Company Overview

April 2025

NASDAQ: JBIO

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Forward Looking Statements

Certain statements in this presentation, other than purely historical information, may constitute "forward-looking statements" within the meaning of the federal securities laws, including for purposes of the "safe harbor" provisions under the Private Securities Litigation Reform Act of 1995. These forward-looking statements include, but are not limited to, express or implied statements relating to Jade's expectations, hopes, beliefs, intentions or strategies regarding the future of its pipeline and business including, without limitation, Jade's ability to achieve the expected benefits or opportunities with respect to JADE-001, JADE-002 and JADE-003, including the expected timelines for JADE-001 entering the clinic and initial data from such trial, the potential of JADE-001, JADE-002 and JADE-003 to become best-in-class drugs and the timing of the combined company's trading on The Nasdaq Capital Market. The words "opportunity," "potential," "milestones," "pipeline," "can," "goal," "strategy," "target," "anticipate," "achieve," "believe," "contemplate," "continue," "could," "estimate," "expect," "intends," "may," "plan," "possible," "project," "should," "will," "would" and similar expressions (including the negatives of these terms or variations of them) may identify forward-looking statements, but the absence of these words does not mean that a statement is not forward-looking. These forward-looking statements are based on current expectations and beliefs concerning future developments and their potential effects. There can be no assurance that future developments affecting Jade will be those that have been anticipated. These forward-looking statements involve a number of risks, uncertainties (some of which are beyond Jade's control) or other assumptions that may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements. These risks and uncertainties include, but are not limited to, risks related to those uncertainties and factors more fully described in Jade's most recent filings with the Securities and Exchange Commission (including its S-4 Registration Statement), as well as risk factors associated with companies, such as Jade, that operate in the biopharma industry. Should one or more of these risks or uncertainties materialize, or should any of Jade's assumptions prove incorrect, actual results may vary in material respects from those projected in these forward-looking statements. Nothing in this communication should be regarded as a representation by any person that the forward-looking statements set forth herein will be achieved or that any of the contemplated results of such forward-looking statements will be achieved. You should not place undue reliance on forward-looking statements in this communication, which speak only as of the date they are made and are qualified in their entirety by reference to the cautionary statements herein. Jade does not undertake or accept any duty to release publicly any updates or revisions to any forward-looking statements. This communication does not purport to summarize all of the conditions, risks and other attributes of an investment in Jade.

Market and Industry Data

Certain information contained in this presentation and statements made orally during this presentation relate to or are based on studies, publications and other data obtained from third-party sources as well as our own internal estimates and research. While we believe these third-party sources to be reliable as of the date of this presentation, we have not independently verified, and make no representation as to the adequacy, fairness, accuracy or completeness of, any information obtained from third party sources. Forecasts and other forward-looking information obtained from these sources are subject to the same qualifications and uncertainties as the other forward-looking statements in this presentation. Statements as to our market and competitive position data are based on market data currently available to us, as well as management's internal analyses and assumptions regarding the Company, which involve certain assumptions and estimates. These internal analyses have not been verified by any independent sources and there can be no assurance that the assumptions or estimates are accurate. While we are not aware of any misstatements regarding our industry data presented herein, our estimates involve risks and uncertainties and are subject to change based on various factors. As a result, we cannot guarantee the accuracy or completeness of such information contained in this presentation.

Jade Biosciences is advancing potentially best-in-class therapies for autoimmune diseases

Current funding through 2027, well-beyond biomarker-rich JADE-001 healthy volunteer data

MOA	Program	Discovery / IND-enabling	Planned Clinical FIH	Planned Interim FIH Data	Potential Indications
anti-APRIL	JADE-001		2H25	1H26	IgAN
Undisclosed	JADE-002		1H26		Multiple systemic AI diseases
Undisclosed	JADE-003		1H27		Undisclosed

Development candidates licensed from Paragon

- Assets designed to maximize clinical responses
- Patient friendly, infrequent dosing

Notes: Jade has entered into an exclusive JADE-001 license agreement with Paragon Therapeutics. Jade holds an exclusive option to license JADE-002 and JADE-003 from Paragon. Jade has not yet entered into a license agreement with respect to JADE-002 or JADE-003.
MOA – mechanism of action; FIH – First-In-Human; IgAN - IgA nephropathy; AI - autoimmune

JADE-001: a potentially best-in-class anti-APRIL mAb for IgAN

Jade is developing a potentially best-in-class anti-APRIL mAb

Estimated $10B+ branded market

Current treatments do not adequately address the need for **long-term disease-modifying therapy** in a typically young IgAN patient population

Anti-APRIL class poised to be frontline treatment for IgAN

Mechanism has potential to be disease modifying, **reducing pathogenic IgA** and proteinuria, **stabilizing kidney function**

Potentially best-in-class profile

JADE-001 is designed to have superior potency and an extended half-life for **maximal efficacy** & **convenient dosing**

Efficient path to PoC and market

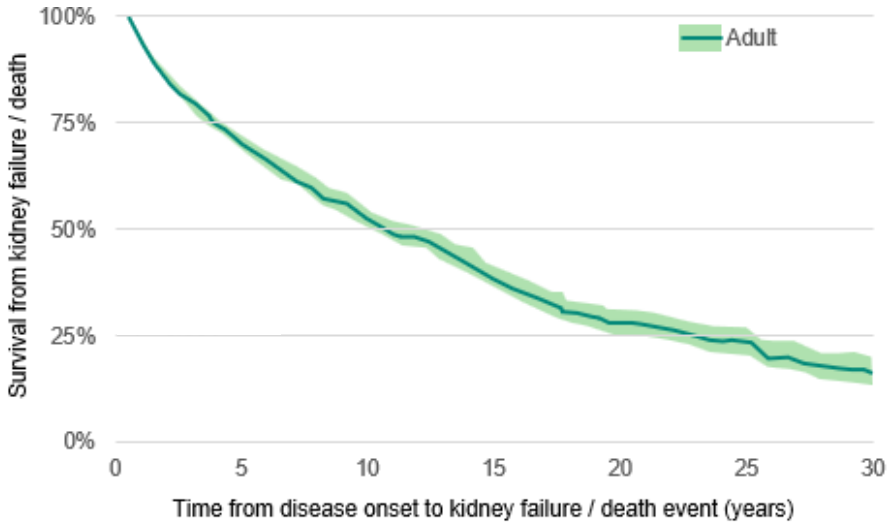
Biomarker-rich and highly translational HV data expected in 1H26; **surrogate endpoints expected to support potential IgAN approval**

HV – healthy volunteer, mAb – monoclonal antibody

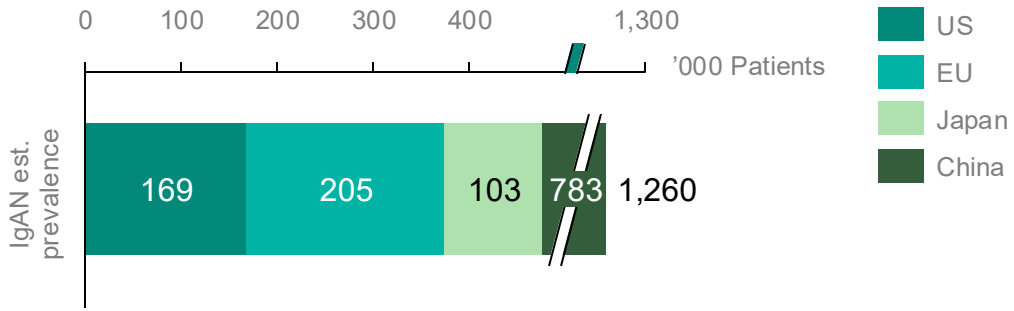
~169K+ IgAN patients in the U.S. with majority requiring treatment*, representing potential $10B+ market

IgAN patients with persistent proteinuria are **at risk of kidney failure**

IgAN is an **autoimmune kidney disease**, typically diagnosed in 20- to 30-year-olds, **requiring life-long therapy**.



