

#### Incyte – AAD 2024

Emerging Dermatology Franchise Led by Opzelura and Povorcitinib

March 11<sup>th</sup>, 2024



## Pablo Cagnoni, MD President & Head of R&D, Incyte



### **Forward Looking Statements**

Except for the historical information set forth herein, the matters set forth in this release contain predictions, estimates and other forward-looking statements, including any discussion of the following: expectations regarding the potential and progress of programs in our pipeline; expectations regarding the number of products Incyte may launch in the near- to mid-term and the potential impact of such products/launches; Incyte's R&D focus for 2024 across its MPN/GVHD, oncology and IAI/dermatology programs; expectations regarding Incyte's portfolio and its potential for growth/expansion; expectations regarding ongoing clinical trials and clinical trials to be initiated, including timelines for data readouts; expectations regarding the ability of ruxolitinib cream and povorcitinib to treat disease; expectations regarding the growth opportunities for Opzelura and the expansion opportunities for povorcitinib, including the potential for povorcitinib to be a best-in-disease oral agent in HS; expectations regarding the therapeutic potential of IL-15 blockade in vitiligo; expectations regarding regulatory filings; and our expectations regarding 2024 newsflow items.

These forward-looking statements are based on Incyte's current expectations and subject to risks and uncertainties that may cause actual results to differ materially, including unanticipated developments in and risks related to: further research and development and the results of clinical trials possibly being unsuccessful or insufficient to meet applicable regulatory standards or warrant continued development; the ability to enroll sufficient numbers of subjects in clinical trials and the ability to enroll subjects in accordance with planned schedules; determinations made by the FDA, EMA, and other regulatory agencies; Incyte's dependence on its relationships with and changes in the plans of its collaboration partners; the efficacy or safety of Incyte's products and the products of Incyte's collaboration partners; the effects of announced or unexpected price regulation or limitations on reimbursement or coverage for Incyte's products and the products of Incyte's collaboration partners; sales, marketing, manufacturing and distribution requirements, including Incyte's and its collaboration partners; and build commercial infrastructure for newly approved products and any additional products that become approved; greater than expected expenses, including expenses relating to litigation or strategic activities; variations in foreign currency exchange rates; and other risks detailed in Incyte's reports filed with the Securities and Exchange Commission, including its annual report on form 10-K for the year ended December 31, 2023. Incyte disclaims any intent or obligation to update these forward-looking statements.



### Incyte at AAD 2024 Agenda

	Pablo Cagnoni, MD	Welcome & Introduction
	Jim Lee, MD, PhD	IAI / Dermatology Pipeline Overview
		Hidradenitis Suppurativa: Treatment and Novel Therapeutics in Development
9:00-10:00 am	Martina Porter, MD	<b>Efficacy and Safety of Ruxolitinib Cream in Patients With Mild</b> <b>Hidradenitis Suppurativa</b> : Results From a Randomized, Double-Blind, Vehicle- Controlled Phase 2 Study
	Shawn Kwatra MD	Prurigo Nodularis: Treatment and Novel Therapeutics in Development
	Sildwill Kwalia, MD	<b>Efficacy and Safety of Povorcitinib in Patients With Prurigo Nodularis:</b> Results From a Randomized, Double-Blind, Placebo-Controlled Phase 2 Study
10:00-10:30 am	Q&A	



### >10 Potential High Impact Launches by 2030

	Product	Indication	Status	2024	2025	2026	2027	2028	2029	2030+	
		Pediatric AD	Phase 3								
/IAI		Prurigo N	Phase 3								
	Ruxolitinib Cream	HS (mild/mod)	Phase 3*								
logy		Lichen P	Phase 2								
Dermato		Lichen S	Phase 2								
		HS (mod/sev)	Phase 3								
	Povorcitinib	Vitiligo	Phase 3								
		Prurigo N	Phase 3*								
		3L+ cGVHD B	LA submitted								
	Axatilimab	1L (+ steroids)	Phase 3								
VHD		1L (+ rux)	Phase 2								
N/G/	BETi	MF	Phase 1								
MP	Zilurgisertib	MF	Phase 1								
	mCALR	MF & ET	Phase 1								
	JAK2V617Fi	MF, PV & ET	Phase 1								
		cSCC (monotherapy)	Phase 2								
Onc		Solid Tumors (combination)	Phase 2								
ne/(	CDK2	Solid Tumors	Phase 1								
Hei	Tafacitamah	FL/MZL	Phase 3								
	raidSitaiiidD	1L DLBCL	Phase 3								

### **Key Highlights from 2024 AAD Annual Meeting**





## Jim Lee, MD, PhD Group Vice President, Head of Inflammation and Autoimmunity, Incyte



#### **Expanding IAI/Dermatology Pipeline with Near-Term** Launch Potential



AD= atopic dermatitis; PN= prurigo nodularis; HS=hidradenitis suppurativa; LP=lichen planus; LS= lichen sclerosus; CSU= chronic spontaneous urticaria Not inclusive of entire pipeline

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### **Ability to Address the Entire Spectrum of Disease with a Topical and Oral Agent**

