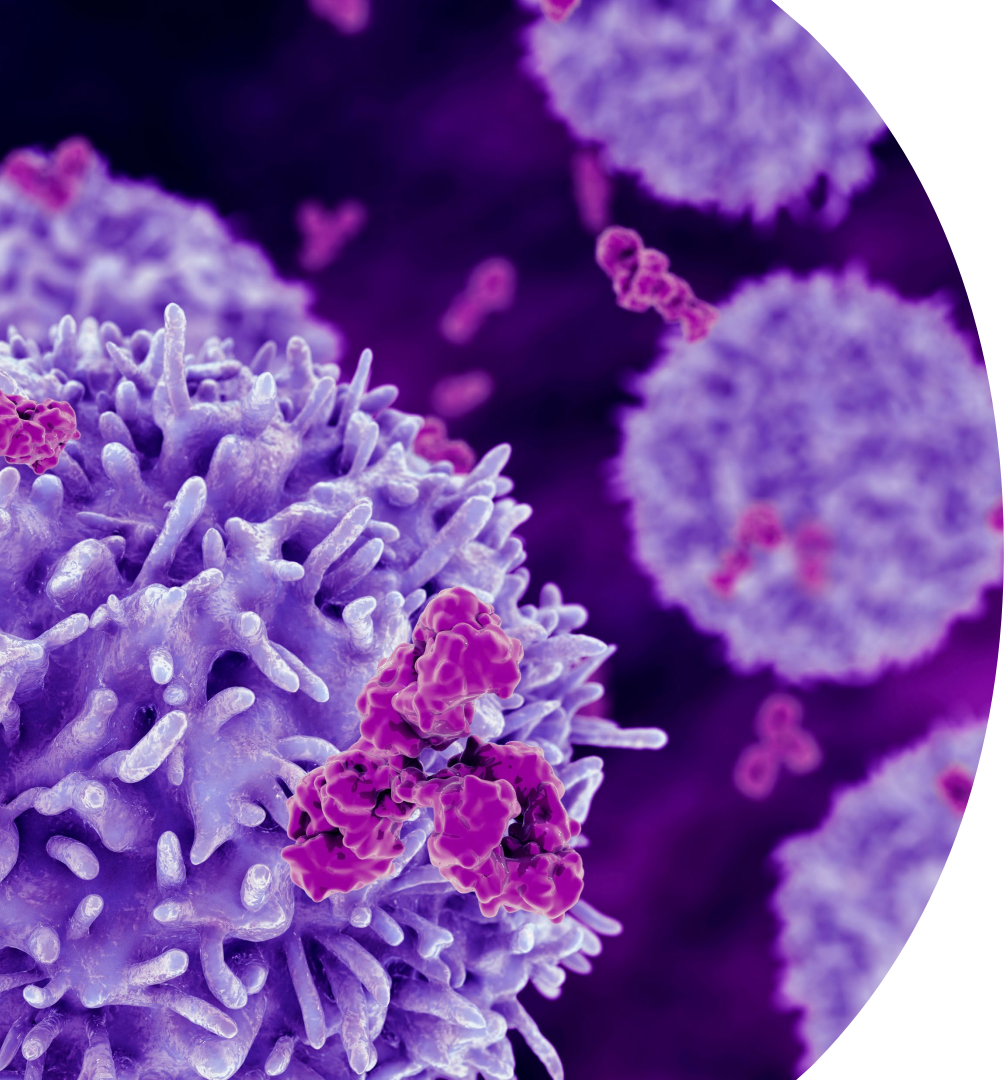

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Immunology Investor Event

Cambridge, MA

March 29, 2022

Forward-looking statements

This document contains forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995, as amended. Forward-looking statements are statements that are not historical facts. These statements include projections and estimates and their underlying assumptions, statements regarding plans, objectives, intentions and expectations with respect to future financial results, events, operations, services, product development and potential, and statements regarding future performance. Forward-looking statements are generally identified by the words "expects", "anticipates", "believes", "intends", "estimates", "plans" and similar expressions. Although Sanofi's management believes that the expectations reflected in such forward-looking statements are reasonable, investors are cautioned that forward-looking information and statements are subject to various risks and uncertainties, many of which are difficult to predict and generally beyond the control of Sanofi, that could cause actual results and developments to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. These risks and uncertainties include among other things, the uncertainties inherent in research and development, future clinical data and analysis, including post marketing, decisions by regulatory authorities, such as the FDA or the EMA, regarding whether and when to approve any drug, device or biological application that may be filed for any such product candidates as well as their decisions regarding labelling and other matters that could affect the availability or commercial potential of such product candidates, the fact that product candidates if approved may not be commercially successful, the future approval and commercial success of therapeutic alternatives, Sanofi's ability to benefit from external growth opportunities, to complete related transactions and/or obtain regulatory clearances, risks associated with intellectual property and any related pending or future litigation and the ultimate outcome of such litigation, trends in exchange rates and prevailing interest rates, volatile economic and market conditions, cost containment initiatives and subsequent changes thereto, and the impact that COVID-19 will have on us, our customers, suppliers, vendors, and other business partners, and the financial condition of any one of them, as well as on our employees and on the global economy as a whole. Any material effect of COVID-19 on any of the foregoing could also adversely impact us. This situation is changing rapidly, and additional impacts may arise of which we are not currently aware and may exacerbate other previously identified risks. The risks and uncertainties also include the uncertainties discussed or identified in the public filings with the SEC and the AMF made by Sanofi, including those listed under "Risk Factors" and "Cautionary Statement Regarding Forward-Looking Statements" in Sanofi's annual report on Form 20-F for the year ended December 31, 2021. Other than as required by applicable law, Sanofi does not undertake any obligation to update or revise any forward-looking information or statements.

Agenda

Immunology Investor Event, March 29, 2022

8:00-8:05 Introduction, Eva Schaefer-Jansen

8:05-9:00 Presentation

Play to Win in Immunology, Paul Hudson

Immunology Strategy, Bill Sibold

Leading with Dupixent®, Brian Foard

Expand beyond Type 2, Naimish Patel

Disruptive technologies, Frank Nestle

9:00-9:10 Break

9:10-9:50 Expert encounter

'Fireside chat'

John Reed in dialogue with:

- **Bartolome R. Celli**, MD, FCCP
  Brigham and Women's Hospital
  Professor of Medicine, Harvard Medical School
- **Joseph F. Merola**, MD, MMSc
  Brigham and Women's Hospital
  Associate Professor, Harvard Medical School

9:50-10:20 Q&A with Presenters

10:20-10:30 Moving to 2 breakout sessions

10:30-11:00 Breakout session 1

Dermatology

Moderated by Brian Foard/Frank Nestle and Sanofi panelists

11:00-11:05 Switching rooms/Break

11:05-11:35 Breakout session 2

Respiratory

Moderated by Bill Sibold/Naimish Patel and Sanofi panelists

11:35-11:40 Break and move back to main plenary session

11:40-11:50 Concluding remarks

Paul Hudson

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Play to Win in Immunology

Paul Hudson

Chief Executive Officer

Play to Win: *Our six-year plan* – ahead of schedule

- Refocus with decisive actions
- Growth through winning assets
- Margin expansion

- Transformative launches
- Agile and efficient resource deployment
- Leading R&D productivity

Our key *growth* drivers

Dupixent®

€13bn+

COPD not included[1]

Vaccines

>2x

sales by the end of the decade[2]

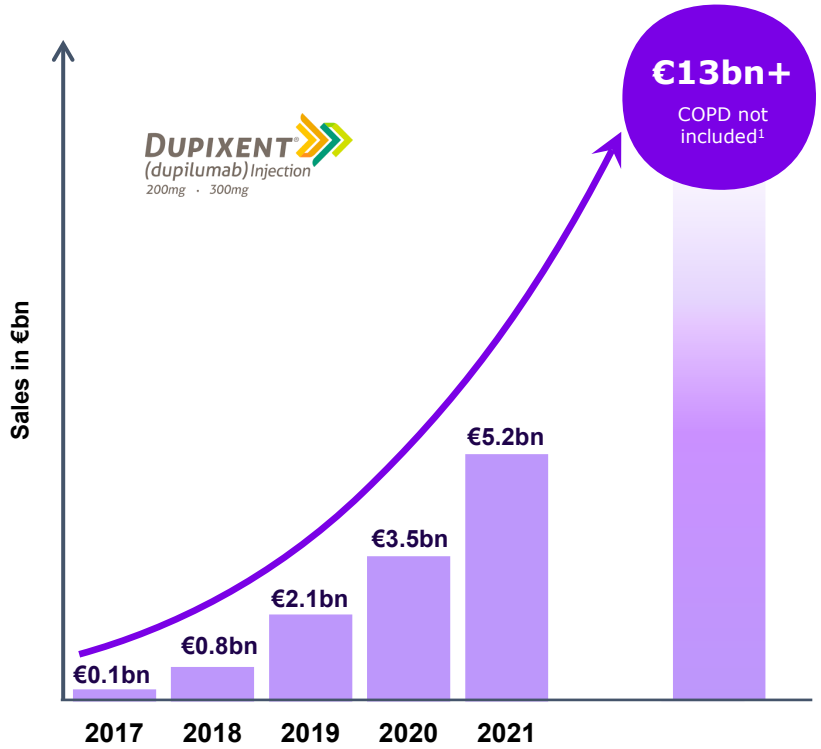
Pipeline

>90 projects

Majority in Immunology, Oncology, Neurology, and Vaccines

1. €13bn+ refers to the peak sales ambition, not including COPD
2. vs. 2018, risk-adjusted, internal estimate, excluding Covid-19 vaccine
Dupixent® is jointly developed and co-commercialized with Regeneron

Dupixent® - Strong driver of *sustainable growth*



Accretive to **BOI margin** in 2022

Economies of scale driving **profitability**

Manufacturing improvements continue

Expansion into **COPD**

1. €13bn+ refers to the peak sales ambition, not including COPD. Dupixent® is under investigation in COPD and not yet approved by any regulatory agency to treat COPD.

Our *strategic roadmap* to win in Immunology

Building an Immunology Megabrand

DUPIXENT® (dupilumab)

Strong internal immunology science

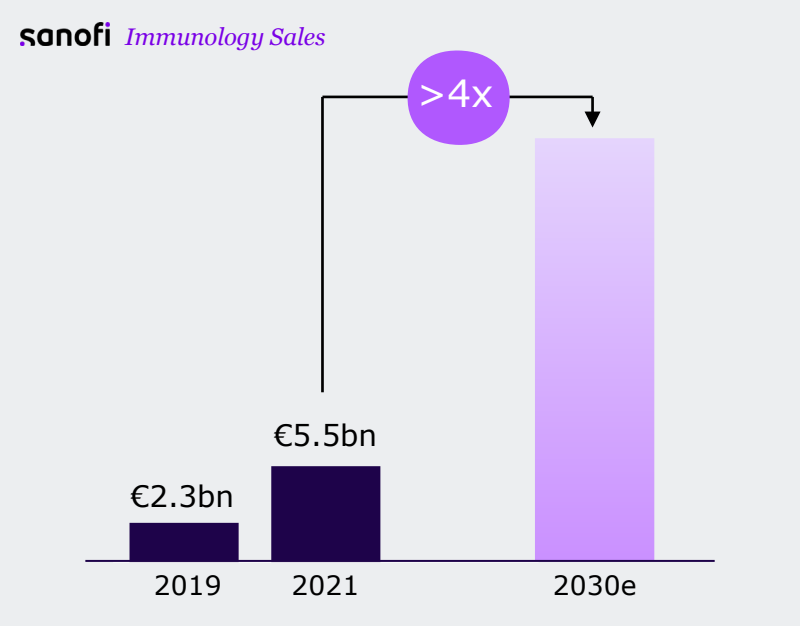
Combined with value-creating external Business Development

World-class leadership team

Deep bench of talent with diverse backgrounds

Advancing innovative pipeline

First-in-Class/ Best-in-Class potential in new therapeutic fields



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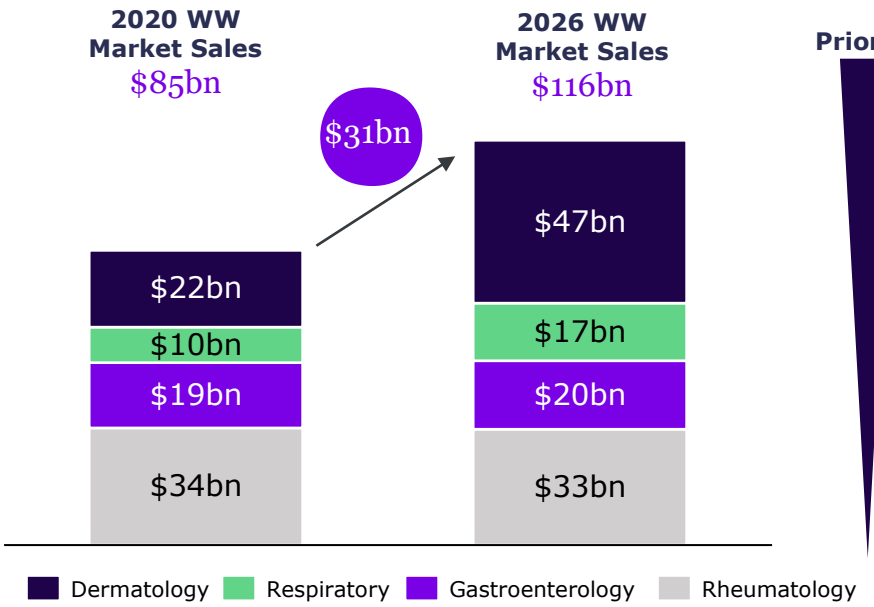
Immunology Strategy

Bill Sibold

EVP, Global Head of Specialty Care

Immunology growth driven by *priority* areas



Dermatology
Market today: Psoriasis, AD
Upside: Accelerated AD and other indications CSU, HS, PN...