~1M+ global patients, **significant potential ex-U.S. market potential**

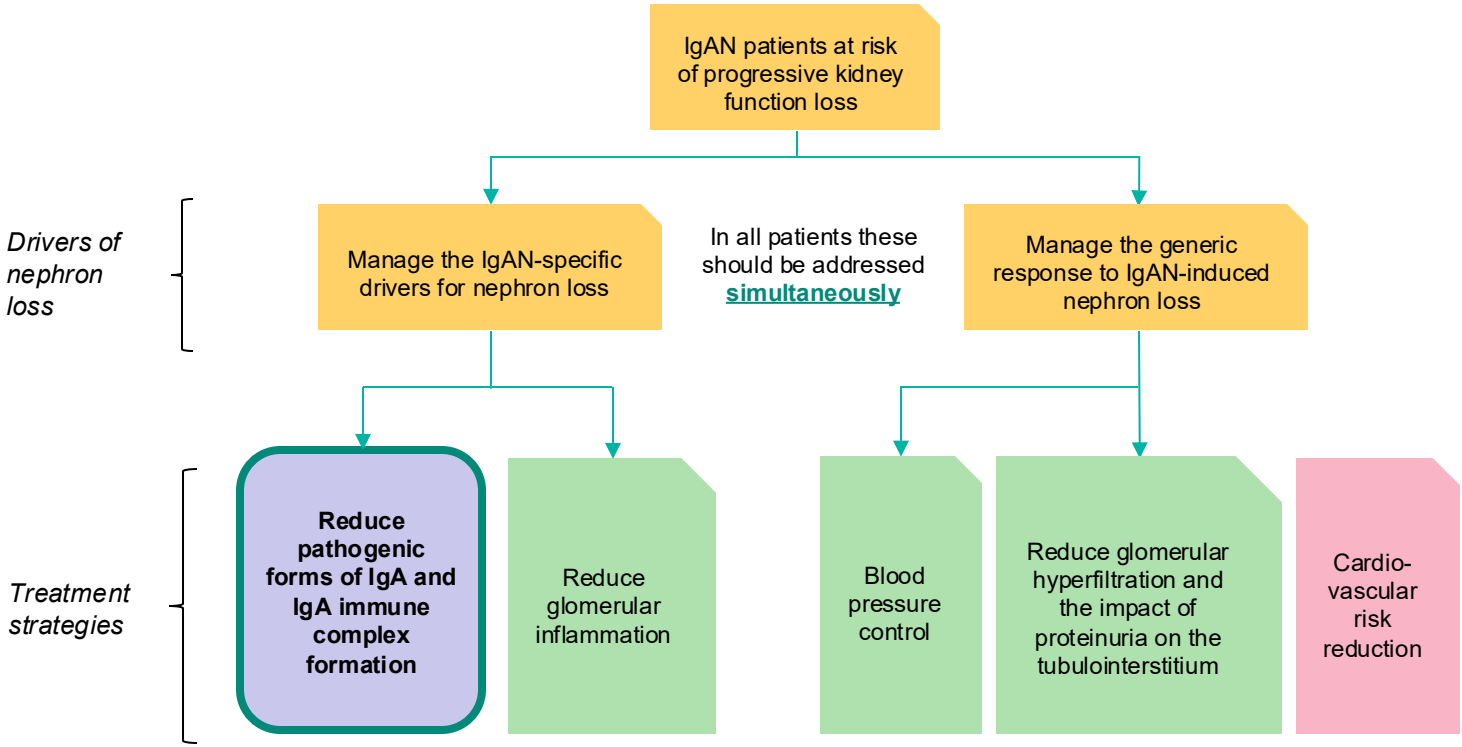


~169K+ patients with IgAN in the U.S., with **60-75%** requiring treatment per international guidelines

There is a high unmet need for **disease-modifying treatments that are safe, well-tolerated, and convenient** particularly considering that IgAN is often **diagnosed in young adults** and requires **lifelong care**

*Per KDIGO guidelines, treatment should be initiated in all cases where patients have proteinuria ≥0.5 g/day.
Notes: U.S. prevalence estimate from FDA; EU prevalence estimate from EMA; Japan / China prevalence estimates from a Novartis presentation. Estimated pricing of ~$120K-$150K per year based on Filspari and Tarpeyo.
Sources: 2023 Pitcher (CJASN); FDA Reviews for Filspari / Tarpeyo; EMA; Novartis; 2018 Schena (Seminars in Nephrology); Reuters

Proposed updates to KDIGO guidelines support the frontline therapeutic potential of the anti-APRIL class in IgAN



KDIGO updates anticipated to increase **IgAN diagnosis**, expand **at-risk patient population** requiring treatment**, lower proteinuria target** to clinical remission, and require **targeted therapies** that **reduce pathogenic IgA.**

Expanding Patient Population

- Kidney biopsy recommended in all adults with proteinuria ≥0.5 g/d where IgAN is a possible diagnosis
- Recommends **additional treatment should be initiated in all cases** where patients have proteinuria ≥0.5 g/d

Lower Proteinuria Targets

- Establishes new treatment goal: proteinuria maintained at <0.5 g/day, **preferably <0.3 g/day**

Redefining Treatment Strategies

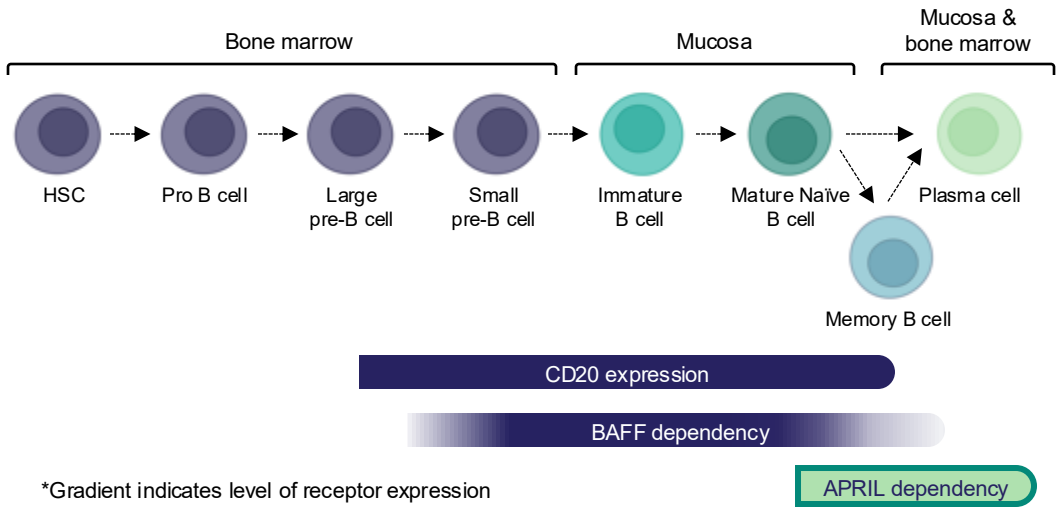
- New guidelines direct the use of treatments that have been **proven to reduce pathogenic forms of IgA**

Sources: KDIGO Guidelines Public Review Draft; 2023 Mathur (NEJM); Jade analysis
KDIGO – Kidney Disease Improving Global Outcomes

Reducing pathogenic IgA production by plasma cells is a potentially disease-modifying approach for IgAN

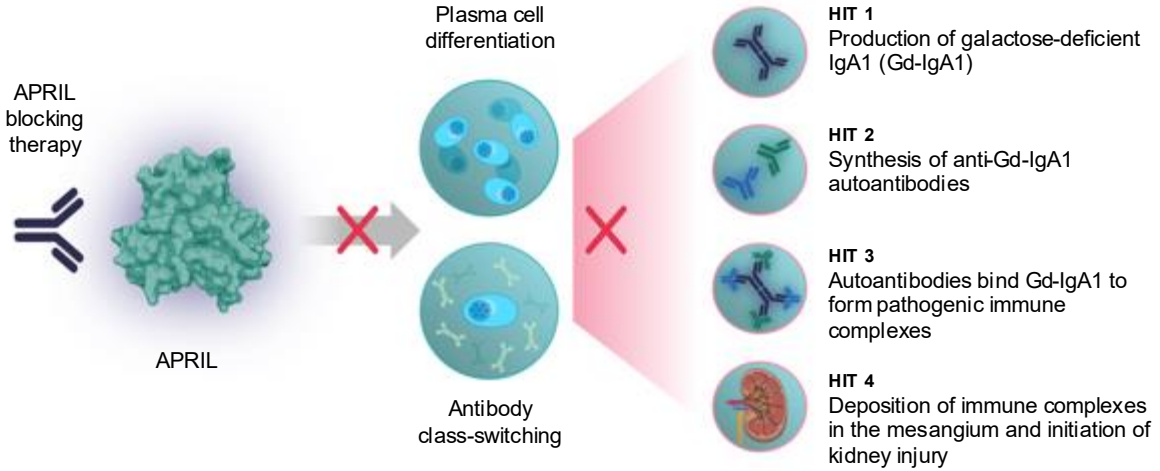
Broad **B-cell depletion is ineffective** in IgAN…

- B-cell depletion with rituximab (anti-CD20) **failed to reduce Gd-IgA1, anti-Gd-IgA1 autoantibody, or proteinuria** and **did not impact eGFR**.
- BAFF neutralization (blisibimod) **did not reduce IgA or proteinuria.**



…while **targeted plasma cell modulation is highly effective**.

- APRIL and dual APRIL/BAFF neutralization **result in significant and sustained depletion of Gd-IgA1, reduction in proteinuria, and eGFR stabilization.**



Neutralizing APRIL depletes Gd-IgA1, reduces proteinuria, and preserves eGFR, providing a disease-modifying treatment of IgAN without impacting B-cell development and maturation.

