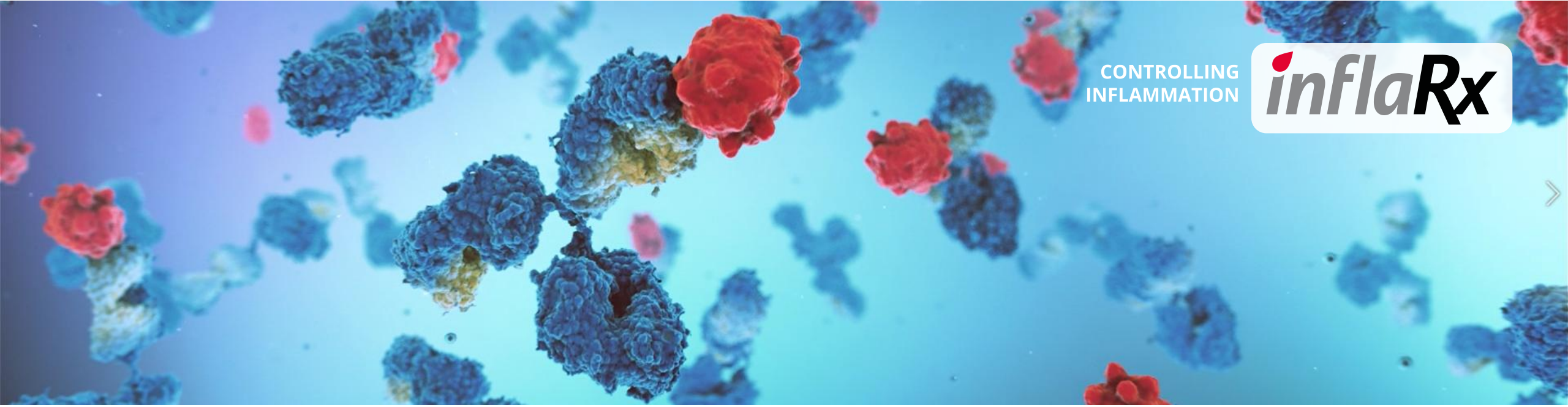
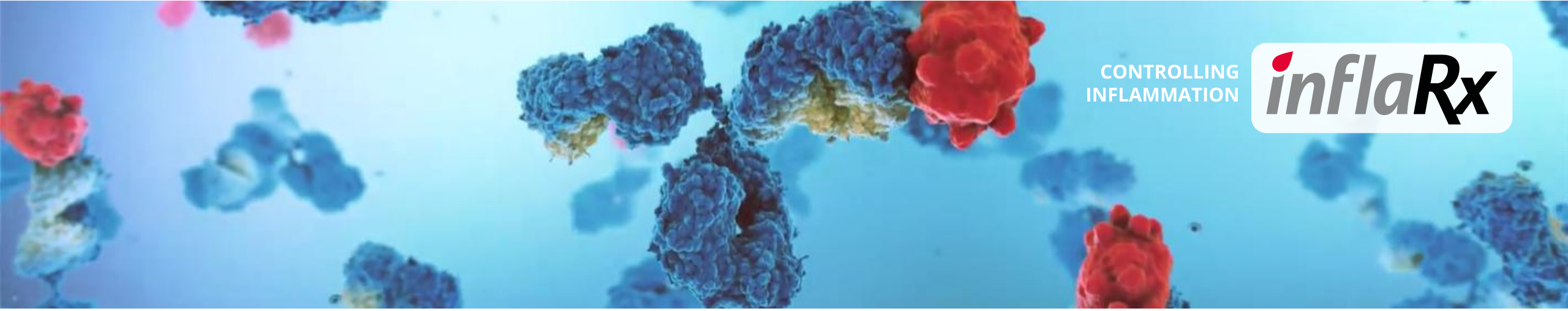


CORPORATE PRESENTATION

JANUARY 2025



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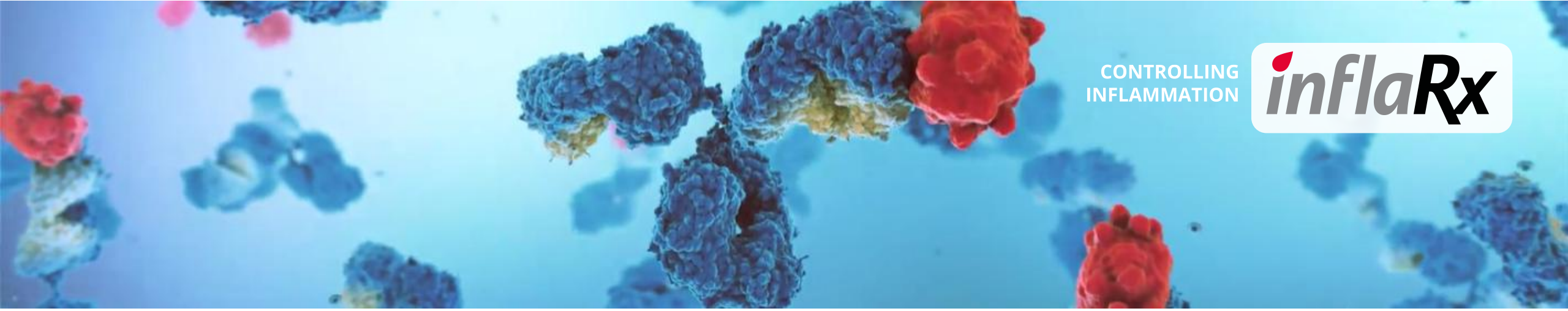
Forward-Looking Statements

This press release contains forward-looking statements. All statements other than statements of historical fact are forward-looking statements, which are often indicated by terms such as "may," "will," "should," "expect," "plan," "anticipate," "could," "intend," "target," "project," "estimate," "believe," "predict," "potential" or "continue," among others. Forward-looking statements appear in a number of places throughout this release and may include statements regarding our intentions, beliefs, projections, outlook, analyses and current expectations concerning, among other things, the receptiveness of GOHIBIC (vilobelimab) as a treatment for COVID-19 by COVID-19 patients and U.S. hospitals and related treatment recommendations by medical/healthcare institutes and other third-party organizations, our ability to successfully commercialize and the receptiveness of GOHIBIC (vilobelimab) as a treatment for COVID-19 by COVID-19 patients and U.S. hospitals or our other product candidates; our expectations regarding the size of the patient populations for, market opportunity for, coverage and reimbursement for, estimated returns and return accruals for, and clinical utility of GOHIBIC (vilobelimab) in its approved or authorized indication or for vilobelimab and any other product candidates, under an EUA and in the future if approved for commercial use in the U.S. or elsewhere; our ability to successfully implement The InflaRx Commitment Program, the success of our future clinical trials for vilobelimab's treatment of COVID-19 and other debilitating or life-threatening inflammatory indications, including PG, and any other product candidates, including INF904, and whether such clinical results will reflect results seen in previously conducted pre-clinical studies and clinical trials; the timing, progress and results of pre-clinical studies and clinical trials of our product candidates and statements regarding the timing of initiation and completion of studies or trials and related preparatory work, the period during which the results of the trials will become available, the costs of such trials and our research and development programs generally; our interactions with regulators regarding the results of clinical trials and potential regulatory approval pathways, including related to our MAA submission for vilobelimab and our biologics license application submission for GOHIBIC (vilobelimab), and our ability to obtain and maintain full regulatory approval of vilobelimab or GOHIBIC (vilobelimab) for any indication; whether the FDA, the EMA or any comparable foreign regulatory authority will accept or agree with the number, design, size, conduct or implementation of our clinical trials, including any proposed primary or secondary endpoints for such trials; our expectations regarding the scope of any approved indication for vilobelimab; our ability to leverage our proprietary anti-C5a and C5aR technologies to discover and develop therapies to treat complement-mediated autoimmune and inflammatory diseases; our ability to protect, maintain and enforce our intellectual property protection for vilobelimab and any other product candidates, and the scope of such protection; our manufacturing capabilities and strategy, including the scalability and cost of our manufacturing methods and processes and the optimization of our manufacturing methods and processes, and our ability to continue to rely on our existing third-party manufacturers and our ability to engage additional third-party manufacturers for our planned future clinical trials and for commercial supply of vilobelimab and for the finished product GOHIBIC (vilobelimab); our estimates of our expenses, ongoing losses, future revenue, capital requirements and our needs for or ability to obtain additional financing; our ability to defend against liability claims resulting from the testing of our product candidates in the clinic or, if approved, any commercial sales; if any of our product candidates obtain regulatory approval, our ability to comply with and satisfy ongoing obligations and continued regulatory overview; our ability to comply with enacted and future legislation in seeking marketing approval and commercialization; our future growth and ability to compete, which depends on our retaining key personnel and recruiting additional qualified personnel; and our competitive position and the development of and projections relating to our competitors in the development of C5a and C5aR inhibitors or our industry; and the risks, uncertainties and other factors described under the heading "Risk Factors" in our periodic filings with the SEC. These statements speak only as of the date of this press release and involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Given these risks, uncertainties and other factors, you should not place undue reliance on these forward-looking statements, and we assume no obligation to update these forward-looking statements, even if new information becomes available in the future, except as required by law.



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Information and Sources

Certain information contained in this presentation relates to or is based on studies, publications, surveys and other data obtained from third-party sources and InflaRx's own internal estimates and research. While InflaRx believes these third-party sources to be reliable as of the date of this presentation, it has not independently verified, and makes no representation as to the adequacy, fairness, accuracy or completeness of, any information obtained from third-party sources. In addition, all of the market data included in this presentation involves a number of assumptions and limitations, and there can be no guarantee as to the accuracy or reliability of such assumptions. Further, while we believe our own internal research is reliable, such research has not been verified by any independent source.

Avacopan Data

We have not conducted a head-to-head comparison of Avacopan to INF904 in a clinical trial but have compared the published data for Avacopan to data from our Phase 1 clinical trial of INF904. For the purpose of conducting pre-clinical studies (hamster neutropenia study), we synthesized Avacopan and did a side-by-side comparison. While we believe this comparison to Avacopan to be useful and appropriate, the value of this and other comparisons to Avacopan in this presentation may be limited because they are not derived from a head-to-head trial and they are from trials that were conducted under different protocols at different sites and at different times. Without head-to-head data, we are unable to make comparative claims between INF904 and Avacopan.

About InflaRx

InflaRx GmbH (Germany) and InflaRx Pharmaceuticals Inc. (USA) are wholly owned subsidiaries of InflaRx N.V. (together, "InflaRx").

InflaRx (Nasdaq: IFRX) is a biotechnology company pioneering anti-inflammatory therapeutics by applying its proprietary anti-C5a and anti-C5aR technologies to discover, develop and commercialize first-in-class, potent and specific inhibitors of the complement activation factor C5a and its receptor C5aR. C5a is a powerful inflammatory mediator involved in the progression of a wide variety of inflammatory diseases. InflaRx's lead product candidate, vilobelimab, is a novel, intravenously delivered, first-in-class, anti-C5a monoclonal antibody that selectively binds to free C5a and has demonstrated disease-modifying clinical activity and tolerability in multiple clinical studies in different indications. InflaRx was founded in 2007, and the group has offices and subsidiaries in Jena and Munich, Germany, as well as Ann Arbor, MI, USA. For further information, please visit www.inflarx.com.