Respiratory
Market today: ~70% Asthma, ~30% IPF
Upside: COPD

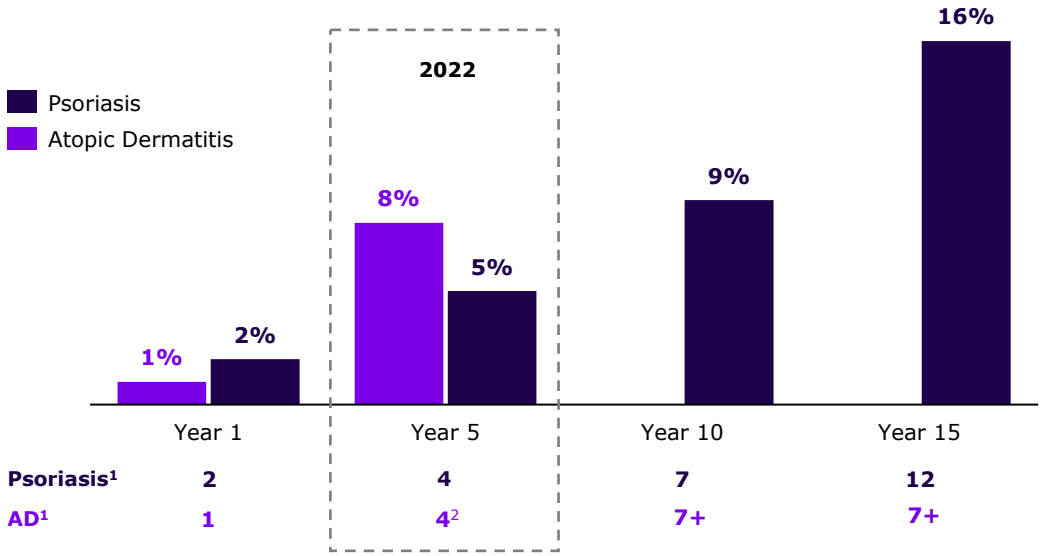
Gastroenterology
Market today: IBD – LOEs vs new entrants
Upside: Eosinophilic gastro diseases

Rheumatology
Market today: ~80% RA – LOEs vs new entrants
Upside: Lupus

Source: Evaluate Pharma consensus forecasts – advanced therapy only, excludes biosimilar sales

Substantial growth potential for AD

Adult advanced therapy penetration in years after launch (in %)



1. Number of advance therapies; Atopic Dermatitis: estimated, pending Ph2/3 readouts 2. Abrocitinib, upadacitinib, tralokinumab and dupilumab
Source: Treated patient counts directly from DRG/Clarivate 2018 report

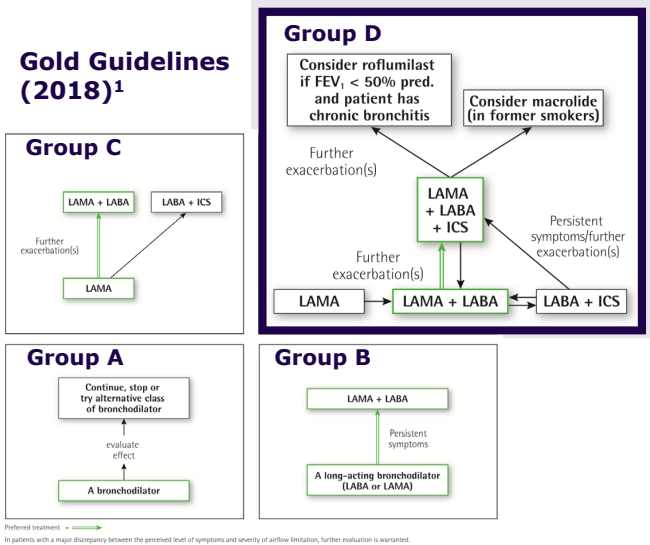
AD market expected to continue to *grow faster than Psoriasis* given high unmet need and competitive entrants

AD adult penetration progressing strongly in the U.S. at *8%* in the *5th year of launch*, significantly ahead of Psoriasis market development

We estimate adult penetration to be over 25% while adolescent and pediatrics in the 10-16% range in 10yrs

No effective therapies for severe COPD patients who failed standard of care

Gold Guidelines (2018)[1]



- Highly symptomatic *frequent exacerbations*
- Highest mortality
- Major driver of healthcare costs in COPD
- No effective advanced therapies to date

- 3rd leading cause of death worldwide, COPD is a progressive disease that imposes a significant burden
- Typically treated with inhaled steroids or bronchodilators -"one size fits all" therapies
- Dupixent® & itepekimab being studied for the potential treatment of moderate to severe COPD patients estimated to be *~2 million patients*[2]
- *No biologics* treatment approved
- *No new MoAs* in more than 10 yrs

1. Pharmacological treatment algorithms by GOLD Grade. Gold guidelines 2018 2. G7 countries: U.S., Canada, France, Germany, Italy, Japan, UK
2. 1 severe or 2 moderate exacerbations per year

Potential to lead in COPD with two biologics to cover *>80% of GOLD D COPD patients*

Patient population G7[1] – 2035e

	Non-Type 2	Type 2
Former smokers (70%)	**itepekimab[2]** ~1,139K patients	**Dupixent®[3] and itepekimab[2]** ~640K patients
Current smokers (30%)		**Dupixent®[3] only** ~270K patients

- Up to ~30-40%[4] of patients with COPD have evidence of Type 2 inflammation
- Both medicines have potential as *1st COPD biologic* reaching 80% of highest unmet need patients
- Pivotal data expected 2023 and 2024

1. G7 countries: U.S., France, Germany, Italy, Japan, UK, Canada
2. Itepekimab is under investigation and not yet approved by any regulatory agency. Itepekimab is being developed in collaboration with Regeneron.
3. Dupixent® is not yet approved for COPD and is being studied in patients with uncontrolled COPD treated with current SoC triple therapy among GOLD D. Patient populations exclude never smokers.
4. Halpin DMG, et al. EClinMed. 2019;14:32–41; Ajithkumar CS, et al. Ind J Basic Appl Med Res. 2018;7:223–228; Oshagbemi OA, et al. Am J Respir Crit Care Med. 2017;195:1402–1404

Blazing the trail with *Dupixent®* in priority areas

		Dermatology	Respiratory		Gastroenterology
		Atopic dermatitis	*Asthma*	*COPD*	*EoE or UC*
Type 2		DUPIXENT® (dupilumab)	DUPIXENT® (dupilumab)		DUPIXENT® (dupilumab)
Beyond Type 2	Injectables				
	Orals				
	Topical				

Dupixent® is under investigation in COPD, EoE and in infant population in AD, and not yet approved by any regulatory agency to treat these indications

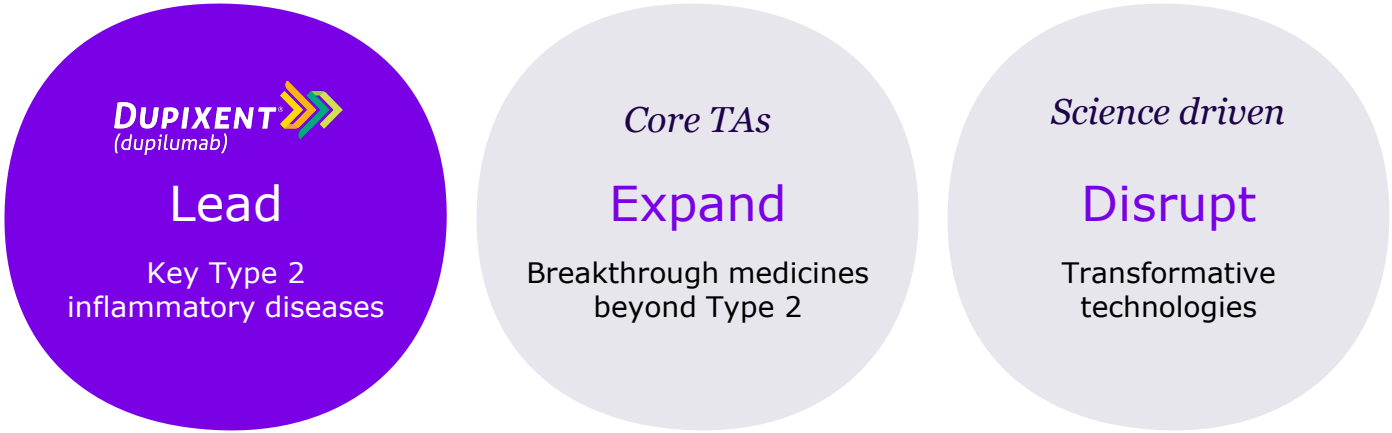
Playing to win with *10 novel molecules* in 3 priority areas

		Dermatology	Respiratory		Gastroenterology
		Atopic dermatitis	*Asthma*	*COPD*	*EoE or UC*
Type 2		DUPIXENT® (dupilumab)	DUPIXENT® (dupilumab)		DUPIXENT® (dupilumab)
Beyond Type 2	**Injectables**	- amlitelimab (anti-OX40L) - anti-IL13/OX40L Nanobody® VHH	- amlitelimab (anti-OX40L) - anti-IL13/TSLP Nanobody® VHH - anti-IL13/OX40L Nanobody® VHH	- itepekimab (anti-IL-33)	- anti-TNFα/IL-23 Nanobody® VHH - non-beta IL-2 (Synthorin™)
	Orals	- rilzabrutinib (BTKi) - IRAK4 degrader	- rilzabrutinib (BTKi)		- eclitasertib (RIPK1)
	Topical	- BTKi			

Eclitasertib is being developed in collaboration with Denali. All other listed agents are currently under clinical investigation and their safety and efficacy have not been evaluated by any regulatory authority. Except with respect to Dupixent® in AD (age 6+) and Asthma, all indications listed are under investigation and not reviewed/approved by any regulatory authority

Immunology Franchise

Transforming the practice of medicine



Dupixent® Leading in Type 2 Inflammatory Diseases

Brian Foard

Global Head of Dupixent® Franchise

Dupixent® - Building a *megabrand*

	2019	2022
Indications	*4*	*6*[1]
Clinical program[2]	Positive pivotal trials in AD, Asthma and CRSwNP COPD and EoE initiated PN, CSU, BP planned	*7* new positive pivotal trials *12* new trials achieving FPI *7* new indications initiated
Patients treated	*125K*	*>400K*
Demographics	adult, adolescent	adult, adolescent, pediatric
Geographies	*20*	*>50*
Competition	No other systemic biologic for Type 2 approved	No other biologic with comparable breadth and scope of data on efficacy and safety across Type 2 indications and age groups

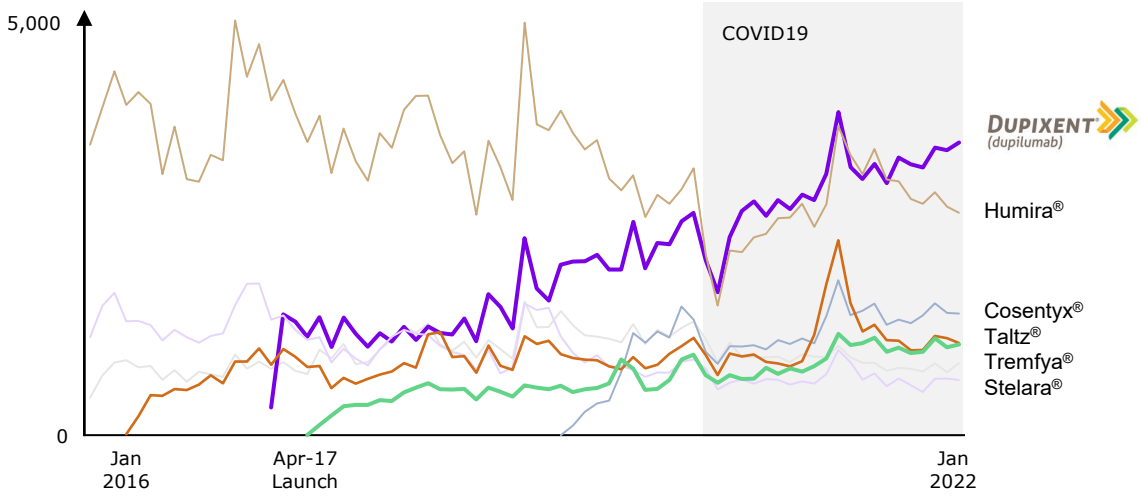
>4.9 million
biologic eligible patients in AD U.S. and Ex-U.S.[3]

>2 million
biologic eligible patients in Asthma and CRSwNP U.S. and Ex-U.S.[4]

1. AD (18+Y, 12-17Y, 6-11Y), Asthma (12+Y, 6-11Y), CRSwNP; 2. For 2022, 7 positive pivotal trials (1 AD 6m-5Y, 1 Asthma 6-11Y, EoEx2, PNx2, 1 CSU), 12 FPI (1 AD 6m-5Y, 1 EoE ped, PNx2, CSUx2, 1 CIndU, 1 BP, 1 AFRS, 1 COPD, 1 CRSsNP, 1 CPUO), 7 New indications (CRSsNP, AFRS, CPUO, CIndU, BP, PN, CSU) 3. Japan, Germany, France, Italy, Spain, United Kingdom and China; 4. Japan, Germany, France, Italy, Spain & United Kingdom.