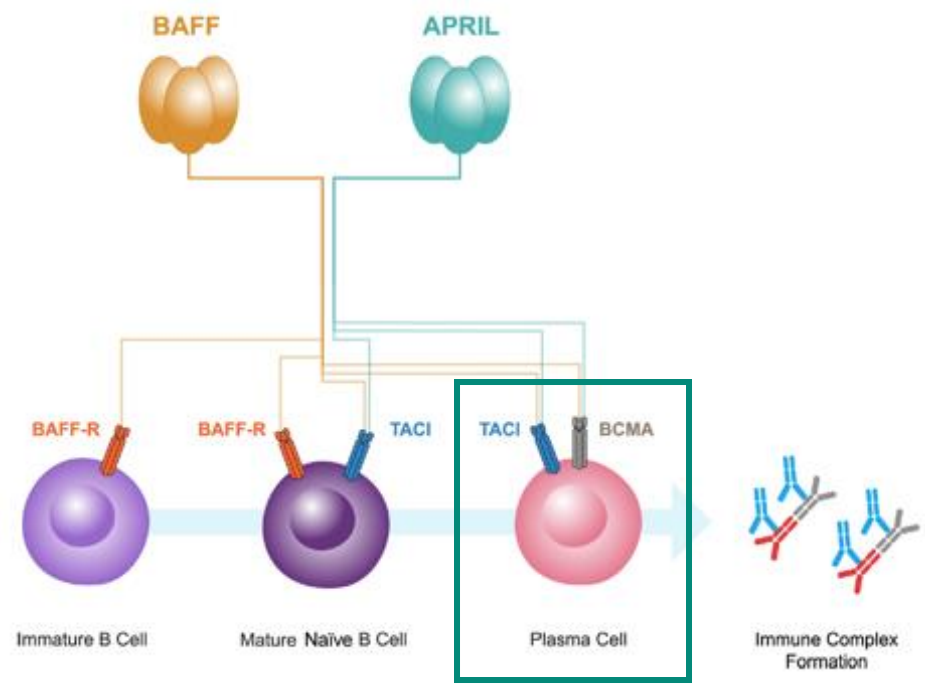
Sources: 2024 Cheung (Front Nephrol); 2023 Mathur (J Clin Med)

Selectively targeting APRIL potentially provides disease modification without added immunosuppression of BAFF inhibition

APRIL is the plasma cell survival factor **critically linked to IgAN pathogenesis and disease activity**

	APRIL	BAFF
Risk variant in IgAN GWAS	✓	✗
Elevated in IgAN patients and **associated with disease severity**	✓	✓/✗
Promotes **excess secretion of Gd-IgA1** in IgAN patient lymphocytes *ex vivo*	✓	No data
Drives **IgA class switching** via TACI *in vivo*	✓	✗
Overexpression in mouse model leads to glomerular IgA deposition	✓	✓
KO mouse model **decreases IgA levels / IgA+ plasma cells** in small intestine	✓	✗
Selective inhibition demonstrates preclinical / clinical efficacy in IgAN	✓	✗

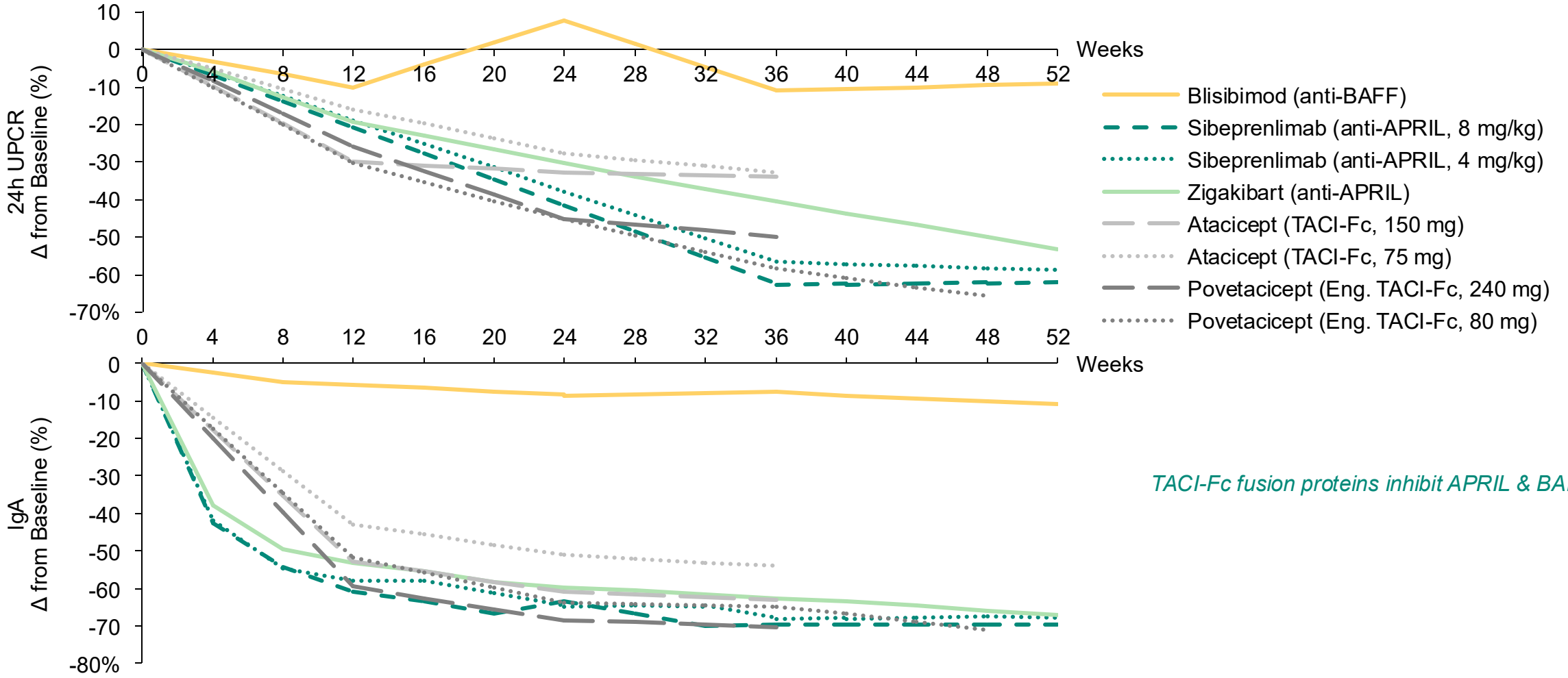
Targeting APRIL **selectively modulates plasma cells**, maintaining pool of mature B cells



Existing genomic, mechanistic, IgAN model, and clinical data **support the importance of APRIL over BAFF** in IgAN, and APRIL-only blockade **avoids the potential for unnecessary immunosuppression**

Sources: 2024 Cheung (Front Nephrol); Chinook 2022 CKD3 Presentation; 2004 Castigli (PNAS); 2001 Schiemann (Science)

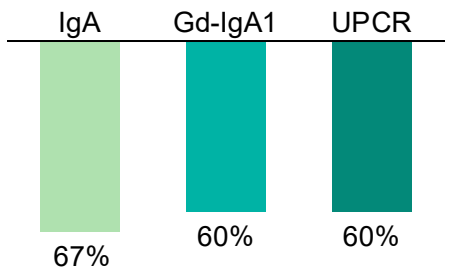
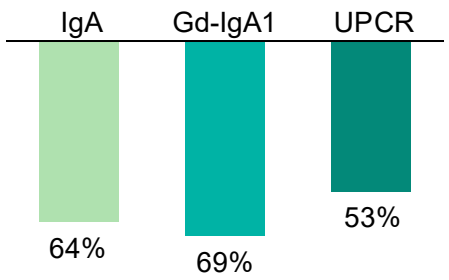
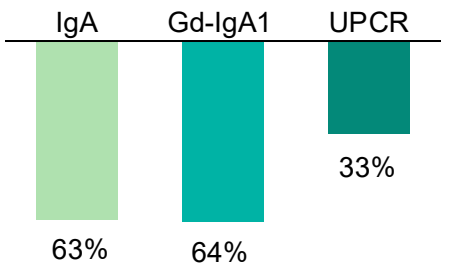
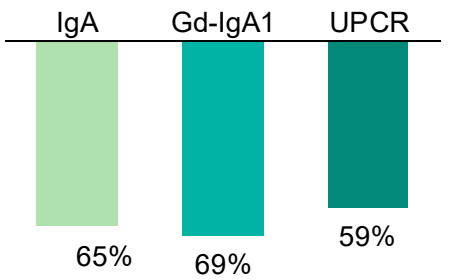
Reductions in proteinuria and IgA in IgAN clinical studies indicate APRIL inhibition is the driving force behind TACI-Fc efficacy



TACI-Fc fusion proteins inhibit APRIL & BAFF

Notes: Cross-trial comparisons are inherently limited and presented for hypothesis-generating purposes only. Data digitized from graphs where publications did not provide specific values. Values only included if N > 5. Blisibimod W52 data is from W60.
Sources: Anthera 2017 10-K; 2023 Mathur (NEJM); 2023 Barratt (ERA Poster); 2024 Lafayette (KI Reports); 2024 Tumlin (WCN Presentation); 2024 Madan (ASN Presentation)

