alpha inhibitors have similar efficacy to IL-23 inhibitors (adalimumab vs. guselkumab)











# When the low may still be high: the heavy burden of residual psoriasis in difficult-to-treat areas despite a low DLQI score among patients under biologics or apremilast: a 5-year, prospective, case-control study

K Bakirtzi<sup>1</sup>, E Sotiriou<sup>1</sup>, E Vakirlis<sup>1</sup>, I Papadimitriou<sup>1</sup>, A Lallas<sup>1</sup>, N Kougkas<sup>2</sup>, E Lazaridou<sup>3</sup>, D Ioannides<sup>1</sup>

**Table 1** Frequencies and correlation of  $\geq 1$  'very much' and 'a lot' responses on the DLQI per physical and psychosocial domain and intention to switch treatment among patients with residual psoriasis in difficult-to-treat areas and the control group after 24 weeks of treatment

	Patients with residual psoriasis in difficult-to-treat areas N, (%)	Control Group N, (%)	p-value	OR	95% CI
Total Number of SIRs	67 (39.0)	11 (7.5)	0.00*	3.54	1.38–4.97
Physical significant impairment	18/67 (26.9)	7 (63.6)	0.00*	2.56	0.47–4.83
Psychosocial significant impairment	49/67 (73.1)	4 (36.4)	0.00*	2.34	1.67–3.31
Number of SIRs in patients with DLQI $\leq 5$	32/56 (57.1)	1/11 (9.1)	0.01*	4.82	2.53–8.44
Intention to switch treatment	63 (36.6)	26 (17.8)	0.02*	2.09	1.86–5.37

SIR, 'significant impact' response; DLQI, Dermatology Life Quality Index; N, number of patients; OR, Odds Ratio; CI, Confidence Interval.

\* indicates statistically significant difference for  $p < 0.05$ .