Indication	Ruxolitinib Cream		Povorcitinib	
	Mild	Disease Spectrum		→ Severe
Prurigo Nodularis	Topical Ruxolitinib Evaluation of Prurigo Nodularis		P3 in planning	
Hidradenitis Suppurativa	P3 in planning		Selective Treatment of Oral Povorcitinib in Hidradenitis Suppurativa	
	Less extensive	Disease Spectrum		More extensive
Vitiligo	<b>Approved</b>		Selective Treatment of Oral Povorcitinib in Vitiligo	



#### **Opzelura: Highly Effective and Well-Tolerated Non-steroidal Topical Treatment**



Patients Treated with Opzelura Since Launch

> 350,000

#### **Commercially Available**

- Approved in U.S. for atopic dermatitis and vitiligo
- Approved in E.U. for vitiligo; launched in Germany, Austria and France\*



\*On January 31, 2024, Incyte received approval in France to promote and distribute Opzelura for vitiligo under a process called "Accès Direct." This process is intended to allow for early access to a therapy while a final price is negotiated, which is expected to take up to twelve months. Once price reimbursement is determined, Incyte will begin recognizing revenue in France.

### **Maximizing the Potential of Opzelura**

**Multiple Indication Expansion Opportunities** 



\* In planning

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<sup>1.</sup> DRG; Silverberg JI. Dermatol Clin. 2017;35(3):283-289

<sup>2</sup> Ständer S, Augustin M, Berger T, Elmariah S, Korman NJ, Weisshaar E, Yosipovitch G. Prevalence of prurigo nodularis in the United States of America: A retrospective database analysis. JAAD Int. 2020 Dec 1;2:28-30 <sup>3</sup> Garg A, Kirby JS, Lavian J, Lin G, Strunk A. Sex- and Age-Adjusted Population Analysis of Prevalence Estimates for Hidradenitis Suppurativa in the United States. JAMA Dermatol. 2017 Aug 1;153(8):760-764.

<sup>4</sup> Li C, Tang X, Zheng X, Ge S, Wen H, Lin X, Chen Z, Lu L. Global Prevalence and Incidence Estimates of Oral Lichen Planus: A Systematic Review and Meta-analysis. JAMA Dermatol. 2020 Feb 1;156(2):172-181.

<sup>5</sup> Melnick L, et al. Lichen sclerosus among women in the United States. Int J of Women's Derm. 2020;6(4):260-262

### **Ruxolitinib Cream: Expanding to the Pediatric Population in Atopic Dermatitis**

- Ruxolitinib cream achieved significant efficacy vs vehicle at Week 8 for IGA-TS and EASI75
  - ✓ **IGA-TS**: 56.5% and 36.6% vs 10.8% placebo
  - ✓ **EASI75**: 67.2% and 51.5% vs 15.4% placebo

Next Steps

- $\checkmark$  Early and sustained itch relief in patients 6 to <12 years
- Well tolerated with no serious infections, MACE, malignancies or thrombosis observed

sNDA submission planned for mid-2024



#### **Pediatric AD patients in the US**

#### Ruxolitinib cream in children 2-12 years (TRuE-AD3)<sup>1</sup>





IGA-TS: Investigators Global Assessment- treatment success; EASI75: ≥75% improvement in Eczema Area and Severity Index (EASI) <sup>1</sup>Data adapted from Eichenfield, L, MD, et al. EADV 2023.

### **Ruxolitinib Cream: Maximum-Use Studies in Children Ages 2-11 with Atopic Dermatitis**

Demonstrates Similar Safety, pK and Efficacy Compared to Adolescents and Adults

#### Safety

- Safety data were consistent between study populations
  - No TEAEs were suggestive of systemic JAK inhibition
  - No serious infections, major adverse cardiovascular events, malignancies, or thromboses were reported
- Hematologic parameters did not change substantially
  from baseline in either study population

#### **PK Parameters During the 4-Week Maximum Use Period**

	Patient	Age, y
Characteristic	<b>2 to 11*</b> <sup>+</sup>	≥12
Baseline	n=27	n=41
Affected BSA, %	58.9 (20.6)	38.1 (16.3)
Lesion area treated, cm <sup>2</sup>	5520 (2530)	6640 (2760)
Weeks 2 and 4 combined	n=27	n=40
C <sub>ss</sub> , nM	98.2 (148)	104 (309)
Application amount of API, <sup>‡</sup> mg	72.8 (54.3)	152 (89.1)



- IGA-TS and EASI75 through Week 8 was comparable between study populations
- In **both** populations, **mean affected BSA decreased** from baseline at Week 2 and continued through Week 8

#### Percentage (SE) of Patients Achieving EASI75 at Weeks 2, 4, and 8





st Samples to determine PK data were obtained at Week 2 only in patients aged 2 to 6 years

<sup>+</sup> Plasma data only available for 26 patients

<sup>+</sup> Average amount of API per application over the 4-week continuous-use maximum-use period

TEAE- treatment-emergent adverse event; PK= pharmacokinetic; API= active pharmaceutical ingredient; BSA= body surface area;  $C_{ss}$ = steady-state plasma concentration of ruxolitinib.

