



ROMA 17-18 Maggio 2024
Roma Eventi-Piazza di Spagna - Via Alibert 5A, 00187 Roma

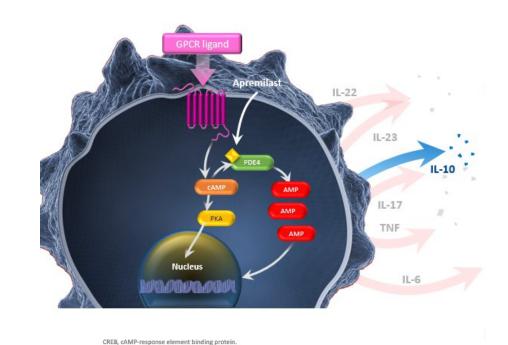


## Federico Pirro

Casistica clinica: place-in-therapy delle small molecules nella psoriasi

**APREMILAST** 

## Meccanismo d'azione e indicazioni



Apremilast, un inibitore orale a basso peso molecolare della fosfodiesterasi 4 (PDE4), agisce a livello intracellulare per modulare una rete di mediatori pro-infiammatori e antinfiammatori.

Inibizione della PDE4 → aumenta i livelli intracellulari di cAMP → sottoregolazione della risposta infiammatoria modulando l'espressione di TNF-a, IL-23, IL-17 e altre citochine infiammatorie. L'AMP ciclico modula inoltre i livelli di citochine antinfiammatorie, come IL-10.

## Indicato per PsO e PsA







# Il paziente "moderato"







## Paziente moderato

**Patients** presenting with disease manifestations adequately not controlled by topical therapy and with significant impairment in the quality of life may require systemic treatments. manifestations include These involvement of visible areas (i.e. face, scalps and hands), genitals, palms and/or soles, nails, or the presence of intense pruritus. Consequently, in daily practice, a systemic therapy could be indicated even if PASI or BSA is lower than 10.

### **Table 3** Indications for systemic treatments

- PASI ≥ 10
- PASI < 10 but with involvement of sensitive area such as hands, palmoplantar, genital, scalp, face, and nails
- BSA ≥ 5% resistant to or in patients reluctant to topical therapy
- BSA < 5% with disseminated lesions
- Subjective perception of disease severity (e.g. DLQI ≥ 10)
- · Active psoriatic arthritis
- Psoriasis associated with severe symptoms (e.g. itch, burning) that are not controlled by topical therapies

''[...] psoriasis could be graded as moderate-to-severe also in cases of **BSA <10% and/or PASI <10 but DLQI >10** because of a significant impact on the quality of life and systemic therapy could be indicated [...]''.

Gisondi P, Girolomoni G. Apremilast in the therapy of moderate-to-severe chronic plaque psoriasis. Drug Des Devel Ther. 2016 May 25;10:1763-70

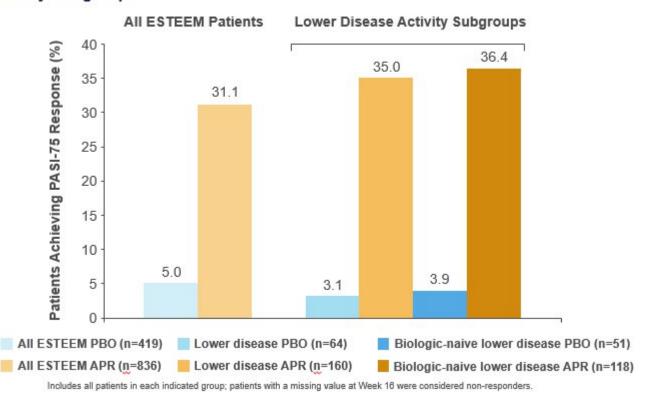






## ESTEEM 1&2

Figure 1. PASI-75 Response at Week 16, All ESTEEM Patients vs. Lower Disease **Activity Subgroups** 







