# Treatment of Plaque Psoriasis Involving High-Impact Sites With Icotrokinra: Subgroup Analyses of the Phase 3, ICONIC-LEAD Trial



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### Background



- Plaque psoriasis (PsO) involving difficult-to-treat sites (e.g., scalp, genitals, palms/soles, nails) can highly impact patients Current treatment guidelines include PsO patients with high-impact site involvement as candidates for systemic therapy, regardless
  - of body surface area (BSA) affected<sup>1</sup>



#### Icotrokinra (ICO)

- The first and only targeted oral peptide that selectively binds the interleukin-23 receptor (IL-23R) and precisely inhibits IL-23 pathway signaling<sup>2</sup>
- Demonstrated significantly higher skin response rates and similar adverse event (AE) rates vs placebo (PBO) at Week (W)16, and no safety signals through W24, in adults and adolescents with moderate-to-severe plaque PsO (ICONIC-LEAD)<sup>3</sup>
- Showed significant skin clearance, including in the scalp and genital areas, and generally similar AE rates, vs PBO at W16 in participants (pts) with plaque PsO involving high-impact sites (ICONIC-TOTAL)4

## Objective



Evaluate the effect of ICO in subsets of ICONIC-LEAD pts with PsO involving difficult-to-treat, high-impact sites, including the scalp, genitals, hands/feet, and nails through W24

## Icotrokinra Blocks IL-23 From Binding to its Receptor Targeted Oral Peptide (IL-23R*i*) IL-23 Receptor **IL-23 Signaling** Inhibits IL-17A, IL-17F, IL-22,

-17A=interleukin-17A, IL-17F=interleukin-17F, IL-22=interleukin-22, IL-23=interleukin-23, IL-23R=interleukin-23 receptor, IL-23Ri=interleukin-23 receptor inhibitor.

## Key Takeaways

In ICONIC-LEAD, a pivotal phase 3 study evaluating the targeted oral peptide ICO in pts with moderate-to-severe plaque PsO and high-impact site involvement:



ICO demonstrated higher rates of scalp, genital, and hand/foot PsO clearance vs PBO at W16

✓ Approximately 80% of ICO-treated pts achieved clear/almost clear-and 62-70% achieved completely clear—high-impact site PsO at W24



ICO substantially improved nail PsO at W16, an early timepoint for nail assessment