### **Opzelura in Two Phase 3 Trials for Prurigo Nodularis**

No Topical Tx Currently Approved

#### **Prurigo Nodularis**

- Chronic, inflammatory skin disease that causes hard, itchy nodules
- Pruritus can be intense, and scratching can cause more lesions
- No oral or topical therapy approved





#### Phase 3 Study Design



#### Phase 3 Data Expected in 2025



### **Povorcitinib: Next-Generation Oral JAK1 Inhibitor with High Selectivity and Potency**

#### **Povorcitinib Highlights**

- ✓ Once daily pill that provides rapid and sustained reduction in inflammation
  - Potency: IC50 ≈ 20 nM
- Selectively targets key cytokines involved in inflammatory/immune disorders
- Highest JAK1/JAK2 selectivity of any JAKi, reducing the likelihood of JAK2 driven effects on platelets and red blood cells
  - 50-fold selectivity over JAK2
  - >200-fold selectivity over JAK3
- High volume of distribution
  - Associated with efficient drug delivery into the target tissues
- Long half-life
  - ~27-35 hours



#### **JAK-STAT Signaling**



#### **Expansion Opportunities for Povorcitinib**

Multiple Indications with Significant Unmet Need



\* In planning; † Not including steroids

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1. Calao M, Wilson JL, Spelman L, Billot L, Rubel D, Watts AD, Jemec GBE. Hidradenitis Suppurativa (HS) prevalence, demographics and management pathways in Australia: A population-based cross-sectional study. PLoS One. 2018 Jul 24;13(7)

2. Ständer S, Augustin M, Berger T, Elmariah S, Korman NJ, Weisshaar E, Yosipovitch G. Prevalence of prurigo nodularis in the United States of America: A retrospective database analysis. JAAD Int. 2020 Dec 1;2:28-30

3. Maurer M. et al. The burden of chronic spontaneous urticaria is substantial: real-world evidence from ASSURE-CSU. Allergy. 2017; 72: 2005-2016

4. Rönnebjerg L, Axelsson M, Kankaanranta H, Backman H, Rådinger M, Lundbäck B, Ekerljung L. Severe Asthma in a General Population Study: Prevalence and Clinical Characteristics. J Asthma Allergy. 2021 Sep 16;14:1105-1115

#### **Continued Improvement at Week 52 in Hidradenitis Suppurativa Patients Treated with Povorcitinib**

#### At Week 52

- ✓ HiSCR50<sup>\*</sup> achieved in 59-67% of povorcitinib treated patients
- ✓ HiSCR75<sup>\*</sup> achieved in 41-52% of povorcitinib treated patients
- HiscR100\* achieved in 22-29% of povorcitinib treated patients



#### Placebo-controlled Period **Open-label Ext Period** In Placebo → 75mg Placebo 15mg 45mg 75mg 15mg → 75mg ₩ 45ma → 75ma 70 60 50 40 30 20 10 Ω Week 2 Week 16 Week 52

Patients Achieving HiSCR50<sup>1</sup>

%

Achieving HiSCR50,

Patients

### **Povorcitinib in HS: Potential to be Best-in-Disease Oral Agent**



#### \*p<0.05 \*\* p<0.01

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HiSCR50 =  $\geq$ 50 % reduction from baseline in AN count with no increase in the number of abscesses or draining; HiSCR90 =  $\geq$ 90 % reduction from baseline in AN count with no increase in the number of abscesses or draining; Pain NRS30 =  $\geq$ 30% reduction and  $\geq$ 1-unit reduction in NRS; NRS= numerical rating scale

1. Adapted from Kirby J, et al. Efficacy and Safety of the Oral Janus Kinase 1 Inhibitor povorcitinib (INCB054707) in Patients with Hidradenitis Suppurativa in a Phase 2, Randomized, Double-blind, Dose Ranging Placebo-controlled Study. JAAD. October 2023 2. Adapted from Kimbell A, et al. Efficacy and Safety of Upadacitinib in Moderate-to-Severe Hidradenitis Suppurativa: A Phase 2, Randomized, Placebo-Controlled Study. Presented at AAD 2023.

3. Adapted from Tzelios T, et al. Depth of Efficacy Response to Upadacitinib Treatment in Moderate-to-Severe Hidradenitis Suppurativa. Presented at EADV 2023.

Data presented are from separate clinical trials. Head-to-head data are not available. Caution should be exercised when comparing data across studies.

## **Povorcitinib: Substantial Repigmentation in Adults with Extensive Vitiligo**

Phase 2 trial (n=171) evaluating povorcitinib in vitiligo<sup>1</sup>:

- Substantial repigmentation after 24 weeks of Tx
- ✓ Continued improvement seen through 36 and 52 weeks of Tx
  - ✓ F-VASI75: 48.4% 58.6% at Week 52<sup>2</sup>
  - ✓ **T-VASI50:** 37.0% 45.2% at Week 52<sup>2</sup>
- All doses generally well tolerated with favorable safety profile



#### Patients achieving F-VASI75<sup>1</sup>, %



F-VASI75: The proportion of participants achieving at least a 75% improvement in the facial vitiligo area scoring index (F-VASI); T-VASI50: The proportion of participants achieving at least a 50% improvement in the total body Vitiligo Area Scoring Index (T-VASI); <sup>1</sup>Pandya 19 A., et al. Efficacy and Safety of Povorcitinib for Extensive Vitiligo: 52-Week Results From a Double-Blinded, Placebo-Controlled, Dose-Ranging Phase 2b Study; <sup>2</sup>In patients who received any dose of povorcitinib from Day 1

