



# **Takeda to Acquire Late-Stage, Potential Best-in-Class, Oral Allosteric TYK2 Inhibitor NDI-034858 From Nimbus Therapeutics**



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Better Health, Brighter Future

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# Takeda to acquire late-stage, potential best-in-class, oral allosteric TYK2 inhibitor NDI-034858 from Nimbus Therapeutics



- Potential to demonstrate best-in-class efficacy and safety in psoriasis as well as multiple other immune-mediated diseases, including Inflammatory Bowel Disease (IBD), psoriatic arthritis and Systemic Lupus Erythematosus
- Phase 3 psoriasis study expected to start in 2023; potential for regulatory filing in FY25-27 timeframe
- Acquisition strengthens Takeda's growing late-stage pipeline, in alignment with the company's therapeutic area strategy and expertise in immune-mediated diseases
- Under the terms of the agreement, Takeda will pay Nimbus USD \$4B upfront, and two milestone payments of \$1B each upon achieving annual net sales of \$4B and \$5B. The upfront payment will be primarily funded by cash on hand
- The transaction is expected to close before the end of FY2022, contingent on completion of review under antitrust laws

# NDI-034858, a selective allosteric tyrosine kinase 2 (TYK2) inhibitor



## High Selectivity Allows for Greater Inhibition of TYK2

- NDI-034858 is a novel, investigational, oral, allosteric inhibitor of tyrosine kinase 2 (TYK2) with high specificity for TYK2 over JAK1, JAK2, JAK3 kinases
  - NDI-034858 has 1,500,000-fold selectivity for TYK2 over JAK1

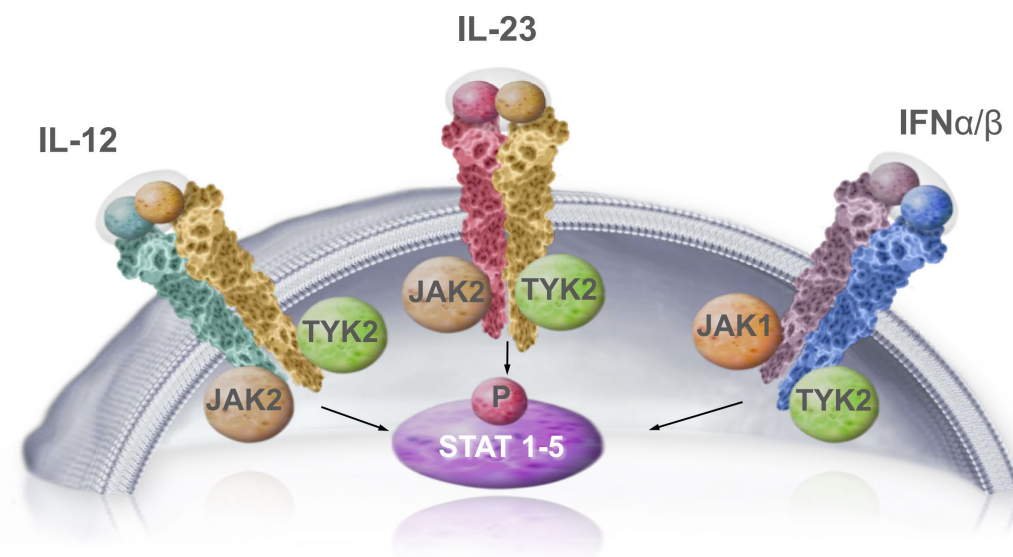
	NDI-034858	Deucravacitinib
TYK-2 –JH2 binding $K_D$	0.0034 nM	0.0045 nM
JAK1 –JH2 binding $K_D$	5000 nM	0.49 nM
Biochemical Selectivity (Fold)	$1.5 \times 10^6$	109
Fold Selectivity (vs. deucravacitinib)	$1.3 \times 10^4$	

Source: Nimbus proprietary structure based computational modeling; side-by-side evaluation of biochemical potency of NDI-034858 and deucravacitinib (synthesized by Nimbus for nonclinical research purposes only).

