Efficacy and Safety of Icotrokinra, a Novel Targeted Oral Peptide (IL-23R-inhibitor), in Adolescents With Moderate-to-Severe Plaque Psoriasis: Subgroup Analyses From a Phase 3, Randomized, Double-Blind, Placebo-Controlled Study (ICONIC-LEAD)

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Background



Pediatric plaque psoriasis (PsO)

Approximately one-third of patients with plaque PsO report onset before adulthood; however, few advanced treatment options are available¹



Icotrokinra

Patients with moderate-to-severe plaque PsO are generally 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:

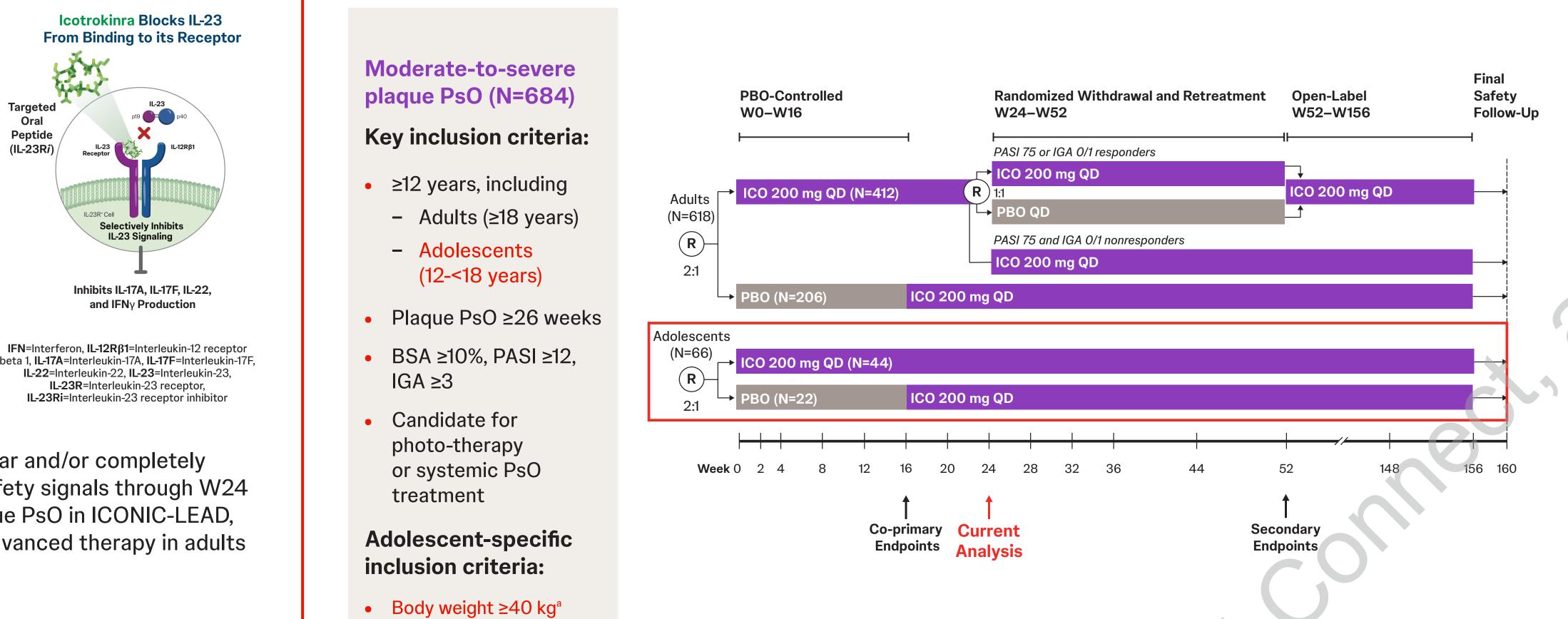
- Selectively binds the interleukin (IL)-23 receptor and inhibits IL-23 signaling²
- Demonstrated significant skin clearance and no safety signals through 1 year in Phase 2 PsO studies^{3,4}
- Demonstrated significantly higher rates of almost clear and/or completely clear skin vs placebo (PBO) at Week (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 adolescents⁵

Objective



Key clinical outcomes and adverse events (AEs) from the ICONIC-LEAD adolescent subgroup through Week (W)24 are reported