### **Povorcitinib in Asthma and Chronic Spontaneous Urticaria**

#### Asthma

- Asthma is a chronic inflammatory disease
- Th2 and Th1/Th17 cytokines control the major components of an inflammatory asthmatic response
- Povorcitinib is being studied in moderate-to-severe, uncontrolled, type 2 and non-type 2 asthmatic patients

#### Chronic spontaneous urticaria

- CSU is a mast-cell driven disease, presenting with chronic itch
- Over-activation of dermal mast cells results in increased levels of Th1, Th2 and Th17-related cytokines
- Povorcitinib is being studied in patients inadequately controlled by 2nd generation histamines

### JAK1 pathway involved in asthma and CSU pathophysiology



#### **Next Steps**

BOLVE

Phase 2 studies are enrolling Data Expected in 2025

### **Therapeutic Potential of IL-15 Blockade in Vitiligo**

- Autoimmune destruction of melanocytes leads to skin depigmentation
- Established lesions are maintained in part through IL-15-dependent survival signals



Phase 1 studies enrolling



## Martina Porter, MD

Hidradenitis Suppurativa: Treatment and Novel Therapeutics in Development

Efficacy and Safety of Ruxolitinib Cream in Patients With Mild Hidradenitis Suppurativa: Results From a Randomized, Double-Blind, Vehicle-Controlled Phase 2 Study



### Background

- HS is a chronic, recurring inflammatory skin disease that is associated with painful inflammatory nodules and abscesses<sup>1</sup>
  - May progress to draining tunnels, ulcerations, malodorous discharge, and permanent scarring
- There is no currently approved therapy for milder HS, and standard treatments are often inadequate<sup>1</sup>









# HS Has an Estimated Prevalence of ≈0.3-4.1% and May be Underdiagnosed<sup>1-4</sup>

- Onset typically between puberty and age 40 years
  - Most frequently between ages 21-29 years<sup>1,4-8</sup>
- Affects females ≈3× more often than males in European and North American populations<sup>9,10</sup>
- Greater prevalence among African Americans and biracial people vs Caucasians in the U.S.<sup>6,7,11,12</sup>

Mean delay to correct diagnosis:<sup>13-15</sup> **7-10 years** 

#### Estimates of HS Prevalence Vary<sup>1-4,16-20</sup>



1. Nguyen TV, et al. J Eur Acad Dermatol Venereol. 2021;35:50-61. 2. Díaz D, et al. Curr Dermatol Rep. 2022;11:336-40. 3. Jfri A, et al. JAMA Dermatol. 2021;157:924-31. 4. Miller IM, et al. Dermatol Clin. 2016;34:7-16. 5. Goldburg SR, et al. J Am Acad Dermatol. 2020;82:1045-6. 6. Garg A, et al. J Invest Dermatol. 2018;138:2152-6. 7. Garg A, JAMA Dermatol. 2017;153:760-4. 8. Calao M, et al. PLoS One. 2018;13:e0200683. 9. Chandran NS, et al. Exp Dermatol. 2021;30(Suppl. 1):23-6. 10. Ingram JR. Br J Dermatol. 2020;83:990-8. 11. Garg A, et al. J Am Acad Dermatol. 2017;77:118-22. 12. Shao K, et al. J Am Acad Dermatol. 2022;87:733-44. 13. Sachdeva M, et al. J Cutan Med Surg. 2021;25:177-87. 14. Garg A, et al. J Am Acad Dermatol. 2020;82:366-76. 15. Kokolakis G, et al. Dermatology. 2020;236:421-30. 16. Kashetsky N, et al. Clin Exp Dermatol. 2022;47:72-79. 17. Snyder CL, et al. Clin Cosmet Investig Dermatol. 2023;16:1833-1841. 18. Vazquez BG, et al. J Invest Dermatol. 2013;133:97-103. 19. Phan K, et al. Biomed Dermatol. 2020;4:2. 20. Garg A, et al. Am J Clin Dermatol. 2023;24:977-990.

### Significant Comorbidities and Risks for All-Cause Mortality Are Common

Most Common Self-Reported Comorbidities in a Global Survey of Patients with HS (N=1,299)



### What is Mild HS?

#### By extent of disease/scarring

Hurley Stage 1 ٠

#### By inflammatory burden

<4 AN count (abscess ٠ + nodule count)



Stage I (~70%) Abscess formation, single or multiple without sinus tracts and cicatrization

#### **MODERATE TO SEVERE**

Stage II (~20-25%) Recurrent abscesses with tract formation and cicatrization. Single or multiple, widely separated lesions

#### Stage III (~5%) Diffuse or near-diffuse involvement, or multiple interconnected tracts and abscesses across entire area

### **2019 North American Clinical Management** Guidelines for HS: A good place to start

	Hurley Stage I (mild) Hurley Stage II (moderate) Hurley Stage III (severe)	
		Nodules & abscesses  Tunnels
Medical Treatment	Discuss pain management, mental health, wound care, avoidance of triggers, tobacco cessation, weight reduction Tetracyclines	Supported by literature Expert opinion
Procedural Treatment	Local excisions  Deroofing (surgery or CO2)  Wide surgical excision (or CO2)	Table I. Str
Acute Lesions (all Stages)	IL steroids, I&D, topical resorcinol, deroofing	Topical/IL the Clindamyc

See additional Tables for details of each treatment. Other potential treatments are discussed in the text. HS management should be individualized for each patient and affected area; medical and physical therapies may be combined for optimal treatment; if lack of response, select treatment for more advanced disease.