✓ Approximately 30% of ICO-treated pts achieved completely clear nail PsO at W24

## Methods

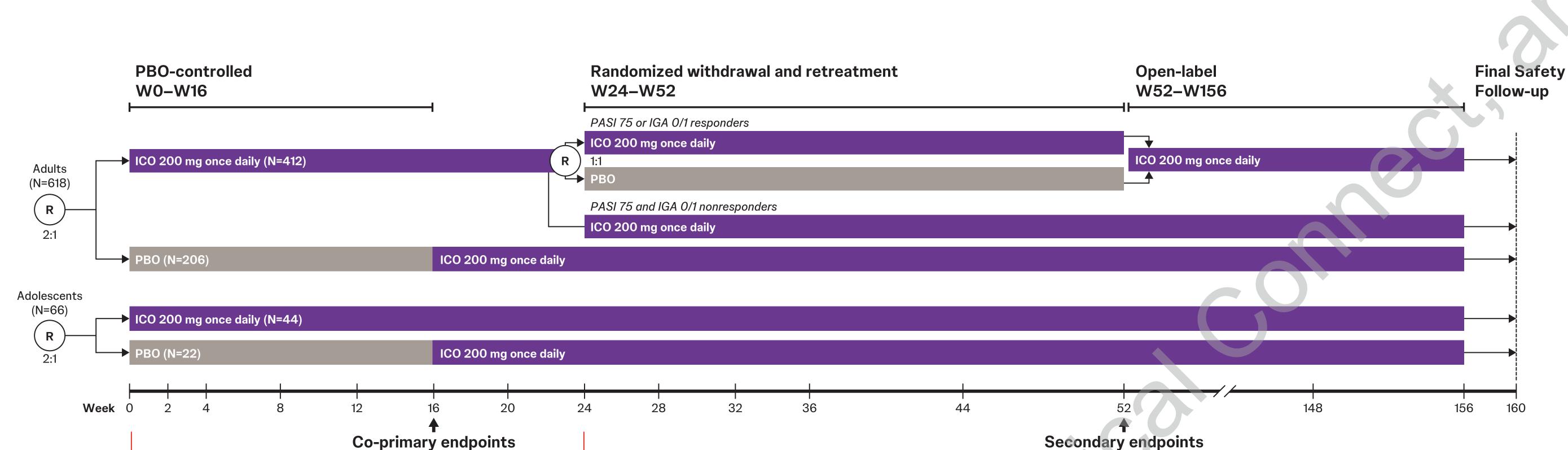


**ICONIC-LEAD Key Inclusion Criteria** 

Moderate-to-severe plaque PsO (N=684)

- ≥12 years
- Plaque PsO for ≥26 weeks
- Body surface area (BSA) ≥10%
- Psoriasis Area and Severity Index (PASI) score ≥12
- Investigator's Global Assessment (IGA) score ≥3
- Candidate for phototherapy or systemic treatment for plaque Ps0

**PsO**=psoriasis.



**Outcomes & Analyses** 

ICO vs PBO at W16 and ICO at W24

- Scalp-specific IGA (ss-IGA) score of 0/1 and 0<sup>a</sup>
- Static Physician's Global Assessment of Genitalia (sPGA-G) score of 0/1 and 0<sup>a</sup>
- PGA of hands and feet (hf-PGA) score of 0/1 and 0<sup>a</sup>
- Fingernail PGA (f-PGA) score of 0/1 and 0<sup>a</sup>
- Modified Nail Psoriasis Severity Index (mNAPSI) percent improvement from baseline<sup>b</sup>