**Potential for enhanced efficacy without introducing JAK-related toxicities**

## Tyrosine Kinase 2 (TYK2)

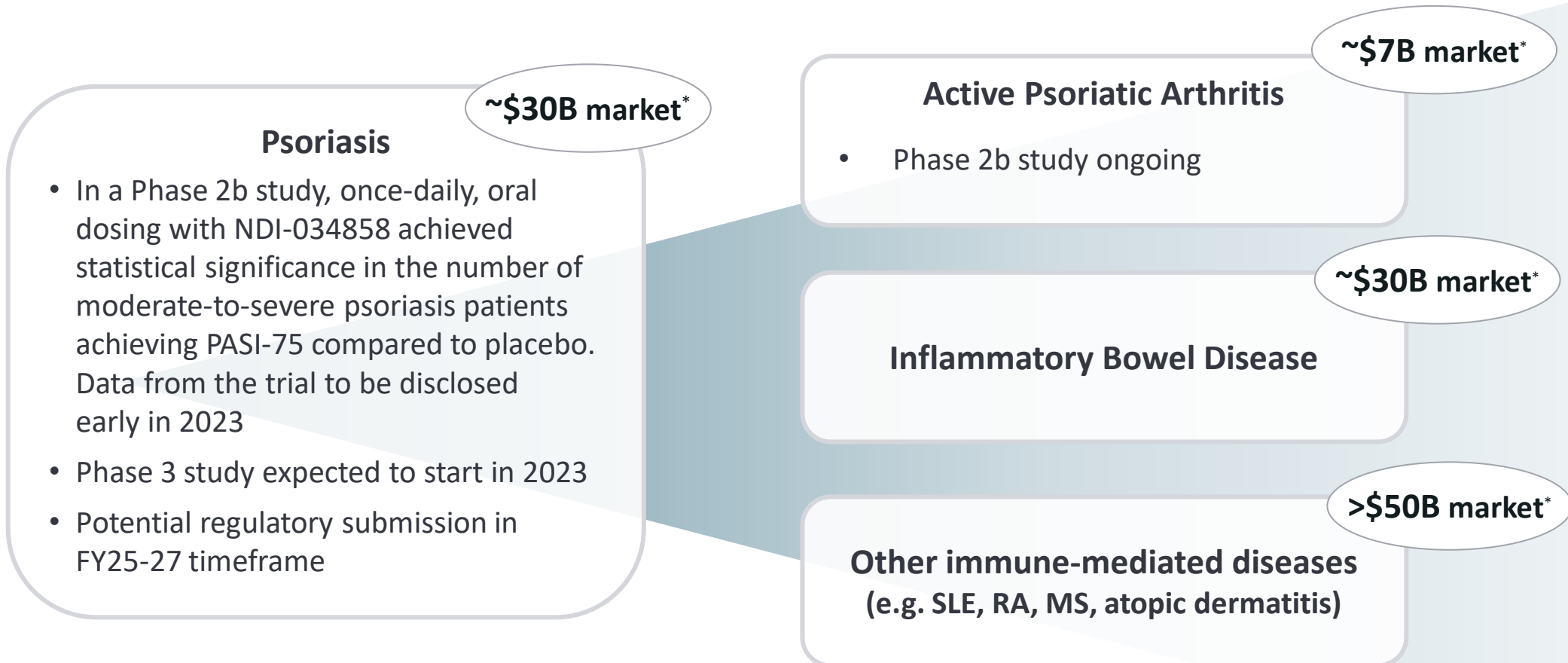
- Obligate signal transducer of receptors for interleukin (IL)-12, IL-23 and Type I interferon
- Heterodimer with JAK1 or JAK2; inhibition of either dimer moiety impedes signal transduction



# Potential best-in-class efficacy & safety in multiple immune-mediated diseases



- Mechanism of action could lead to activity in broad range of indications representing a multi-billion dollar revenue opportunity
- Aligned with Takeda's therapeutic area strategy and expertise in immune-mediated diseases



\*Estimated market size in 2028. Source: Evaluate Pharma

PASI: Psoriasis area and severity index

SLE: Systemic Lupus Erythematosus; RA: Rheumatoid Arthritis; MS: Multiple Sclerosis



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