





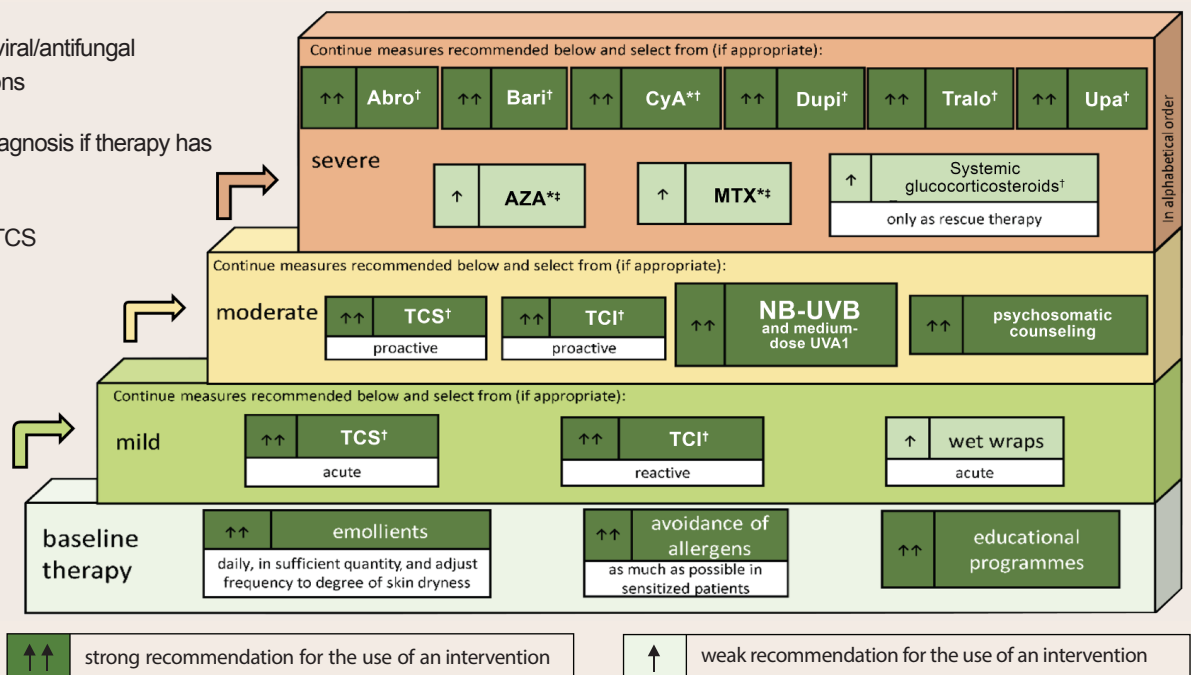
# Treatment Individualization in Moderate-to-Severe AD