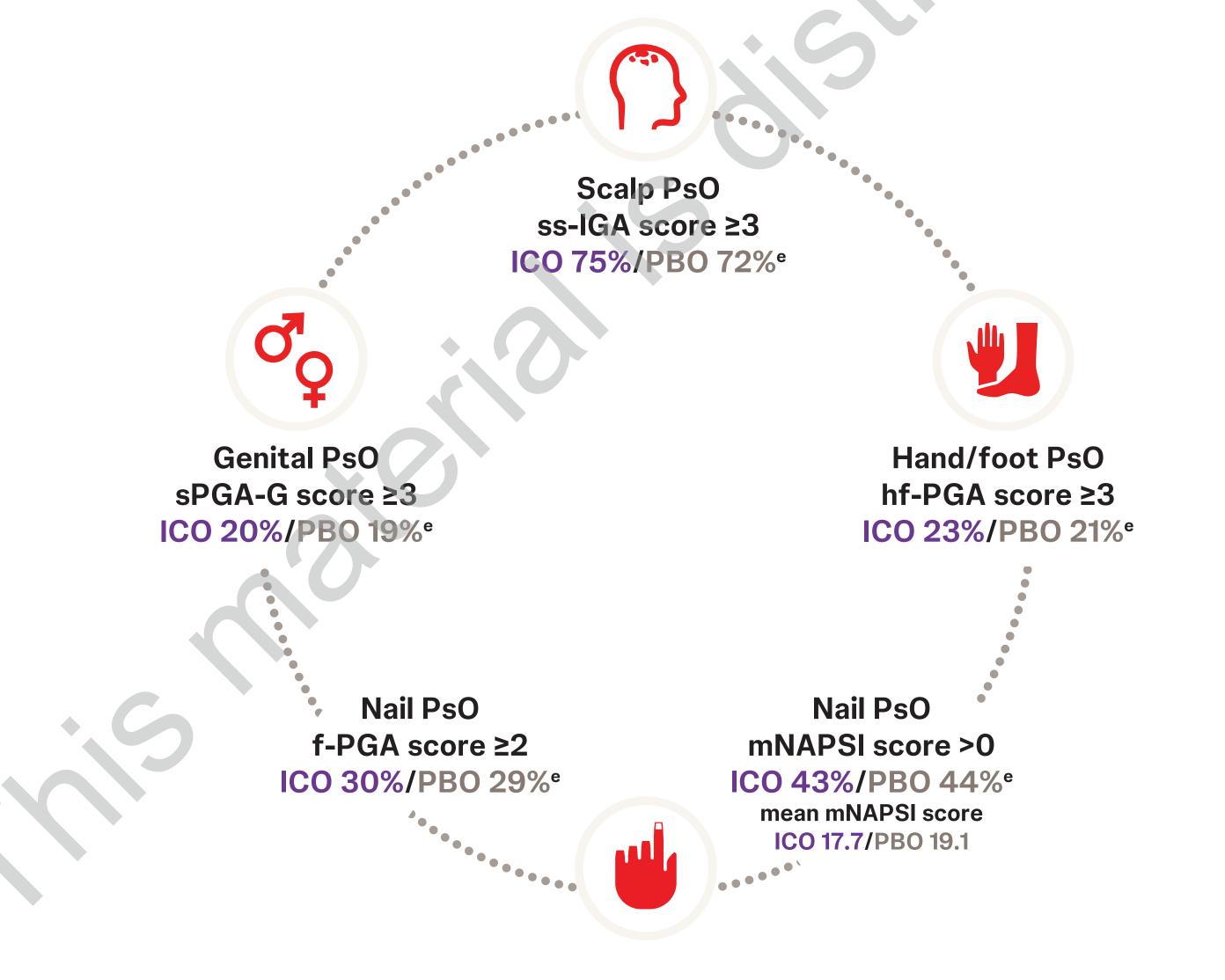
<sup>a</sup>Nonresponder imputation/ <sup>b</sup>zero percent improvement from baseline assigned after pts discontinued study drug due to a lack of efficacy or an AE of worsening of PsO, or initiated prohibited medication that could impact PsO. Observed data were used for pts who discontinued study agent for other reasons. <sup>a</sup>After accounting for these intercurrent events, pts with missing data were considered nonresponders. <sup>b</sup>The remaining missing data were not imputed and were accounted for through correlation of repeated measure in the MMRM model. **AE**=adverse event, **ICO**=icotrokinra, MMRM=mixed-effect model repeated measure, PBO=placebo, PGA=Physician's Global Assessment, PsO=psoriasis, **pts**=participants, **W**=week.