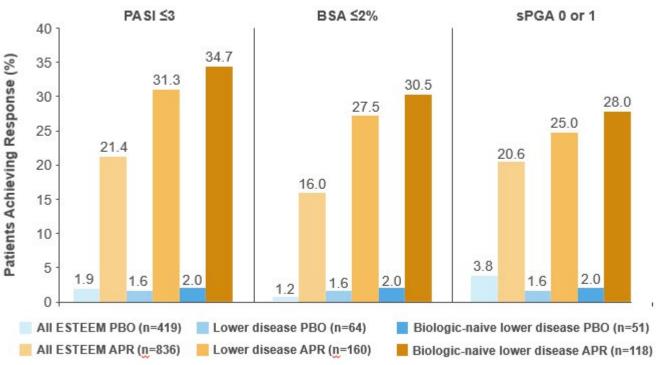






## ESTEEM 1&2

Figure 2. PASI ≤3, BSA ≤2%, and sPGA 0 or 1 at Week 16, All ESTEEM Patients vs. **Lower Disease Activity Subgroups** 



Includes all patients in each indicated group; patients with a missing value at Week 16 were considered non-responders.

Iversen L, et al. EADV 2017 [poster P1957]

ESTEEM 1 & 2 Pooled



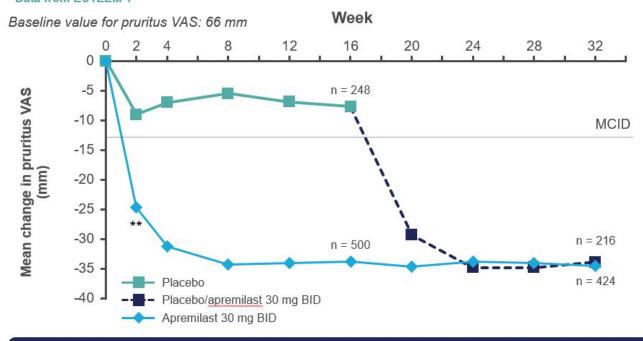




## Effects of Apremilast on Pruritus and Skin Discomfort/Pain Correlate With Improvements in Quality of Life in Patients With Moderate to Severe Plaque Psoriasis.

Sobell JM1, Foley P, Toth D, Mrowietz U, Girolomoni G, Goncalves J, Day RM, Chen R, Yosipovitch G.

#### Data from ESTEEM 1



Improvement in pruritus severity was correlated with an improvement in patient quality of life

\*\* P < 0.0001 vs. placebo (post hoc analysis); observed, full analysis set. Week 16, n = 248 (placebo) and n = 500 (apremilast 30 mg BID); Week 32, n = 216 (placebo) and n = 424 (apremilast 30 mg BID). BID, twice daily; MCID, minimal clinically important difference; VAS, visual analogue scale.

Sobell J, et al. Acta Derm Venereol 2016;96:514-520.