Harnessing C5a/C5aR for controlling inflammation in I&I

InflaRx Highlights

Uniquely targeting complement C5a/C5aR, a validated mechanism and critical part of the inflammation cascade with:

- **First-in-class and highly potent anti-C5a monoclonal antibody (vilobelimab + second generation IFX-2)**
- **Best-in-class potential oral C5aR inhibitor INF904**:
  - **Addressing limitations** of marketed comparator (clearly differentiated plasma PK profile and inhibitory potential in Phase 1)
  - **Pipeline-in-a-drug** with potential to address several large markets in immuno-dermatology and broader I&I

A targeted development focus on immuno-dermatology where InflaRx can drive pipeline value in larger markets and has strong core IP and medical use IP coverage

- **Vilobelimab in late-stage development for PG** an unmet need with no approved drug in the US or Europe
- **INF904** now in Phase 2 development to initially demonstrate pipeline-in-a-drug potential in large markets of CSU and HS

Large upside potential in additional indications in I&I for proprietary drugs with options for collaborations

Strong balance sheet with enough cash to fund operations into 2026 and advance programs toward next milestones

Team with proven **track record of delivering clinical and regulatory successes**

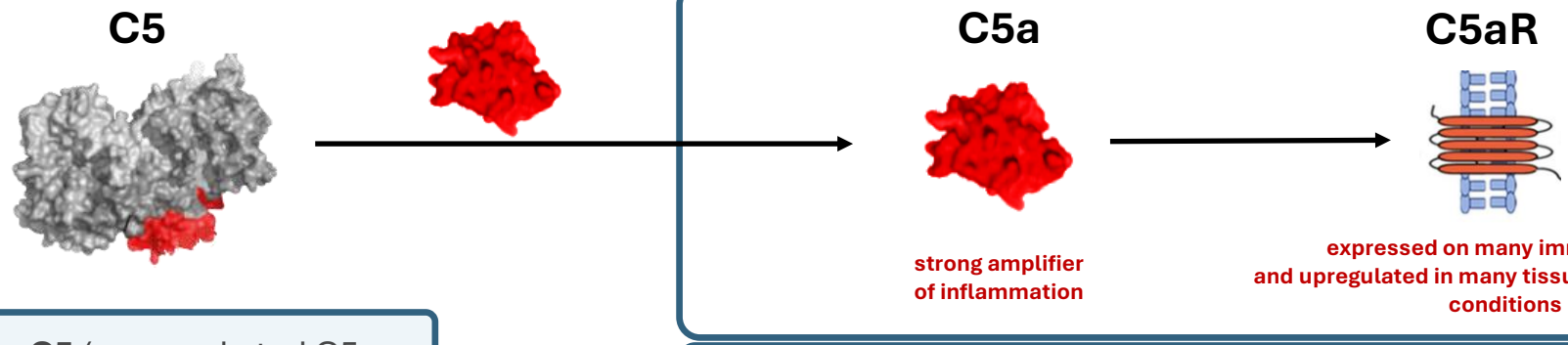
CSU [chronic spontaneous urticaria. **HS** [hidradenitis suppurativa]. **PG** [pyoderma gangrenosum]. **I&I** [inflammation and immunology].

C5a/C5aR are validated targets promoting inflammation

Targeting strong pro-inflammatory mechanisms

vilobelimab
intravenous mAB

INF904
oral small molecule



Targeting C5 (e.g. marketed C5 blockers) **does not prevent** enzymatic **C5a formation**, but only complement pathway mediated cleavage (classic, lectin, alternative) **and is not suitable** for tightly controlling C5a/C5aR1-driven inflammation

Anaphylatoxin C5a is upstream of the cytokine network

- Boosting effect on various pro-inflammatory cytokines
- IL-17, IL-6, IL-8, IL-1 and others

Strong activator of neutrophils and macrophages

- Chemotaxis of neutrophils
- O_2 radical generation + granular enzyme release
- NETosis (neutrophil extracellular traps)

Essential role in many inflammatory conditions

- Acute and chronic inflammation and other conditions
- Over 6,000 publications on role in numerous diseases

C5a/C5aR1 signaling inhibition: The importance of a targeted approach

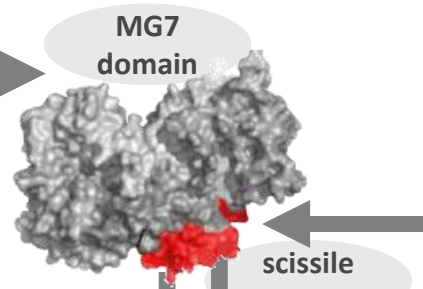
Complement Pathways		
Classical	**Lectin**	**Alternative**
Antibody binding	Mannose binding	Foreign surfaces

C3 activation

C5-convertases

1.) through C5 convertases (complement mediated)

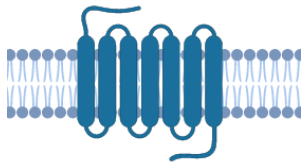
Targeting C5 (e.g. marketed C5 blockers) **does not prevent enzymatic C5a formation**, but only complement pathway-mediated cleavage (classic, lectin, alternative) **not suitable** for tightly controlling C5a/C5aR1-driven inflammation



2.) through enzymatic cleavage at scissile bond (thrombin, trypsin, elastase, etc.)

C5a

C5aR1



Key mediator of inflammation involved in many inflammatory pathways and upstream of the cytokine network

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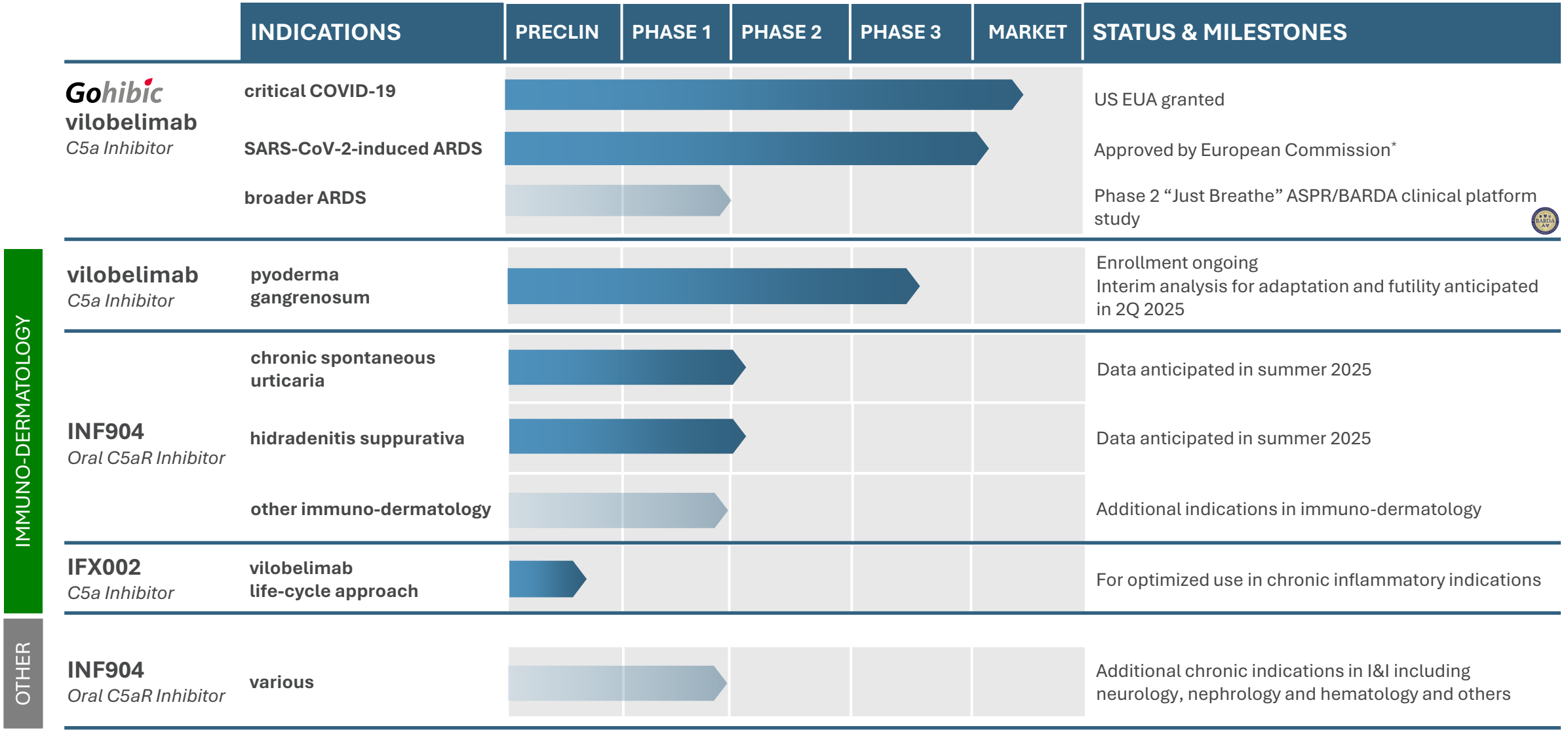
Late-stage pipeline targets multiple sizable markets



* Commercial partnering and distribution options in the EU being considered.

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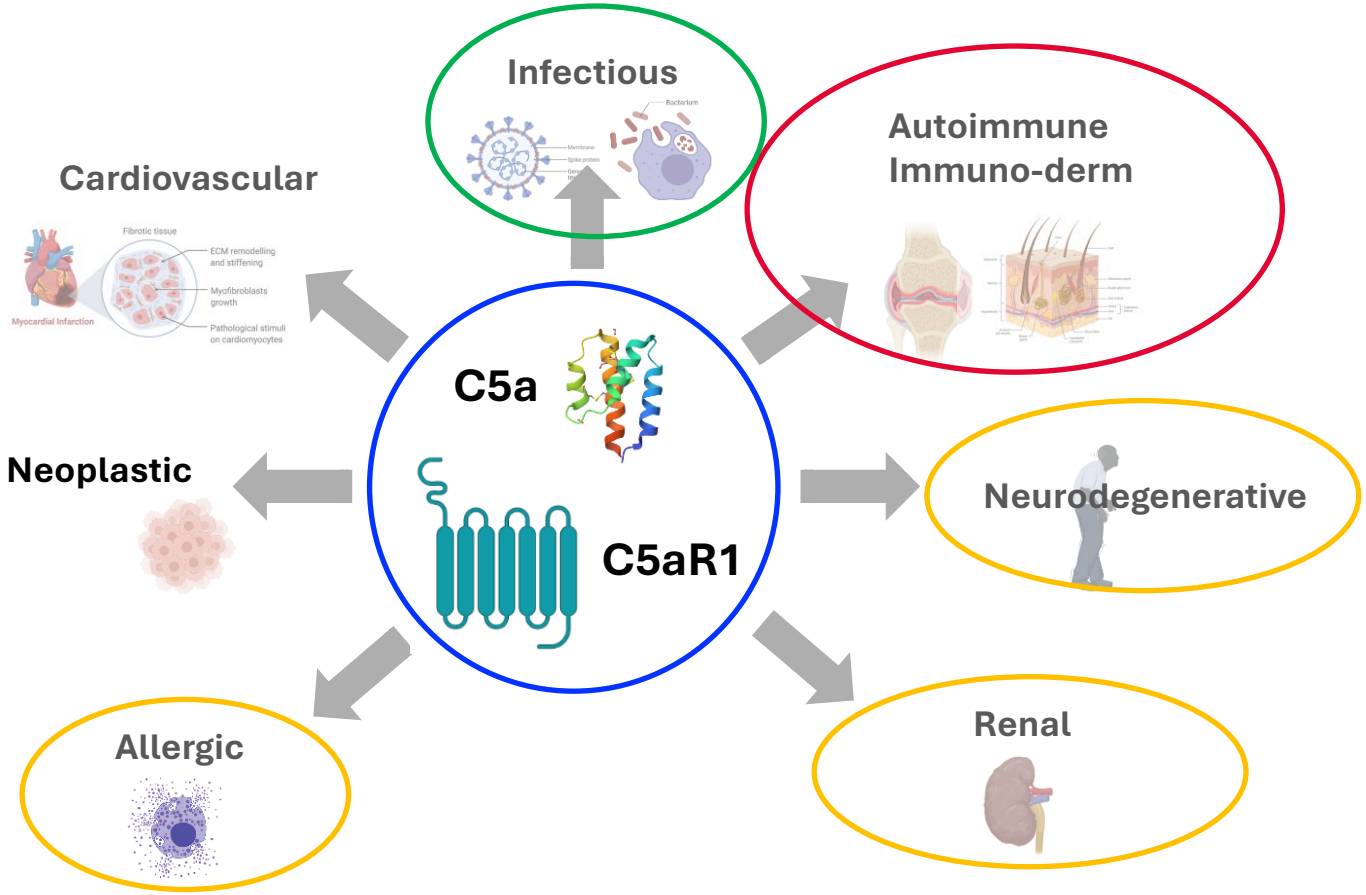
Significant opportunity in immuno-dermatology