#### Results

### Baseline characteristics were similar between groups

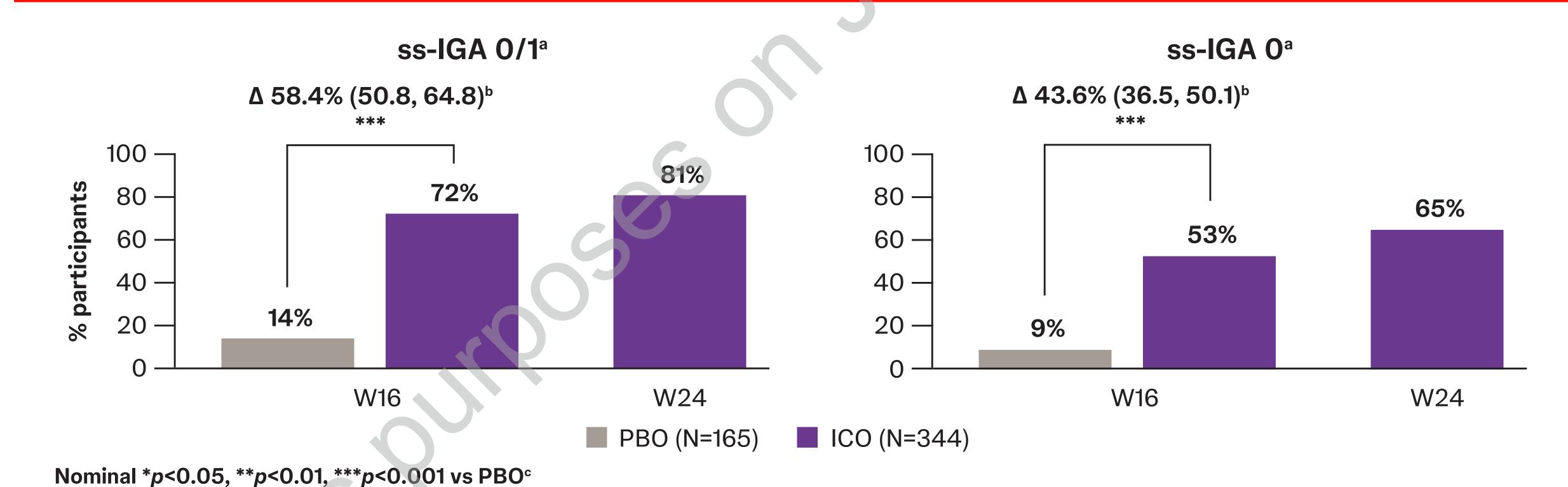
| Baseline Characteristics |                               | ICO 200 mg QD<br>(N=456) | PBO<br>(N=228)          |
|--------------------------|-------------------------------|--------------------------|-------------------------|
| Demographics             |                               |                          |                         |
|                          | <b>Age,</b> yrs               | 42.4 (16.3)              | 43.2 (16.6)             |
|                          | Female                        | 36%                      | 32%                     |
|                          | Race, Asian/Black/White       | 24/1/72%                 | 25/1/72%                |
|                          | <b>BMI,</b> kg/m <sup>2</sup> | 29.2 (6.9) <sup>a</sup>  | 29.3 (7.0) <sup>a</sup> |
| Disease Characteristics  |                               |                          |                         |
|                          | PsO disease duration, yrs     | 17.3 (13.9)              | 16.6 (12.7)             |
|                          | % BSA with PsO                | 24.6 (14.3)              | 27.1 (16.2)             |
|                          | IGA score                     |                          |                         |
|                          | Moderate (3)                  | 75%                      | 76%                     |
|                          | Severe (4)                    | 25%                      | 24%                     |
|                          | <b>PASI</b> (0–72)            | 19.4 (7.1)               | 20.8 (8.1)              |
| Prior PsO treatments     |                               |                          |                         |
|                          | Phototherapy <sup>b</sup>     | 30%                      | 29%                     |
|                          | Systemic therapy <sup>c</sup> | 72%                      | 71%                     |
|                          | Biologic therapy <sup>d</sup> | 32%                      | 37%                     |

High-impact site PsO was balanced between groups



Data shown are mean (SD) unless otherwise noted. PsO involving high-impact sites was not mutually exclusive. aICO: N=455; PBO: N=227. <sup>b</sup>PUVA and UVB. <sup>c</sup>Conventional nonbiologic systemics, novel nonbiologic systemics, 1,25-vitamin D3 and analogues, phototherapy, and biologics. <sup>d</sup>Adalimumab, alefacept, briakinumab, brodalumab, certolizumab pegol, efalizumab, etanercept, guselkumab, infliximab, ixekizumab, natalizumab, risankizumab, secukinumab, tildrakizumab, and ustekinumab. <sup>e</sup>Among all randomized pts (ICO: N=456/PBO: N=228). BMI=body mass index, BSA=body surface area, f-PGA=fingernail PGA, hf-PGA=PGA of hands and feet, ICO=icotrokinra, IGA=Investigator's Global Assessment, mNAPSI=modified Nail Psoriasis Severity Index, PASI=Psoriasis Area and Severity Index, **PBO**=placebo, **PGA**=Physician's Global Assessment, **PsO**=psoriasis, **pts**=participants, **PUVA**=psoralen plus ultraviolet A, **QD**=once daily, **R**=randomization, **SD**=standard deviation, **sPGA-G**=static PGA of Genitalia, **ss-IGA**=scalp-specific IGA, **UVB**=ultraviolet B, **yrs**=years.