#### **Surgical Management**

- Unroofing or WLE for persistent single lesions (usually <4 total, will treat 1-2 lesions at a time)

#### Milder patients

- Topical washes: zinc pyrithione, BPO wash, chlorhexidine
- Doxycycline 100 mg PO BID x 2-3 months  $\rightarrow$  if ٠ no improvement, escalate therapy
- For women, hormonal therapies: ٠ Spironolactone, OCPs, finasteride
- Oral retinoids •

#### Ie I. Strength of recommendations for the management and treatment of HS

Recommendations	Strength of recommendation	Level of evidence
Topical/IL therapies		
Clindamycin	С	н, ш
Zinc pyrithione	с	III
Chlorhexidine	С	Expert opinion
Resorcinol	с	III
Triamcinolone (IL)	C	III
Benzoyl peroxide	с	III
Dapsone	С	Expert opinion
Systemic antibiotics		
Tetracyclines	с	II, III
Rifampin + clindamycin	В	11
Rifampin + moxifloxacin + metronidazole	с	Ш
-	-	/

### When to consider biologics or JAK inhibitors

- Moderate to severe: Hurley stage 2 or 3; 4 or more abscesses, nodules, draining fistula/tunnels
  - Higher inflammatory burden
  - More diffuse scarring
  - Longer, sustained flares
  - Significant pain, severely impacted quality of life
- Failure to respond to antibiotics, hormonal therapy, and/or other immunosuppressive or immunomodulatory treatment
- Large ulcerations

#### When the patient wants to consider these options!

- many patients are hesitant
- some patients are eager

### Efficacy and Safety of Ruxolitinib Cream in Patients With Hidradenitis Suppurativa (Hurley Stage I and II): Results From a Randomized, Double-Blind, Vehicle-Controlled Phase 2 Study

<u>Martina L. Porter, MD,</u><sup>1</sup> M. Celeste Ferreira-Cornwell, PhD,<sup>2</sup> Mingyue Wang, PhD,<sup>2</sup> Haq Nawaz, MD, MPH, MBA, MS,<sup>2</sup> Melinda J. Gooderham, MD<sup>3</sup>

<sup>1</sup>Harvard Medical School and Beth Israel Deaconess Medical Center, Boston, MA, USA; <sup>2</sup>Incyte Corporation, Wilmington, DE, USA; <sup>3</sup>SKiN Centre for Dermatology, Peterborough, ON, Canada

## **Study Design**



AN, abscess and inflammatory nodule; BSA, body surface area; NRS, numerical rating scale. ClinicalTrials.gov: NCT05635838.

<sup>†</sup> Baseline and study visit scores calculated as the average of the 7 prior daily scores.

<sup>‡</sup> Treatment was applied directly to each AN (including ~1 cm of the surrounding area) identified at baseline as well as new lesions identified postbaseline after consultation with the investigator. Rescue treatment was not permitted.

# Patient Demographics and Baseline Clinical Characteristics

Characteristic	Vehicle (n=35)	1.5% Ruxolitinib Cream (n=34)	Characteristic	Vehicle (n=35)	1.5% Ruxolitinib Cream (n=34)
Age, median (range), y	29.0 (18–54)	29.0 (19–59)	Hurley stage, n (%)		
Female, n (%)	33 (94.3)	29 (85.3)	I I	18 (51.4)	17 (50.0)
Race, n (%)					17 (50.0)
White	12 (34.3)	19 (55.9)		17 (48.6)	17 (50.0)
Black	18 (51.4)	11 (32.4)	AN count, mean (SD)	5.3 (1.8)	5.6 (1.8)
Asian	2 (5.7)	0	Abscesses	0.7 (1.3)	0.6 (1.3)
Other	3 (8.6)	3 (8.8)	Inflammatory nodules	4.6 (2.1)	4.9 (2.0)
BMI, mean (SD), kg/m <sup>2</sup>	33.1 (6.7)	36.7 (9.5)	Itch NPS score, mean (SD)	11(28)	4.0 (2.6)
Relevant comorbidities,			Itch NKS scole, mean (SD)	4.1 (2.0)	4.0 (2.0)
n (%)			Skin Pain NRS score, mean (SD)	4.2 (2.4)	4.4 (2.4)
Anxiety	10 (28.6)	7 (20.6)	Prior HS therapy, n (%)	21 (60.0)	21 (61.8)
Depression	9 (25.7)	7 (20.6)	Biologics	2 (5 7)	0
Disease duration,	6.3	4.2	Diologios	2 (0.7)	U
median (range), y	(0.4–20.1)	(0.4–38.1)	Prior surgical treatment, n (%)	9 (25.7)	6 (17.6)

BMI, body mass index.