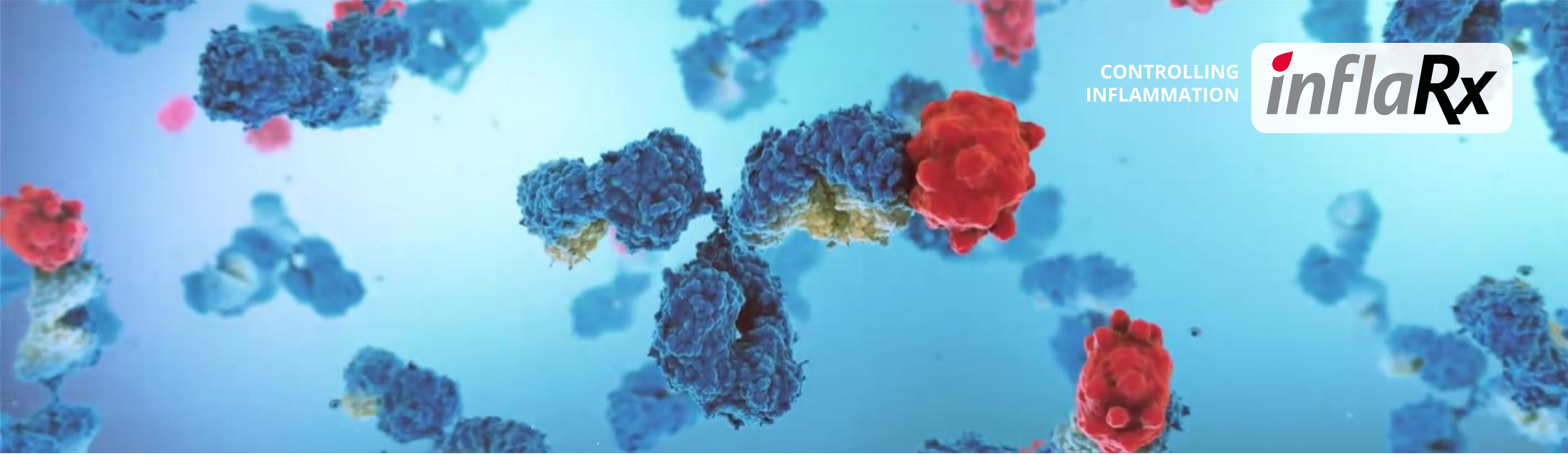
Why Immuno-Dermatology

- Potential to target **several attractive, billion-dollar+ commercial markets**
- InflaRx has identified **unmet medical needs** that INF904 could strongly address
- **Strong rationale** for the role of C5a/C5aR based on mechanism of action, pre-clinical and clinical data
- **Established endpoints** with the ability of INF904 to potentially achieve a clinical edge and prove to be a differentiated competitor
- INF904 is an oral drug with **no known safety concerns and potential broad therapeutic index**
- As a C5aR antagonist, INF904 acts on a **differentiated pathway with a MoA** not currently addressed by any other treatment approaches in the immuno-dermatology field
- Established **network of experts and in-house trial expertise**
- **Strong IP coverage** for C5aR inhibition in certain immuno-dermatological diseases

C5a & C5aR inhibition: Suggested medical utility in broader I&I by underlying pre-clinical and clinical research



- Initial focus on immuno-dermatology
- Vilobelimab with proven life-saving anti-inflammatory effect in critically ill COVID-19 patients
- Additional development expansion opportunity in various chronic inflammatory disease areas: renal, neurodegenerative, allergic etc.

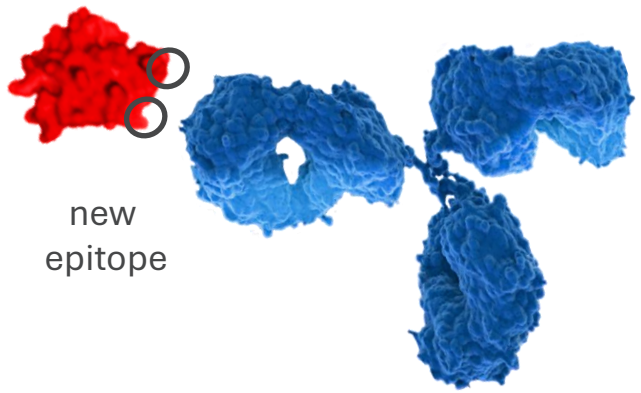


Vilobelimab for Ulcerative Pyoderma Gangrenosum (PG)

Vilobelimab: A first-in-class anti-C5a monoclonal antibody

Vilobelimab Key Features

- ✓ Highly selective anti-C5a mAb
- ✓ Blocks C5a biological effects up to 100% in human blood
- ✓ Leaves MAC formation intact
- ✓ Fast binding / high affinity to the newly discovered epitope
- ✓ Commercially validated / available under Emergency Use Authorization in certain severely ill COVID-19 patients



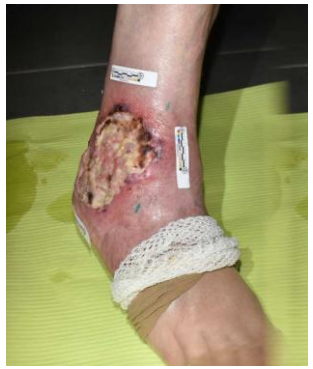
Development Areas in Acute and Sub-Acute Inflammation

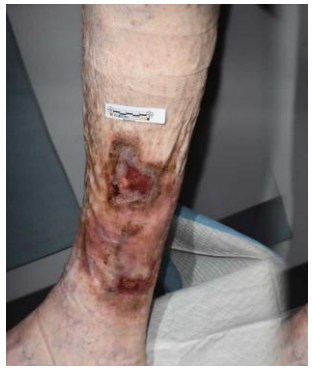
As a fast acting highly specific monoclonal antibody infused, vilobelimab delivers:

- Strong and immediate C5a inhibition in blood
- Fast onset of inhibition of neutrophil activation in human blood
- Potential disease modifying activity for diseases in which C5a signaling may play a key role

PG: An autoimmune condition with high unmet medical need

PG Overview and Unmet Need





Clinical features

- PG is a rare but potentially life-threatening skin disorder that can lead to chronic, difficult-to-treat wounds
- Patients frequently suffer from other autoimmune disorders, e.g. ulcerative colitis, rheumatoid arthritis and hematological diseases
- Patients suffer from severe pain, long healing times and frequent relapses

Incidence and market potential

- Rare – estimated that up to 50,000 patients in the US and Europe are affected
- Significant market potential – premium pricing expected based on performed market study

Current treatment and medical need

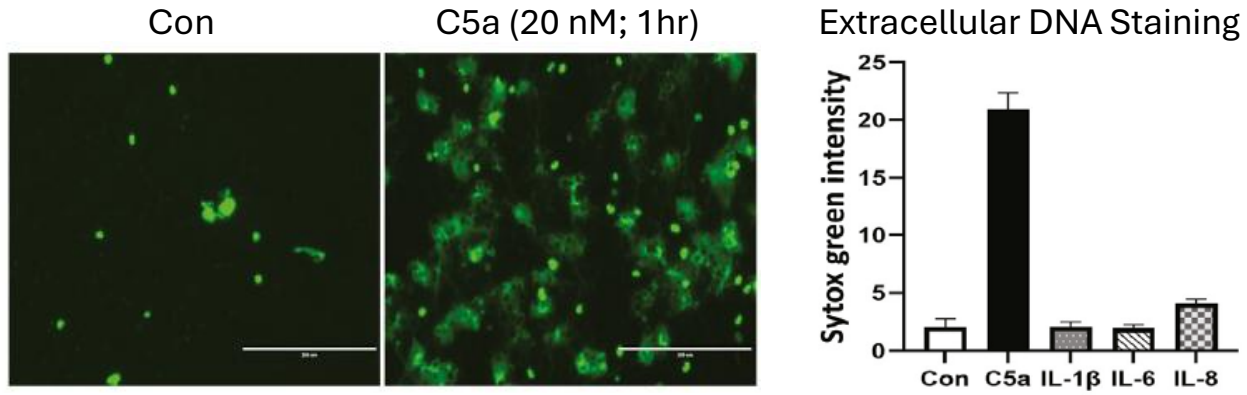
- No drugs currently approved in the US or EU
- For less severe cases, topical or intralesional treatments can be used, including topical steroids
- Use of systemic immunosuppression in rapidly progressing cases
- Mixed reports about efficacy; long treatment durations and relapses are frequently seen

› Strong rationale for treatment with vilobelimab:
PG associated with neutrophilic skin infiltration in affected areas and lesions, potentially triggered by C5a

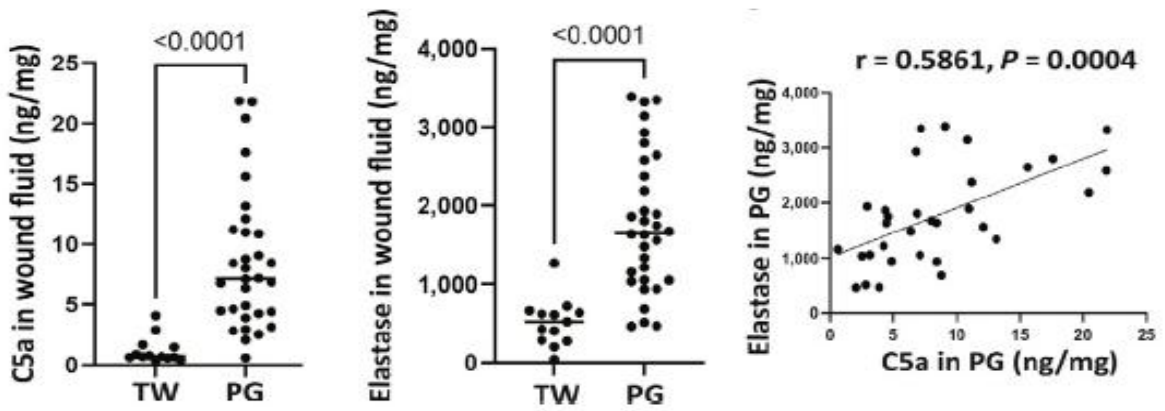
PG Pathogenesis: Potential role of the C5a/C5aR axis