The *Leading* Immunology Brand in *Specialty Dermatology*

U.S. monthly dermatologist NBRx[1]



Outstanding performance

- *8%* AD 6Y+ biologic eligible patient penetration[2]
- In 2021, Germany and Japan advanced therapy market grew *>50%* in a competitive environment
- In competitive environment, Dupixent® aims to be the gold-standard and foundational first-line systemic therapy in moderate to severe AD

1. IQVIA NPA Patient Insights, Jan'22. 2. IQVIA Custom Monthly Patient Report, Jan'22. AD: moderate to severe atopic dermatitis. All registered trademarks are owned by their respective companies. Leading Immunology Brand in US NBRx.

Dupixent® - *New MOA in CSU* with positive Ph III data in *bio-naïve* patients

Primary endpoint Study A[1]: Mean changes from baselines at week 24

Chronic spontaneous urticaria (CSU) is a debilitating *Type 2 inflammatory disease*, defined by intense itch and hives

Dupixent® *met primary endpoints* in Ph3 Study A[1] of reducing itch and urticaria activity

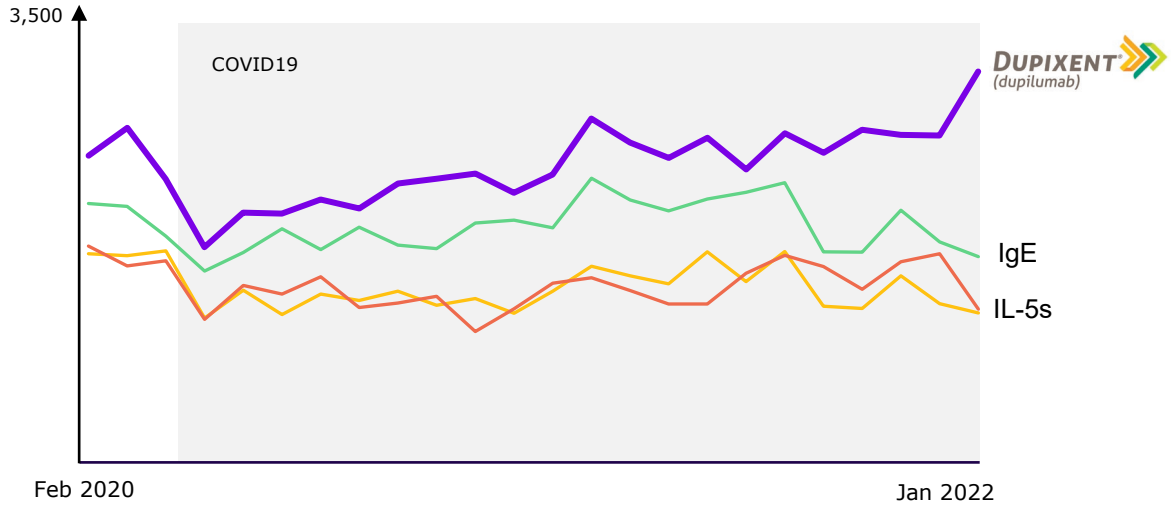
In patients refractory to omalizumab (Study B[1]), Dupixent® did not reach statistical significance in an interim analysis; *numeric improvements* observed across key endpoints

Ambition to *move ahead with filing*

1. LIBERTY CUPID clinical program, 2. Non-sedating H1-antihistamine, 3. p<0.001
The use of Dupixent® for CSU is investigational and the safety and efficacy has not been evaluated by any Regulatory Authority. The trial demonstrated safety results similar to the known safety profile of Dupixent® in its approved indications. For the 24-week treatment period, the occurrence of treatment emergent adverse events were generally similar between the Dupixent® and placebo groups (50% of Dupixent® patients and 59% of placebo patients).

The *Leading* Immunology brand in *Specialty Respiratory*

U.S. monthly respiratory NBRx[1]



Outstanding performance

- *19%* Asthma 12Y+ biologic penetration[2]
- *5%* Asthma 6-11Y biologic penetration[2]
- *#1* Asthma NBRx share (28%) QTD Q1'22[3]

- *#1* in Asthma new patient share in Germany (31%)[4]
- *#1* total Asthma patients share 28% and new patient share 36% in Japan[5]

Potential *best-in-disease* Type 2 Asthma profile[6] approved 6Y+ in U.S. & EU and 12Y+ in JP

First biologic approved in CRSwNP in the U.S., EU, JP and CA

1. IQVIA Custom US Monthly National Source of Business (Asthma, CRswNP indications), Jan'22. 2. IQVIA Custom Monthly Patient Report, Jan'22 3. IQVIA Custom US Weekly National Source of Business, 2/18/22 4. Germany IQVIA LRx-Database. Dupixent® asthma biologics market (naive and switches) Source of Business, Observational period 01/2022. 5. Japan local ATU W13 Jan '22. 6. Type 2 phenotype: Eos ≥150 or FeNo ≥ 20 ppb, and/or OCS dependence. Leading Immunology Brand in US NBRx.

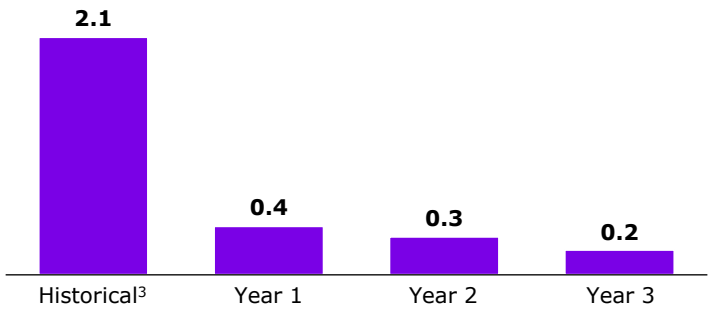
Dupixent®: Potential *best-in-disease* in Type 2 Asthma

Dupixent® significantly reduced Asthma attacks and demonstrated rapid and sustained improvements in lung function across a broad population of Type 2 Asthma patients[1] as young as 6 years

≥18 years

Progressively declining exacerbation rate

Unadjusted annualized exacerbation rate across 3 years[2] (n=182)

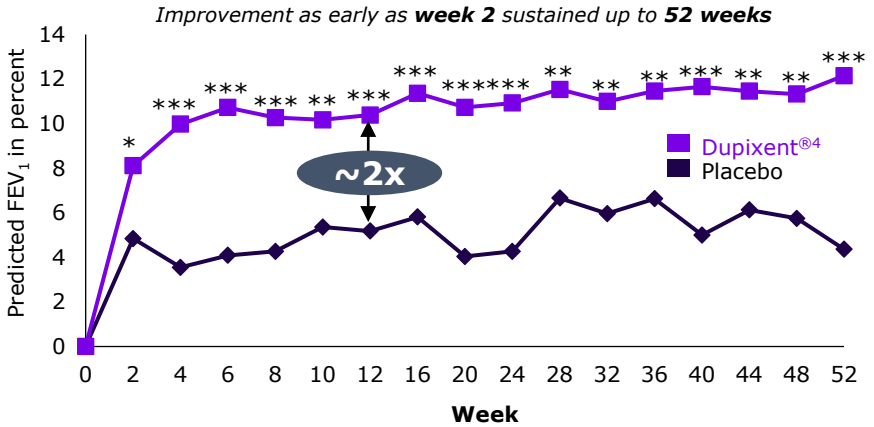


>60% Type 2 patients had no exacerbations for 3 years

6-11 years

Rapid and sustained improvement in lung function[5]

FEV_1 percent predicted, LS mean Δ from baseline (n=350)



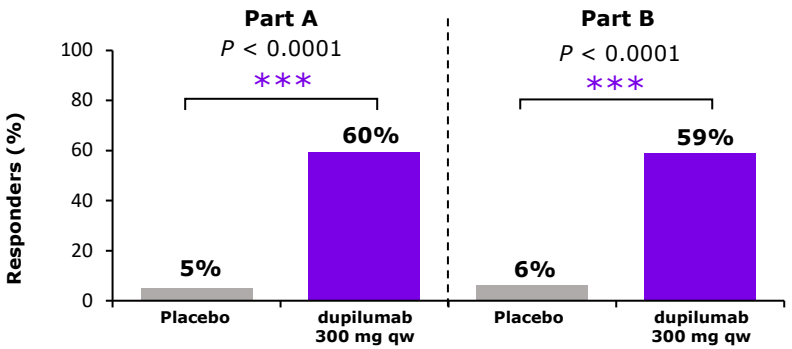
1. Type 2 phenotype: Eos ≥150 or FeNo ≥20 ppb, and/or OCS dependence. 2. Population treated with dupilumab 300 mg Q2W across QUEST & TRAVERSE (with 96-week data on TRAVERSE). 3. Historical refers to the mean event count of severe exacerbations in the 1 year prior to QUEST. 4. Dupixent® dose: 100mg q2w (16 to ≤ 30kg)/200mg q2w (> 30kg). 5. The overall rates of adverse events were 83% for Dupixent® and 80% for placebo

Pivotal results support Dupixent's® potential as the first and only biologic for *Eosinophilic Esophagitis*

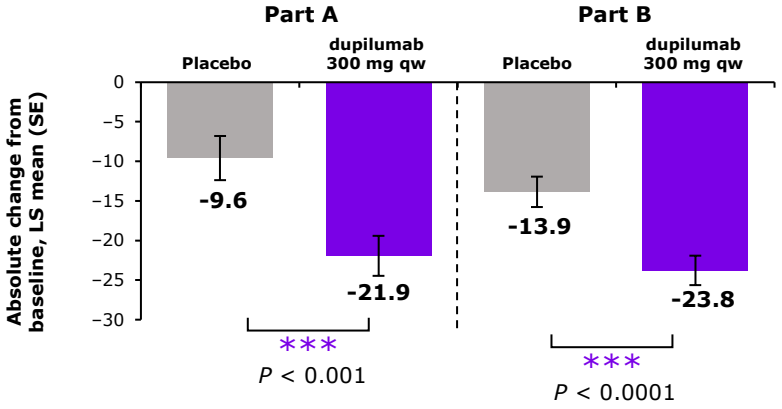
FDA
Breakthrough Therapy Designation

U.S. regulatory submission completed, pending FDA acceptance

Proportion of patients achieving peak esophageal eosinophil count ≤ 6 eos/hpf



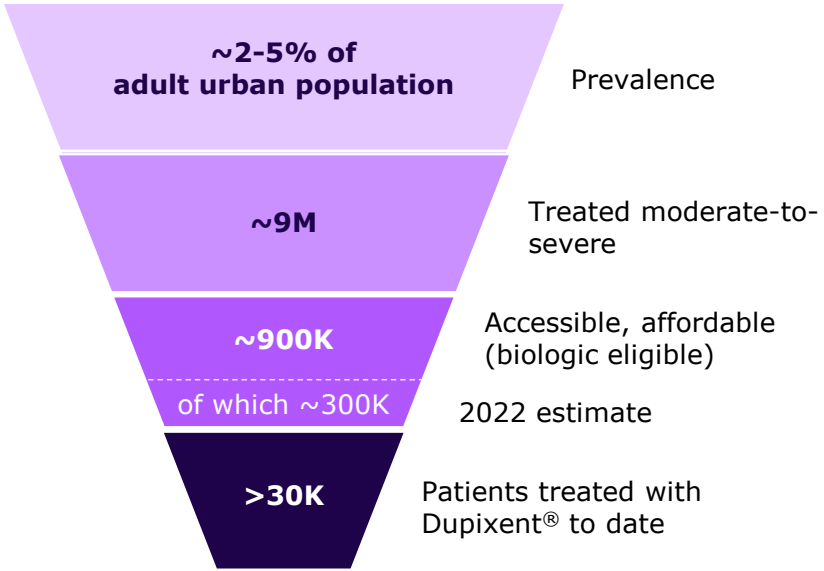
Absolute change from baseline in DSQ score, symptoms