## Goals of Treatment

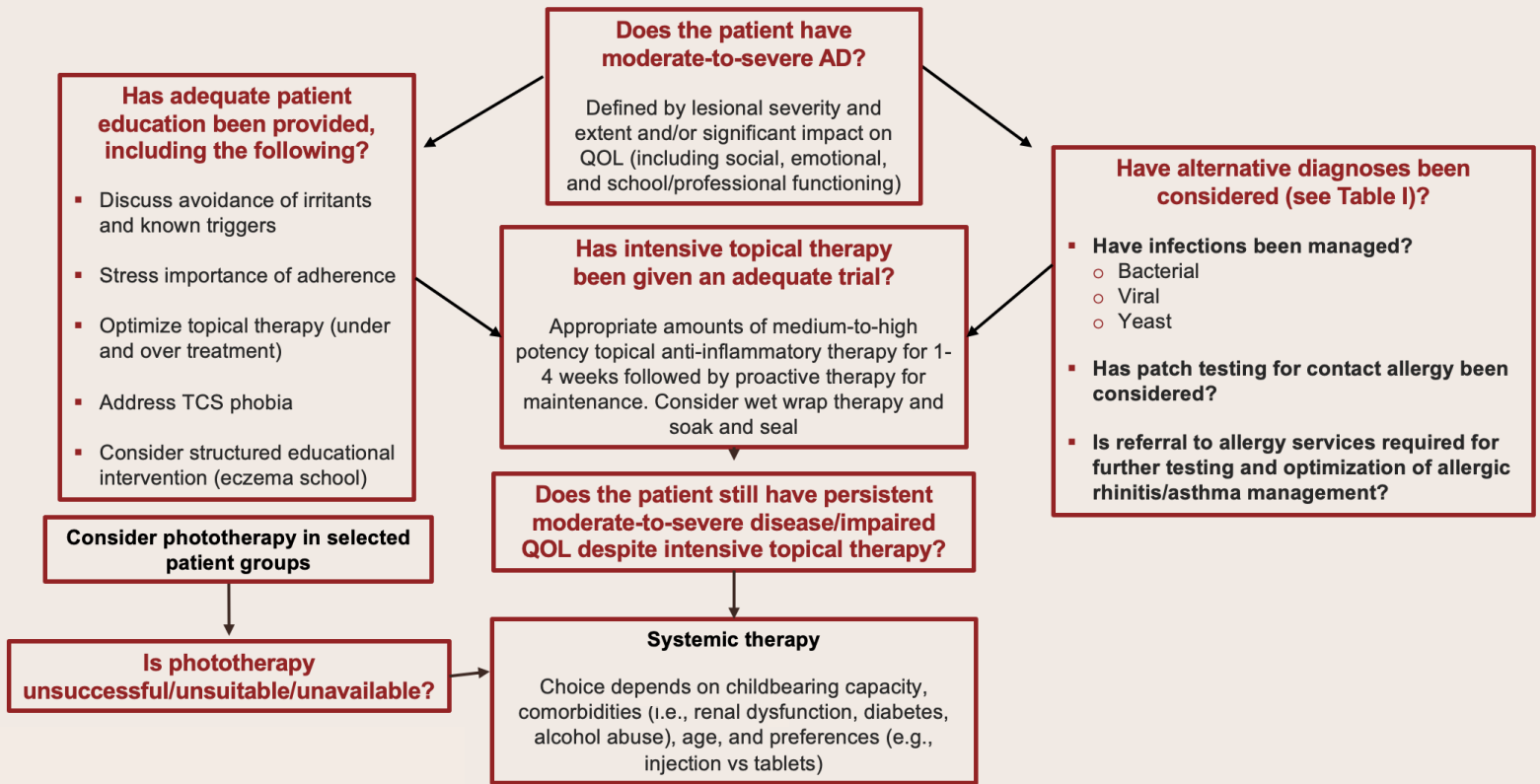
- 
**Relieve symptoms:** reduce itching, dermatitis, and inflammation to provide relief and improve QOL for the patient
- 
**Prevent exacerbations:** implement measures to prevent flare-ups, including avoiding triggers, maintaining skin hydration, and using topical treatments as prescribed
- 
**Restore skin barrier function:** repair and protect the skin barrier to reduce transepidermal water loss and minimize the risk of skin infections
- 
**Minimize treatment risks:** ensure that treatments used to manage AD are safe and effective, while minimizing the risk of AEs

## EuroGuiDerm Guidelines Stepped-Care Plan for Adults With AD

- Add antiseptic/antibiotic/antiviral/antifungal treatment in cases of infections
- Consider compliance and diagnosis if therapy has insufficient effect
- Refer to Part II, Table 2 for TCS classes recommendation