### Change From Baseline in AN Count Through Week 16 (Primary Endpoint)



LSM, least squares mean.

\* P<0.05 vs vehicle calculated from mixed model for repeated measures with fixed effect of treatment group, stratification factor, visit, and visit by treatment interaction.

## Proportion of Patients Achieving AN50, AN75, AN90, and AN100 at Week 16



### Patients Achieving HiSCR and Change in IHS4 Score From Baseline Through Week 16



HiSCR, Hidradenitis Suppurativa Clinical Response; IHS4, International Hidradenitis Suppurativa Severity Score System. <sup>↑</sup> ≥50% reduction in AN count and no increase in abscess or draining fistula count from baseline.

### Change From Baseline in Skin Pain and Itch NRS Score Through Week 16

 Skin Pain and Itch NRS scores were moderate at baseline<sup>†</sup> and improved similarly in both groups during the study



<sup>+</sup> Mean (SD) Skin Pain NRS score at baseline: vehicle, 4.2 (2.4); ruxolitinib cream, 4.4 (2.4). Mean (SD) Itch NRS score at baseline: vehicle, 4.1 (2.8); ruxolitinib cream, 4.0 (2.6).

### Safety at Week 16

- Ruxolitinib cream was generally well tolerated over 16 weeks
- No serious TEAEs were reported among patients who applied ruxolitinib cream

n (%)	Vehicle (n=35)	1.5% Ruxolitinib Cream (n=34)
Patients with TEAE	15 (42.9)	13 (38.2)
Most common TEAEs <sup>†</sup>		
COVID-19	0	2 (5.9)
Nasopharyngitis	0	2 (5.9)
Nausea	2 (5.7)	0
Patients with treatment-related TEAE <sup>‡</sup>	4 (11.4)	4 (11.8)
Patients with application site reactions	1 (2.9)	1 (2.9)
Patients with serious TEAE	1 (2.9)	0
Patients with grade ≥3 TEAE	2 (5.7)	0
Patients with TEAE leading to discontinuation	0	2 (5.9)§

TEAE, treatment-emergent adverse event.

<sup>†</sup> Occurring in  $\geq$ 2 patients in either treatment group.

<sup>‡</sup>No treatment-related TEAE occurred in >1 patient.

§ Contact dermatitis (n=1, related to treatment); hidradenitis (n=1, unrelated to treatment).

### Conclusions

- Twice-daily 1.5% ruxolitinib cream was effective in patients with milder HS
  - Patients who applied ruxolitinib cream achieved a significantly greater reduction in AN count from baseline at Week 16 vs vehicle (primary endpoint)
  - -More patients who applied ruxolitinib cream vs vehicle achieved
    - AN count reduction thresholds (≥50%, ≥75%, ≥90%, or 100%)
    - HiSCR
    - Greater IHS4 improvements
- Ruxolitinib cream was generally well tolerated in patients with milder HS
- Modifications to traditionally accepted clinical endpoints may be needed in studies of patients with milder HS

### Shawn Kwatra, MD

Prurigo Nodularis: Treatment and Novel Therapeutics in Development

**Efficacy and Safety of Povorcitinib in Patients With Prurigo Nodularis:** Results From a Randomized, Double-Blind, Placebo-Controlled Phase 2 Study



### Background

- PN is an inflammatory skin disease characterized by intensely pruritic lesions<sup>1</sup>
- Pathogenesis of PN has been linked to proinflammatory cytokines and chemokines that signal through the JAK/STAT pathway<sup>2,3</sup>





### Prurigo Nodularis is Rare but Prevalence may be Underestimated

#### **Prevalence**

- Affects approximately:
  - 37-148 per 100,000
    adults in the
    United States<sup>1-3</sup>
  - 8.4-210 per 100,000 people in Europe<sup>10</sup>
- An estimated 7-22 per 100,000 children in the United States have the disease<sup>3,4</sup>
- Prevalence may be underestimated<sup>5</sup>

#### Age

- Most commonly affects people 40-69 years of age<sup>1,6-8</sup>
- Mean age at diagnosis is approx. 51 years<sup>1</sup>

#### Sex

Reports vary, but the disease may be more common in women (≈53-54.6%) vs men<sup>1,6,7</sup>

#### Race

- More common and potentially more severe among patients with skin of color<sup>1,6,8,10,11</sup>
  - 3.4× more likely in African Americans vs white people<sup>6</sup>
  - Increased all-cause mortality among African American vs white, Hispanic, or Asian patients<sup>11</sup>