Sources: Rothenberg Met al., Journal of Allergy and Clinical Immunology, Vol 149, Issue 2, Supplement, 2022,Pg AB312,
The safety results of the trials were generally consistent with the known safety profile of Dupixent® in its approved indications. For the 24-week treatment period, overall rates of adverse events were 84% (67/80) for Dupixent® 300 mg weekly and 71% (55/78) for placebo.Dupixent® in EoE is investigational and has not been fully reviewed by regulatory authorities; Dupixent® is developed and commercialized in collaboration with Regeneron

Dupixent® China: 'All In' to build a *Blockbuster*

High unmet need in AD[1]



Major Milestones Achieved – in less than 2 years

Atopic Dermatitis launch indication

- *July 2020* – fastest BLA approval in China
- *December 2020* – Inclusion in NRDL
- *September 2021* – Approval in adolescent AD indication
- *February 2022* – Approval in children 6Y+

Launch execution

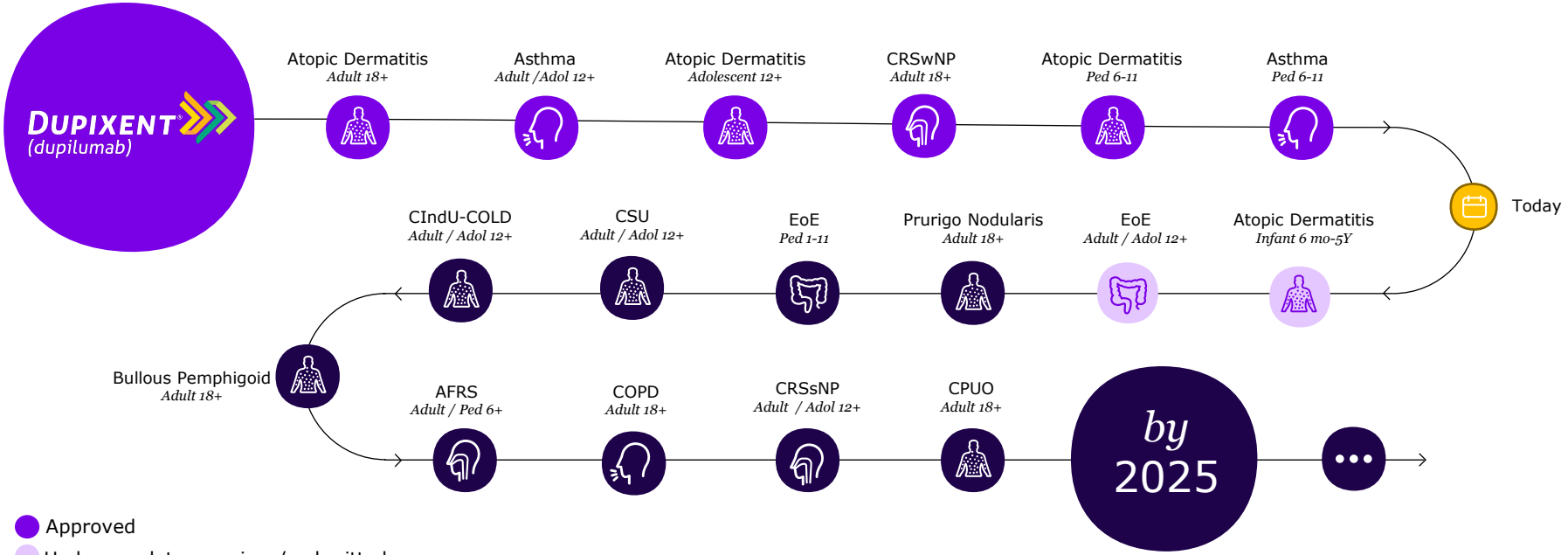
- Coverage in *>3,000 hospitals* and *>15,000 HCPs*
- *> 1,000 hospitals* listed
- *1/3* of accessible affordable market unlocked

Planned indications and launch year

- *AD infant* – 2023
- *Asthma* – 2024
- *COPD* – 2025

1 Based on China KOL estimates and publications as well as internal analysis; this is based on total urban China population (approximately 60% of total population)

We are just at the *beginning of our journey…*

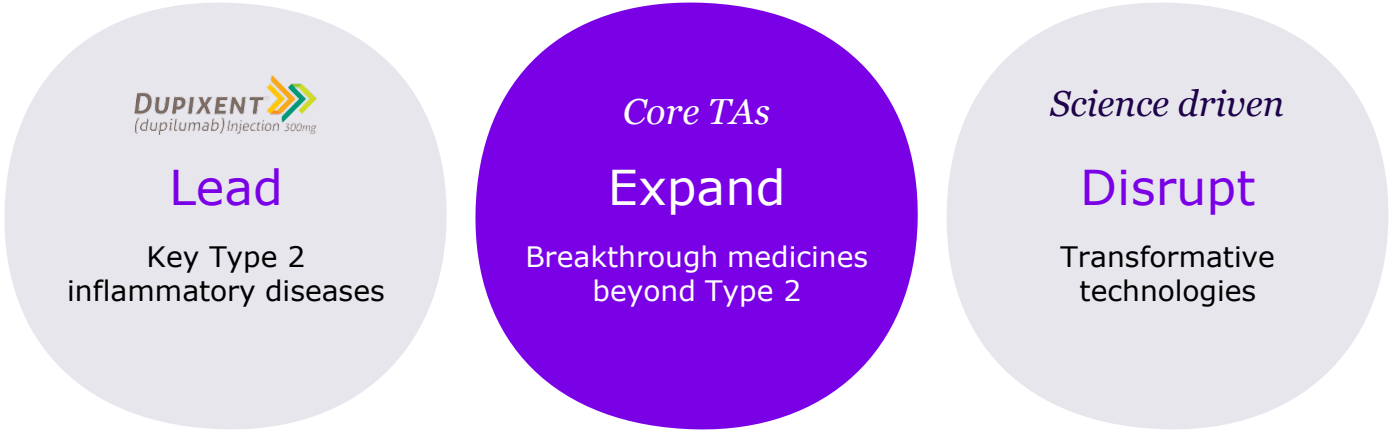


…opportunity to add at least *1.5 million*[1] of eligible patients

1. Sanofi epidemiology estimates

Immunology Franchise

Transforming the practice of medicine



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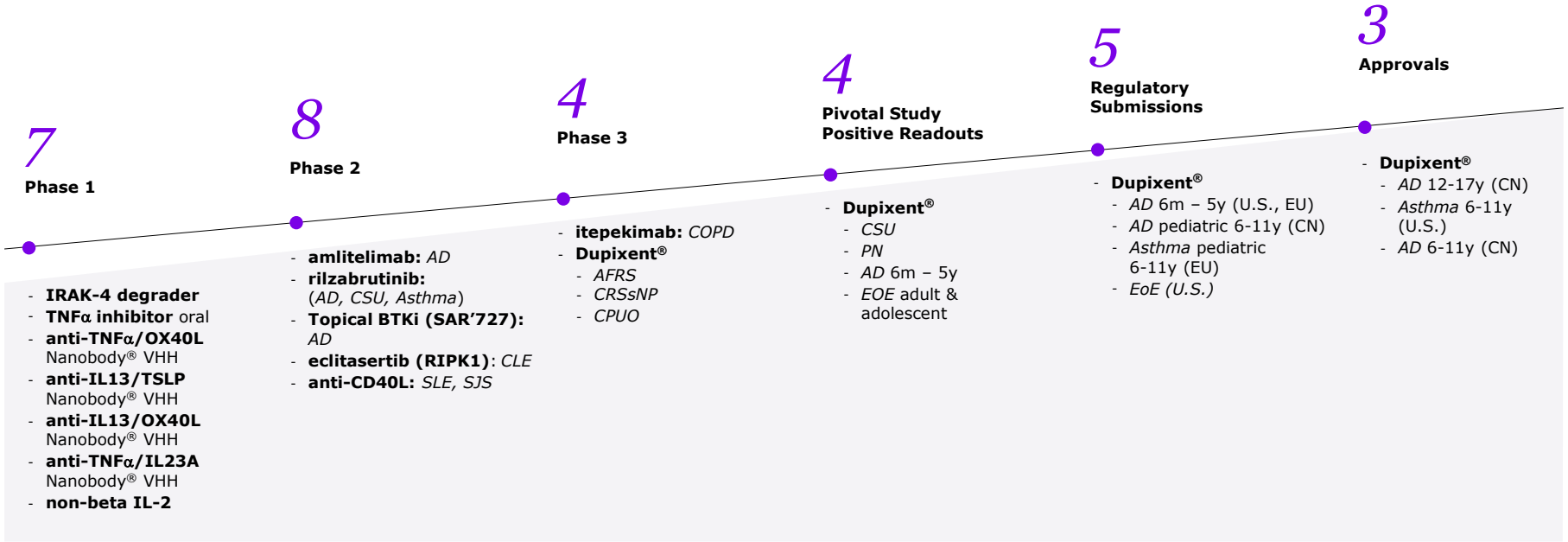
Leadership in Dermatology and Respiratory

Naimish Patel MD

Global Head of Development,
Immunology & Inflammation

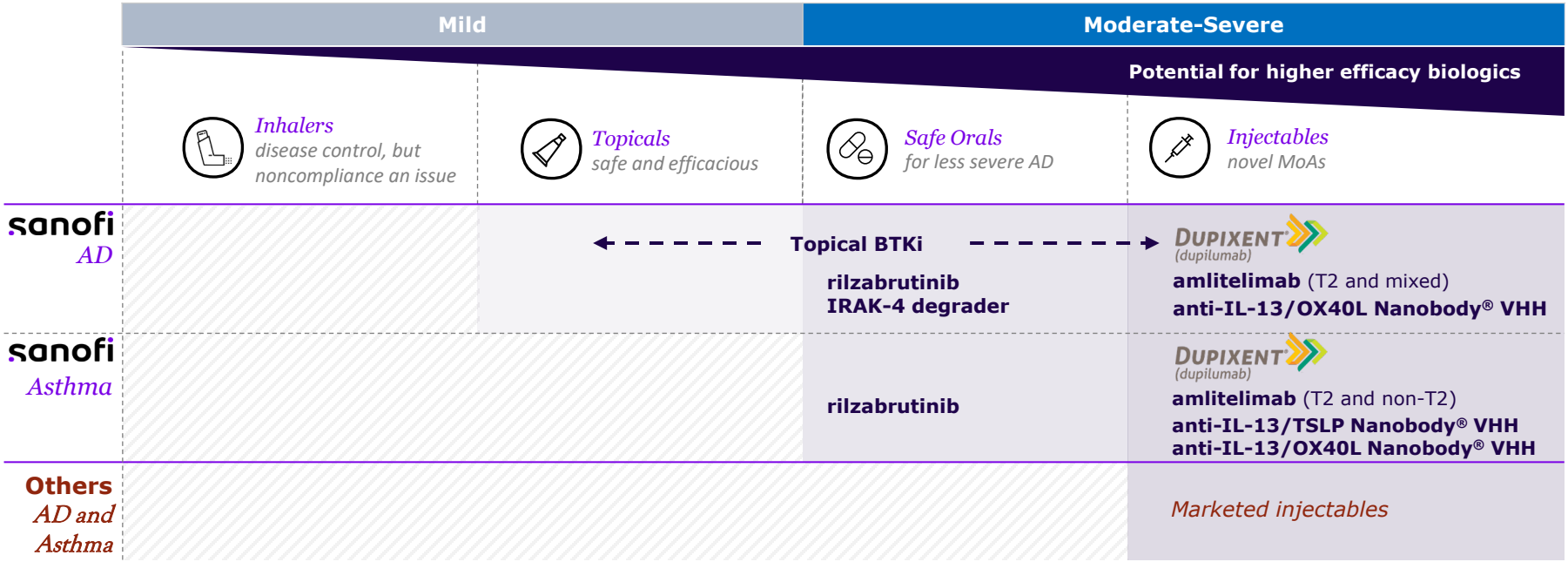
Immunology achievements since 2021 Capital Markets Day

1st Dupixent® COPD Study – BOREAS – completed enrollment Feb 2022



These products are currently under clinical investigation and their safety and efficacy have not been evaluated by any regulatory authority.
2021 CMD: Sanofi Capital Markets Day, February 5, 2021

Sanofi ambition to address *unmet medical needs* for *a broad spectrum of AD and Asthma* patients

