

## US Biopharmaceuticals

AAD 2024 Takeaways: Psoriasis  
Competition Intensified

## Industry Overview

## Oral IL-23 efficacy maintained through 52 weeks

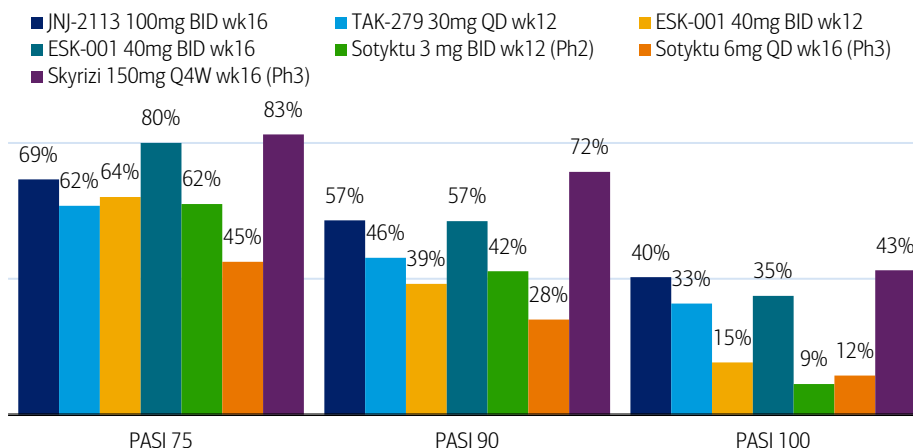
At the AAD conference, J&J presented the first data from FRONTIER 2, the phase 2 long-term extension (52 weeks) study evaluating JNJ-2113, an oral IL-23 receptor inhibitor, in psoriasis. Overall, efficacy was maintained from previously published week 16 results in FRONTIER 1 across key primary and secondary endpoints, including PASI 75/90/100 and IGA response rates. Importantly, we continue to be impressed by the efficacy achieved in the 100mg twice-daily group (highest dose level), with complete/near complete skin clearance rates approaching injectable IL-23s (i.e., Skyrizi, Tremfya) (see Exhibits 1 & 2). That said, we remain cautious on the orals commercial opportunity given IL-23 biologics can be dosed every 2-3 months with superior efficacy, according to our KOL conversations. Of note, JNJ-2113 pivotal phase 3 clinical program in psoriasis is ongoing, using a 200mg once-daily dose. Maintain Neutral rating on JNJ, \$180 PO.

## Another TYK2 on the block

Besides JNJ-2113, the oral competitive landscape is increasingly crowded with other emerging oral TYK2 agents that also look to achieve similar efficacy as biologics. At the AAD, Alumis presented phase 2 psoriasis data of its ESK-001, an allosteric TYK2 inhibitor, with results that look comparable to JNJ-2113 for the highest dose group (40mg twice-daily). Importantly, efficacy continued to improve from week 12 to 16, with compelling results and durability during the open label extension period. Alumis looks to initiate phase 3 in 2H24 and is developing once-daily formulation in parallel. As an aside, Takeda's TAK-279 (another oral TYK2) is currently in phase 3 with once-daily formulation. Overall, we are seeing rapid progress in the development of oral agents for psoriasis, and it remains to be seen who will emerge as the winner.

## Exhibit 1: Psoriasis Data Comparison

New oral IL-23 and TYK2 demonstrating efficacy approaching biologics (PBO-adjusted)



Source: BofA Global Research, company presentation, FDA label; Sotyktu and Skyrizi data are based on average of phase 3 trials  
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11 March 2024

Equity  
United States  
Biopharmaceuticals

**Geoff Meacham**  
Research Analyst  
BofAS  
+1 646 855 1004  
geoff.meacham@bofa.com

**Charlie Yang**  
Research Analyst  
BofAS  
+1 646 855 5732  
charlie.yang@bofa.com

**Susan Chor**  
Research Analyst  
BofAS  
+1 646 855 0102  
susan.chor@bofa.com

**Alexandria Hammond**  
Research Analyst  
BofAS  
+1 646 855 1654  
alexandria.hammond@bofa.com

**John Joy**  
Research Analyst  
BofAS  
+1 646 855 1136  
john.joy@bofa.com

## Abbreviation:

PASI: psoriasis area and severity index  
IL-23: Interleukin-23  
KOL: key opinion leader  
TYK2: tyrosine kinase 2  
AAD: American Academy of Dermatology  
QD: once daily  
BID: twice daily  
Q4W: once every 4 weeks

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Timestamp: 11 March 2024 07:43AM EDT

# Psoriasis Data Comparison

## Exhibit 2: Psoriasis Data Comparison

New oral IL-23 and TYK2 demonstrating efficacy approaching biologics (PBO-adjusted)

Company	Drug	Phase	Dose	MoA	N	Week	PASI 75	PASI 90	PASI 100	IGA 0/1	IGA 0
J&J	JNJ-2113	Ph2	100mg BID	oral IL-23	42	16	69%	57%	40%	53%	45%
	JNJ-2113	Ph2	100mg QD	oral IL-23	43	16	56%	44%	23%	51%	28%
Takeda	TAK-279	Ph2	30mg QD	oral TYK2	52	12	62%	46%	33%	48%	33%
	TAK-279	Ph2	15mg QD	oral TYK2	53	12	62%	45%	15%	45%	15%
Alumis	ESK-001	Ph2	40mg BID	oral TYK2	39	12	64%	39%	15%	-	-
	ESK-001	Ph2	40mg BID	oral TYK2	82	16	80%	57%	35%	-	-
	ESK-001	Ph2	40mg QD	oral TYK2	39	12	56%	26%	8%	-	-
Bristol	Sotyktu	Ph 2	6 mg BID	oral TYK 2	45	12	60%	42%	18%	58%	-
	Sotyktu	Ph 2	3 mg BID	oral TYK 2	45	12	62%	42%	9%	69%	-
	Sotyktu	Ph3 (PsO-1)	6mg QD	oral TYK2	330	16	46%	32%	14%	47%	17%
AbbVie	Sotyktu	Ph3 (PsO-2)	6mg QD	oral TYK2	511	16	44%	24%	9%	41%	14%
	Skyrizi	Ph3 (PsO-1)	150mg Q4W	subq IL-23	304	16	80%	70%	36%	80%	35%
	Skyrizi	Ph3 (PsO-2)	150mg Q4W	subq IL-23	294	16	85%	73%	49%	79%	48%