## ICO demonstrated high rates of scalp PsO clearance at W16 & W24



<sup>a</sup>Among pts with a baseline ss-IGA score ≥3. <sup>b</sup>Treatment difference and 95% CI (using Miettinen-Nurminen method) were calculated adjusting for age group, baseline weight category for adults, and geographic region using Mantel-Haenszel weights. P-values were based on CMH chi-square test stratified by age group, baseline weight category for adults, and geographic region. CI=confidence interval, CMH=Cochran-Mantel-Haenszel, ICO=icotrokinra, PBO=placebo, pts=participants, ss-IGA=scalp-specific Investigator's Global Assessment, W=week.

Substantial proportions of ICO-treated pts achieved genital PsO clearance at W16 & W24

sPGA-G 0/1<sup>a</sup> sPGA-G O<sup>a</sup> Δ 33.8% (15.7, 49.6)<sup>b</sup> Δ 34.4% (16.6, 49.3)<sup>b</sup> 100 — 100 — 80% 71% 70% 80 – 58% 60 – 39%

Nominal \*p<0.05, \*\*p<0.01, \*\*\*p<0.001 vs PBO<sup>c</sup>

W16

**Current analysis** 

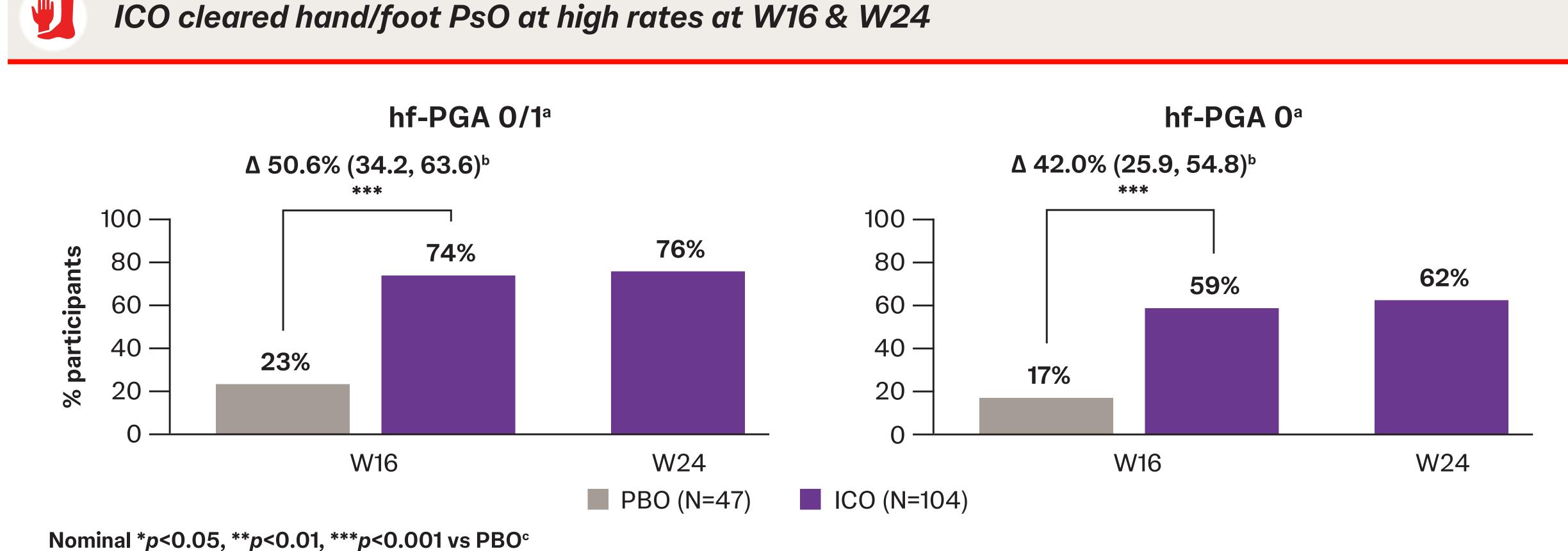
ICO=icotrokinra, IGA=Investigator's Global Assessment, PASI=Psoriasis Area and Severity Index, PBO=placebo, R=randomization, W=week.