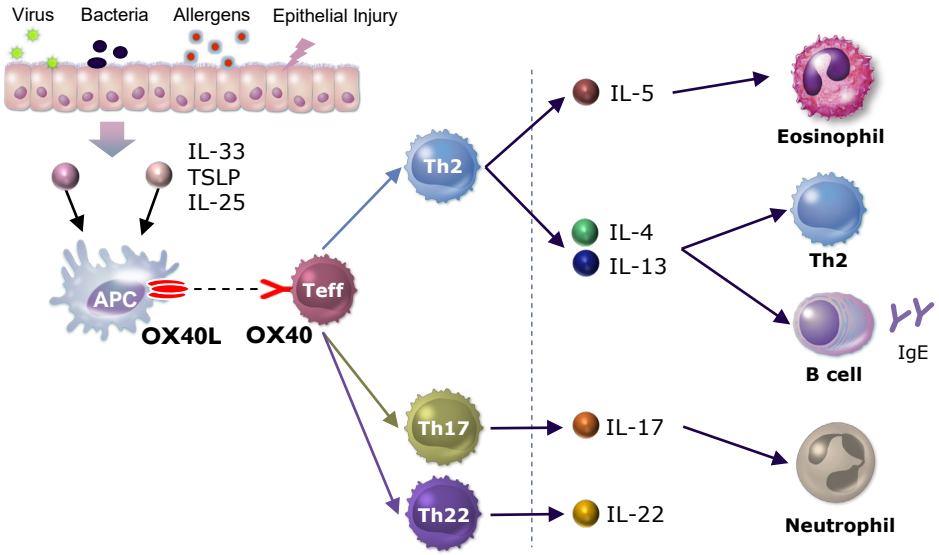


Except with respect to Dupixent®, all listed agents are investigational and the safety and efficacy has not been evaluated by any regulatory authority

Beyond Type 2: Opportunity for *amlitelimab* and *rilzabrutinib* in patients with mixed inflammatory response

Upstream Initiation
Activation

Tissue Effects
Amplification



Atopic Dermatitis
Precision Medicine Approach

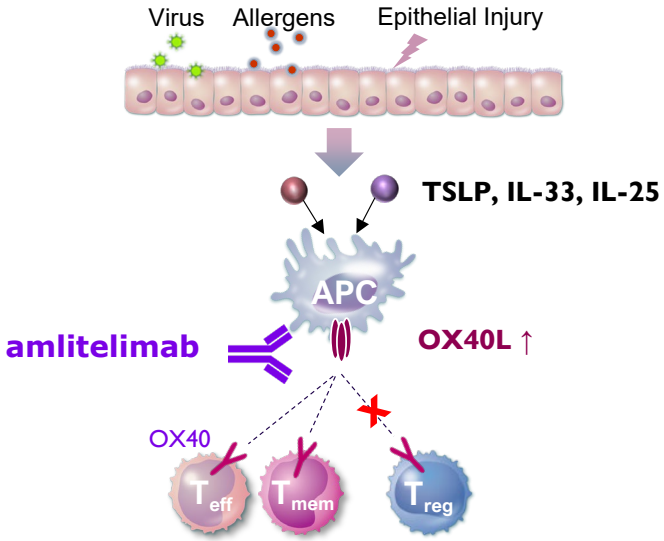
Th2 dominant
Dupixent®
amlitelimab
(anti-OX40L)

Th17/22+Th2 (mixed)
Dupixent®
amlitelimab (anti-OX40L)

rilzabrutinib (BTKi)

Source: https://www.type2inflammation.com/science-cytokines. Immunity. 2019 Apr 16;50(4):778-795
Noda et al, J Al Clin Imm 2015 Nov;136(5):1254-64.
All listed agents, except Dupixent®, are investigational and the safety and efficacy has not been evaluated by any regulatory authority.

Amlitelimab, an anti-OX40L, rebalances inflammation *without immunosuppressive cell depletion* in early studies

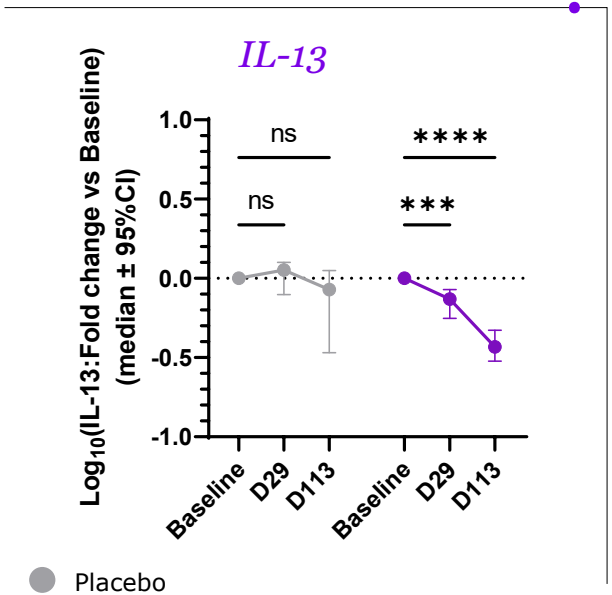


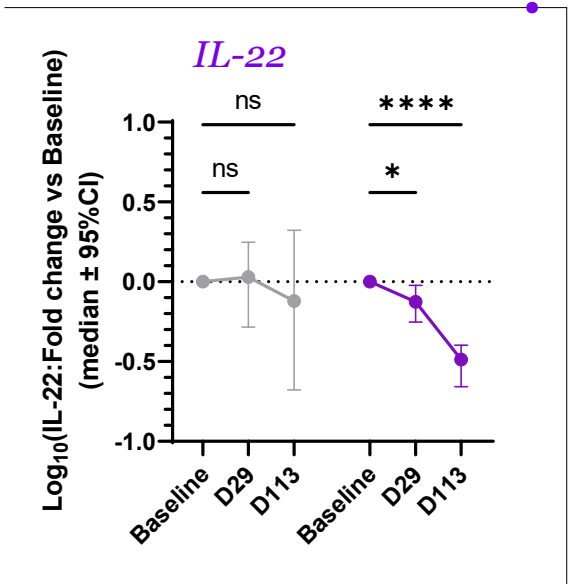
OX40L blockade with advantages to OX40 depletion

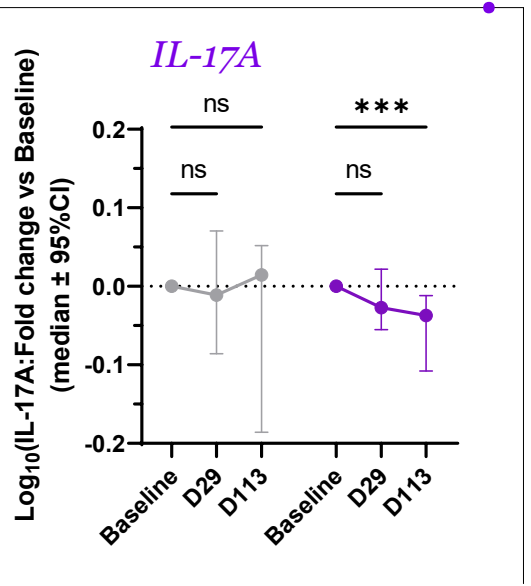
	OX40L Blocker	OX40 Depleter
Limited expression at sites of inflammation	✓	✗
Preserves T_{eff}, T_{mem} cells	✓	✗
Preserves and activates T_{reg}	✓	✗
Avoids cytokine release (fever, chills)	✓	✗

The information on this slide is for purposes of illustrating Amlitelimab's differentiated MoA. No conclusions should be drawn regarding the clinical efficacy of Amlitelimab alone or in comparison to any other treatment. No head to head studies comparing the referenced MoAs have been conducted. Amlitelimab is currently under clinical investigation, and its safety and efficacy have not been evaluated by any regulatory authority. Need to be confirmed in Ph3 trials.

Amlitelimab treatment decreases key Type 2 and non-Type 2 *pathway biomarkers* in AD[1] patients





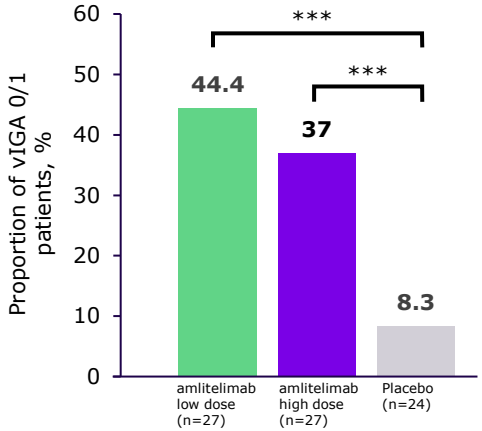


Placebo
amlitelimab

Phase 2a data
****p<0.0001; ***p<0.001; *p<0.05; Baseline vs Day 29/113 (Two-way ANOVA with Dunnett's multiple comparisons test). Amlitelimab is currently under clinical investigation, and its safety and efficacy have not been evaluated by any regulatory authority

Amlitelimab - Priority Asset with a *highly competitive target profile*

Ph 2 study[1]: >40% with clear/almost clear skin (16 weeks Q4W)



Potential *first-in-class* anti-OX40L

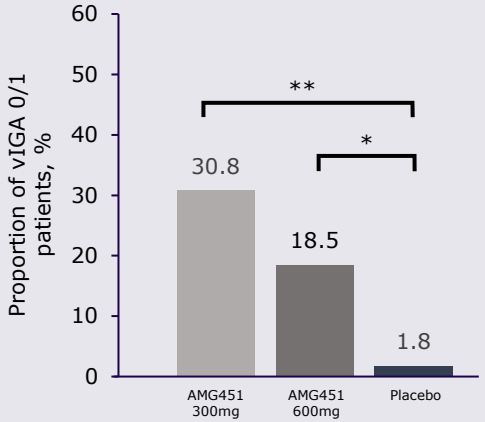
Convenient *subcutaneous administration* starting with Phase 2b

Attractive target product profile due to *infrequent dosing regimen* and *durability of response*, addressing mixed-phenotype AD populations

~70% of IGA 0/1 patients with *sustained response* off drug for 24 weeks

***p<0.001 vs placebo (Cochran-Mantel-Haenszel test)
1. Abstract 2729, Weidinger S, EADV 2021
The information on this slide is for purposes of illustrating amlitelimab's differentiated target profile. No head to head studies have been conducted and therefore, no conclusions should be drawn regarding the clinical efficacy of amlitelimab alone or in comparison to any investigational or approved treatment.

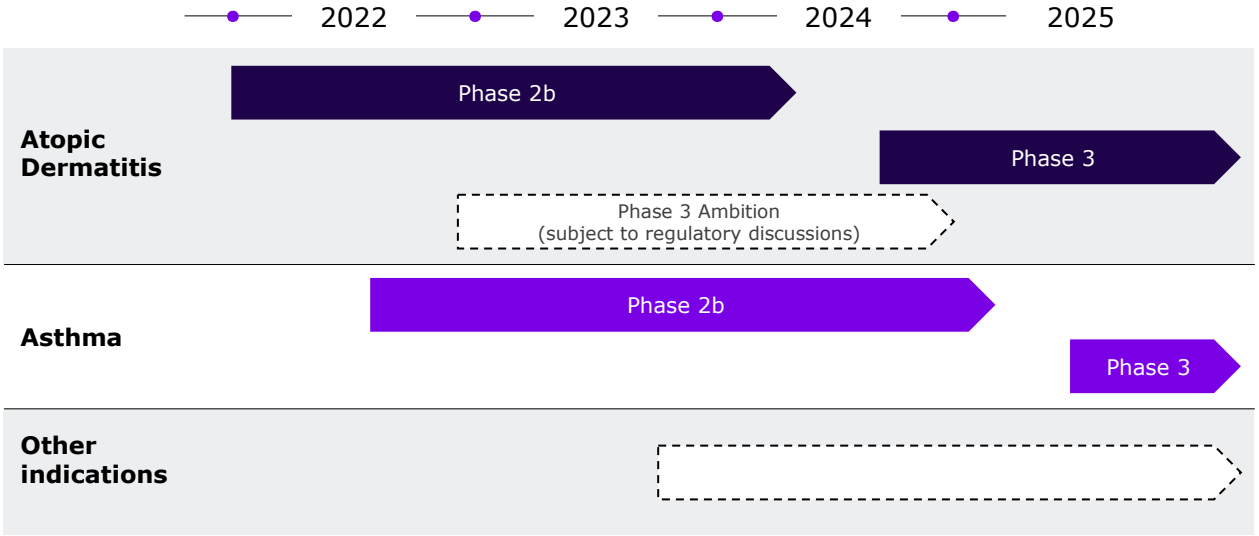
Ph 2 study[2]: AMG451 (16 weeks Q2W)