Source: BofA Global Research, company presentation, FDA label

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## Price objective basis & risk

### Johnson & Johnson (JNJ;A-2-7;\$159.52)

Our price objective of \$180/share is based on a sum of the parts (SOTP) of roughly 18x MedTech multiple, and 14x pharma '24 multiple, slightly below peers given looming loss of exclusivity (LOE) and talc uncertainty, yielding \$57/share, and \$123/share, respectively.

The downside risks to our PO are slower growth in MedTech due to competitive pressure and faster-than-expected erosion from biosimilars to the pharma business.

Upside risks to our PO are better-than-expected launch of new products, better-than-expected clinical data for the pharma pipeline, quick resolution of talc litigation, and constructive M&A.

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	Acumen Pharma	ABOS	ABOS US	Geoff Meacham
	Agios Pharmaceuticals	AGIO	AGIO US	Greg Harrison, CFA
	BioMarin	BMRN	BMRN US	Geoff Meacham
	BioXcel Therapeutics	BTAI	BTAI US	Greg Harrison, CFA
	BridgeBio Pharma	BBIO	BBIO US	Greg Harrison, CFA
	Caribou	CRBU	CRBU US	Geoff Meacham
	CRISPR Therapeutics	CRSP	CRSP US	Geoff Meacham
	Eli Lilly and Company	LLY	LLY US	Geoff Meacham
	Gilead Sciences Inc.	GILD	GILD US	Geoff Meacham
	HUTCHMED	HCM	HCM US	Alec W. Stranahan
	Immatics	IMTX	IMTX US	Alec W. Stranahan
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	Kura Oncology	KURA	KURA US	Jason Zemansky
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	MeiraGTx	MGTX	MGTX US	Alec W. Stranahan
	Merck & Co.	MRK	MRK US	Geoff Meacham
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	Neumora Therapeutics	NMRA	NMRA US	Geoff Meacham
	Rani Therapeutics	RANI	RANI US	Geoff Meacham
	Regenxbio, Inc.	RGNX	RGNX US	Alec W. Stranahan
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	Royalty Pharma	RPRX	RPRX US	Geoff Meacham
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	Moderna	MRNA	MRNA US	Geoff Meacham
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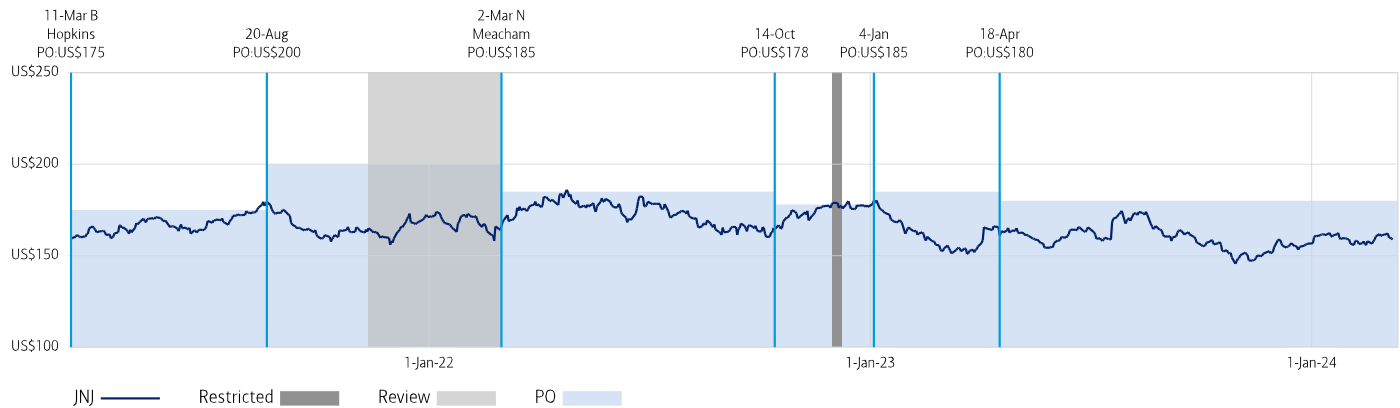
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Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
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	Day One Biopharmaceuticals	DAWN	DAWN US	Alec W. Stranahan
	Novavax	NVAX	NVAX US	Alec W. Stranahan
	Regeneron Pharmaceuticals Inc.	REGN	REGN US	Geoff Meacham
	Reneo Pharmaceuticals	RPHM	RPHM US	Jason Zemansky
	TG Therapeutics	TGTX	TGTX US	Alec W. Stranahan
	United Therapeutics Corporation	UTHR	UTHR US	Greg Harrison, CFA

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## Johnson &amp; Johnson (JNJ) Price Chart



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Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	234	60.94%	Buy	115	49.15%
Hold	80	20.83%	Hold	36	45.00%
Sell	70	18.23%	Sell	29	41.43%

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Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

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