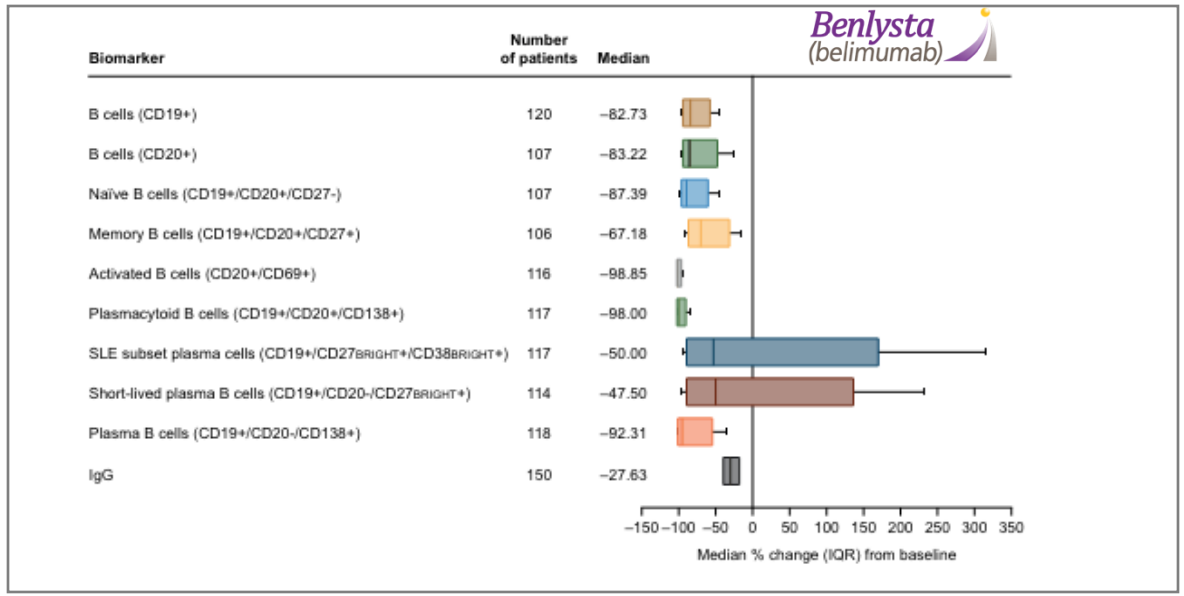
No clinical evidence that inhibiting BAFF provides additional efficacy beyond APRIL alone in IgAN

	Sibeprenlimab	Zigakibart	Atacicept	Povetacicept
MoA	anti-APRIL	anti-APRIL	TACI-Fc	Engineered TACI-Fc
Status	P3	P3	P3	P3
Δ from baseline in critical disease markers *(W36 timepoint*)*	 N=79 (4/8 mg/kg pooled)	 N=35 (600 mg)	 N=32 (150 mg)	 N=9 (80 mg)
GFR stabilization	✓ (12 months)	✓ (18 months)	✓ (24 months)	✓ (12 months)
Hematuria resolution	✓	No data	✓	✓
Safety	✓ Well tolerated, no overall ↑ infections, slight ↑ in URTIs vs. pbo	✓ Well tolerated (no pbo), no drug discontinuations	✓ Well-tolerated, slight ↑ in infections (& URTIs) vs. pbo	✓ Well-tolerated (no pbo) 240 mg ↑ infections
P3 Dosing	400 mg SC, Q4W	600 mg SC, Q2W	150 mg SC, QW	80 mg SC, Q4W

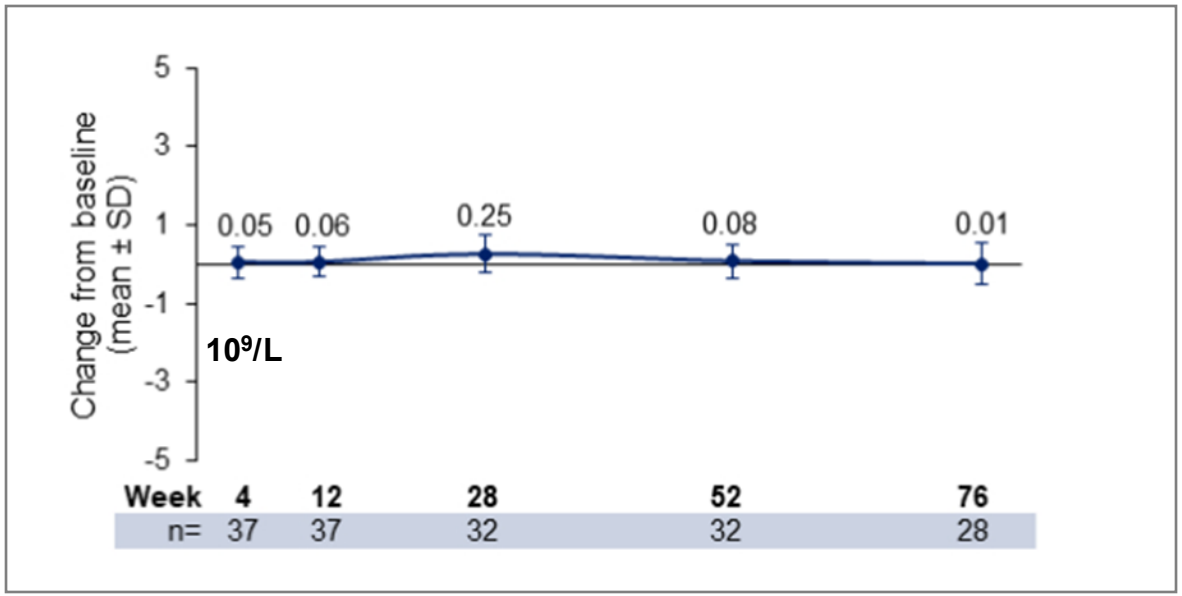
Notes: Cross-trial comparisons are inherently limited and presented for hypothesis-generating purposes only. Zigakibart IgA / Gd-IgA data at W40; UPCR data at W52 (only timepoint available); change from baseline is not pbo-controlled; N represents patients on dose(s) for which data is shown. Atacicept infections/URTIs placebo - (32%/0%), 25 mg (38%/0%), 75 mg (49%/9%), 150 mg (39%/6%). Povetacicept infection rates: Grade 1/2/≥3 – 80 mg 10%/5%/0%, 240 mg 18%/27%/3%. Sibeprenlimab infections/URTIs placebo - (55%/0%), 2 mg/kg (39.5%/8%), 4 mg/kg (56%/12%), 8 mg /kg (53%/5%). Sources: 2023 Mathur (NEJM); 2024 Barratt (ERA Presentation); VERA January 2024 R&D Day; ALPN 2024 WCN Investor Update; 2024Madan (ASN Presentation)

BAFF inhibition is accompanied by the potential for significant long-term B cell depletion

Long-term BAFF inhibition **significantly depletes all B cell populations**…



… whereas chronic **APRIL inhibition does not impact circulating lymphocytes**



~7-year belimumab data in SLE shows **continuous BAFF inhibition lowers B cell populations from ~50% to ~99%**, with most populations decreasing >80%.