**p<0.001 ; *p<0.05 vs placebo (Cochran-Mantel-Haenszel test)
2. Abstract 2867, Guttman-Yassky E, EADV 2021

Amlitelimab - *Accelerated development* program following compelling Ph 2 data

Rapid Phase 2b start following positive Phase 2a in AD in 2021

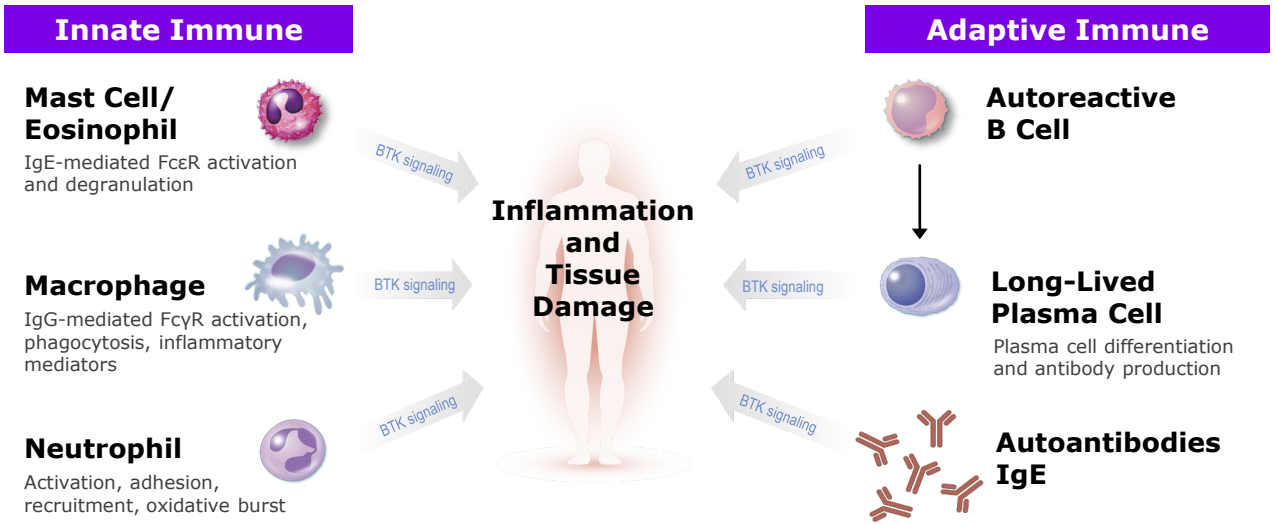


Plan to run Phase 3 in *Atopic Dermatitis* concurrently to Phase 2

Asthma Phase 2b starting in second half of 2022

Planned development programs for other indications to start in 2023

Rilzabrutinib and *Topical BTKi* positioned to address earlier stage Atopic Dermatitis



Topical BTKi (SAR444727)

- Phase 2 study readout in H1 2023

rilzabrutinib

- Phase 2 study in moderate to severe AD
- Readout in H1 2023

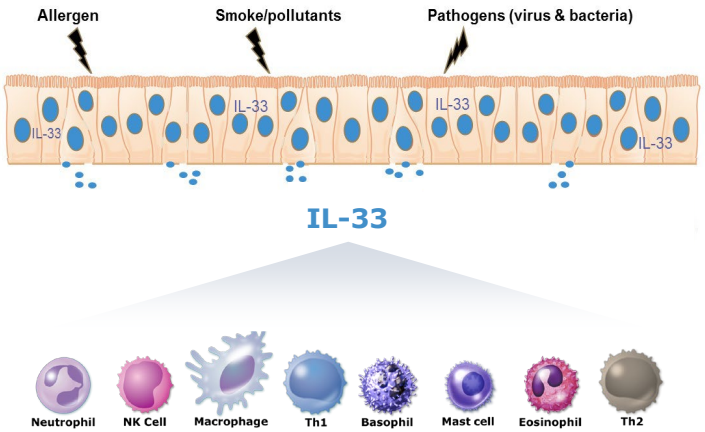
Rilzabrutinib and topical BTKi are currently under clinical investigation, and their safety and efficacy have not been evaluated by any regulatory authority

Rilzabrutinib is being evaluated in *multiple Phase 2 clinical trials* across a *range of indications*

	AD	Asthma	CSU	IgG4
Target Population	Inadequately controlled with topicals; adults 18 or older; moderate-severe	Add-on to ICS and second controller; adults 18-70 yrs, moderate-severe	moderate-severe disease; inadequate response to oral anti-H1	Adult patients with IgG4-RD
Clinical Trial Design	- Placebo-controlled, 2 dose levels - N=120 - Primary efficacy evaluated at week 16	- Placebo-controlled, 2 dose levels - N=192 - Primary efficacy at week 12	- Placebo-controlled, 3 dose levels - N=152 - Primary efficacy evaluated at week 12	- 2 arms, open label - N=25 - Primary efficacy evaluated at week 12
Primary Endpoint	- Change in EASI Score	- Loss of Asthma Control	- ISS7/UAS7	- IgG4-RD RI
Positioning in oral BTKi class	**Best-in-class**	**First-in-class**	**Best-in-class**	**First-in-class**

Phase 2 readouts in 2023 and 2024

Itepekimab: A *potent IL-33 blocker* with sub-nanomolar affinity

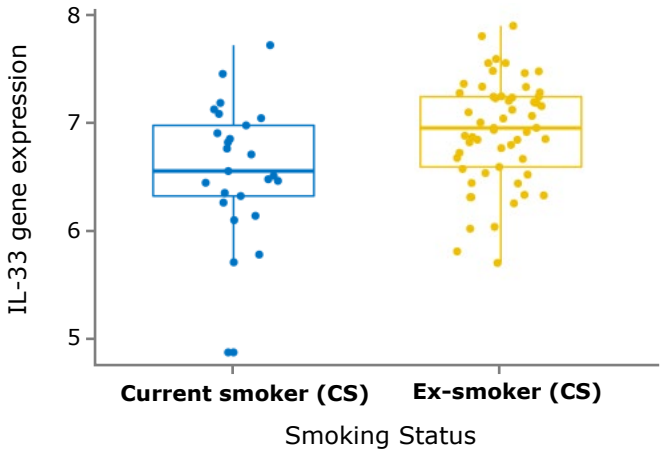


- Binds to human IL-33 with *high affinity* (K_d = 42 pM)
- Blocks the formation of the IL-33 / ST2 (IL-33 receptor) signaling complex and attenuates the downstream inflammatory cascade including both Type 2 and Type 1 immune responses
- Potential to be *best and first-in-class IL-33 biologic* to treat former smokers with moderate to severe Type 2 and non-Type 2 COPD
- *Potential for best-biologic efficacy*, with unprecedented exacerbation reduction in former smokers

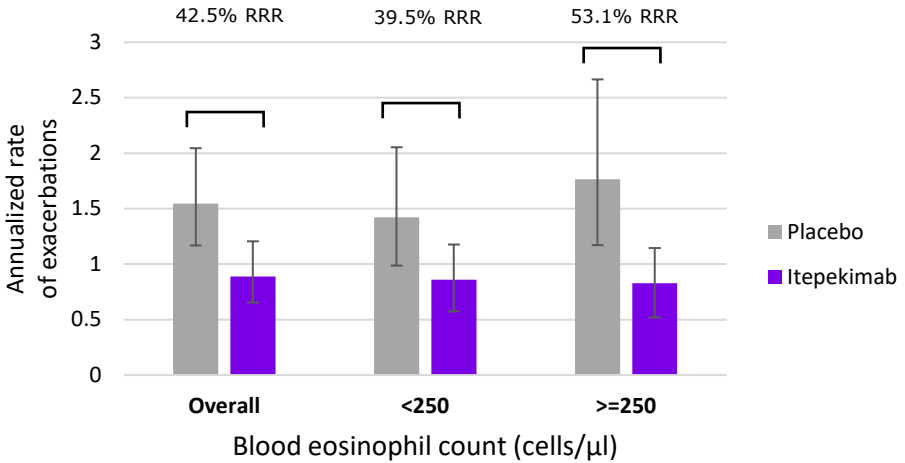
Itepekimab is under investigation and not yet approved by any regulatory agency.

Itepekimab - *Clear benefit in former smokers* in COPD Phase 2 demonstrated regardless of Type 2 status[1]

Higher IL-33 gene expression in lungs of former smokers with COPD



Itepekimab reduced exacerbations in COPD former smokers, in Type 2 and non-Type 2 patients



1. Rabe et al. Lancet Respir Med. 2021
Itepekimab is under investigation and not yet approved by any regulatory agency. Itepekimab was generally well tolerated. Treatment emergent adverse events occurred in 78% of itepekimab patients and 80% of placebo patients.

Address airway inflammation to *improve lung function* and *reduce exacerbations* in COPD

Potential treatment paradigm

Paula

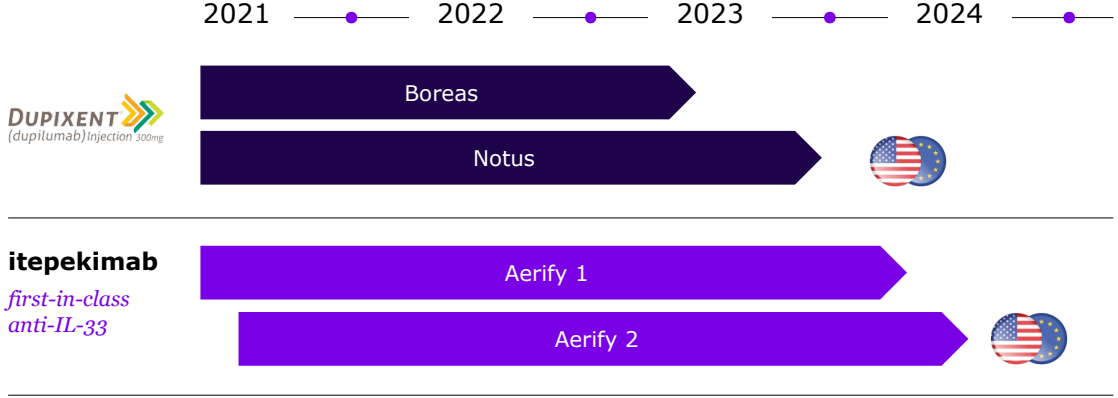
67 yr woman
COPD for 10 years
3 exacerbations in last year
Frequent SOB, Cough
Meds: ICS/LABA/LAMA

- Active Smoker → **High** Blood eos → Dupixent®
- Former Smoker
  - → **High** Blood eos → Dupixent®
  - → **High** Blood eos → itepekimab
  - → **Low** Blood eos → itepekimab

Itepekimab is under investigation and not yet approved by any regulatory agency. Dupixent® is under investigation in COPD and not yet approved by any regulatory agency to treat COPD.

Parallel studies to address both *Type 2 and non-Type 2 COPD*

Itepekimab Phase 3 and Dupixent® Phase 3 in COPD are targeting *two distinct populations* with minimal overlap



Ambition to lead in COPD with two complementary assets, Dupixent® and itepekimab, with potential to deliver *first-in-class and best-biologic efficacy*

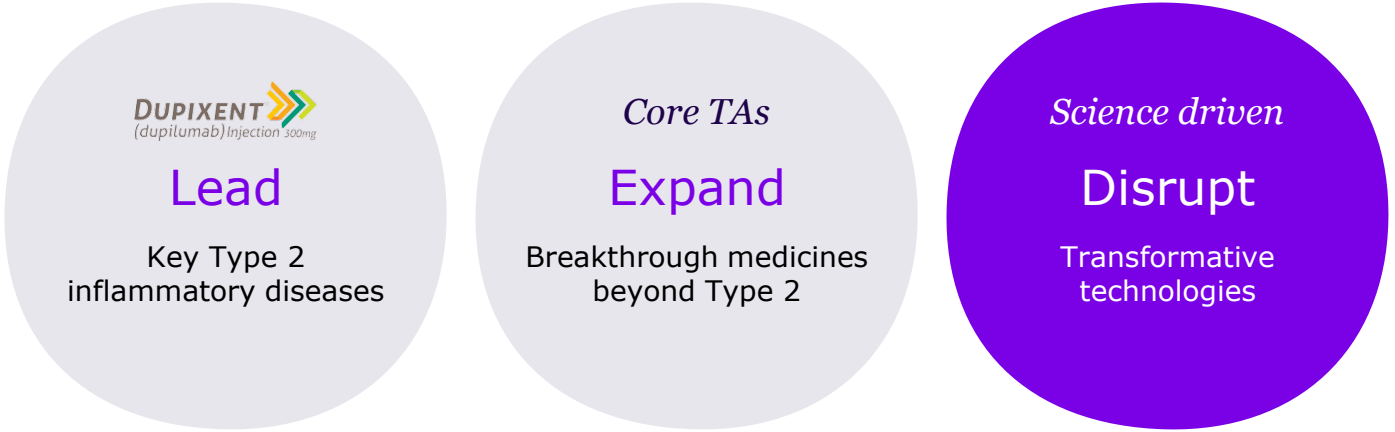
Itepekimab pivotal program addresses an *additional 40%* of COPD patients not targeted by Dupixent®

Opportunity to *lead the science of emerging COPD endotypes* (e.g. former smokers/frequent exacerbators)