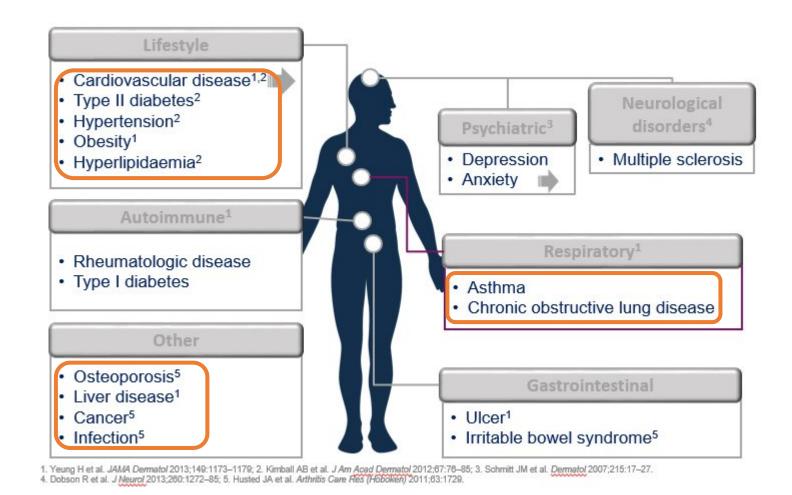
# Il paziente anziano con comorbidità







## Paziente anziano









**ROMA 17-18 Maggio 2024** 

## Paziente anziano

Oral DMARDs

#### Absolute contraindications<sup>a</sup>

- Severe or serious infections<sup>1,11</sup>
- Severe liver or kidney disorders<sup>1,11</sup>
- Alcohol abuse<sup>1</sup>
- Acute peptic ulcer<sup>1,11</sup>
- History or current malignancy<sup>1,11</sup>
- Significant anaemia, leukopenia, or thrombocytopenia<sup>2</sup>

- Congestive heart failure<sup>1</sup>
- Moderate to severe heart failure<sup>3</sup>
- Sepsis<sup>4</sup>
- History of or currently active infections (including tuberculosis and chronic hepatitis B)1,11
- Systemic malignancy<sup>1</sup>

#### Relative contraindications<sup>a</sup>

- Kidney or liver disorders<sup>1,2,11</sup>
- Diabetes<sup>2,11</sup>
- Obesitv<sup>2</sup>
- Active infectious disease<sup>2</sup>
- Live vaccine<sup>2,11</sup>
- Concomitant treatment (e.g. SUP, nephrotoxic drugs)<sup>1,2,11</sup>
- Compatibility with lifestyle<sup>5,6</sup>
  - E.g. family planning<sup>7,8</sup> or burden of monitoring<sup>11</sup>

- Current, active, serious infections<sup>10</sup>
- Severe liver disease<sup>11</sup> History of tuberculosis<sup>10</sup>
- Malignancy<sup>11</sup>
- Hepatitis C<sup>1</sup>
- Live vaccines<sup>1,10,11</sup>
- Fear of needles/injections<sup>8</sup>
- Concomitant treatment (e.g. PUVA >200 treatments)
- Compatibility with lifestyle<sup>11</sup>
  - E.g. burden of monitoring

<sup>a</sup>List not exhaustive.

1. Pathirana D et al. JEADV. 2009;23(supple 2):1-70. 2. Kalb RE et al. J Am Acad Dermatol. 2009;60:824-837. 3. Remicade (infliximab) Pl. 4. Enbrel (etanercept) Pl. 5. Schaarschmidt ML et al. Arch Dermatol. 2011;147:1285–1295. 6. Chan SA et al. J Dermatolog Treat. 2013;24:64–69. 7. Tung JP and Maibach Hl. Drugs. 1990; 40:697–712. 8. Landau JL et al. Skin Therapy Lett. 2011;16:1–3. 10. Cush. Ann Rheum Dis. 2005;64(suppl 4):iv18–iv23. 11. Nast A et al. JDDG. 2011;9(suppl 2):S1–S104.









Table 4 Continued

	Other label indications	Dosage	Duration	Efficacy	Safety	Contraindications	Important drug interactions	Drug screening	Drug monitoring
Apremilast									
Moderate-to- severe plaque psoriasis in adult	Psoriatic arthritis	Oral; 30 mg twice daily, morning and	Approved for continuous treatment regimen	PASI75 in 28.8– 33.1% and PASI90 in 8.8– 9.8% of patients at week 16	Transient nausea and diarrhoea. Upper respiratory tract infections. Uncommon suicidal ideation and behaviour.	Pregnancy or breastfeeding. Active infections	None	None	None
patients who failed to respond to, or who have contraindications		evening without regard to meals. Initial							
to, or are intolerant to other systemic therapy including cyclosporine,		5-day titration period							
methotrexate or PUVA									