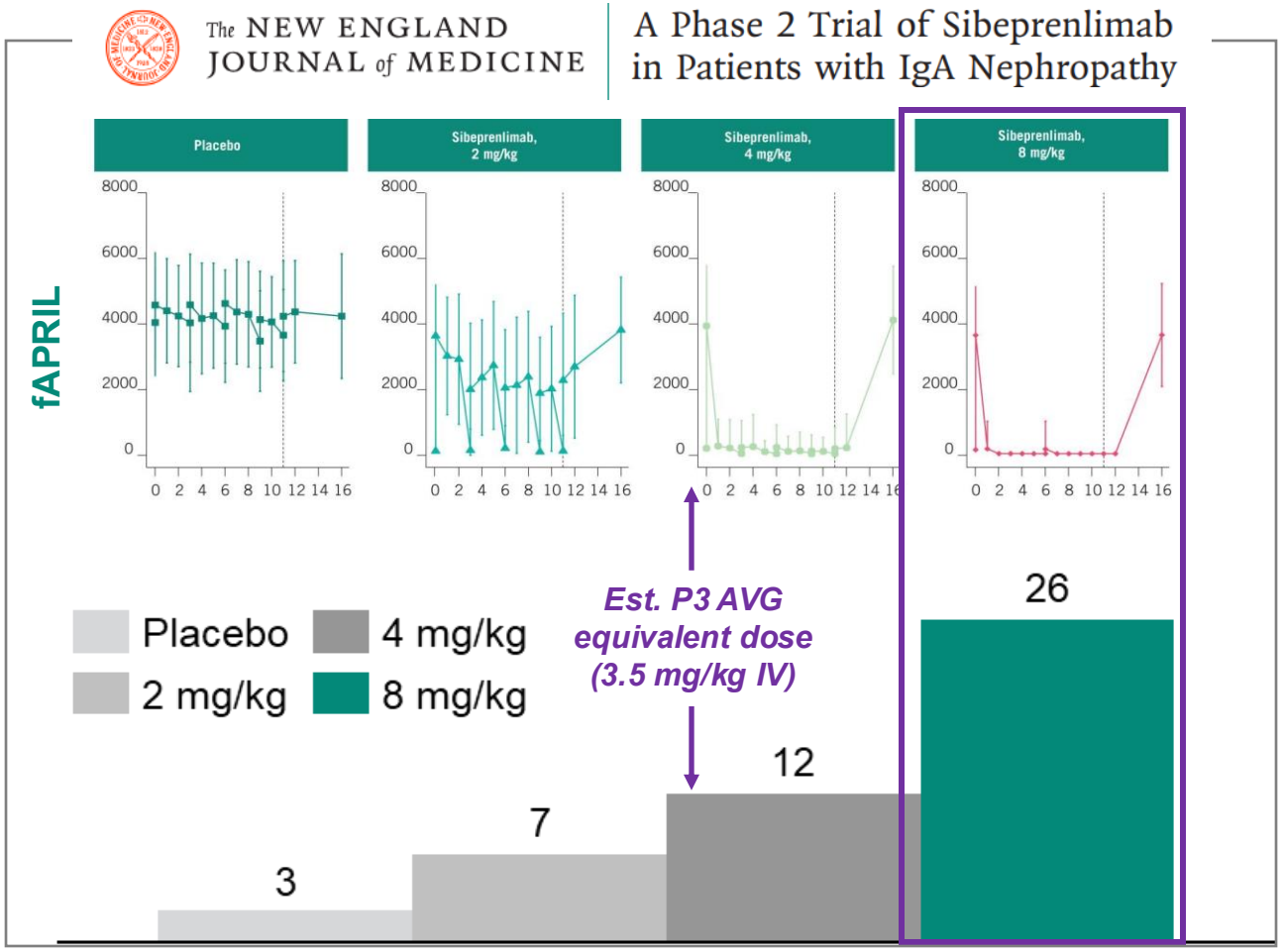
Long-term BAFF suppression, in an otherwise young and healthy patient population, **is unnecessary** given equivalent efficacy in IgAN from anti-APRILs and TACI-Fcs observed to date.

Sources: 2022 Struemper (Lupus Sci Med); Barratt ASN 2024

Deeper APRIL suppression drives superior clinical efficacy

- Highest rates of **clinical remission** (proteinuria <0.3 g/day) for sibeprenlimab was accompanied by the **deepest levels of APRIL suppression.**
- **Safety profile consistent** across dose levels, with **no increase in overall infections**.
- Potential for anti-APRILs with **higher affinity** and **increased systemic exposure** to **provide more complete APRIL neutralization** throughout the dosing interval **and maximize clinical remission rates.**

JADE-001 has potential to **demonstrate superior clinical activity by maximizing remission rates** in **significantly more patients than other anti-APRIL programs** in development.



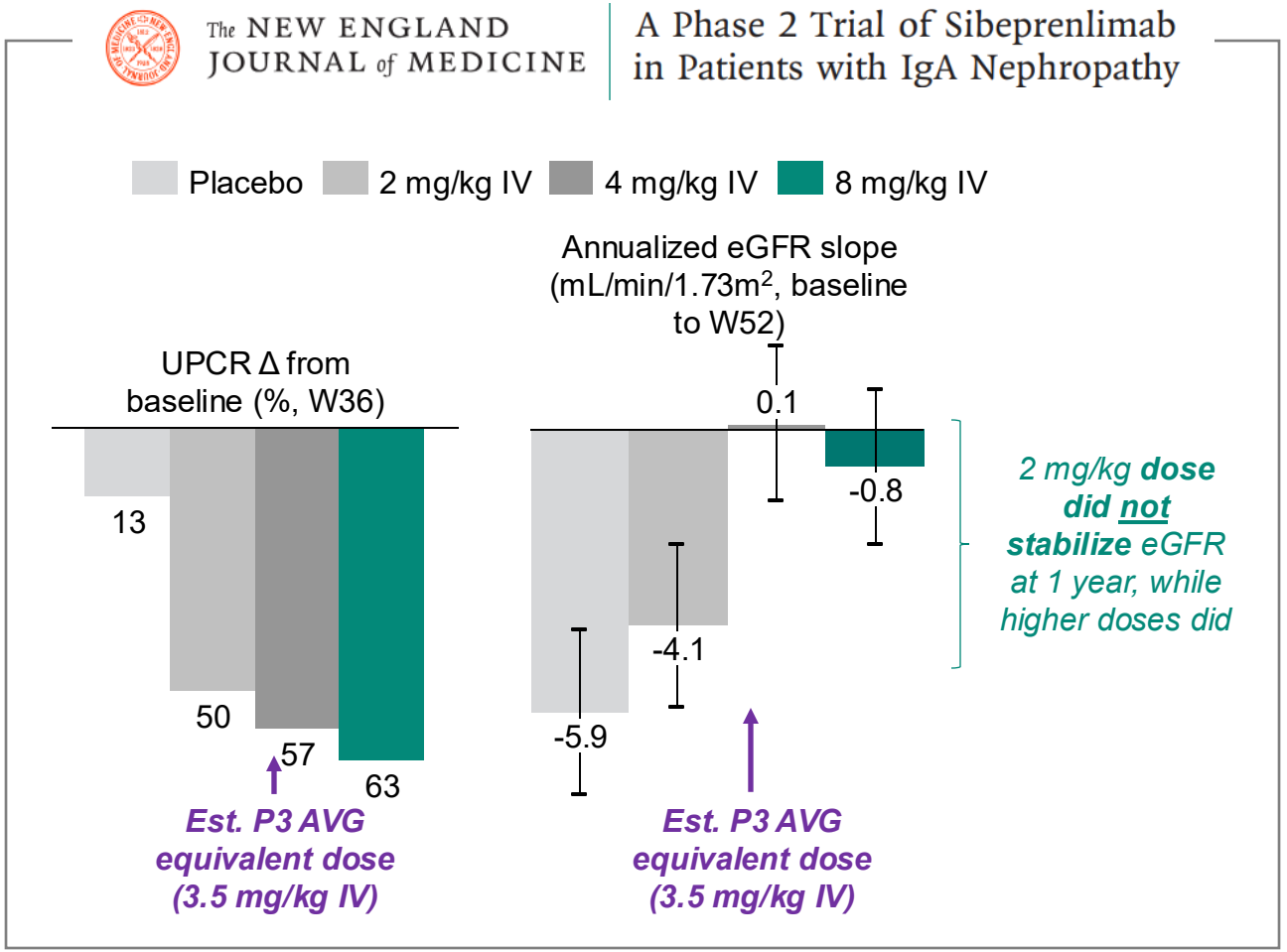
Note: Estimated sibeprenlimab P3 dose (400 mg SC) based on average 85 kg IgAN patient (95% CI ~50-120 kg) and 75% bioavailability.
Source: 2023 Mathur (NEJM)

Sibeprenlimab is potentially under-dosed in ongoing Phase 3 trial

Other anti-APRILs do not inhibit APRIL fully through the dosing interval

- **Sibeprenlimab** dosed as a single **400mg SC injection Q4W** in ongoing **global Phase 3** VISIONARY trial.
- 400 mg SC Q4W **equates to ~3.5 mg/kg IV for average IgAN patient (2.5-6 mg/kg).**
- Estimated Phase 3 equivalent dose range demonstrated **lower efficacy on key UPCR endpoints in Phase 2** ENVISION trial.
- **~50%** of HV in P1 SAD showed positive antidrug antibody activity following single SC dose, which may further **impact PK, efficacy, and safety profile** in Phase 3.

Potential under-dosing of sibeprenlimab creates **additional opportunity for JADE-001** to demonstrate potentially best-in-class clinical activity for patients.