LPI achieved in Feb 2022 for Boreas

Immunology Franchise

Transforming the practice of medicine



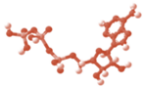
sanofi

Breaking into New Frontiers in Immunology

Frank Nestle

Global Head of Research
and Chief Scientific Officer

Disruptive technologies driving *FiC/BiC medicines*



Small Molecules

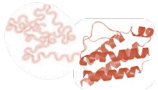
- rilzabrutinib
- eclitasertib/ RIPK1 Inhibitor
- TNFα Inhibitor
- IL-17A Blocker

Antibodies

- anti-CD40L
- amlitelimab
- itepekimab
- dupilumab

Nanobody® Molecules

- anti-IL-13/TSLP
- anti-IL-13/OX40L
- anti-TNFα/OX40L
- anti-TNFα/IL-23



Synthetic Cytokines

- Non-beta IL-2

Degraders

- IRAK4 Degrader

5 **Respiratory** | ***4*** **Dermatology** | ***4*** **Gastroenterology** | ***4*** **Rheumatology**

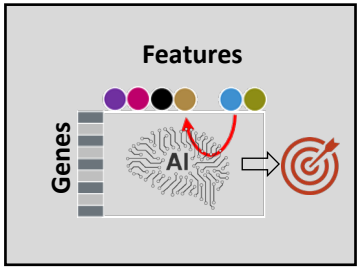
AI research factory

Improving quality and productivity of immunology research portfolio

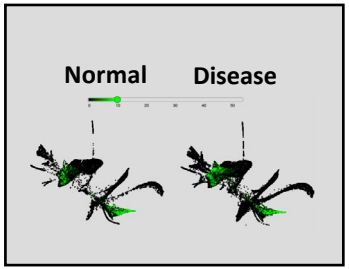
<< *AI Empowered* >>

Target *Discovery* | **Drug** *Discovery* | **Clinical** *Translation*

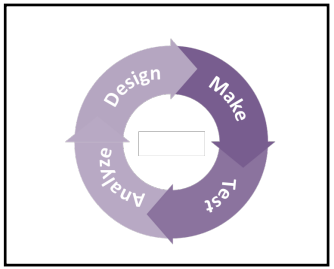
Target Identification Engine



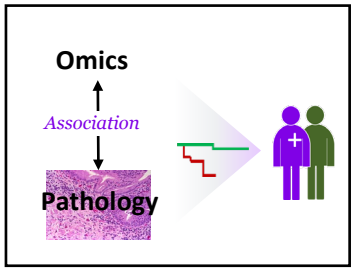
Single-Cell Disease Maps



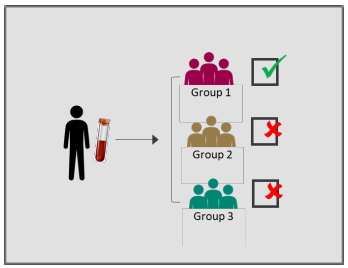
DMTA based Molecular Design



Digital Pathology



Disease Endotyping & Patient Stratification

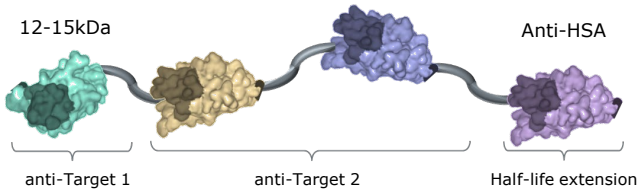


Exscientia OWKIN

Reducing timelines and increasing probability of success

Nanobody® molecules enable multi-targeting strategy

A strong early clinical pipeline delivering transformative medicines



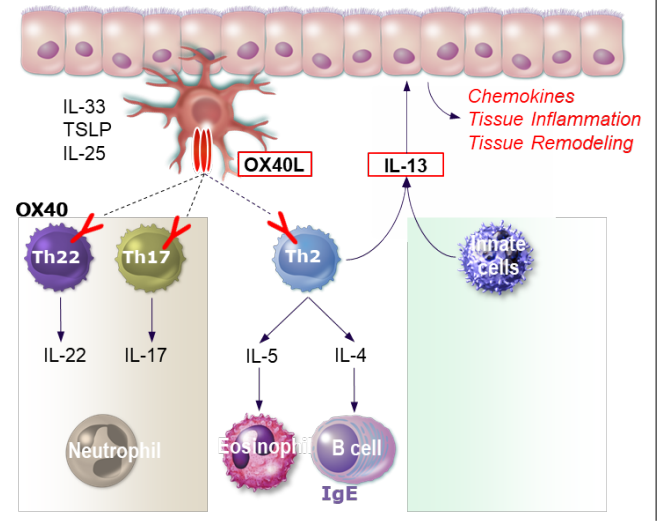
- Multi-targeting strategy to break efficacy ceilings
- Convenience of dosing
- Convenience of administration
- Simplified development approach
- Favorable economics and Cost of Goods

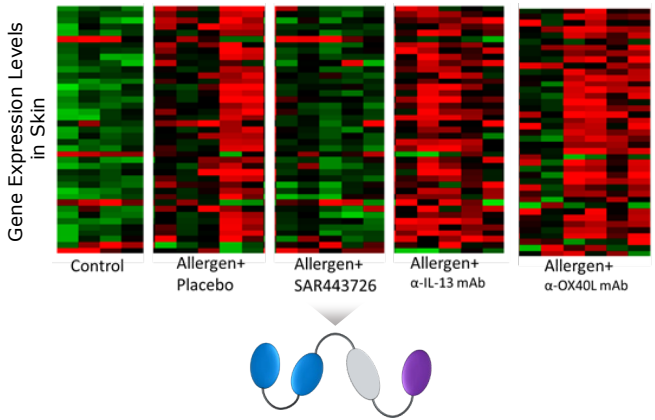
Aspirational Profile

anti-IL-13/TSLP	Phase I	Asthma	- Break efficacy ceiling - Broadening patient population
anti-IL-13/OX40L	Phase I	AD	- Break efficacy ceiling - Durable disease remission
anti-TNFα/OX40L	Phase I	RA	- Break efficacy ceiling - Durable disease remission
anti-TNFα/IL-23	Phase I	UC	- Break efficacy ceiling - Address TNFi non-response
anti-TNFα/IL-6	Preclinical	RA	- Break efficacy ceiling - Durable disease remission

Anti-IL-13/OX40L bispecific Nanobody® molecule

Potential to break efficacy ceilings in Type 2 Inflammation





House Dust Mite induced skin inflammation in a model of Atopic Dermatitis demonstrates potent reversal of reactions by SAR443726

Anti-IL-13/OX40L Nanobody® VHH with potent picomolar binding affinity to both IL-13 and OX40L

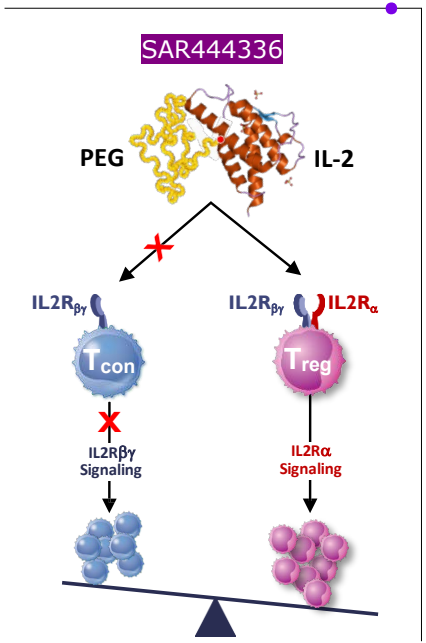
Albumin-binding designed to extend half-life

Enhanced efficacy of bispecific Nanobody® VHH in several preclinical models of Type 2 biology & diseases

Phase 1 in healthy subjects ongoing; Indication: AD

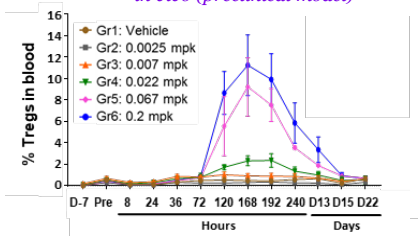
SAR444336/THOR-809: Precisely engineered non-β IL-2

Selectively targeting regulatory T cells to restore immune homeostasis

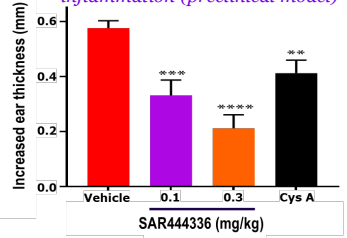


Tregs expanded in vivo are highly suppressive

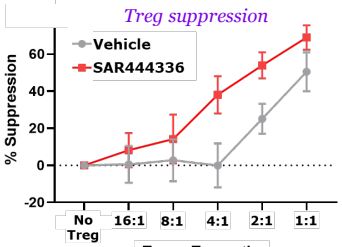
Dose-dependent Treg expansion in vivo (preclinical model)



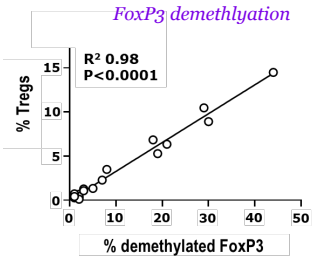
Dose-dependent control of skin inflammation (preclinical model)



Treg suppression



FoxP3 demethlyation



Unique platform leverages **synthetic biology technology**

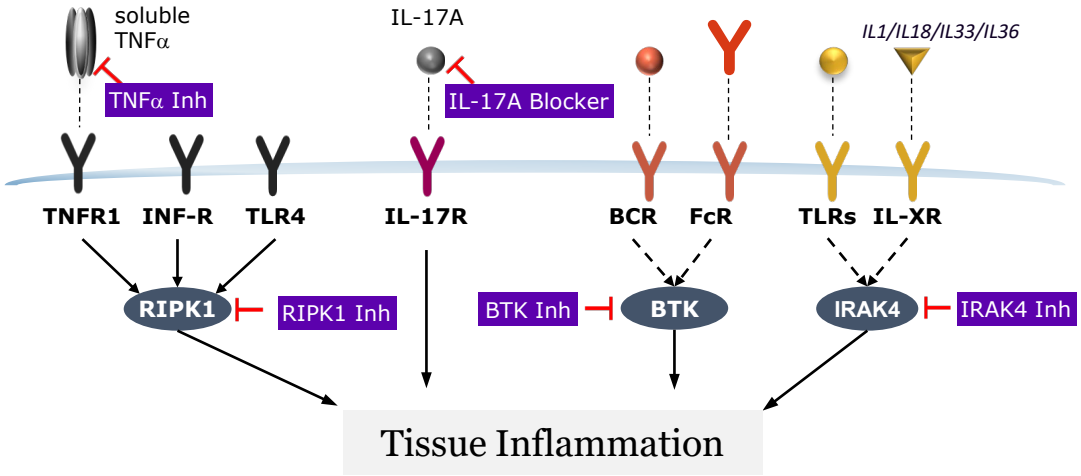
Engineered for:
- Site-specific PEGylation affords absent binding to IL-2Rβ with preserved IL-2Rα engagement
- Low MHC binding to limit immunogenicity

Achieves **high Treg selectivity**
- Expansion of highly suppressive Tregs with demethylated FOXP3 gene

Controls skin inflammation *in vivo* in preclinical model

Phase 1 in healthy subjects in progress

Next-generation of *oral pathway medicines*



Dermatology | Respiratory | Gastroenterology | Rheumatology

Antibody-like efficacy with oral convenience

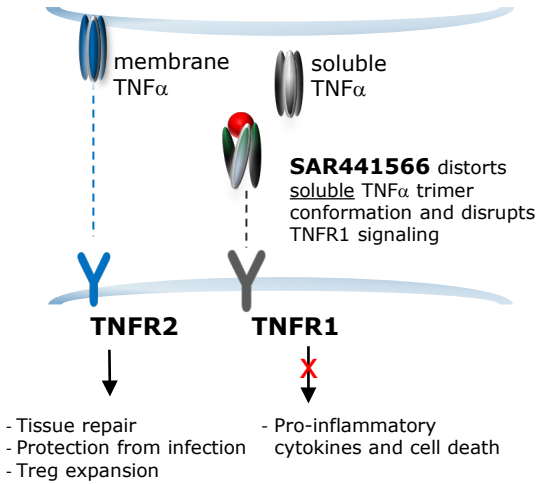
- **Soluble TNFα Inhibitor** (**SAR441566**) selectively blocks TNFR1 signaling
- **Oral IL-17A Blocker** target a key pro-inflammatory pathway

Tackling nodal targets

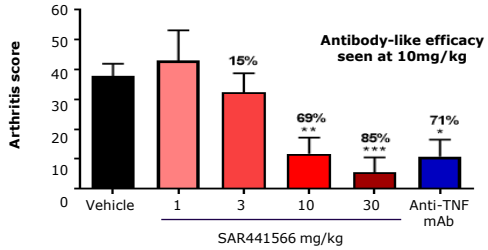
- **RIPK1 Inhibitor (eclitasertib)** targets a master regulator of cell death and proinflammatory cytokine production
- **BTK Inhibitor – covalent reversible (rilzabrutinib)** targets 2 key molecular pathways
- **IRAK4 Degrader** – blockade of kinase and scaffold function for maximal disease impact