ICONIC-LEAD – Study Design & Adolescent Subgroup



^aWeight limit was set to ensure similar exposures between adults and adolescents. **BSA**=body surface area, **ICO**=lcotrokinra, **IGA**=Investigator Global Assessment, **PASI**=Psoriasis Area and Severity Index, PBO=placebo, QD=once daily, R=randomized, 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 and completely clear skin than PBO at W16



In adolescents receiving ICO, skin response rates increased through W24:

Clear/almost clear

- ✓ IGA 0/1: 86%
- PASI 90: 89%

Completely clear

- 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 W24⁵

Methods

Endpoints & statistical considerations



Endpoints in adolescents

- Overall ICONIC-LEAD co-primary endpoints at W16
- Investigator Global Assessment (IGA) 0/1 response (IGA score of cleared [0] or minimal [1] and ≥2-grade improvement from baseline)
- Psoriasis Area and Severity Index (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 α =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

Results

safety monitoring board for AbbVie, Abeona, Biocryst, Daiichi Sankyo, and Galderma. MM, JC, SL GJ, SR, FN, and CD: Employee: Johnson & Johnson. PREVIOUSLY PRESENTED AT: World Congress of Pediatric Dermatology (WCPD); Buenos Aires, Argentina; April 8–11, 2025.

Inhibits IL-17A, IL-17F, IL-22,

IL-22=Interleukin-22, IL-23=Interleukin-23,

IL-23Ri=Interleukin-23 receptor inhibitor

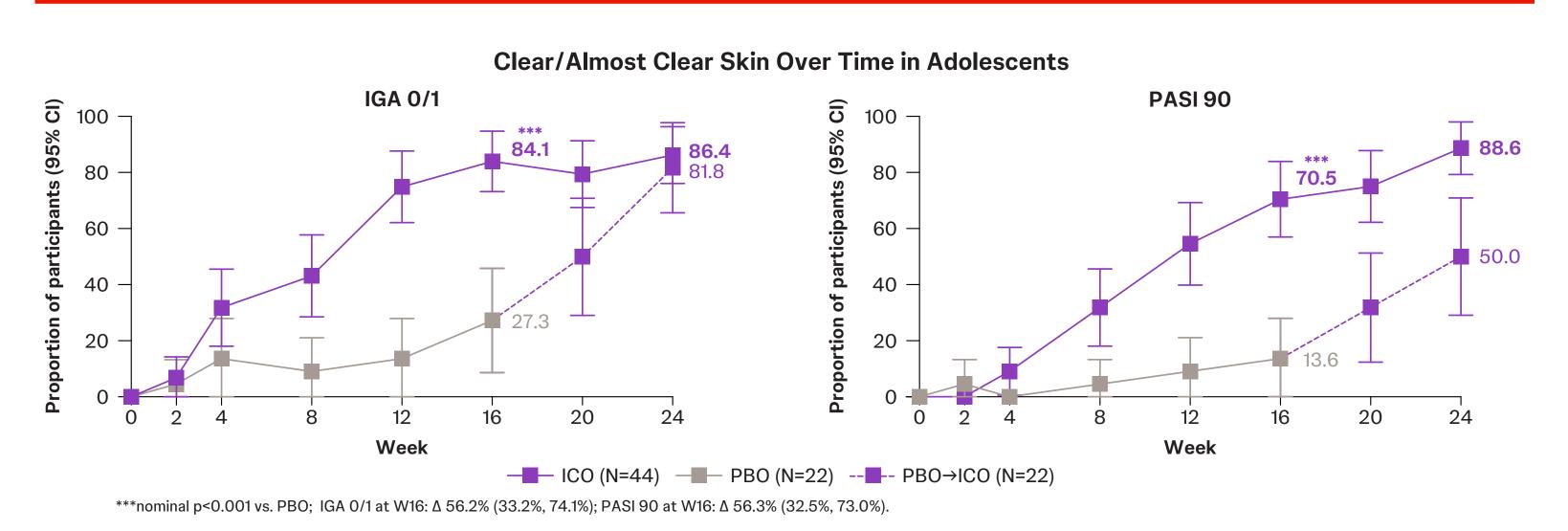
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Adolescent characteristics were generally balanced across groups

