# Efficacy and Safety of Icotrokinra, a Novel Targeted Oral Peptide (IL-23R-Inhibitor), in Adolescents With Moderate-to-Severe Plaque Psoriasis:



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# Subgroup Analyses From a Phase 3, Randomized, Double-Blind, Placebo-Controlled Study (ICONIC-LEAD)

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#### Conflicts of Interest

LE: Investigator: AbbVie, Amgen, Arcutis, Bausch, Castle Biosciences, Dermavant, Galderma, Incyte, Lilly, Pfizer, Regeneron, and Sanofi-Genzyme; Consultant: AbbVie, Amgen, Attovia, Almirall, Apogee, Arcutis, Bristol Myers Squibb, Dermavant, Forte, Galderma, Incyte, Johnson & Johnson, LEO Pharma, Novartis, Pfizer, Regeneron, Sanofi, Seanergy, UCB, and Verrica.

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WW: Speaker, consultant, and/or investigator: AbbVie, Amgen, Arcutis, Eli Lilly, Johnson & Johnson, LEO Pharma, National Psoriasis Foundation, Novartis, Pfizer, Regeneron, Sanofi, and UCB.

JS: Speaker, consultant, and/or investigator: AbbVie, Amgen, Arcutis, Bristol Myers Squibb, Coval Biopharma, Dermavant, Eli Lilly, Johnson & Johnson, KoBio Labs, LEO, National Psoriasis Foundation, Novartis, Pfizer, Regeneron, Sanofi, and UCB.

NM: Honoraria for participation on advisory boards, as a speaker and/or for consultancy: AbbVie, Almirall, Boehringer Ingelheim, Bristol Myers Squibb, Dr. Wolff, Eli Lilly, Johnson & Johnson, La Roche-Posay, LEO Pharma, Novartis, Pfizer, Sanofi, and UCB.

JB: Speaker: Galderma, Krystal, Sanofi, Pfizer, Regeneron, and Verrica; Consultant: Dermavant; Investigator: AbbVie, Amgen, Arcutis, Dermata, Dermavant, Eli Lilly, Incyte, Johnson & Johnson, Pfizer, Quoin, Regeneron, Sanofi, Takeda, and UCB.

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AP: Investigator: AbbVie, Biomendics, Dermavant, Eli Lilly, Incyte, Johnson & Johnson, Regeneron, and UCB; Consultant: Abeona, Arcutis, BioCryst, Boehringer-Ingelheim, Castle Creek, Chiesi, Dermavant, Johnson & Johnson, Krystal, LEO, Lilly, L'Oreal, MoonLake Immunotherapeutics, Peltheos, Quoin, Regeneron, and Sanofi; Data safety monitoring board for AbbVie, Abeona, Biocryst, Daiichi Sankyo, and Galderma.

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### Background & Objective



#### Pediatric plaque psoriasis (PsO)

 Approximately one-third of patients with plaque PsO report onset before adulthood; however, few advanced treatment options are available<sup>1</sup>



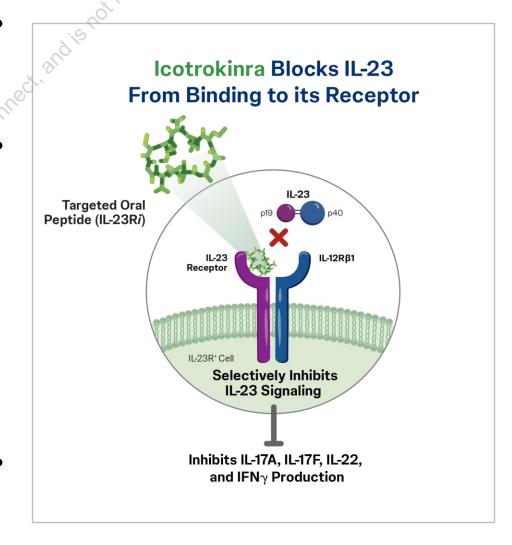
#### **Icotrokinra**

- Patients with moderate-to-severe plaque PsO are limited to injectable therapies to achieve high-level efficacy with a favorable safety profile
- Icotrokinra (ICO) is a first-in-class, targeted oral peptide that:
  - Selectively binds the interleukin (IL)-23 receptor and inhibits IL-23 signaling<sup>2</sup>
  - Demonstrated significant skin clearance and no safety signals through 1 year in Phase 2 PsO studies<sup>3,4</sup>
  - Demonstrated significantly higher rates of almost clear and/or completely clear skin vs placebo (PBO) at Week (W)16 and no safety signals through W24 among all participants with moderate-to-severe plaque PsO in ICONIC-LEAD, the first pivotal Phase 3 trial evaluating a systemic advanced therapy in adults and adolescents<sup>5</sup>