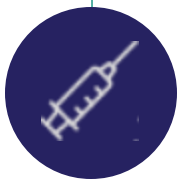
Notes: Estimated sibeprenlimab P3 dose based on average 85 kg IgAN patient (95% CI ~50-120 kg) and 75% bioavailability.
Sources: 2023 Mathur (NEJM); 2023 Zhang (Clin Pharm)
HV – healthy volunteers; ADA+ – antidrug antibody positive

Potentially best-in-class profile of JADE-001

Femtomolar APRIL Affinity + Half Life Extension

Potentially best-in-class efficacy

APRIL inhibitors demonstrate greater proteinuria reduction and increased clinical remission rates with higher exposures and more complete APRIL suppression



Infrequent Q8W+ dosing

Minimizes burden in a typically young IgAN patient population potentially requiring life-long therapy (≤ 6 injections/year)

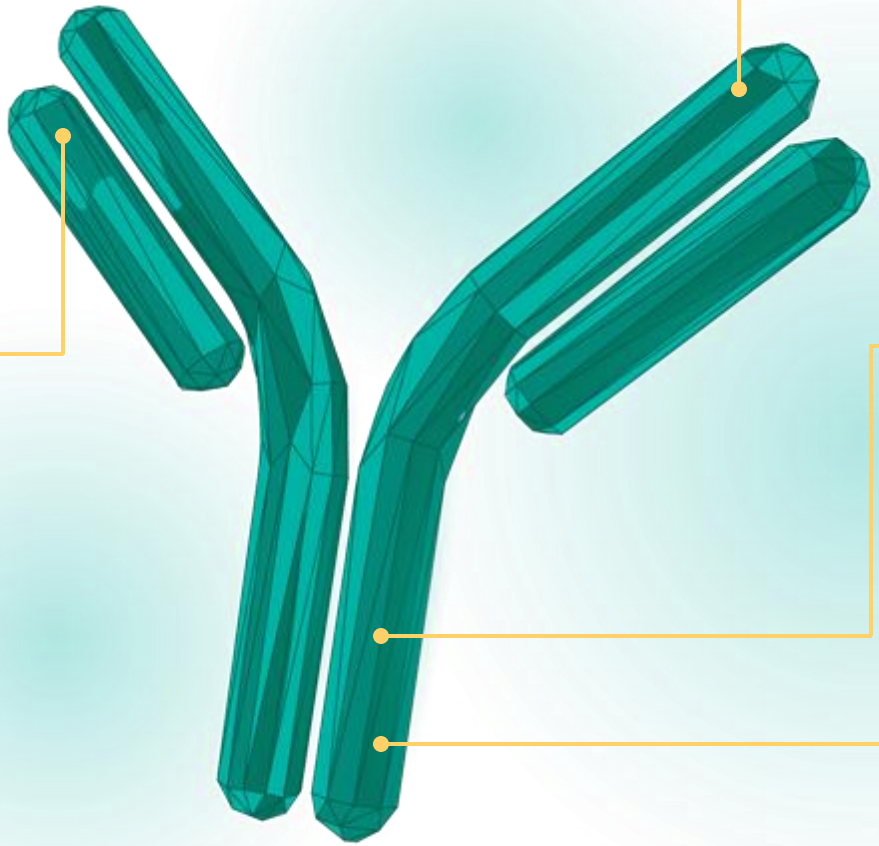
Avoids unnecessary immunosuppression

Selectively targeting APRIL provides disease modifying impact while avoiding B-cell depletion associated with BAFF inhibition

Potentially best-in-class properties of JADE-001

Novel IP for composition of matter into mid-2040s

***De novo* antibody discovery campaign** pursued to achieve fully-human, potentially best-in-class mAb



Ultra-high (fM) APRIL binding affinity

- Binds **APRIL** to neutralize activity
- **Greater APRIL binding affinity** than sibeprenlimab, zigakibart, povetacicept and atacicept

Half-life extension through validated YTE Fc modification

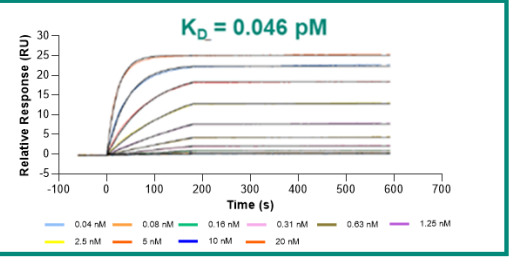
- Longer exposure intended to maximize efficacy and reduce dosing frequency

Effector-null human IgG1 Fc

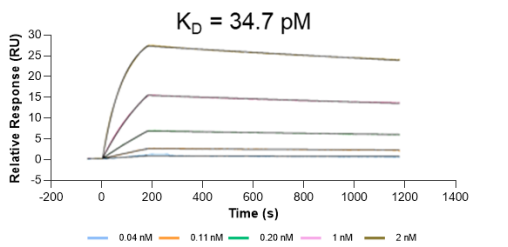
Notes; Paragon has filed provisional patent applications covering the subject matter of JADE-001, which we have exclusively licensed from Paragon. No head-to-head clinical trials have been conducted between JADE-001 and the referenced drug candidates. Cross-trial comparisons are inherently limited and presented for hypothesis-generating purposes only.
fM – femtomolar

JADE-001 has femtomolar affinity and a slow off-rate that is superior to other anti-APRILs currently in development

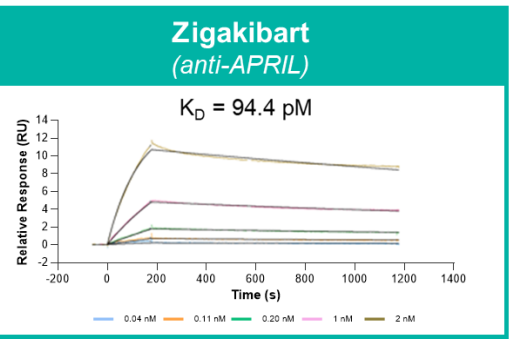
JADE-001
(anti-APRIL)



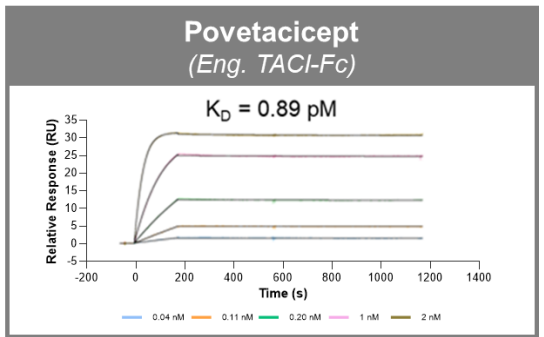
Sibeprenlimab
(anti-APRIL)



Zigakibart
(anti-APRIL)

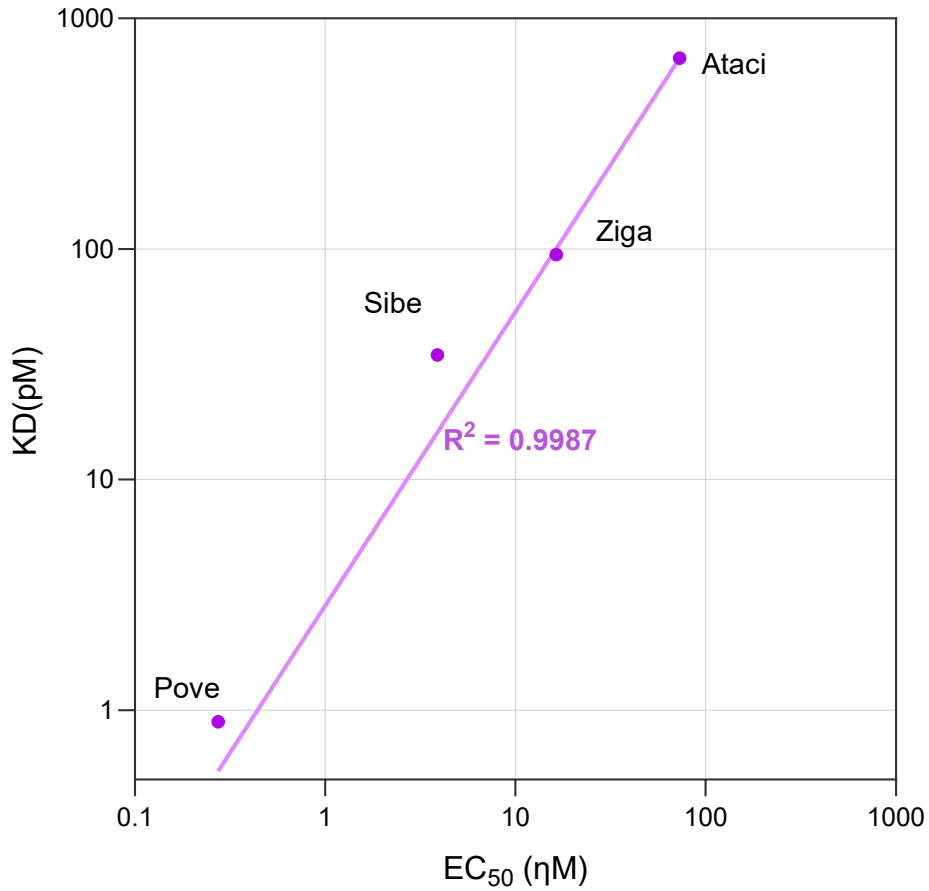


Povetacicept
(Eng. TACI-Fc)



	K_a (1/Ms)	K_d (1/s)	K_D (pM)	Affinity vs JADE-001
Sibeprenlimab	3.9E+06	1.4E-04	34.7	**~755x↓**
Zigakibart	2.5E+06	2.4E-04	94.4	**~2,050x↓**
Povetacicept	1.2E+07	1.1E-05	0.89	**~20x↓**
JADE-001	**2.3E+06**	**1.1E-07**	**0.046**	**-**