Baseline cl	haracteristics of adolescents	ICO 200 mg QD (N=44)	PBO (N=22)			
Demograp	hic					
	Age, yrs	15.0 (1.8)	15.0 (1.5)			
	Female	52%	64%			
	Race, Asian/Black/White	23/4/70%	23/0/77%			
	BMI , kg/m ²	26.0 (7.1)	24.4 (7.9)			
Disease characteristics						
	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 treatment for PsO						
	Systemic therapy ^a	52%	50%			
	Biologic therapy ^b	14%	41%			
	Phototherapy (PUVA or UVB)	23%	14%			

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

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



Note: 95% CIs are based on the normal assumption without adjustment (Wald Method). PBO→ICO includes PBO participants who crossed over to receive ICO at W16 through W24. Participants with ICE 1–2 or missing data were imputed as nonresponders through W24. P-value derived from Cochran-Mantel-Haenszel chi-square test stratified by geographic region. CI=confidence interval, ICO=icotrokinra, IGA=Investigator's Global Assessment, PASI=Psoriasis Are and Severity Index, PBO=placebo, W=week.

PRESENTED AT: Las Vegas Dermatology (LV Derm) Seminar 2025; Las Vegas, NV, USA; September 14, 2024. doi:10.1016/j.jaad.2024;10.076. 5. Bissonnette R, et al. N Engl J Med. 2024;390:510–21. 4. Ferris LK, et al. N Engl J Med. 202 Maharashtra, India, with funding from Johnson & Johnson Medical School-Houston; Research grants paid to medical school: AbbVie, Arcutis, Eli Lilly, Johnson & John

Seanergy, Strata, Takeda, Trevi, and Verrica. Tweeta, Trevi, and Verrica. DW-T: Advisor, speaker, or investigator: AbbVie, About. Amgen, Biogen IDEC, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Eli Lilly, MSD, Mylan, Novartis, Pfizer, and UCB. DM: Speaker, bonoraria, and/or advisory board member: AbbVie, Abbott, Actelion Pharmaceutica, Bayer, Biogen IDEC, Boehringer, Bristol Myers Squibb, Celgene, Eli Lilly, MSD, Mylan, Novartis, Pfizer, and UCB. DM: Speaker, bonoraria, investigator and/or advisory board member: AbbVie, Abbott, Actelion Pharmaceutica, Bayer, Biogen IDEC, Boehringer, Bristol Myers Squibb, Celgene, Eli Lilly, MSD, Mylan, Novartis, Pfizer, and UCB. DM: Speaker, bonoraria, and/or advisory board member: AbbVie, Almirall, Amgen, Biogen, Boehringer, Bristol Myers Squibb, Celgene, Eli Lilly, MSD, Mylan, Novartis, Pfizer, and UCB. DM: Speaker, bonoraria, and/or advisory board member: AbbVie, Almirall, Amgen, Biogen, Boehringer, Bristol Myers Squibb, Celgene, Eli Lilly, MSD, Mylan, Novartis, Pfizer, and UCB. DM: Speaker, bonoraria, and/or advisory board member: AbbVie, Abbott, Actelion Pharmaceutica, Bayer, Biogen, Boehringer, Bristol Myers Squibb, Celgene, Eli Lilly, MSD, Mylan, Novartis, Pfizer, and UCB. DM: Speaker, bonoraria, and/or advisory board member: AbbVie, Abbott, Actelion Pharmaceutica, Bayer, Bristol Myers Squibb, Celgene, Eli Lilly, MSD, Mylan, Novartis, Pfizer, and UCB. DM: Speaker, bonoraria, and/or advisory board member: AbbVie, Abbott, Actelion Pharmaceutica, Bayer, Bristol Myers Squibb, Celgene, Bristol Myers Squibb, Cel