SAR441566: The first oral TNFα inhibitor

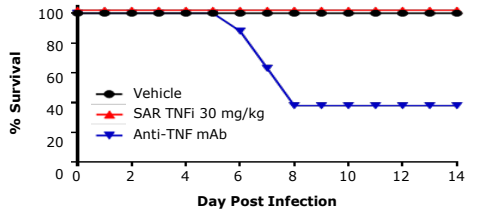
Tackling the largest therapeutic class in immunology



Antibody-like efficacy in arthritis model



Listeria infection model



Oral TNFα inhibitor treated mice do not succumb to listeria infection in contrast to anti-TNF biologic

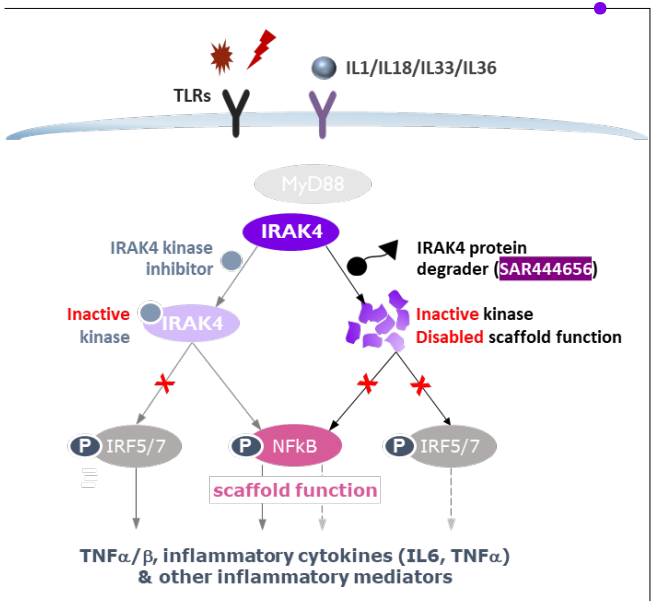
SAR441566, small molecule TNFα inhibitor, offers potential for antibody-like efficacy with oral convenience

Selective inhibition of TNFR1 signaling offers potential for lower infection risk and improved efficacy

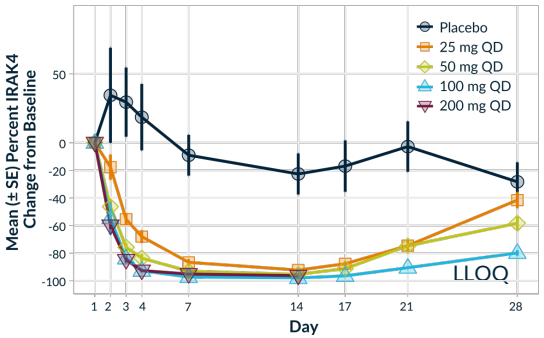
Unique Mechanism of Action presents a potential to differentiate from marketed TNFα biologics and JAK inhibitors

Phase 1 in healthy subjects ongoing
Proof of Mechanism readout in Psoriasis early 2023

SAR444656 (KT-474): *Potent orally bioavailable IRAK4 degrader*



Ph1 MAD PBMC IRAK4 (Kymera)



Degradation of IRAK4 protein abolishes its kinase activity and scaffold function

Potential for oral immunology pathway drug **across multiple indications**

SAR444656 treatment resulted in **potent IRAK4 protein degradation** in blood (PBMC) and skin of healthy volunteers

Ph1 study ongoing

Expected advances in early *Immunology Pipeline*

6 Phase 1 readouts

H1 2022
- TNFα inhibitor oral

H2 2022
- anti-IL-13/OX40L Nanobody® VHH
- anti-TNFα/OX40L Nanobody® VHH
- IRAK-4 degrader oral

2023
- anti-TNFα/IL-23 Nanobody® VHH
- non-beta IL-2

3 Phase 1b (PoM) readouts

H2 2022
- anti-IL-13/TSLP Nanobody® VHH: *Asthma*

2023
- TNFα inhibitor oral: *Psoriasis*

2024
- anti-IL13/OX40L Nanobody® VHH: *AD*

8 Phase 2 readouts

2022
- Topical BTKi: *AD*

2023
- eclitasertib (RIPK1): *CLE*
- CD40L: *SJS, SLE*
- rilzabrutinib (BTKi): *AD, CSU, Asthma*

2024
- rilzabrutinib (oral BTKi): *IgG4*

These products are currently under clinical investigation and their safety and efficacy have not been evaluated by any regulatory authority.

Roadmap for leadership in Immunology Research

Key Nodal Pathways

Technology Innovation

Precision Immunology

Our Ambition:

Breaking efficacy ceilings, achieving durable response and expanding into new indications

Agenda

Immunology Investor Event, March 29, 2022

8:00-8:05 Introduction, Eva Schaefer-Jansen

8:05-9:00 Presentation

Play to Win in Immunology, Paul Hudson

Immunology Strategy, Bill Sibold

Leading with Dupixent®, Brian Foard

Expand beyond Type 2, Naimish Patel

Disruptive technologies, Frank Nestle

9:00-9:10 Break

9:10-9:50 Expert encounter

'Fireside chat'

John Reed in dialogue with:

- **Bartolome R. Celli**, MD, FCCP
  Brigham and Women's Hospital
  Professor of Medicine, Harvard Medical School
- **Joseph F. Merola**, MD, MMSc
  Brigham and Women's Hospital
  Associate Professor, Harvard Medical School

9:50-10:20 Q&A with Presenters

10:20-10:30 Moving to 2 breakout sessions

10:30-11:00 Breakout session 1

Dermatology

Moderated by Brian Foard/Frank Nestle and Sanofi panelists

11:00-11:05 Switching rooms/Break

11:05-11:35 Breakout session 2

Respiratory

Moderated by Bill Sibold/Naimish Patel and Sanofi panelists

11:35-11:40 Break and move back to main plenary session

11:40-11:50 Concluding remarks

Paul Hudson


sanofi

Collaborations

Name	Developed in collaboration with…
Dupixent® **itepekimab** **Kevzara®**	Regeneron
eclitasertib (RiPK1i)	Denali
SAR444656 (IRAK-4)	Kymera

Abbreviations (Part 1)

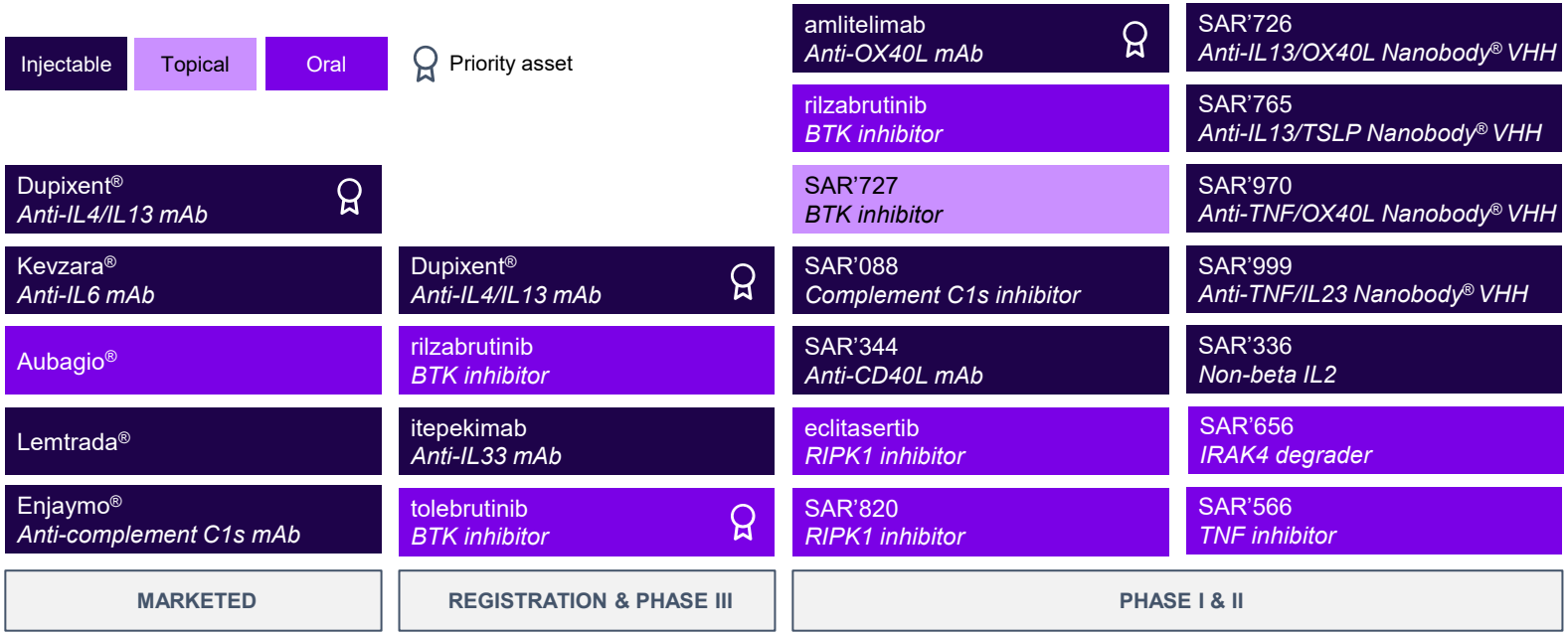
AD	Atopic Dermatitis
AFRS	Allergic Fungal Rhinosinusitis
AI	Artificial Intelligence
APC	antigen-presenting cell
BD	Business Development
BiC	Best In Class
BLA	biologic license application
BOI	Business Operating Income
BP	Bullous Pemphigoid
BTKi	Bruton tyrosine kinases inhibitor
CInDU	Chronic Inducible Cold Urticaria
CLE	Cutaneous Lupus Erythematosus
CMD	capital market day
CN	China
COPD	Chronic Obstructive Pulmonary Disease
CPUO	Chronic Pruritus of Unknown Origin
CRSsNP	Chronic Rhinosinusitis without Nasal Polyps
CRSwNP	Chronic Rhinosinusitis with Nasal Polyps
CSU	Chronic Spontaneous Urticaria
DMTA	Design, Make, Test, Analysis
DSQ	Dysphagia Symptom Questionnaire
EASI	Eczema Area and Severity Index
EoE	Eosinophilic Esophagitis
Eos /hpf	Eosinophil / high power field
EU	European Union
FcγR	Fc (fragment crystallizable)-gamma receptors
FcεR	Fc-epsilon receptors
FEV1	Forced Expiratory Volume
FiC	First-in-class

FPI	first patient in
HCP	HealthCare Partners
HS	Hidradenitis Suppurativa
HSA	human serum albumin
IBD	Inflammatory Bowel Disease
ICS	Inhaled corticosteroids
Ig	immunoglobulin
IGA	Investigator Global Assessment
IgG4-RD	IgG4-related disease
IgG4-RD RI	IgG4-RD Responder Index
IL	interleukin
IPF	Idopathic Pulmonary Fibrosis
IRAK4	Interleukin-1 receptor-associated kinase 4
ISS7	Injury Severity Score
JAK	Janus kinase
JP	Japan
kDa	kilodalton
LABA	Long-acting beta-agonists
LAMA	Long-acting muscarinic antagonists
LoE	Loss of Exclusivity
LPI	Last Patient In
LS	Least Squares
LS mean (SE)	least square mean (standard error)
mAb	Monoclonal Antibody
MoA	Mechanism of Action
Nab	Nanobody® VHH
NBRx	New-to-brand
NK cell	natural killer cell
NRDL	National Reimbursement Drug List

Abbreviations (Part 2)

oral anti H1	Oral H1 antihistamines
OX40L	OX40 ligand
PN	Prurigo Nodularis
PoM	Proof of Mechanism
Q2W	Once every two-week dosing
Q4W	Once every four-week dosing
QW	Once weekly dosing
RA	Rheumatoid Arthritis
RIPK1	Receptor-Interacting serine/threonine-Protein Kinase 1
RRR	Relative Risk Reduction
SJS	Sjögren's Syndrome
SLE	Systemic Lupus Erythematosus
SOB	Shortness of breath
SoC	Standard of Care
TAs	Therapeutic Areas
Teff	Effector T cells
TH2, (TH17, TH22,…)	T helper 2 cells
Tmem	Memory T cells
TNF	tumour necrosis factor
TNFR	TNF receptor
Treg	Regulatory T cells
TSLP	Thymic stromal lymphopoietin
UAS7	Urticaria Activity Score
UC	Ulcerative Colitis

Building an *industry-leading* immunology pipeline



As of March 29, 2022