<sup>a</sup>Among pts with a baseline sPGA-G score ≥3. <sup>b</sup>Treatment difference and 95% CI (using Miettinen-Nurminen method) were calculated adjusting for age group and baseline weight category for adults using Mantel-Haenszel weights. °P-values were based on CMH chi-square test stratified by age group and baseline weight category for adults. CI=confidence interval, CMH=Cochran-Mantel-Haenszel, ICO=icotrokinra, PBO=placebo, pts=participants, **sPGA-G**=static Physician's Global Assessment of Genitalia, **W**=week.

ICO (N=92)

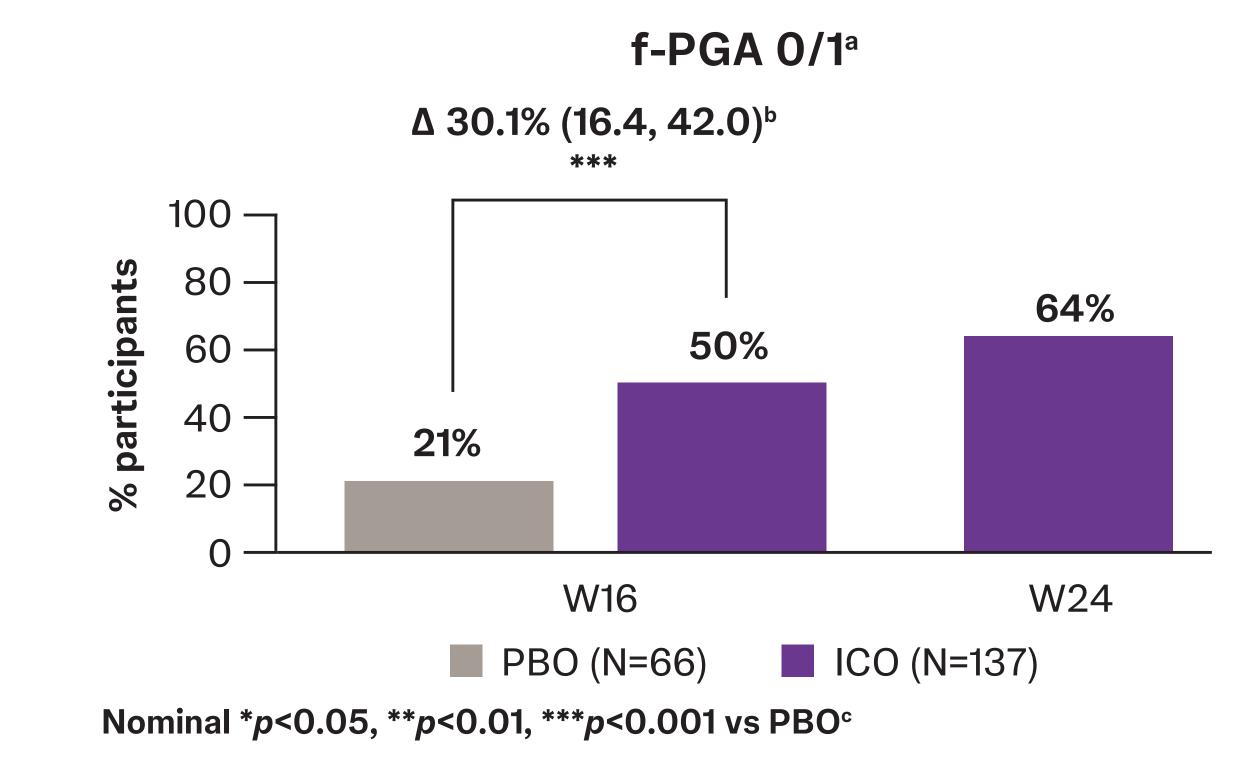
W24

PBO (N=44)