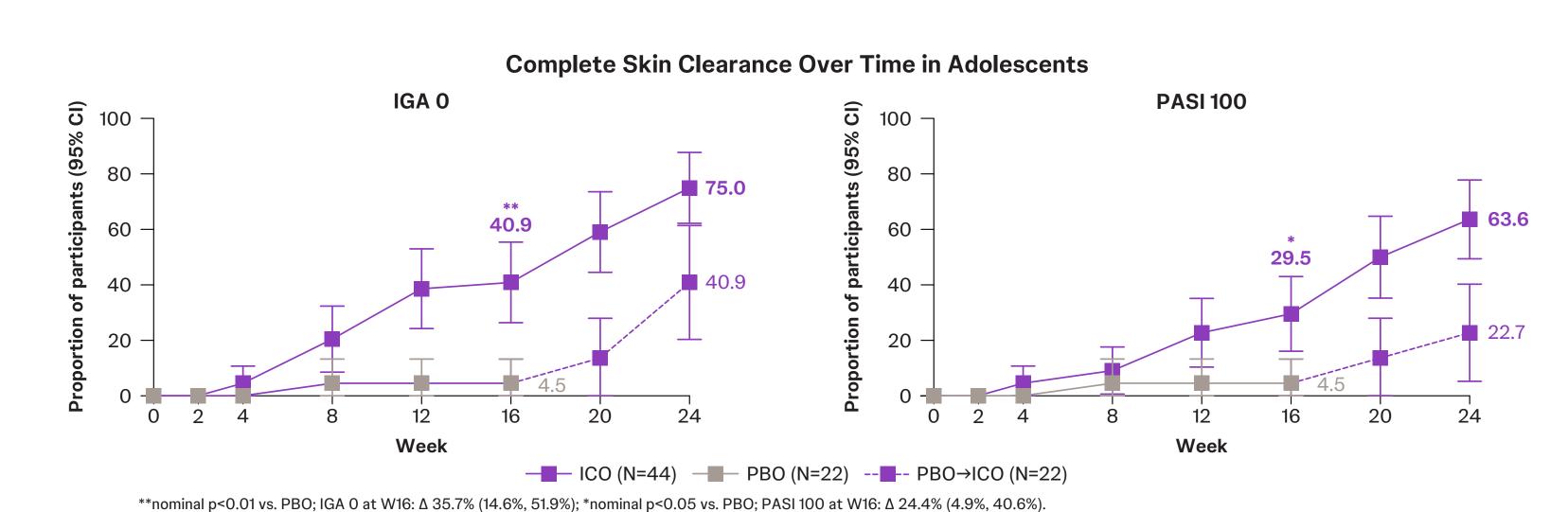
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Regeneron, Sanofi, and UCB. **NM:** Honoraria for participation, Bristol Myers Squibb, Dr. Wolff, Eli Lilly, Johnson & Johnson, Pfizer, Quoin, Regeneron, Sanofi, and UCB. **AM:** Honoraria or research grants: AbbVie, Acelyrin, Arcutis, Bristol Myers Squibb, Dermavant, Eli Lilly, Galderma, Krystal, Sanofi, and UCB. **AM:** Honoraria or research grants: AbbVie, Acelyrin, Arcutis, Bristol Myers Squibb, Dermavant, Eli Lilly, Galderma, Krystal, Sanofi, and UCB. **AM:** Honoraria or research grants: AbbVie, Acelyrin, Arcutis, Bristol Myers Squibb, Dermavant, Eli Lilly, Galderma, Consultancy: AbbVie, Amgen, Arcutis, Dermavant, Eli Lilly, Incyte, Johnson & Johnson

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



Note: 95% CIs are based on the normal assumption without adjustment (Wald Method). PBO→ICO includes PBO participants who crossed over to receive ICO at W16 through W24. Participants with ICE 1–2 or missing data were imputed as nonresponders through W24. P-value derived from Cochran-Mantel-Haenszel chi-square test stratified by geographic region. CI=confidence interval, ICE=intercurrent event, ICO=icotrokinra, IGA=Investigator's Global Assessment, PASI=Psoriasis Area and Severity Index, **PBO**=placebo, **W**=week.

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

	Adolescents		Overall study population	
AEs through W16	ICO 200 mg QD (N=44)	PBO (N=22)	ICO 200 mg QD (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)
SAE, n (%)	2 (4) ^{a,b}	10	6 (1)	6 (3)

^a17-year-old female with a medical history of obesity and a gastric sleeve procedure leading to rapid weight loss before entering the study. CT 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-year-old 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. AE=adverse event, CT=computerized tomography, ICE=intercurrent event, ICO=icotrokinra, PBO=placebo, QD=once daily, SAE=serious AE, W=week.

- 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