# Treatment Algorithm for Systemic Therapy

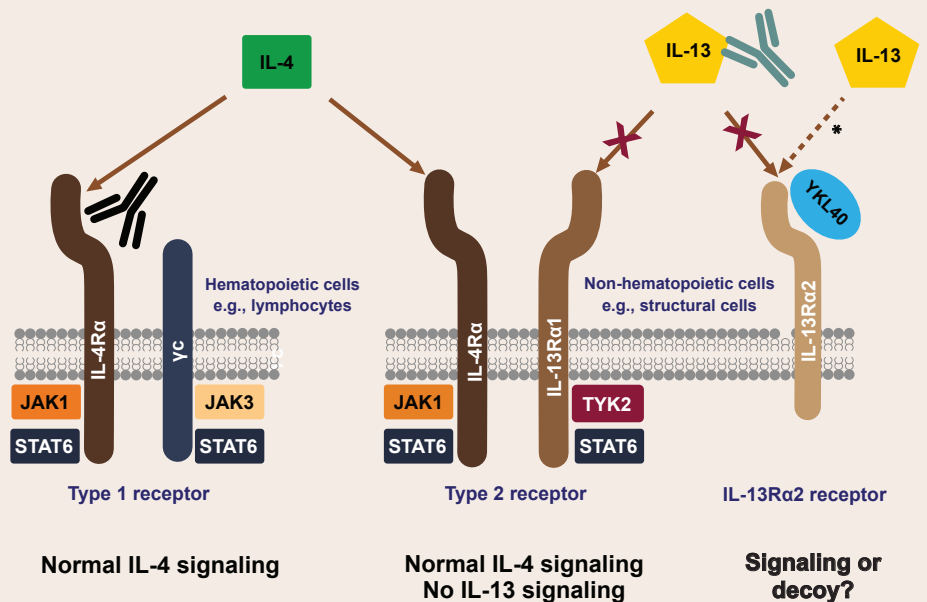


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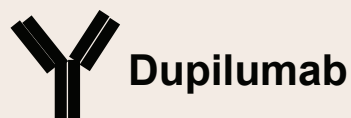
## Mechanisms of Action of Systemic Therapies

### Biologics

- Dupilumab binds to the IL-4R $\alpha$  subunit, blocking signaling of both IL-4 and IL-13, while tralokinumab specifically binds to IL-13