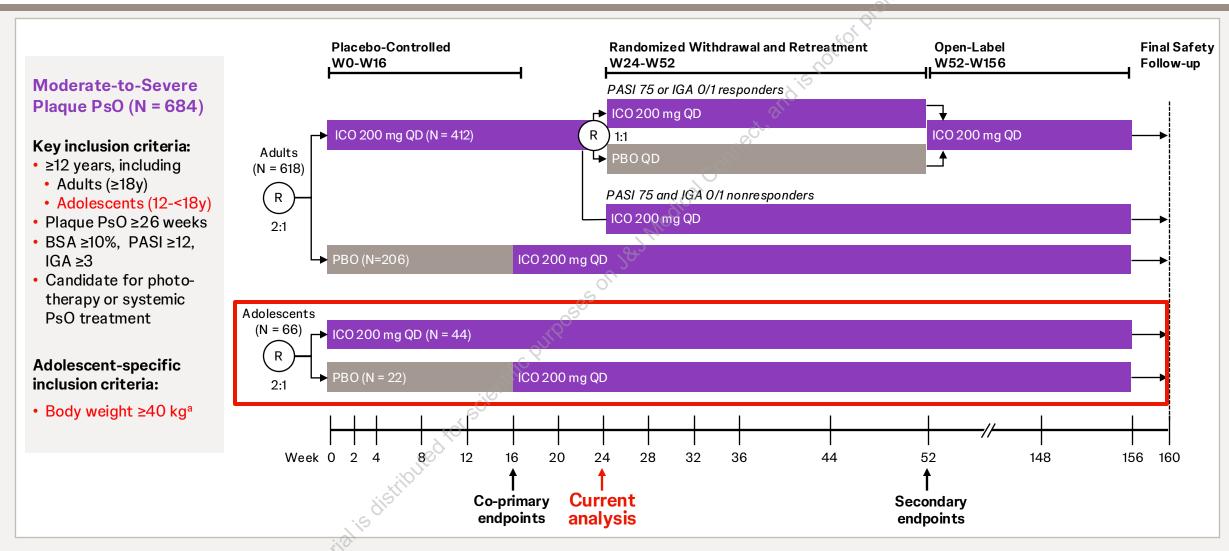


#### **Objective**

 Key clinical outcomes and adverse events (AEs) from the ICONIC-LEAD adolescent subgroup through W24 are reported



# ICONIC-LEAD – Study Design & Adolescent Subgroup



### **Endpoints & Statistical Considerations**



#### **Endpoints in adolescents**

- Overall ICONIC-LEAD co-primary endpoints at W16
  - IGA 0/1 response (IGA score of cleared [0] or minimal [1] and ≥2-grade improvement from baseline)
  - PASI 90 response (≥90% improvement from baseline in total PASI score)
- Select key secondary endpoints assessing complete skin clearance at W16
  - IGA 0 response
  - PASI 100 response
- Assessment of clinical response and AEs continued through W24