- The etiology of PG is believed to be linked to the dysregulation of the immune system, specifically, **altered neutrophil function**
- Evidence suggest that **complement activation and C5a play an important role** in the disease development:
  - High C5a levels were detected in the wound fluids from PG patients
  - C5a levels correlated well with elastase levels in wound fluids, a NETosis marker
  - C5a/C5aR axis activation may be a key driver for NETosis in PG

C5a Induces NETosis in Control Neutrophils



C5a Levels in PG Wound Fluid Correlate With NETosis



Wang et al 2024. J invest Derm. 144; TW = Trauma Wound

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PG Phase 2a showed no safety or tolerability concerns and dose-dependent activity

Clinical Response

- **High-dose group showed highest rate of target ulcer closure and clinical remission (86%)**
- Out of 17 evaluable patients at end of treatment visit or day of last drug administration
  - **Clinical remission (PGA ≤ 1) reported in 9 patients (53%)**
  - Clinical response (PGA ≤ 3) reported in 1 additional patient (6%)
  - Slight improvement (PGA = 4) reported in 7 patients (41%)

Safety

- No infusion-related reactions observed
- For 2 patients, related SAEs were reported
  - Erysipelas leading to hospitalization (judged as non-related by sponsor)
  - Rash due to delayed hypersensitivity reaction
- Observed AE profile in line with patients' underlying diseases
- No dose-related AEs detected

Phase 3 Initiated Based on Feedback From FDA

Orphan Drug and Fast Track Status US FDA

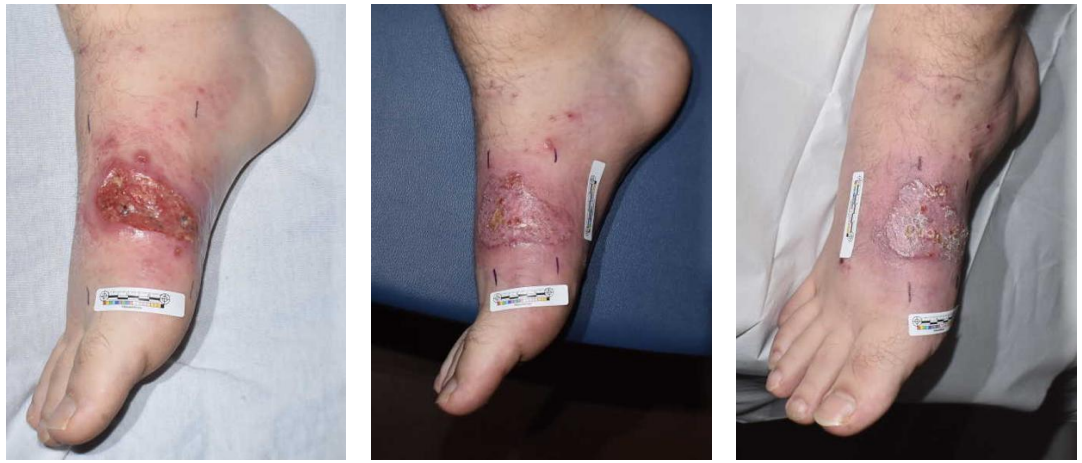
Orphan Drug Status EMA

PG Phase 2a treatment examples - Patient case studies

Target Ulcer Developed While on Adalimumab

- **MH:** PG since August 2020, Psoriasis since 2017
- **Previous PG medication:** None
- **Cohort 3:** 2400 mg Q2W up to Day 85 -> exclusion after 9 doses due to delayed availability of pos. baseline TB testing result (no TB activation)
- **Concomitant medication:** Adalimumab for psoriasis 40mg q2w since 2017

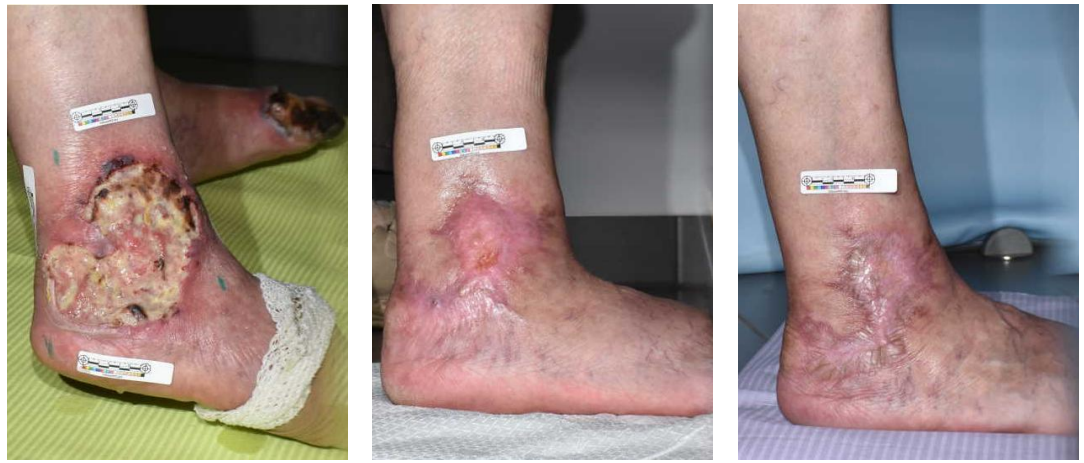
Baseline	Day 85	Day 89
	PGA = 1	PGA = 1
Area: 1136 mm^2	Area: 0.00 mm^2	Area: not yet available



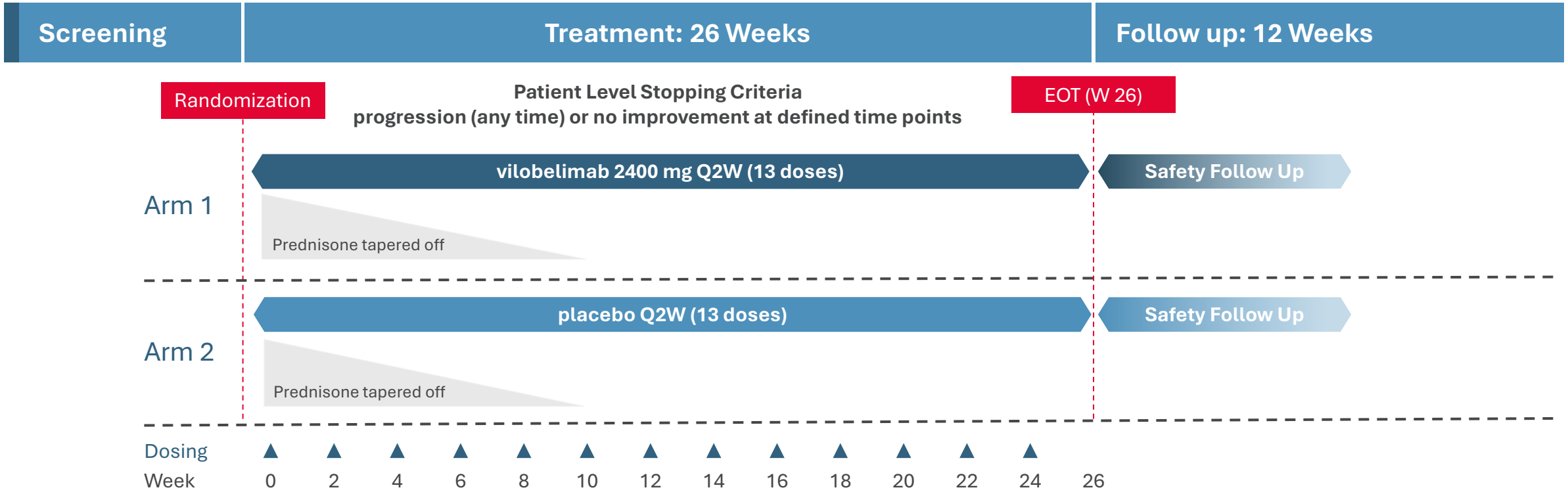
Target Ulcer Reappeared

- **MH:** PG since 2019, Hypertension since 1998
- **Previous PG medication:** Methylprednisolone only in Jun 2019, Dapsone Jun 2019 - Aug 2020, Cyclosporine Oct 2019 - Aug 2020 -> ulcer healed and reappeared after discontinuation of immunosuppressants
- **Cohort 2:** 1600 mg Q2W, individual up-titration to 2400 mg at D57, treatment completed
- **Concomitant medication:** Prednisone 10 mg for PG since October ‘20

Baseline	Day 99	Day 189
	PGA = 1	PGA = 1
Area: 3695 mm^2	Area: 0.00 mm^2	Area: 0.00 mm^2



PG Phase 3 design: Interim analysis expected in 2Q 2025



Adaptive Design

Arm 1 n approx. = 15

Arm 2 n approx. = 15

Interim Analysis*
set rules for size adjustment or futility stop by IDMC

Total number of patients to be adjusted between 50 – 100**

Primary endpoint: complete target ulcer closure

* Blinded except for independent data safety monitoring committee / **Adjustment of randomization ratio to 2:1 (Arm 1 to Arm 2) after blinded interim analysis

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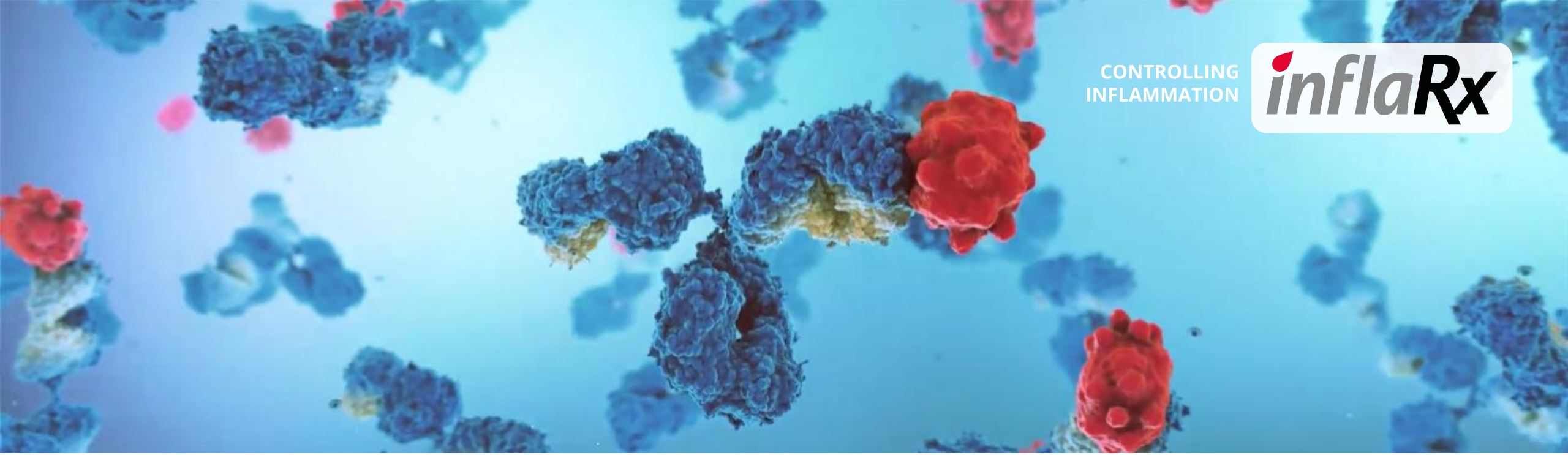