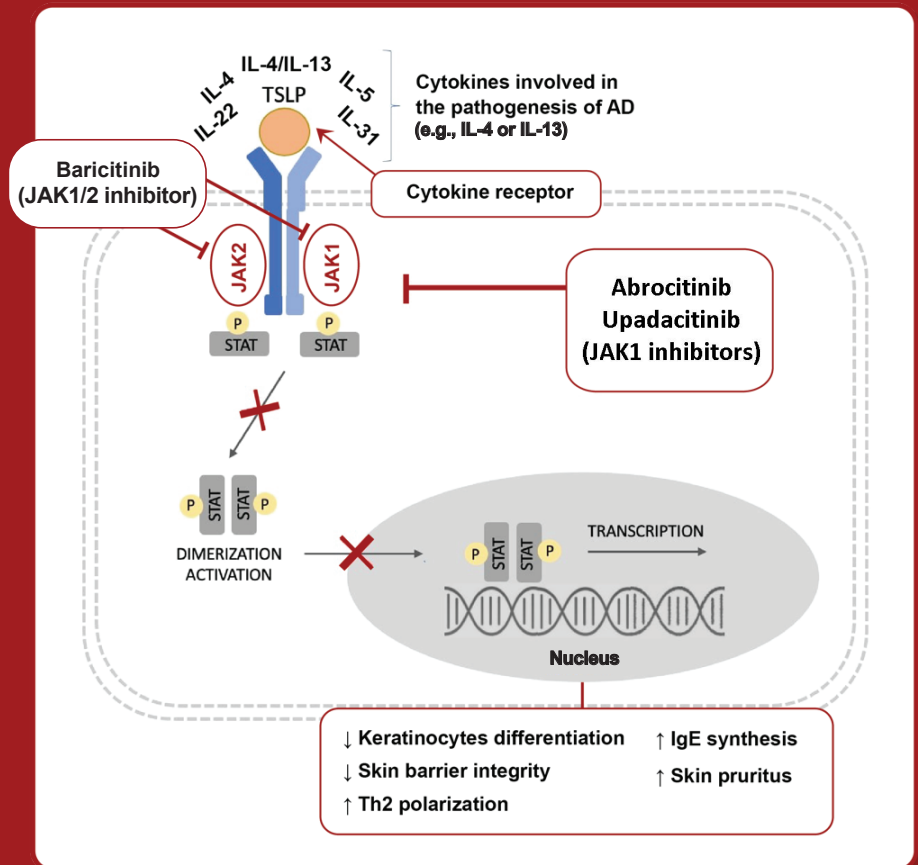
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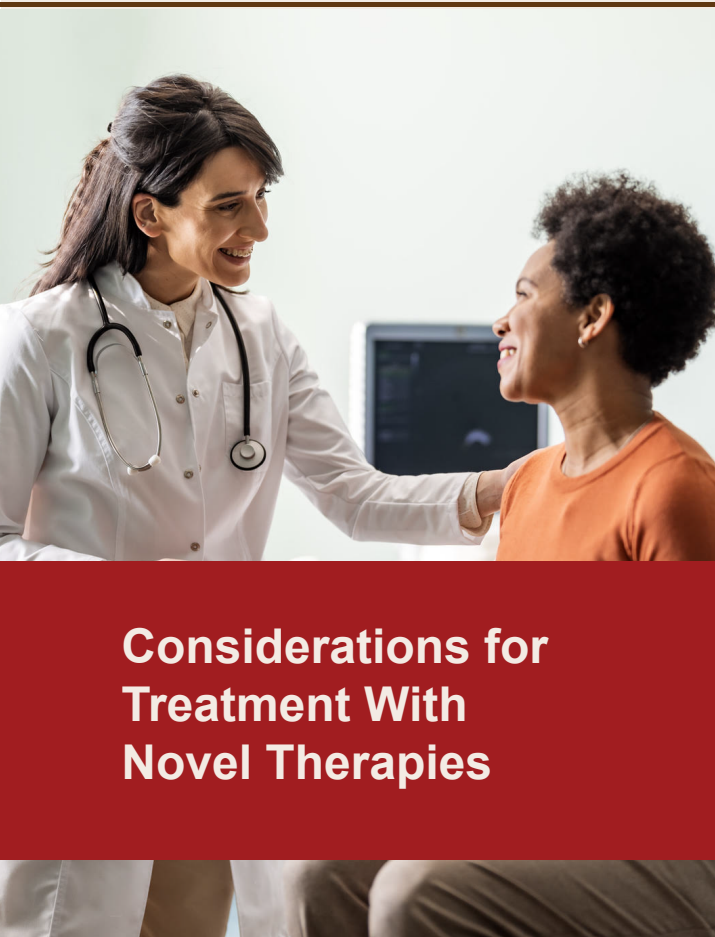
# Mechanisms of Action of Systemic Therapies (cont.)

## JAK Inhibitors

- Oral JAK inhibitors work by selectively inhibiting JAK1 (abrocitinib, upadacitinib) or both JAK1 and JAK2 (baricitinib), which play a crucial role in the signaling pathways of various cytokines, including IL-4 and IL-13



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## Considerations for Treatment With Novel Therapies

- Biologic therapy vs an oral JAK inhibitor**
  - Biologics and JAK inhibitors differ in efficacy, safety, route of administration
  - Select and optimize treatment based on:
    - Age
    - Agent mechanisms of action
    - Comorbidity status
    - Potential for significant AEs
  - Generally, biologics are considered first-line options followed by JAK inhibitors
  - JAK inhibitors may be a good choice for patients who
    - Dislike needles
    - Require a rapid onset of action
- Selecting a biologic therapy**
  - Both dupilumab and tralokinumab are efficacious long-term options with manageable safety profiles
  - Consider dupilumab for patients with comorbid asthma, eosinophilic esophagitis, and/or chronic rhinosinusitis with nasal polyps over tralokinumab given its indications for these conditions
- Selecting a JAK inhibitor**
  - Consider baricitinib, where available, for cases of moderate AD
  - Consider upadacitinib or abrocitinib for cases of severe AD