#### Statistical considerations

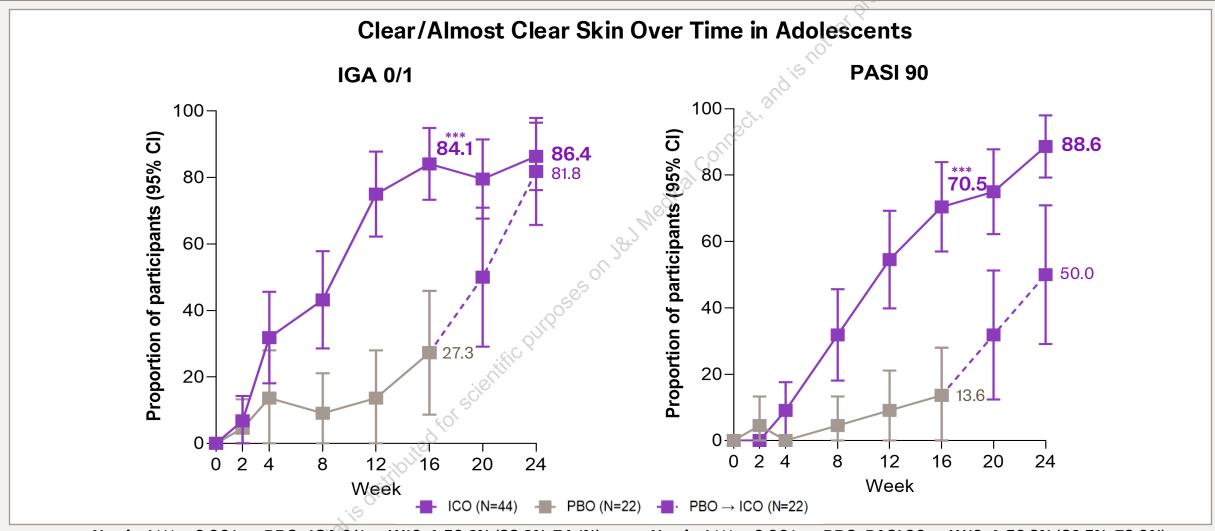
- Adolescents were analyzed as a subgroup of the ICONIC-LEAD study
- Nominal p values for ICO vs PBO at W16 were based on Cochran-Mantel-Haenszel chi-square test stratified by geographic region (the Americas, the European Union, Asia-Pacific; 2-sided  $\alpha$ =0.05)
- Participants with the following intercurrent events (ICE) were considered as nonresponders:
  - Discontinued study drug due to lack of efficacy or AE of worsening of PsO (ICE 1)
  - Initiated prohibited medication that could impact PsO (ICE 2)
- Observed data were used for participants with an ICE of discontinuing study agent due to other reasons
- After accounting for these ICE, nonresponder imputation (NRI) was applied to participants with missing data

# Adolescent characteristics were generally balanced across groups

		401	
seline Characteristics of Adolescents		ICO (N = 44)	PBO (N = 22)
Demographics			
ÅÅ	Age, yrs	15.0 (1.8)	15.0 (1.5)
	Female	52%	64%
	Race, Asian/Black/White	23/4/70%	23/0/77%
	<b>BMI,</b> kg/m <sup>2</sup>	26.0 (7.1)	24.4 (7.9)
Characteristics		190	
	PsO disease duration, yrs	4.9 (4.0)	5.8 (3.4)
	% BSA with PsO	26.1 (15.6)	27.1 (14.0)
	IGA score		
	Moderate (3)	70%	82%
	Severe (4)	30%	18%
	PASI (0-72)	19.8 (8.2)	18.6 (4.0)
Prior PsO Treate	ments		
•	Systemic therapy <sup>a</sup>	52%	50%
	Biologic therapy <sup>b</sup>	14%	41%
	Phototherapy (PUVA or UVB)	23%	14%

Data shown are mean (SD) unless specified otherwise. <sup>a</sup>Includes conventional nonbiologic, novel nonbiologic, 1,25-vitamin D3 and analogues, phototherapy, and biologics. <sup>b</sup>Includes etanercept, infliximab, adalimumab, ustekinumab, briakinumab, secukinumab, ixekizumab, brodalumab, guselkumab, risankizumab, tildrakizumab, alefacept, efalizumab, natalizumab, and certolizumab pegol. **BSA**=body surface area, **BMI**=body mass index, **ICO**=icotrokinra, **IGA**=Investigator's Global Assessment, **PASI**=Psoriasis Area and Severity Index, **PBO**=placebo, **PsO**=psoriasis, **PUVA**=psoralen plus ultraviolet A, **UVB**=ultraviolet B.