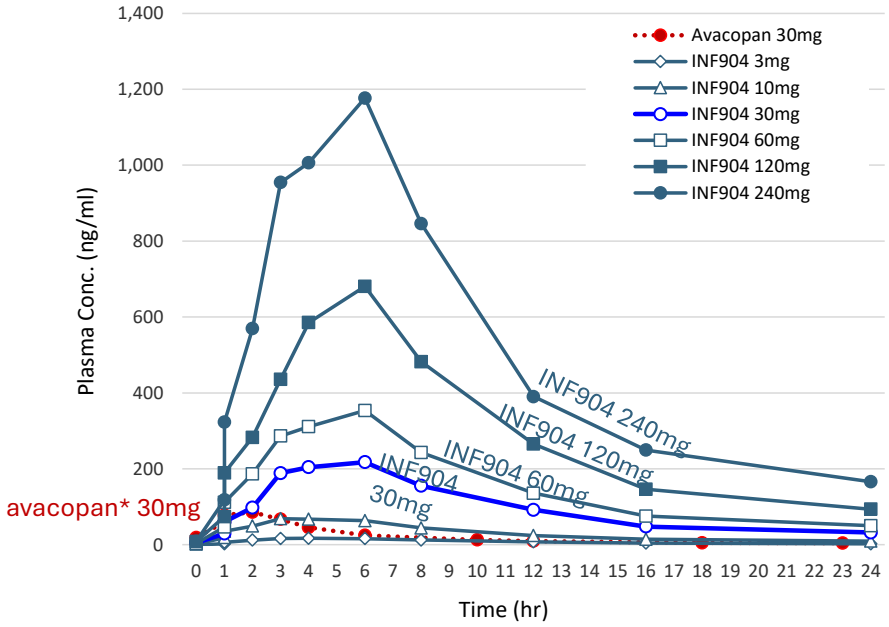
INF904: An Oral Highly Selective C5aR Inhibitor With Best-in-Class Potential

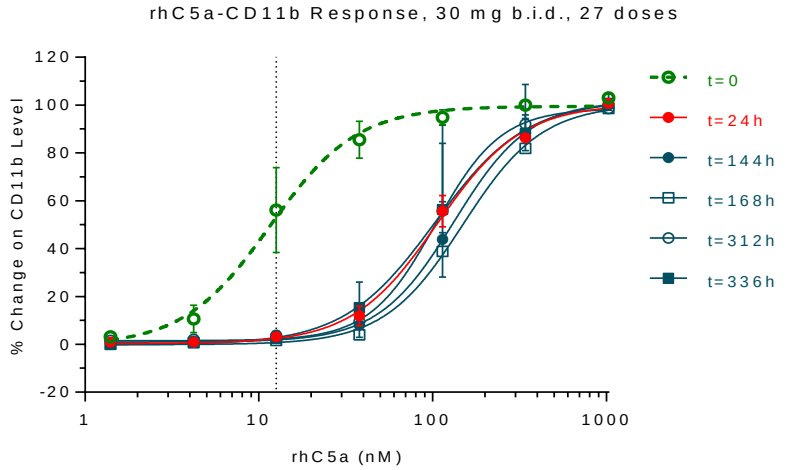
INF904: Oral C5aR antagonist with best-in-class potential

- ✓ **Superior PK/PD profile** in Phase 1 SAD and MAD studies compared to reported data from marketed comparator avacopan:
  - **~3-fold higher C_{max}** and **~10-fold higher AUC_{last}** (at comparable dosing levels)
  - **Significantly increased blocking activity** >90% blocking of C5a activity
  - **Faster achievement of therapeutic exposures** with broad therapeutic index, BID and QD dosing
- ✓ **Favorable drug safety profile** supported by preclinical studies and data reported from InflaRx's Phase 1 SAD and MAD trials
- ✓ **Other favorable features** compared to avacopan:
  - **Higher drug strength with potential for reduced capsule intake**
  - **Much weaker inhibitor of CYP3A4/5 in pre-clinical studies**

These properties allow for exploring a significantly more potent C5aR1 inhibition in patients and this, ultimately, may lead to higher clinical efficacy for INF904

This **could open significant additional market opportunities**



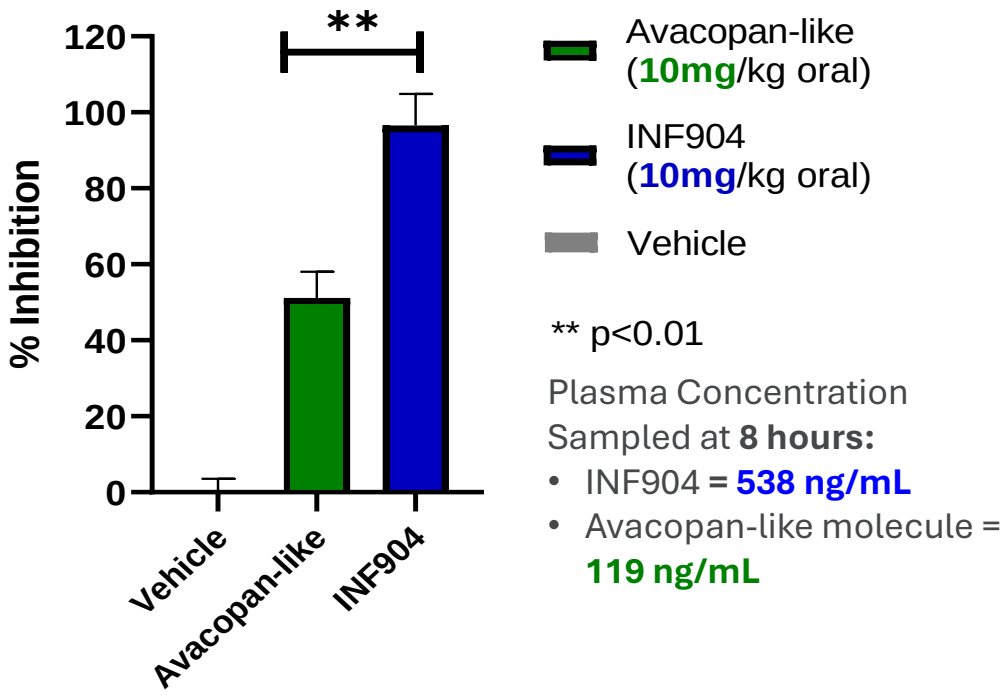


*InflaRx data on file: PK Results From Single Ascending Dose (SAD) Phase 1 study – note: Avacopan data (Becker et al, 2016, PLoS One) are superimposed in graph for orientation. Avacopan was not included as a comparator in INF904 Phase I study
** InflaRx data on file: PD Results from multiple ascending dose (MAD) Phase 1 study.

INF904: Oral C5aR antagonist with best-in-class potential

INF904 has double the inhibitory effect in vivo in a pre-clinical model compared to avacopan

Inhibition of in vivo neutrophil activation by INF904 compared to avacopan-like molecule*



** p<0.01

Plasma Concentration Sampled at **8 hours:**

- INF904 = **538 ng/mL**
- Avacopan-like molecule = **119 ng/mL**

INF904 doubled the in vivo inhibitory effect at comparable dose when tested head-to-head with avacopan.

The **strongly improved PK features of INF904** (plasma exposure) may drive the ability to increase efficacy in vivo.

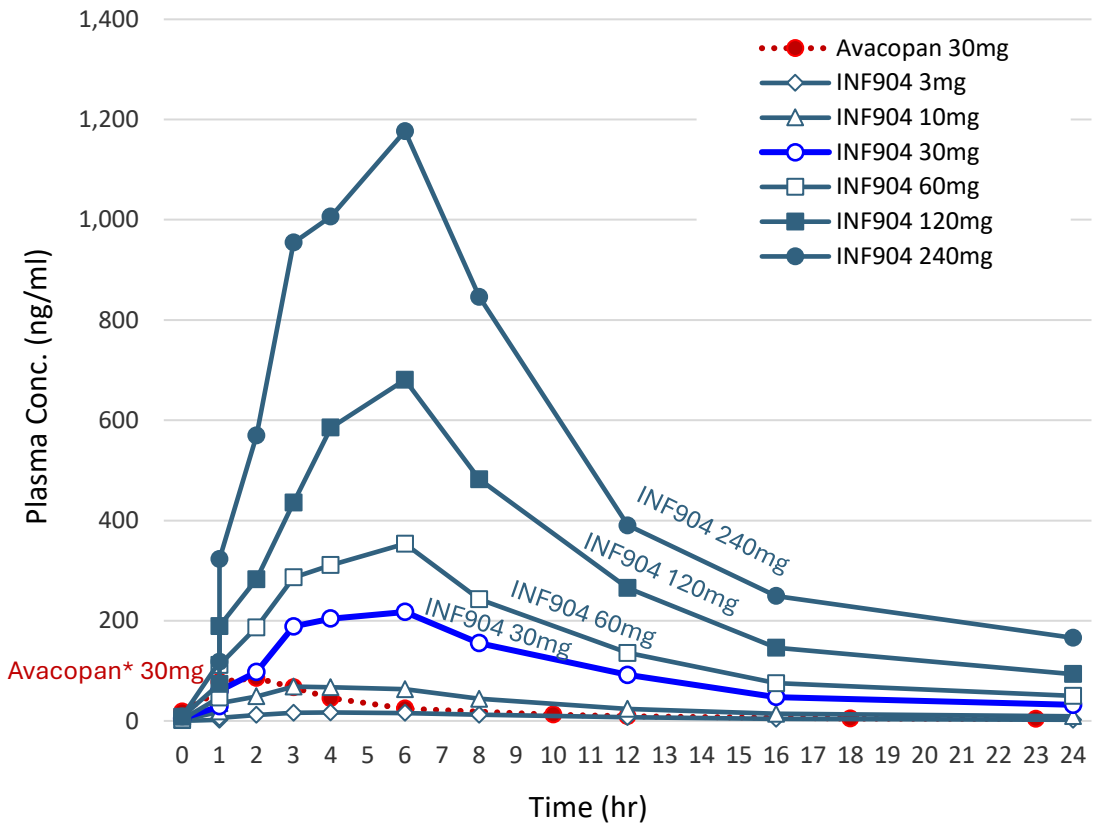
Experiment: Challenge of rodents with C5a leads to neutrophil activation and consequent adherence (sticking) of neutrophils to the endothelial cell wall of vessels = mimicking a neutropenia (vehicle). This effect can be completely inhibited when C5aR activation is blocked.

Note: INF904 dosing within this experiment exerts an approximately 4.5-fold higher plasma level 8 h after dosing when compared to the identical dosing with avacopan*

Source: InflaRx data on file.
*Avacopan synthesized based on the published structure and publicly available data.

INF904: Oral C5aR antagonist with best-in-class potential

PK results from single ascending dose (SAD) Phase 1



Parameter	Unit	*Dose*	INF904	Avacopan*
AUC_{inf}	h.ng/ml	*3 mg*	285	25
		10 mg	1264	130
		30 mg	5956	628
AUC_{last}	h.ng/ml	*3 mg*	254	23
		10 mg	1117	122
		30 mg	5197	557
C_{max}	ng/ml	*3 mg*	21.5	9
		10 mg	74.8	25
		30 mg	289	79
t_{max}	hr	*3 mg*	3.5	1.2
		10 mg	4	1.7
		30 mg	5.01	1.7

› In comparison to published data for avacopan INF904 is approximately 3-fold higher in C_{max} and 10-fold higher in systemic exposure (AUC_{last}) for comparable doses (3, 10, 30 mg)

Source: Bekker et al. 2016, PLoS One; 11(10): e0164646

***Please note:** Avacopan data taken from Bekker et al. 2016, PLoS One; 11(10): e0164646 are superimposed in graph for orientation. Avacopan was not included as a comparator in INF904 Phase I study.