APRIL affinity by SPR is highly predictive of *in vivo* potency to lower serum IgA in humans

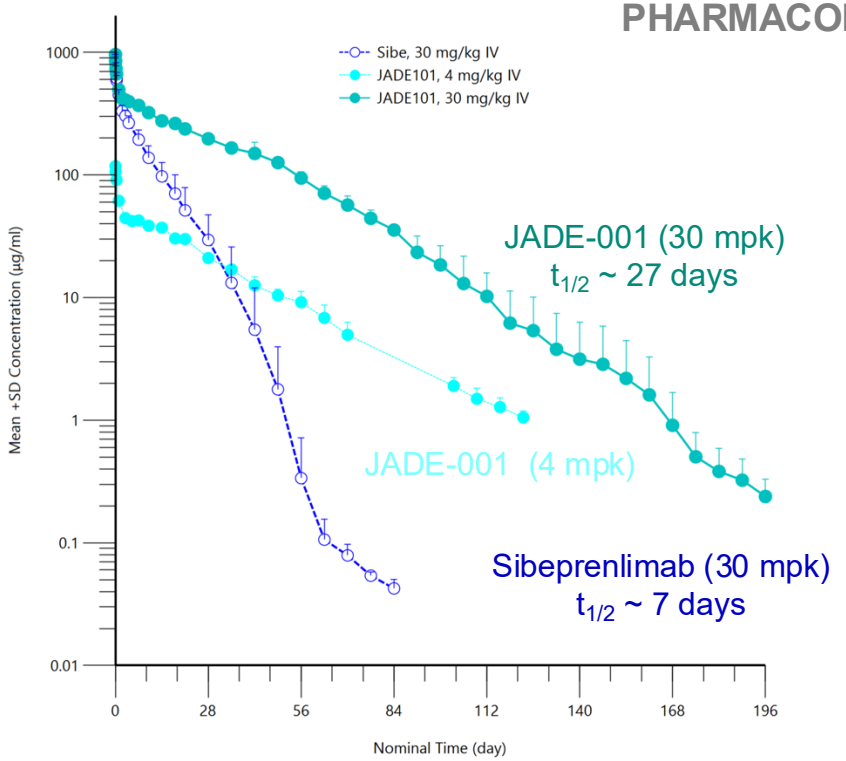


Source: Internal data; Benchmarks manufactured based on publicly available sequences. Atacicept APRIL KD 672 pM (Vera internal data). IgA EC_{50} estimates calculated using compartmental PK models linked to indirect response models to describe IgA kinetics built using published PK and IgA concentration-time profiles for each molecule. Sibeprenlimab: Mathur, 2022 and Zhang, 2023; Ziga: ASN, 2021/2022 and WCN, 2021; Povetacicept: Davies, 2024; Ataci: Willen, 2020, Nestorov, 2008/2010, Munafo, 2007). These data are derived from different trials at different points in time, with differences in trial design and populations. As a result, cross-trial comparisons cannot be made, and no head-to-head clinical trials of JADE-001 and other agents have been conducted.

JADE-001 exhibits a highly differentiated NHP PK/PD profile from sibeprenlimab

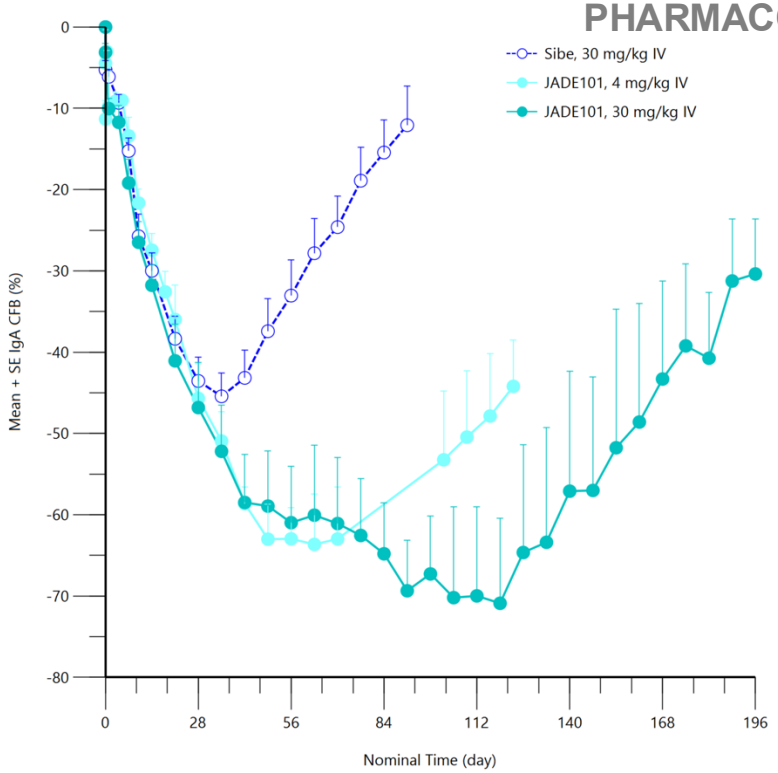
>3X increased half-life compared to sibeprenlimab in NHPs coupled with successful mitigation of TMDD …

PHARMACOKINETICS



… which is **accompanied by deep and prolonged IgA reduction** in NHPs following a single, saturating dose

PHARMACODYNAMICS



JADE-001 has the potential to extend dosing interval through low clearance via half-life extension, target-mediated drug disposition mitigation & ultra-high (fM) human affinity.

Jade BIOSCIENCES

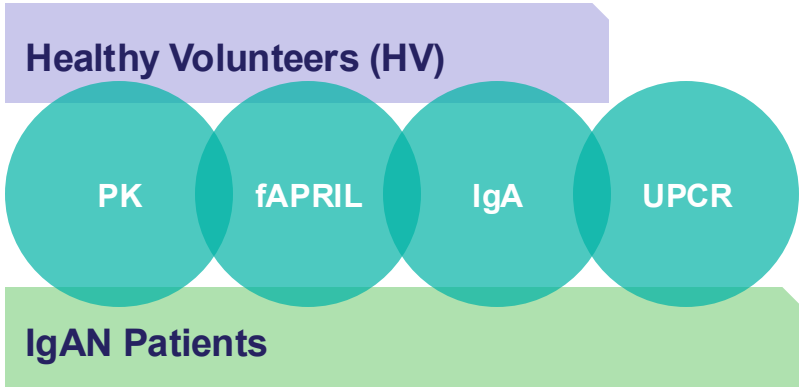
Sibeprenlimab and JADE-001 dosed at 30 mg/kg and 4 mg/kg (single dose), N=4 per group. Comparison agent manufactured based on available sequences from patents / company releases. Study duration shorter for lower dose. ADA+ samples excluded from analysis. Source: Internal data. No head-to-head clinical studies of JADE-001 and other agents have been conducted.

Anticipated 1H26 HV data potentially positions JADE-001 for accelerated development

PK, fAPRIL and IgA HV data expected in 1H 2026 and will define the dose and schedule designed to fully suppress fAPRIL throughout the dosing interval in IgAN patients.

MOA	Program	IND Enabling	Phase 1 Initiation	Interim Healthy Volunteer Data	Potential Indications
anti-APRIL	JADE-001	Ongoing	2H 2025	1H 2026	IgAN

- Anti-APRIL MOA provides **biomarker rich data predictive of clinical efficacy**
- **Consistent PK/PD** relationships in **HV and IgAN patients**
  - HV PK highly predictive of IgAN PK and directly linked to fAPRIL suppression
  - HV IgA reduction expected to highly correlate with IgAN IgA reduction
  - Early IgA response expected to highly correlate with future UPCR reduction in IgAN