# Safety Considerations of Novel Therapies



## Biologic Therapies

### Conjunctivitis

- Patients with a history of eye discomfort may be at higher risk of developing conjunctivitis; counsel and monitor patients receiving treatment more closely
- Encourage patients to report any eye discomfort
- Regularly evaluate patients receiving dupilumab for conjunctival erythema and ophthalmologic complaints
- All patient-reported ocular symptoms should be diagnosed and treated adequately; refer patients to an ophthalmologist for further assessment and comanagement if necessary



## Oral JAK Inhibitors

### Serious Bacterial, Fungal, Viral, + Other Opportunistic Infections

- Consider the risks and benefits of treatment before initiating JAK inhibitors in patients:
  - With chronic or recurrent infection
  - Who have been exposed to TB
  - With a history of a serious or an opportunistic infection
  - Who have resided or traveled in areas of endemic TB or endemic mycoses
  - With underlying health conditions that may predispose them to infection
- If a patient develops a serious infection, including a serious opportunistic infection, interrupt JAK inhibitor treatment until the infection is controlled

### Tuberculosis

- Evaluate and test patients for TB before starting oral JAK inhibitor therapy; consider yearly screening for patients in highly endemic areas
- JAK inhibitors are not recommended for use in patients with active TB
- For patients with a new diagnosis of latent TB or prior untreated latent TB, or for patients with a negative test for latent TB but who are at high risk for TB infection, start preventive therapy for latent TB before initiating JAK inhibitor therapy
- Monitor patients for signs and symptoms of TB, including patients who tested negative for latent TB

### Viral Reactivation

- If a patient develops HZ virus, consider interrupting JAK inhibitor therapy until the episode resolves
- Perform viral hepatitis screening and monitoring for reactivation in accordance with clinical guidelines before starting therapy and during therapy with JAK inhibitors
- JAK inhibitors are not recommended for use in patients with active HBV or HCV
- Monitor patients with inactive HBV for expression of HBV DNA during therapy with JAK inhibitors; consult a liver specialist if HBV DNA is detected

### COVID-19

- In patients with COVID-19, monitor for signs and symptoms of new infections during and after treatment with JAK inhibitors
- There is limited information regarding the use of JAK inhibitors in patients with COVID-19
- Risks and benefits of treatment with JAK inhibitors in patients with COVID-19 and other concurrent infections should be considered

## Manage the Whole Patient



Assess QOL

Evaluate comorbidities

Review medication history

Assess psychosocial factors

Assess psychosocial factors

# Treatment Individualization in Moderate-to-Severe AD

## Abbreviations and References

### Abbreviations:

Abro: abrocitinib  
AD: atopic dermatitis  
AE: adverse event  
AZA: azathioprine  
Bari: baricitinib  
CyA: cyclosporin A  
Dupi: dupilumab  
EuroGuiDerm: European guideline  
HBV: hepatitis B virus  
HCV: hepatitis C virus  
HZ: herpes zoster  
IgE: immunoglobulin E  
IL: interleukin  
JAK: Janus kinase  
MTX: methotrexate  
NB-UVB: narrow-band ultraviolet B  
QOL: quality of life  
STAT: signal transducer and activator of transcription  
TB: tuberculosis  
TCI: topical calcineurin inhibitor  
TCS: topical corticosteroid  
Tralo: tralokinumab  
TSLP: thymic stromal lymphopoietin  
TYK: tyrosine kinase  
Upa: upadacitinib  
UVA1: ultraviolet A1

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