#### Comorbidities

- Associated with:<sup>4</sup>
  - Psychiatric conditions
  - Infections
  - Autoinflammatory and autoimmune diseases
  - Other dermatologic and allergic diseases
  - Malignancies
  - Endocrine and metabolic diseases
  - Other systemic comorbidities

a Prurigo Nodularis is a NORD-classified disease in the United States.1

1. Huang AH, et al. J Am Acad Dermatol. 2020;83:1559-1565. 2. Ständer S, et al. JAAD Int. 2021;2:28-30. 3. Wongvibulsin S, et al. J Invest Dermatol. 2021;141:2530-2533. 4. Huang AH, et al. J Am Acad Dermatol. 2022;86:655-657. 5. Elmariah S, et al. J Am Acad Dermatol. 2021;84:747-760. 6. Boozalis E, et al. J Am Acad Dermatol. 201;79:714-719. 7. Wongvibulsin S, et al. J Invest Dermatol. 2021;141:2530-2533. 8. Whang KA, et al. Medicines (Basel). 2019;6:88. 9. National Organization for Rare Disorders. Accessed Nov 2023. https://rarediseases.org/rare-diseases/prurigo-nodularis/ 10. Misery L. Br J Derm. 2022;187:464-471. 11. Sutaria N, et al. J Am Acad Dermatol. 2022;86:487-490.

# Itch Intensity and Persistence is Associated with a Significant QoL Burden



- 71.1% of patients reported itch being present often or always<sup>1</sup>
- 51.2% of patients rated their itch as being severe or very severe (≥7/10 in the Itch NRS scale)<sup>1</sup>
- Moderate to severe impairments in QoL have been reported in patients with prurigo nodularis<sup>1,2</sup>
- Patients with prurigo nodularis exhibit greater reductions in QoL vs patients with other chronic pruritic skin conditions<sup>3</sup>

<sup>a</sup> Results from a pan-European, prospective, cross-sectional, patient-reported questionnaire.

NRS, numerical rating scale; QoL, quality of life.

1. Pereira MP, et al. J Eur Acad Dermatol Venereol. 2020;34:2373-2383. 2. Janmohamed SR, et al. Arch Dermatol Res. 2021;313:669-677. 3. Steinke S, et al. J Am Acad Dermatol. 2018;79:457-463.e5.

### **Current Treatment Landscape**

#### **Evolving Paradigm**

- Shift from topical steroids ➤ first line systemics
- Dupixent- approved for prurigo nodularis
  - not seeing fast responses
- Off-label JAKs
- Significant unmet need

### Efficacy and Safety of Oral Povorcitinib in Patients With Prurigo Nodularis: Results From a Randomized, Double-Blind, Placebo-Controlled Phase 2 Study

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## **Study Design**



IGA, Investigator's Global Assessment; NRS, numerical rating scale; QD, once daily.

ClinicalTrials.gov: NCT05061693; EudraCT: 2021-006329-23.

<sup>†</sup> Patients in the extension period receive 1 of 2 doses based on their Week 16 responder status.

### Assessments

#### **Primary endpoint**

 Proportion of patients achieving ≥4-point improvement from baseline in Itch NRS (NRS4<sup>†</sup>) at Week 16

#### **Additional endpoints**

- Proportion of patients achieving IGA<sup>‡</sup> treatment success (IGA-TS; IGA score of 0 or 1 with ≥2-grade improvement from baseline) at Week 16
- Proportion of patients achieving both Itch NRS4 and IGA-TS
- Frequency and severity of adverse events

#### **Statistical analysis**

- Analysis of the primary endpoint was performed using exact logistic regression
- Secondary endpoints were summarized using descriptive statistics
- Patients with missing data or those who received rescue therapy were imputed as nonresponders

<sup>‡</sup> Overall severity rating on a scale from 0 to 4, accounting for the number of pruriginous lesions (score of 0, no pruriginous lesions; score of 1, 1–5 pruriginous lesions).

<sup>&</sup>lt;sup>†</sup> Data for study visits calculated as the average of the prior 7 daily worst itch scores.

### Patient Demographics and Baseline Clinical Characteristics

• Patient demographics and baseline clinical characteristics were similar across treatment groups

Characteristic	Overall Population (N=146)	Characteristic	Overall Population (N=146)
Age, median (range), y	56.0 (19–74)	IGA score, n (%)	
Female, n (%)	96 (65.8)	3	117 (80.1)
White, n (%)	121 (82.9)	4	28 (19.2)
BMI, mean (SD), kg/m²	31.5 (7.2)	Itch NRS, mean (SD)	8.0 (1.4)
Relevant medical history, n (%)		Itch NRS ≥7.0, n (%)	107 (73.3)
Depression	36 (24.7)	Skin pain NRS, mean (SD)	7.0 (2.2)
Seasonal allergy	23 (15.8)	DLQI, mean (SD)	15.6 (6.7)
Atopic dermatitis	21 (14.4)	Prior therapy, <sup>†</sup> n (%)	
Anxiety	20 (13.7)	Topical corticosteroids	126 (86.3)
Asthma	19 (13.0)	Nonsedating antihistamines	50 (34.2) 25 (17.1)
Hypothyroidism	18 (12.3)	Oral corticosteroids	21 (14.4)
Disease duration, median (range), y	4.1 (0.3–31.8)	NB-UVB phototherapy	21 (14.4)

BMI, body mass index; DLQI, Dermatology Life Quality Index; NB-UVB, narrow-band ultraviolet-B.

<sup>†</sup> Occurring in >10% of patients; patients could receive >1 prior therapy.