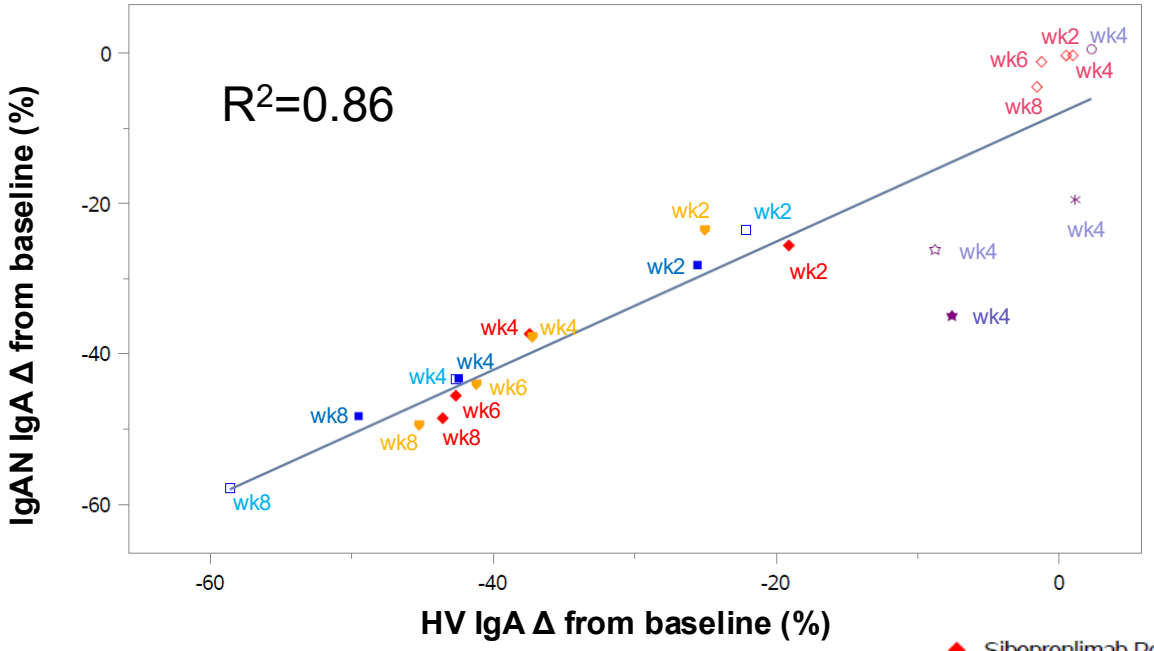
fAPRIL – Free A Proliferation-Inducing Ligand

Sources: Zigakibart: (ASN 2021/2022 and WCN2021). Sibeprenlimab: Mathur 2022 (KI Reports) for Phase 1. Chan 2023 (KI Reports) for Phase 2 IgA; Mathur 2024 (NEJM) for Phase 2 UPCR. Povetacicept: Davies 2024 (Clin Transl Sci) for Phase 1. Madan 2024 (ASN) for Phase 2. Atacicept: Willen 2020 (European Journal of Drug Metabolism and Pharmacokinetics) for Phase 1. Zigakibart: Lo 2020 (ASN) for Phase 1. Barratt 2023 (ERA) for Phase 2 IgA, Barratt 2024 (ASN abstract) for Phase 2 UPCR. Floege 2024 (ERA) for Phase 2. Mezagitamab: December 2024 Takeda SEC from 6-K for Phase 2.

Biomarker-rich, directly translational HV data supports the potential to accelerate clinical development

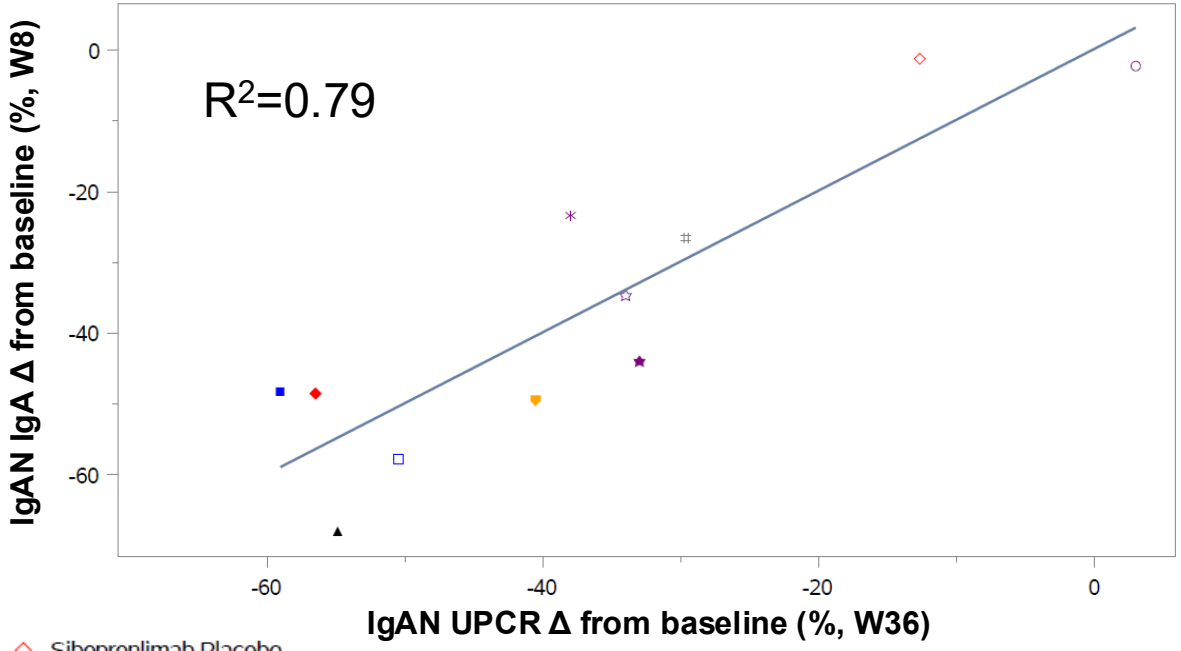
IgA reduction in HVs is **highly correlated** with IgA reduction in IgAN patients at **multiple time points**…

IgAN Patients vs **Healthy Volunteers**



…and **early IgA reduction** further correlates with **W36 UPCR reduction**, the endpoint for accelerated approval

IgAN Patients



- Sibeprenlimab Pooled
- Sibeprenlimab Placebo
- Povetacicept 80 mg
- Povetacicept 240 mg
- Atacicept Placebo
- Atacicept 25 mg
- Atacicept 75 mg
- Atacicept 150 mg
- Zigakibart 600 mg
- Felzartamab 16 mg/kg 9 doses
- Mezagitamab 600 mg 16 doses

Notes: Sibeprenlimab IgAN IgA reductions (LHS) are average of 4 mg/kg and 8 mg/kg cohorts (HV data is from 6 mg/kg cohort); the two cohorts saw effectively equivalent IgA reduction at W4 and W8. Zigakibart UPCR data is at 52W. Atacicept IgAN W8 is average of W4 and W12 datapoints. Trend lines are best linear fit.

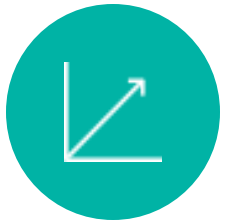
Sources: 2022 Mathur (KI Reports); 2023 Mathur (NEJM); 2020 Lo (ASN Presentation); 2023 Barratt (ERA Poster); 2024 Barratt (ERA Presentation); 2022 Dillon (ASN Poster); 2024 Tumlin (WCN Presentation); Anthera 2017 10-K; 2024 Lafayette (KI Reports); 2024 Madan (ASN Presentation)

Pipeline beyond JADE-001

Additional Jade programs expected to focus on best-in-class product profiles in high-value autoimmune indications

Autoimmune indications with **significant market opportunity**

Potentially **best-in-class** and **best-in-indication** product profile



Potential **rapid path** to clinical PoC

Limited competition expected

Jade **team expertise**

Evaluating additional opportunities to **build pipeline of potentially best-in-class** autoimmune therapies.

Jade Biosciences is advancing potentially best-in-class therapies for autoimmune diseases

Current funding through 2027, well-beyond biomarker-rich JADE-001 healthy volunteer data

MOA	Program	Discovery	IND-enabling	Planned Clinical FIH	Planned Interim FIH Data	Potential Indications
anti-APRIL	JADE-001			2H25	1H26	IgAN
Undisclosed	JADE-002			1H26		Multiple systemic AI diseases
Undisclosed	JADE-003			1H27		Undisclosed

Development candidates licensed from Paragon

- Assets designed to maximize clinical responses
- Patient friendly, infrequent dosing

Notes: Jade has entered into an exclusive JADE-001 license agreement with Paragon Therapeutics. Jade holds an exclusive option to license JADE-002 and JADE-003 from Paragon. Jade has not yet entered into a license agreement with respect to JADE-002 or JADE-003.
MOA – mechanism of action; FIH – First-In-Human; IgAN - IgA nephropathy; AI - autoimmune

Capitalization following close of merger with Aerovate

$49.9M cash as of March 31, 2025
+$192.7M net proceeds from PIPE on April 28, 2025

		Number of Shares
Common stock	Shares outstanding	32,235,927
Common stock equivalents	Preferred stock (as converted to common stock)	12,622,000
	Pre-funded warrants	7,766,247
Common stock & common stock equivalents	**Total outstanding**	**52,624,174**

Notes: The cash balance figure is preliminary and is subject to change pending completion of our unaudited financial statements for the quarter ended 3/31/25. Additional information and disclosures would be required for a more complete understanding of our financial position and results of operations as of 3/31/25. Our independent registered public accounting firm has not audited, reviewed or performed any procedures with respect to this figure and, accordingly, does not express an opinion or any other form of assurance about them. Number of shares are on an as-converted basis and following the 1:35 reverse stock split effected in connection with the merger. The pro forma, post-split fully diluted share count, which includes equity incentives such as employee stock options, is approximately 60.6 million shares. Refer to AVTE and JBIO SEC filings for additional information.

Thank you

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NASDAQ: JBIO