### MAJOR CARDIAC EVENTS, MALIGNANCIES, DEPRESSION AND SUICIDALITY - 3-YEAR POOLED ESTEEM DATA

Data from ESTEEM 1-2

		exposure period 52 weeks <sup>a</sup>	Apremilast-exposure period 0 to ≤ 182 weeks <sup>a</sup> Apremilast n = 1184; pt-yrs = 1902.2		
	Apremilast n =	1184; pt-yrs = 915.7			
Patients	n (%)	EAIR/100 pt-yrs	n (%)	EAIR/100 pt-yrs	
Major cardiac events	4 (0.3)	0.4	10 (0.8)	0.5	
Malignancies Haematological Skin Basal cell carcinoma Squamous cell carcinoma Keratoacanthoma Malignant melanoma Solid tumours Breast cancer Lip and/or oral cavity cancer Rectal cancer	15 (1.3) 0 9 (0.8) 4 (0.3) 3 (0.3) 0 2 (0.2)	1.6 0 1.0 0.4 0.3 0	23 (1.9) 1 (0.1) <sup>b</sup> 11 (0.9) 5 (0.4) 4 (0.3) 1 (0.1) 3 (0.3) 1 (0.1)	1.2 0.1 0.6 0.3 0.2 0.1	
Renal cell carcinoma Thyroid neoplasm Uterine cancer Prostate cancer Thyroid cancer	0 1 (0.1) 0 1 (0.1) 0	0 0.1 0 0.1 0	1 (0.1) 1 (0.1) 2 (0.2) 1 (0.1) 1 (0.1) 1 (0.1) 1 (0.1)	0.1 0.1 0.1 0.1 0.1 0.1	
Depression as an AE Depression as a serious AE	24 (2.0) 1 (0.1)	2.7 0.1	33 (2.8) 2 (0.2)	1.8 0.1	
Suicide attempt Completed suicide	1 (0.1) 0	0.1 0	1 (0.1) 0	0.1 0	

<sup>·</sup> Rates of major cardiac events, malignancies, depression and suicidality were comparable across the APR-exposure periods









<sup>&</sup>lt;sup>a</sup> The APR-exposure periods 0 to ≤ 52 weeks and 0 to ≤ 182 weeks include all patients who received APR regardless of when apremilast exposure started. APR exposure is based on each patient's total exposure to APR, defined as the time interval between the date of the first dose of apremilast and the date of the last dose of APR, inclusive; b diffuse large B-cell lymphoma. AE, adverse event; APR, apremilast 30 mg twice daily; EAIR/100 pt-yrs, 100 times the number (n) of patients reporting the event divided by pt-yrs (up to the first event start date for patients reporting the event); pt-yrs, patient-years. JAAD. 2017 Aug;77(2):310-317.e1. doi: 10.1016/j.jaad.2017.01.052. Epub 2017 Apr 14

## Paziente anziano

In questo contesto, apremilast:

- > Non richiede un monitoraggio laboratoristico durante il trattamento
- > Possiede scarse interazioni con altri farmaci (vantaggio in pazienti anziani spesso in terapia polifarmacologica cronica)
- Buon profilo di **sicurezza in caso di scompenso cardiaco** congestizio
- Possibilità di modulazione della dose in caso di insufficienza renale o di effetti collaterali (riduzione a 30 mg/die con clearance creatinina <30 mL/min)
- > Buon profilo di sicurezza in pazienti con comorbidità neoplastica recente e non aumento dell'incidenza di neoplasie

Kaushik et al, Psoriasis: Which therapy for which patient psoriasis comorbidities and preferred systemic agents









# Il paziente con comorbidità infettive







## Comorbidità infettive

Nell'ambito degli effetti collaterali di apremilast, benché siano preponderanti gli effetti gastrointestinali, è riportato anche un lieve aumento del rischio di infezioni respiratorie delle vie aeree superiori.

Nonostante ciò, apremilast sembra possedere un buon profilo di sicurezza in presenza di comorbidità infettive.