<sup>a</sup>Among pts with a baseline hf-PGA score ≥3. <sup>b</sup>Treatment difference and 95% CI (using Miettinen-Nurminen method) were calculated adjusting for age group and baseline weight category for adults using Mantel-Haenszel weights. °P-values were based on CMH chi-square test stratified by age group and baseline weight category for adults. CI=confidence interval, CMH=Cochran-Mantel-Haenszel, hf-PGA=hands and feet-Physician's Global Assessment, ICO=icotrokinra, PBO=placebo, pts=participants, W=week.

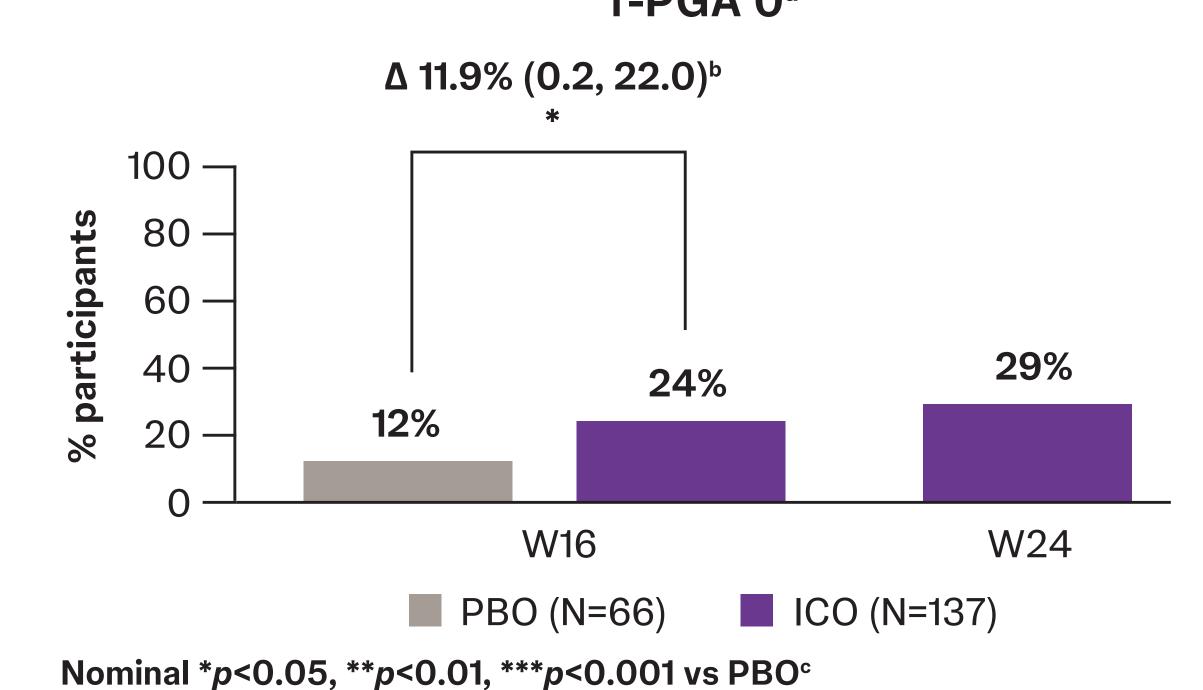
#### ICO demonstrated high rates of clear/almost clear nail PsO at W16 & W24



<sup>a</sup>Among pts with a baseline f-PGA score ≥2. <sup>b</sup>Treatment difference and 95% CI (using Miettinen-Nurminen method) were calculated adjusting for age group and baseline weight category for adults using Mantel-Haenszel weights. °P-values were based on CMH chi-square test stratified by age group and baseline weight category for adults. **CI**=confidence interval, CMH=Cochran-Mantel-Haenszel, f-PGA=fingernail Physician's Global Assessment, ICO=icotrokinra, PBO=placebo, **pts**=participants, **W**=week.