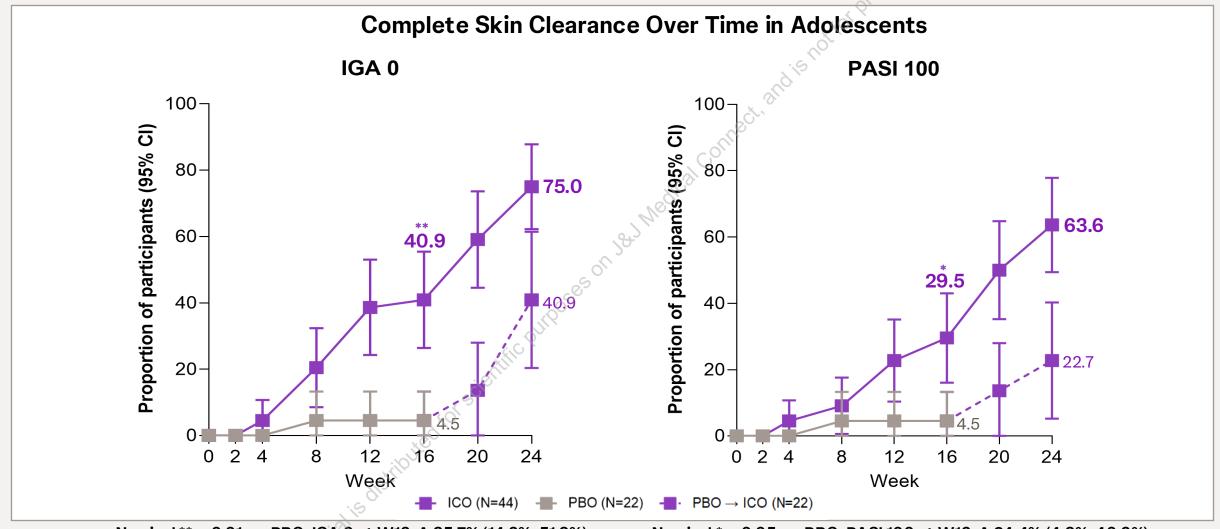
# ICO demonstrated high rates of clear/almost clear skin in adolescents at W16 and W24



Nominal \*\*\**p*<0.001 vs. PBO; IGA 0/1 at W16: Δ 56.2% (33.2%, 74.1%)

Nominal \*\*\**p*<0.001 vs. PBO; PASI 90 at W16: Δ 56.3% (32.5%, 73.0%)

# ICO demonstrated high rates of completely clear skin in adolescents at W16 and W24



Nominal \*\*p<0.01 vs. PBO; IGA 0 at W16: Δ 35.7% (14.6%, 51.9%)

Nominal \*p<0.05 vs. PBO; PASI 100 at W16:  $\Delta$  24.4% (4.9%, 40.6%)

### ICO demonstrated a *favorable safety profile* through W16 in adolescents, consistent with the overall study population

	Adolescents		Overall Study Population	
Adverse Events (AEs) Through W16	ICO (N=44)	PBO (N=22)	ICO (N=456)	PBO (N=228)
Mean weeks of follow-up	16.2	16.2	15.9	15.8
Any AE, n (%)	22 (50)	16 (73)	225 (49)	112 (49)
Infection, n (%)	14 (32)	6 (27)	107 (24)	51 (22)
Upper respiratory tract infection	6 (14)	1 (4)	30 (7)	16 (7)
Nasopharyngitis	5 (11)	3 (14)	31 (7)	15 (7)
<b>SAE,</b> n (%)	2 (4) <sup>a,b</sup>	0	6 (1)	6 (3)

- In adolescents through W24 of ICO:
  - Most common AEs were consistent with those observed through W16 (upper respiratory tract infection, nasopharyngitis)
  - No active TB, malignancy, or death
  - No safety signal emerged
- The proportions of adolescents with clinical laboratory abnormalities were similar between ICO and PBO groups through W16 and remained low through W24 of ICO

al7-year-old female with a medical history of obesity and a gastric sleeve procedure leading to rapid weight loss before entering the study. Computed tomography and ultrasound showed pancreatitis due to choledocholithiasis. Cholecystectomy was performed and she was discharged in good condition. Treatment was interrupted but resumed after resolution and she continues in the study. b17-yearold female with medical history of joint pain was admitted to the hospital at W4 of the study for further diagnostic evaluation of joint pain. No imaging studies were completed. Treatment was continued without interruption. She was discharged the next day in good condition. No diagnosis was confirmed. ICO=icotrokinra, PBO=placebo, SAE=serious AE, TB=tuberculosis, W=Week.

## **Key Takeaways**

ICONIC-LEAD is the first pivotal Phase 3 trial evaluating a systemic advanced therapy for moderate-to-severe plaque PsO simultaneously in adults *and* adolescents



Adolescents receiving ICO achieved higher rates of

- ✓ Clear/almost clear skin
- ✓ Completely clear skin

vs PBO at W16



In adolescents receiving ICO, response rates increased through W24:

- ✓ Clear/almost clear skin
  - ✓ IGA 0/1: 86%
  - ✓ PASI 90: 89%
- ✓ Completely clear skin
  - ✓ IGA 0: 75%
  - ✓ PASI 100: 64%



- ✓ ICO demonstrated a favorable safety profile in adolescents through W16, consistent with the overall study population
- No safety signal was identified through W24



Results from adolescent participants with moderate-to-severe plaque PsO complement those from the overall ICONIC-LEAD study population through W24<sup>1</sup>