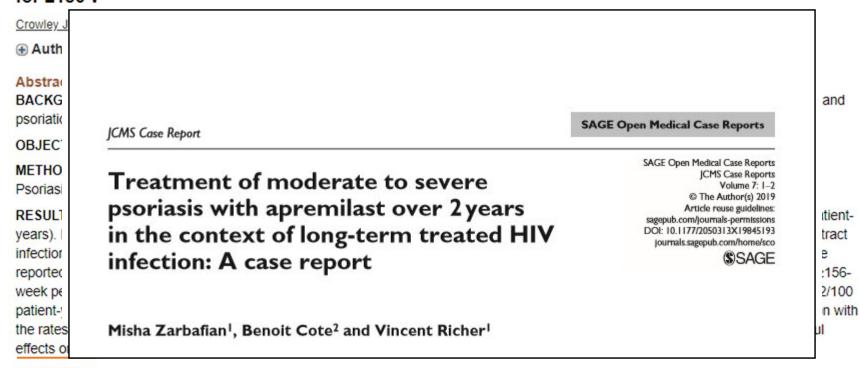
Si ricorda, inoltre, come da scheda tecnica non sia previsto uno screening (markers HBV-HCV, quantiferon test...) pre-terapia.







### Long-term safety and tolerability of apremilast in patients with psoriasis: Pooled safety analysis for ≥156 viscle from 2 phase 2 randomized controlled trials (ECTERN 4 and 2)



LIMITATIONS: This study had a high dropout rate (21% of patients ongoing >156 weeks); most were unrelated to safety concerns.

CONCLUSIONS: Apremilast demonstrated an acceptable safety profile and was generally well tolerated for ≥156 weeks.

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## Ulteriori indicazioni

- Pazienti agofobici: la somministrazione orale è spesso un requisito chiesto dai pazienti
- Pazienti con scarsa compliance: la somministrazione orale e la mancanza di necessità di monitoraggio stretto con esami ematochimici può essere un vantaggio in questa tipologia di pazienti.







### Caso clinico 1

- M, 50 aa.
- Affetto da psoriasi e artropatia psoriasica dal 2008
- Familiarità per psoriasi







### Anamnesi

### In anamnesi patologica remota:

- dislipidemia
- ipertensione arteriosa
- diabete mellito di tipo 2
- pregressa epatite B
- Portatore di 3 stent coronarici per IMA nel 2002

### Terapie precedenti:

- MTX
- Infliximab, sospeso dopo circa due anni di terapia per scarso controllo del quadro cutaneo ed articolare









### Decorso clinico

Recidiva di malattia (PASI 9, DLQI 20, PAIN VAS 80/100, ITCH VAS 9/10). Si richiedono markers HBV-HCV e Quantiferon test