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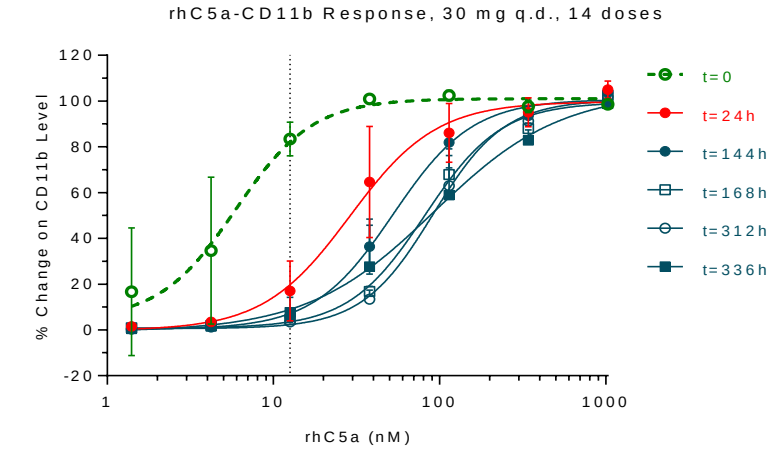
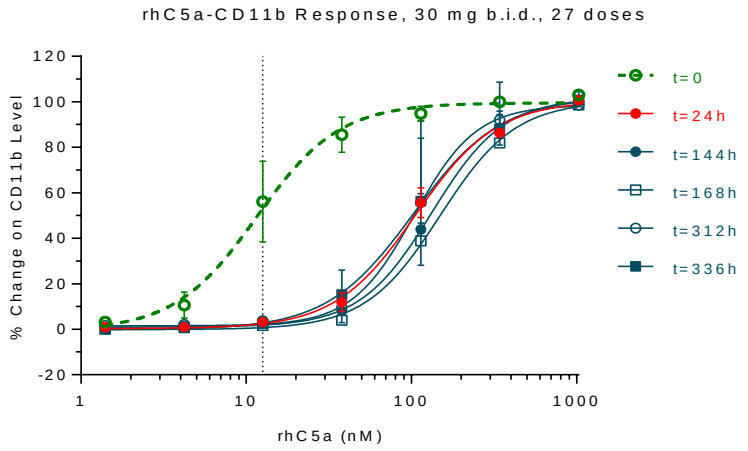
INF904: Oral C5aR antagonist with best-in-class potential

C5a-mediated CD11b upregulation on neutrophils ex vivo up to 14-day dosing

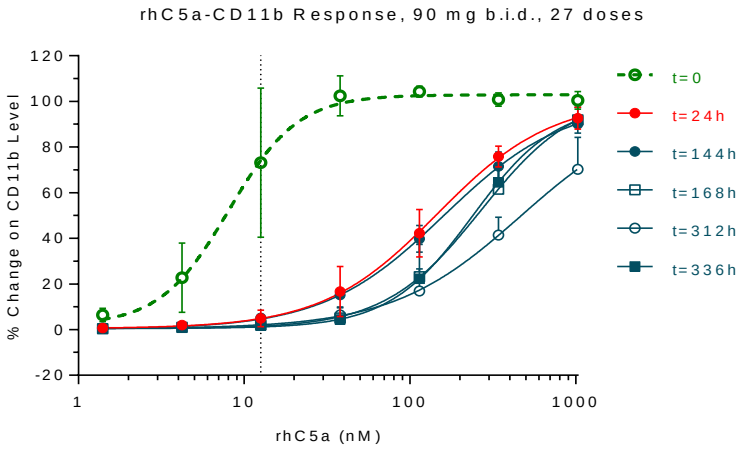
INF904: 30 MG QD



INF904: 30 MG BID



INF904: 90 MG BID



	Upon stimulation with 12.6 nM rhC5a (levels observed in disease state)														
	24 h			144 h (Day 6)			168 h (Day 7)			312 h (Day 13)			336 h (Day 14)		
	30QD	30BID	90BID	30QD	30BID	90BID	30QD	30BID	90BID	30QD	30BID	90BID	30QD	30BID	90BID
Blockade (%)	80	94	90	93	95	94	95	97	97	96	92	97	90	95	97
EC_{50} (nM)	35.6	106.2	145.6	52.4	134.7	160	74.2	149.0	268.2	92.4	126.3	465.7	94.6	110.9	238

PD MAD results confirm strong >90% C5a inhibition at C5a levels found in human diseases – this is clearly differentiated from reported avacopan results which have shown approximately 50% inhibition at a lower challenge of 10nM C5a (7 day dosing – trough)**

*EC_{50} (nM) is the half maximal effective C5a concentration ** Bekker et al. 2016, PLoSOne; 11(10): e0164646

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INF904 development in the immuno-dermatology field

Phase 2a Study Ongoing

Initial Phase 2a – demonstrating pipeline-in-a-drug potential of INF904

- Open-label PK / PD “basket study” to explore initial efficacy signals
- 4-week treatment period in 2 immuno-derm indications **CSU and HS** with established endpoints
- Safety and PK / PD assessment planned for at least 3 different doses

Expected catalysts

- Initial Phase 2a data anticipated in summer 2025
- In addition to providing clinical data, Phase 2a goal is to inform the design of a larger, longer-term Phase 2b study by year-end 2025

Phase 2a open-label basket study concept

Primary and Secondary Endpoints Include Safety and PK

CSU [n = 45]

- 4-week treatment period
  - 4-week follow-up
- 3 study arms with 15 patients per arm
  - 45 patients total
  - 60 mg and 120 mg BID arms
  - 120 mg BID arm in anti-IgE non-responders

HS [n = 30]

- 4-week treatment period
  - 4-week follow-up
- 3 study arms with 10 patients per arm
  - 30 patients total
  - 60 mg, 90 mg and 120 mg BID

Exploratory Endpoints

- Change in weekly
  - Urticaria Activity Score 7 (UAS7)
  - Hives Severity Score (HSS7)
  - Itch Severity Score (ISS7)
- Biomarkers: Tryptase, IgE, IgG, anti-TPO

Patient Reported Outcome Endpoints

- Urticaria Control Test (UCT7)
- Angioedema Activity Score (AAS7)
- Chronic Urticaria Quality of Life Questionnaire

Exploratory Endpoints [change from baseline]

- Total abscess (A), inflammatory nodule (N) and draining tunnel (dT) count (ANdT, AN and separate counts)
- HS lesion related scores (HiSCR–various, modified-HiSCR, IHS-4)
- Clinician's Global Impression of Change (CGI-C)

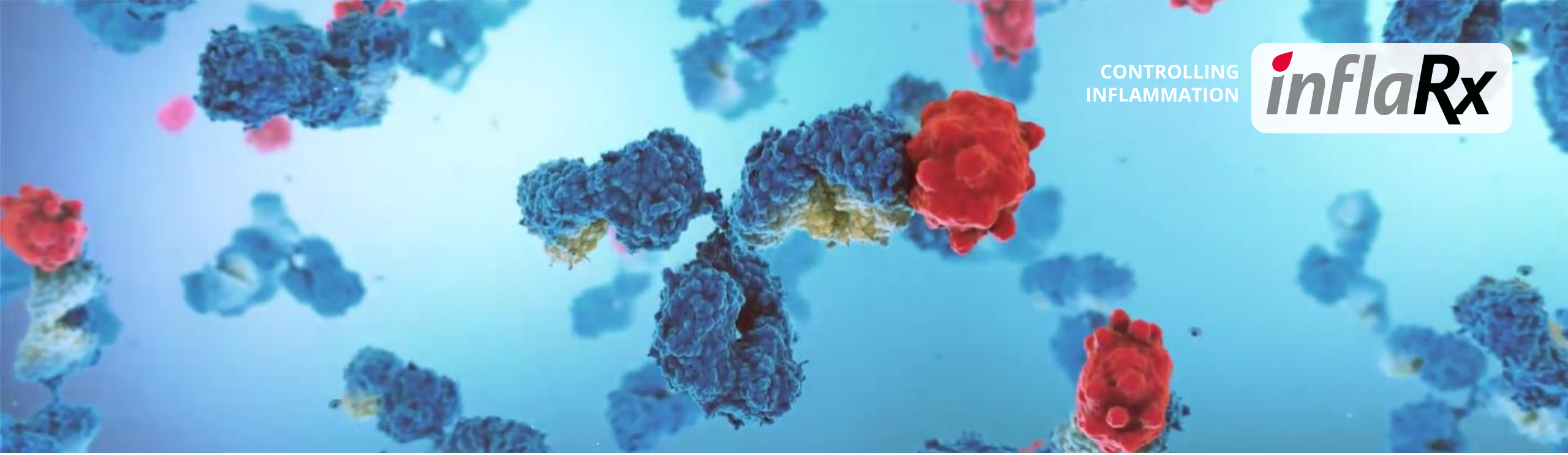
Patient Reported Outcome Endpoints [change from baseline]

- Global Impression of Change in General Quality of Life
- Global Assessment of Skin Pain
- Dermatology Life Quality Index

Phase 2a doses expected to provide a range of drug exposures comparable to the reported levels in the Phase 1 study

Strong commercial potential based on differentiated profile of INF904

- Oral availability provides for **ease of administration** and patient acceptance
- Favorable drug metabolism, PK and toxicology profile positions INF904 as a potential **strong alternative** to other drug classes
- INF904 could address areas of **high unmet medical need** given its strong emerging profile
  - CSU: mechanism of action that suggests impact on IgE-dependent and -independent disease phenotypes
  - CSU and HS: Maintenance / durability of response
  - HS: treatment of draining disease / draining tunnels in HS
  - CSU and HS: safe mechanism of action not associated with known serious side effects
- **MoA is highly relevant** in several immuno-dermatology indications, including most neutrophilic dermatoses
  - Unique mechanism could provide a strong alternative to biologic therapies and may offer advantages to currently developed oral approaches
- Differentiation also applies to other **inflammation & immunology** disease areas beyond immuno-dermatology



INF904 for Chronic Spontaneous Urticaria (CSU)

A strong rationale for developing INF904 in CSU

C5aR Signaling is Involved in Histamine Release in an IgE Independent Manner

- Increasing scientific evidence suggests that **C5aR signaling is involved in histamine release** from mast cells and basophils in CSU in **an IgE independent manner**. This mechanism may play an important role for both described endotypes in CSU:
  - Type I (IgE mediated) and
  - Type IIb (IgG autoantibody mediated)

- Despite availability of current treatment options such as anti-histamines and anti-IgE therapy, **approximately 30-60%* of these patients are estimated to remain non-responsive or symptomatic**.

- INF904 could be a **convenient oral therapeutic option** for those underserved with current therapies.