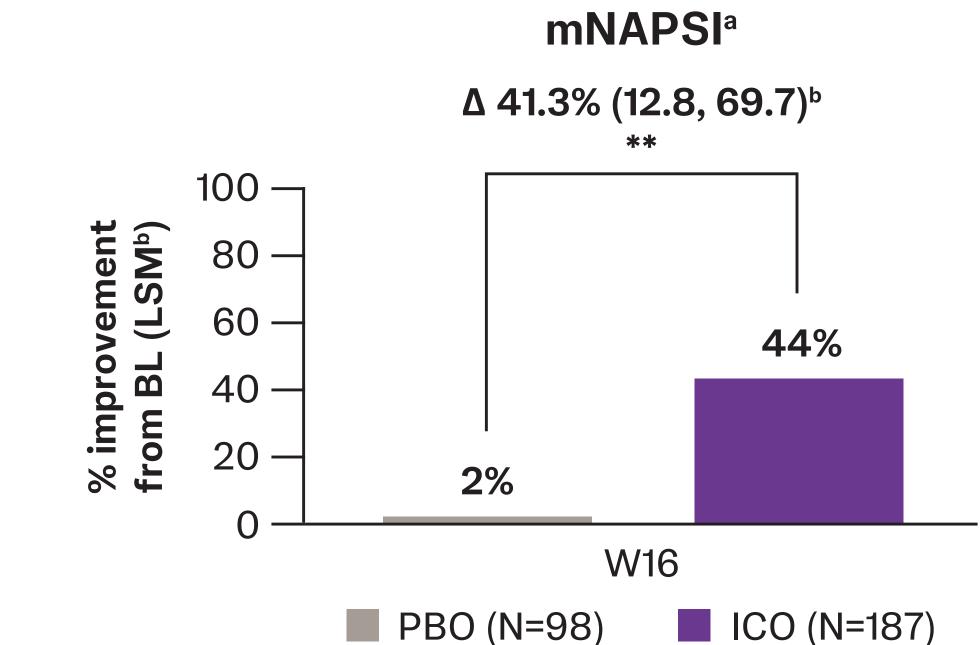
Nearly 30% of ICO-treated pts achieved completely

clear nail PsO at W24 f-PGA O<sup>a</sup>



<sup>a</sup>Among pts with a baseline f-PGA score ≥2. <sup>b</sup>Treatment difference and 95% CI (using Miettinen-Nurminen method) were calculated adjusting for age group and baseline weight category for adults using Mantel-Haenszel weights. °P-values were based on CMH chi-square test stratified by age group and baseline weight category for adults. **CI**=confidence interval, CMH=Cochran-Mantel-Haenszel, f-PGA=fingernail Physician's Global Assessment, ICO=icotrokinra, PBO=placebo, **pts**=participants, **W**=week.

ICO-treated pts achieved substantial improvement in mNAPSI at W16



Nominal \*p<0.05, \*\*p<0.01, \*\*\*p<0.001 vs PBO<sup>b</sup>

<sup>a</sup>Among pts with a baseline mNAPSI score >0. <sup>b</sup>LS Mean, LS Mean difference, and p-value were based on the MMRM model with treatment group, visit, treatment group by visit interaction, age group, baseline weight, geographic region, baseline mNAPSI total score, and baseline mNAPSI total score by visit interaction as covariates. **BL**=baseline, **ICO**=icotrokinra, **LS**=least square, LSM=least squares mean, MMRM=mixed-effect model repeated measure, mNAPSI=modified Nail Psoriasis Severity Index, **PBO**=placebo, **pts**=participants, **W**=week.

W16

W24