- Anti-HBc+ e anti-HBs+ (a basso titolo)
- Quantiferon positivo







### INIZIA APREMILAST

PASI 9

**DLQI 20** 

PAIN VAS 80/100

ITCH VAS 9/10





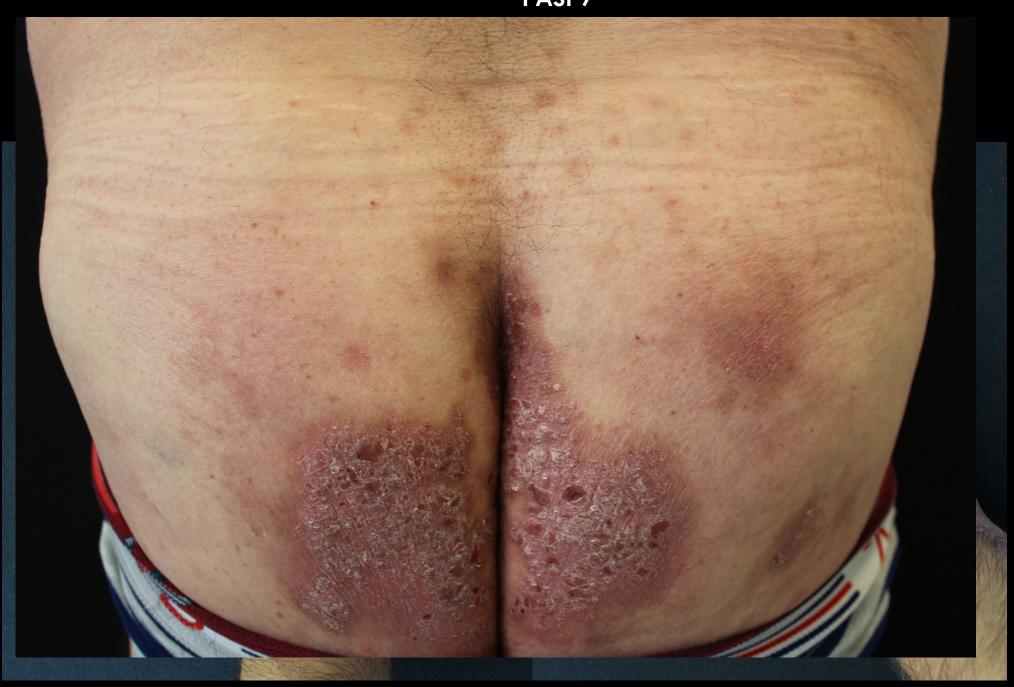




PASI 9 DLQI 20 PAIN VAS 80/100 ITCH VAS 9/10



PASI 9



PASI 9 DLQI 20 PAIN VAS 80/100 ITCH VAS 9/10



PASI 5
DLQI 7
PAIN VAS 40/100
ITCH VAS 2/10



PASI 5
DLQI 7
PAIN VAS 40/100
ITCH VAS 2/10



PASI 5 DLQI 7 PAIN VAS 40/100 ITCH VAS 2/10







## Dopo 52 settimane

Perdita di peso dall'inizio della terapia: 9 Kg







## Follow up

- Apremilast, nel nostro paziente, ha dimostrato una buona efficacia in particolar modo sulla componente articolare
- Buon profilo di sicurezza in paziente con anamnesi positiva per pregresso contatto con HBV e Quantiferon test positivo
- Efficacia sul prurito
- Mantenimento della risposta (week 52) con scarsi effetti collaterali

## Caso clinico 2

- M, 70 aa.
- Affetto da psoriasi dal 1988
- Artrite psoriasica dal 1990
- Familiarità per psoriasi (madre)

### <u>Terapie precedenti</u>

- Ciclosporina
- Methotrexate, sospeso per piastrinopenia, rientrata alla sospensione.
- Adalimumab: intrapreso per recidiva di malattia (PASI 20, DLQI 18, PAIN VAS 90/100) → sospende dopo 4 settimane per piastrinopenia (78000 x10^9/L).







### INIZIA APREMILAST

**PASI 10** 

DLQI 18

PAIN VAS 80/100









PASI 10 DLQI 18 PAIN VAS 80/100



PASI 10 DLQI 18 PAIN VAS 80/100



PASI 10 DLQI 18 PAIN VAS 80/100



W24

PASI 1 DLQI 0 PAIN VAS 20/100



W24

PASI 1 DLQI 0 PAIN VAS 20/100



W24

PASI 1 DLQI 0 PAIN VAS 20/100



PASI 18
DLQI 17
PAIN VAS 70/100



PASI 18
DLQI 17
PAIN VAS 70/100



PASI 18
DLQI 17
PAIN VAS 70/100



PASI 4
W24 (II ciclo) DLQI 3
PAIN VAS 20/100



PASI 4
W24 (II ciclo) DLQI 3
PAIN VAS 20/100



## Follow up

- Apremilast, nel nostro paziente, ha dimostrato una buona efficacia sia sulla componente cutanea sia articolare
- Buon profilo di sicurezza e scarsi effetti collaterali (lieve diarrea all'inizio della terapia, regredita nell'arco di 8 settimane)
- Qualità della vita radicalmente migliorata
- Ripresa dell'effetto terapeutico anche dopo sospensione e recidiva di malattia

## 1. Apremilast inibisce la funzione della PDE-4?

- 1. Sì
- 2. No











2. Apremilast richiede frequenti esami ematici di monitoraggio?

1. Sì

2. No











3. Una insufficienza renale stadio 2 controindica la terapia con apremilast?

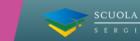
1. Sì

2. No











## GRAZIE PER L'ATTENZIONE

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