- Overall maximum market potential for INF904 in CSU **could exceed US$1 Bn per year****

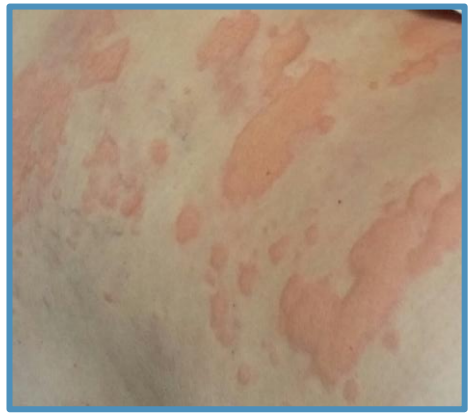
* Metz et al, Clin Rev Allergy Immunol. 2020; 59(1): 38–45
** IFRX proprietary market research, Clarivate

Chronic spontaneous urticaria (CSU)

CSU Overview and Unmet Need

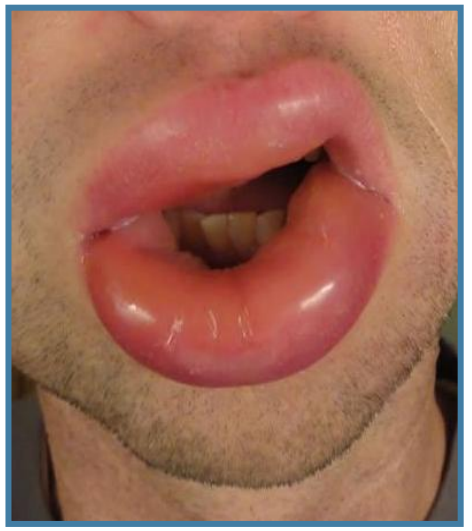
Clinical features

- An immune-mediated chronic inflammatory skin disorder, with dysregulated inflammatory cascades that leave patients predisposed to symptom development: debilitating and intensely itchy hives / wheals for > 6 weeks and often associated with angioedema
- Burden of disease is high and impacts sleep, mental health, QoL and productivity due to absences from school and work
- Co-morbidities include atopic disorders, depression, autoimmune and thyroid disorders



Epidemiology

- Estimated prevalence is around 1% of the general population
- 20% of this population experiences symptoms for more than 5 years
- 20- to 40-year-olds are most affected, with women impacted 2x more than men



Current treatment and medical need

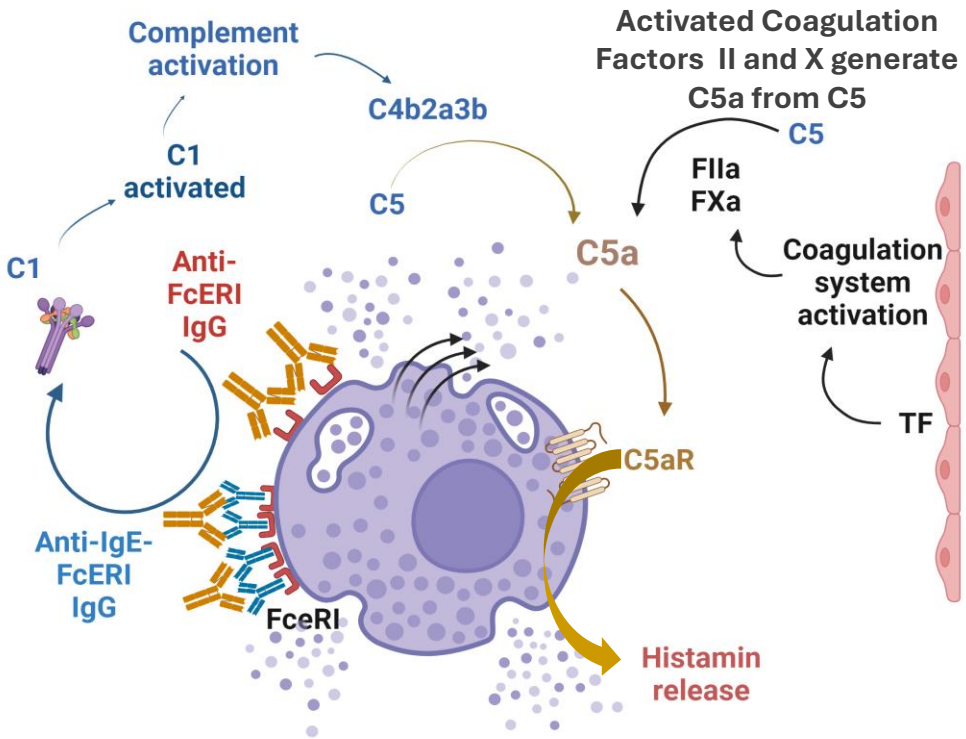
- Therapies such as 2nd-generation antihistamines are not effective in a significant number of patients
- Options such as anti Ig-E therapy and immunosuppressants also do not adequately serve the CSU population

CSU endotypes: Type I auto-allergens and type IIb autoimmunity

C5aR Signaling is Suggested to be Involved in Both Type I and Type IIb Endotypes

1. **Type I autoallergens (IgE mediated)**
   Close contact of two Fc regions of the IgG anti-FcERI or IgG anti-IgE FcERI complex activate complement factor C1

2. **Type IIb autoimmunity (IgG mediated)**
   C5a is activated by the binding of IgG-anti-FcεRI or IgG-anti-IgE to FcεRI on mast cells and basophils
   ~30% of CSU



Modified from Kaplan AP et al Clin Exp Allergy 2009 and Yanase Y, J Allergy Clin Immunol 2021

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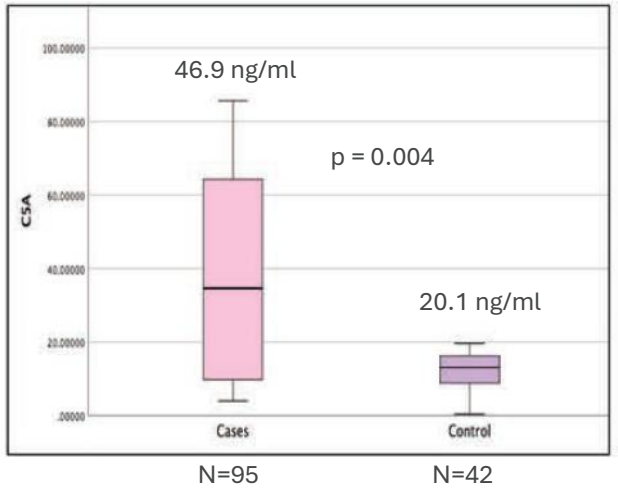
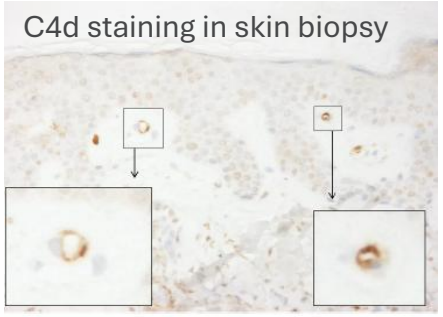
C5a in CSU and its role in IgE-independent histamine release

CSU patients have elevated C5a levels

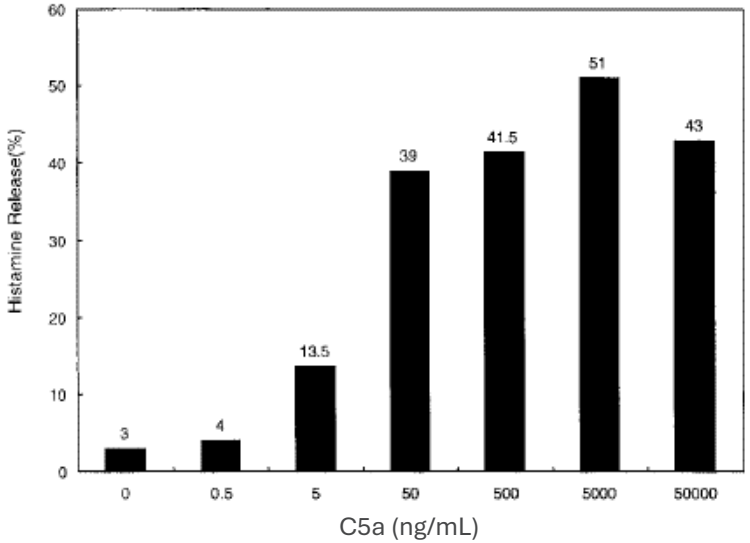


CSU patients show evidence of complement activation in the skin



Bhatia et al. 2024 Asia Pacific Allergy 14 ;
Aghdam et al. 2021 Clin Transl Allergy. 11

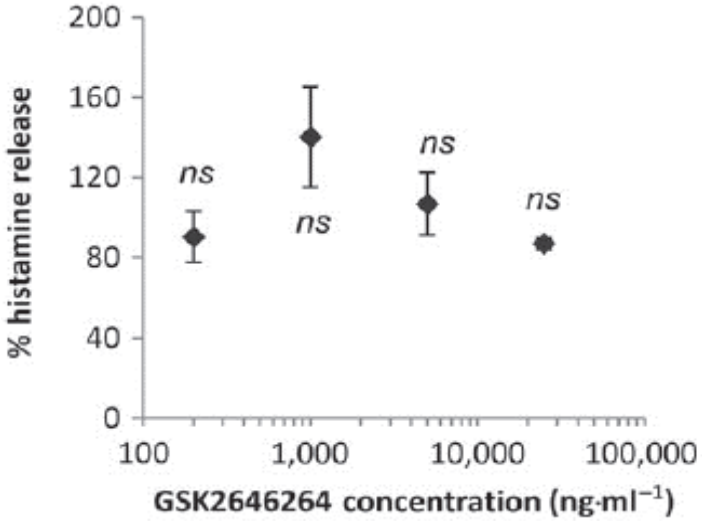
C5a induces histamine release from basophils in a dose-dependent manner



Histamine release (percentage) from donor basophils stimulated with increasing levels of C5a

Kikuchi, 2002 J Allergy Clin Immunol:109

C5a mediated histamine release is independent of the IgE pathway

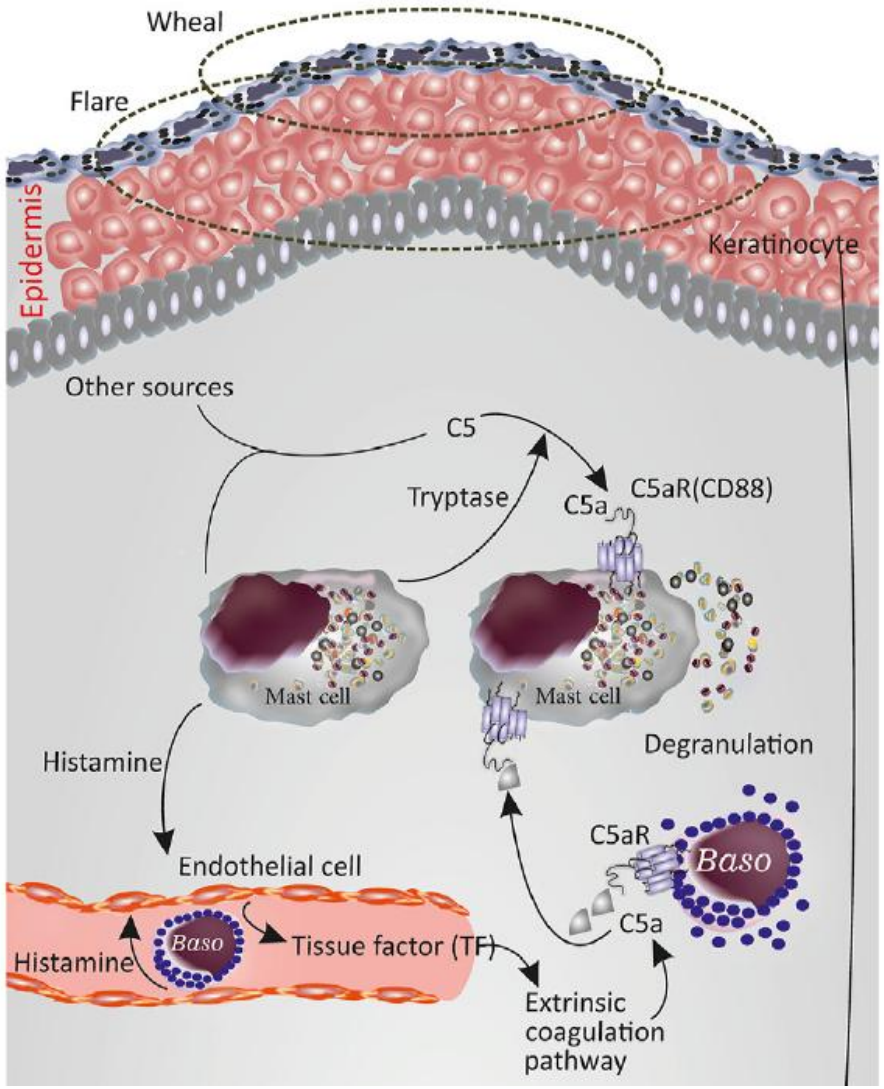


Human Skin ex vivo Model: microdialysis tubing into the ex vivo human skin with 1nM C5a