### Itch NRS4 Through Week 16



\* P<0.05 vs placebo; \*\* P<0.01 vs placebo; \*\*\* P<0.001 vs placebo; \*\*\*\* P<0.0001 vs placebo.</li>
 <sup>†</sup> Patients with missing postbaseline data or use of rescue therapy were imputed as nonresponders.
 P value calculated for odds ratio of active treatment vs placebo in the intent-to-treat population.

### **Time to Itch NRS4**

- Median (95% CI) times to Itch NRS4 were
  - Placebo: NE
  - 15 mg: 58.0 (16.0-NE) days
  - 45 mg: 35.0 (21.0–NE) days
  - 75 mg: 17.0 (13.0–47.0) days



### **IGA-TS<sup>†</sup> Through Week 16**



<sup>†</sup> IGA score of 0 (no pruriginous lesion) or 1 (1–5 pruriginous lesions) with ≥2-grade improvement from baseline. Patients with missing postbaseline data or use of rescue therapy were imputed as nonresponders. IGA was not assessed at Weeks 2 and 6 (remote visits).

### Itch NRS4 and IGA-TS Through Week 16



### Safety at Week 16

• Povorcitinib was generally well tolerated

		Povorcitinib									
n (%)	Placebo (n=37)	15 mg (n=36)	45 mg (n=35)	75 mg (n=37)	Total (n=108)						
Patients with TEAE	19 (51.4)	20 (55.6)	25 (71.4)	28 (75.7)	73 (67.6)						
Most common TEAEs <sup>†</sup>											
Headache	0	6 (16.7)	6 (17.1)	0	12 (11.1)						
Fatigue	1 (2.7)	5 (13.9)	3 (8.6)	2 (5.4)	10 (9.3)						
Nasopharyngitis	3 (8.1)	1 (2.8)	2 (5.7)	5 (13.5)	8 (7.4)						
Patients with serious TEAE	1 (2.7)	2 (5.6)	4 (11.4)	3 (8.1)	9 (8.3)						
Patients with grade ≥3 TEAE	0	1 (2.8)	1 (2.9)	2 (5.4)	4 (3.7)						
Patients with TEAE leading to discontinuation	1 (2.7)	3 (8.3)	2 (5.7)	0	5 (4.6)						

- 1 patient died in the 15-mg povorcitinib group (Day 9 of exposure; considered not related)
  - 70-year-old woman, BMI 49 kg/m<sup>2</sup>, smoker
  - Relevant medical history included COPD and high blood pressure

COPD, chronic obstructive pulmonary disorder; TEAE, treatment-emergent adverse event. <sup>†</sup> Occurring in >6% of patients in the total povorcitinib group.

### Conclusions

- Once-daily povorcitinib had a meaningful (≥4-point reduction in Itch NRS4) and early impact on itch
- More patients receiving povorcitinib achieved IGA-TS or combined IGA-TS and Itch NRS4 compared with placebo
- Povorcitinib was generally well tolerated with no new safety concerns identified
- These phase 2 study results suggest povorcitinib is a promising, novel treatment for PN

## Pablo Cagnoni, MD President & Head of R&D, Incyte



### >10 Potential High Impact Launches by 2030

	Product	Indication	Status	2024	2025	2026	2027	2028	2029	2030+	
		Pediatric AD	Phase 3								
/IAI		Prurigo N	Phase 3								
	Ruxolitinib Cream	HS (mild/mod)	Phase 3*								
logy		Lichen P	Phase 2								
lato		Lichen S	Phase 2								
Derr		HS (mod/sev)	Phase 3								
	Povorcitinib	Vitiligo	Phase 3								
		Prurigo N	Phase 3*								
		3L+ cGVHD B	BLA submitted								
	Axatilimab	1L (+ steroids)	Phase 3								
(HD		1L (+ rux)	Phase 2								
N/G/	BETi	MF	Phase 1								
МРІ	Zilurgisertib	MF	Phase 1								
	mCALR	MF & ET	Phase 1								
	JAK2V617Fi	MF, PV & ET	Phase 1								
		cSCC (monotherapy)	Phase 2								
Onc		Solid Tumors (combination)	Phase 2								
ne/(	CDK2	Solid Tumors	Phase 1								
Her	Tofocitomok	FL/MZL	Phase 3								
	raiasitamaD	1L DLBCL	Phase 3								

#### **Advancing Povorcitinib and Ruxolitinib Cream Franchise into Multiple Indications**

#### Povorcitinib

- Prurigo nodularis Phase 3 study expected to initiate in 2024
- Hidradenitis Suppurativa (mod/sev) Phase 3 data anticipated in 2025
- Vitiligo Phase 3 data anticipated in 2026
- Phase 2 studies in **asthma** and **CSU** enrolling with data expected in **2025**
- Potential for three unique launches in 2026 2028 with blockbuster potential

#### **Ruxolitinib Cream**

- Hidradenitis Suppurativa (mild/mod) Phase 3 study expected to initiate in 2024
  - Pending FDA feedback
- Pediatric Atopic dermatitis BLA submission anticipated mid-2024 with launch anticipated in 2025
- Phase 2 data in Lichen Planus and Lichen
  Sclerosus expected in 2024
- Prurigo nodularis Phase 3 data expected in 2025
- Expansion opportunity into five additional indications by 2029