C5a stimulation of histamine releases is not affected by IgE pathway / SYK inhibitor GSK2646264

Molina et al; 2019 Br J Pharmacol: 176

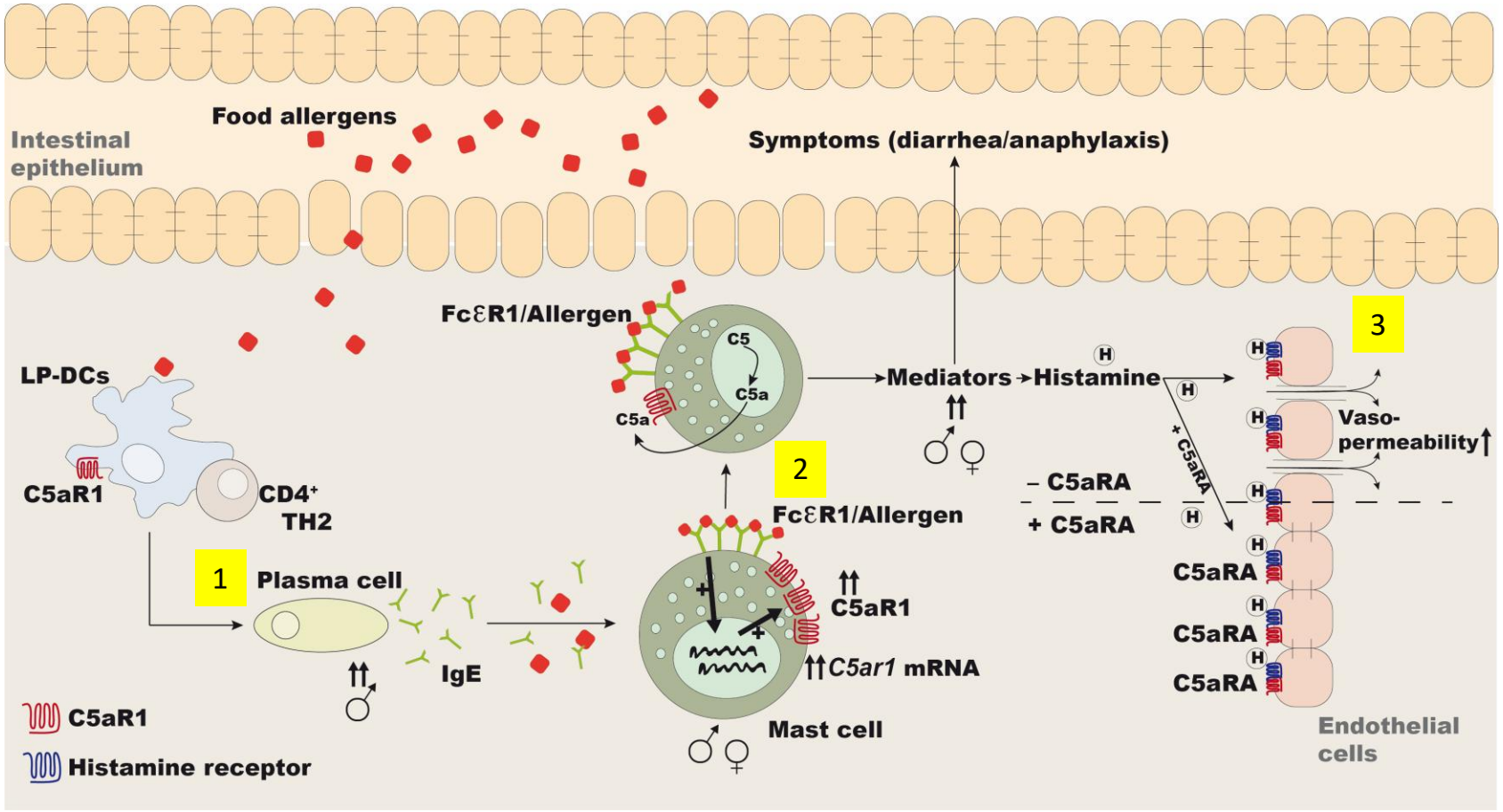
C5a drives mast cell attraction, activation and degranulation



- The chemoattractant nature of C5a for mast cells explains their accumulation at inflammation sites
- Mast cells amplify this cross talk by producing complement proteins and activating them via their released tryptase
- C5a is also produced by the extrinsic coagulation pathway activated by Tissue Factor

Elieh-Ali-Komi D, Metz M, Kolkhir P, Kocatürk E, Scheffel J, Frischbutter S, Terhorst-Molawi D, Fox L, Maurer M. Chronic urticaria and the pathogenic role of mast cells. *Allergol Int. 2023* Jul;72(3):359-368

C5aR1-mediated induction of anaphylaxis via mast cell activation



Kordowski et al. *Allergy* 2019

Activation of the C5a/C5aR1 axis drives the development of anaphylaxis at several levels

1. The regulation of the B cell response in male mice that leads to the production of antigen-specific IgE.
2. The enhancement of FcεR1-dependent degranulation of MCs.
3. The sensitization of the vascular system towards the MC mediator histamine.

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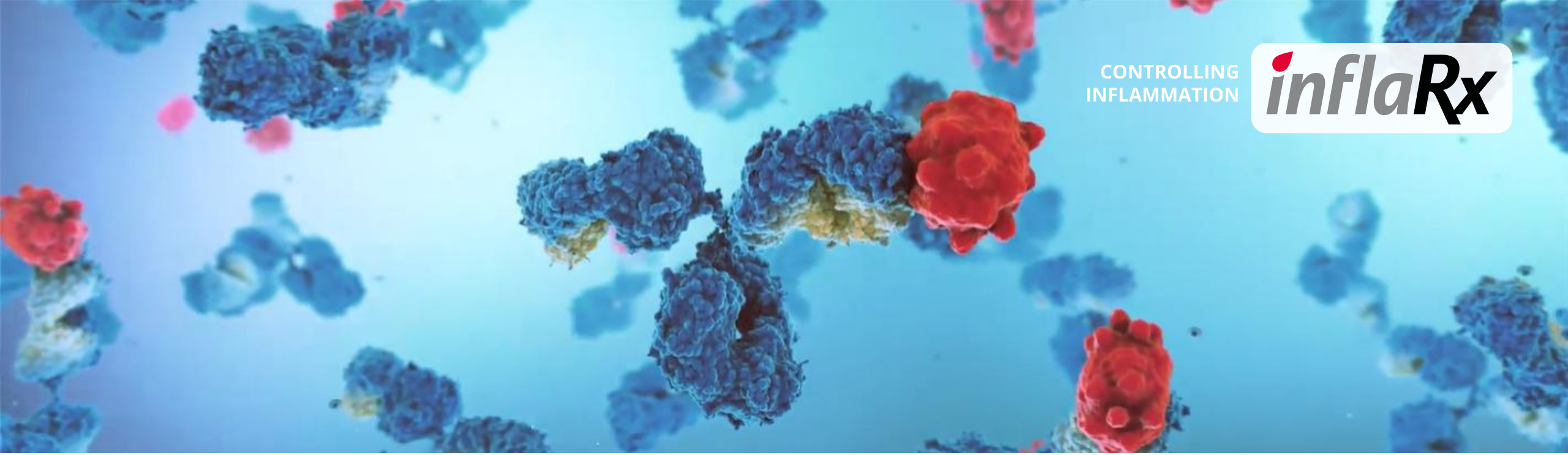
Opportunity for a novel MoA such as anti-C5aR

Opportunities
Ease of administration to address patient preference and adherence ▪ Oral capsules (BD or QD dosing)
New mechanism of action to treat all affected CSU patient populations ▪ Type I IgE mediated and Type IIb autoimmune non-IgE mediated ▪ Anti-Ig E naïve and refractory patients
Excellent benefit-risk profile ▪ Fast onset of action to alleviate itch and hives within 4 weeks or earlier ▪ Durability of response ▪ No Black Box warning ▪ No hair or skin discoloration during and after treatment ▪ No issues with neutropenia or thrombocytopenia ▪ No recurrence of urticaria

INF904 development in CSU

Conclusion

- C5aR signaling is involved in histamine release from mast cells / basophils in CSU
- This C5a-mediated histamine release is independent of the IgE pathway and has been suggested to play a role in both subtypes of CSU
- C5aR inhibition represents a novel mechanism of action (MoA) to address an unmet medical need in CSU
- **INF904 as an oral potent C5aR inhibitor is ideally positioned for development in CSU**



INF904 for Hidradenitis Suppurativa (HS)

A strong rationale for developing INF904 in HS

New Mechanisms are Needed

- **New mechanisms are needed** to address the disease more completely
  - **Moderate to severe patients with active draining disease** have limited approved treatment options proven to be effective
  - Response to treatment with approved **anti-TNF-alpha or anti-IL17 agents is known to wane over time** in a significant number of cases
- HS patients have a preference for oral medications over injections (and surgical incisions)*
- INF904 is an **oral C5aR inhibitor** with:
  - A MoA which inhibits the known C5a induced effects on neutrophil activation and tissue accumulation of immune cells including induction of NETosis – mechanisms which have been suggested to be involved in HS progression and specifically in HS lesion formation
  - Clinical evidence existing that blocking the C5a/C5aR pathway reduces lesion counts in HS
  - A favorable PK/PD profile with a broad dose range for systemic exposure in patients
- Overall maximum market potential for INF904 in HS **could exceed US$ 1.5 Bn per year****

* Willems, D., Hinzpeter, EL., Van der Zee, H.H. et al. Patient 16, 153–164 (2023)
**IFRX proprietary market research, Clarivate

Hidradenitis suppurativa (HS)

HS Overview and Unmet Need

Clinical features

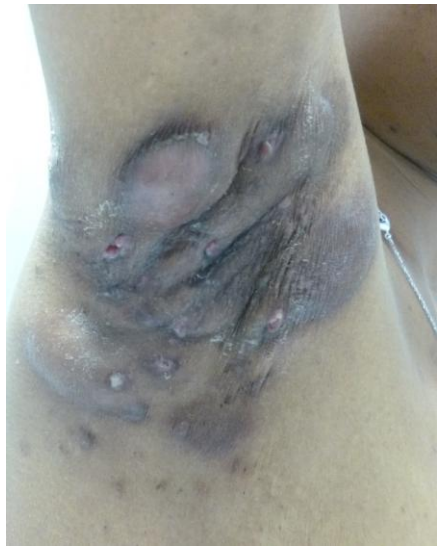
- A chronic, recurring, debilitating neutrophil-driven inflammatory disease, that can persist for years
- Characterized by abscesses, nodules and draining tunnels (dTs) with purulent or bloodstained discharge, that can flare and cause scarring
- Predilection for intertriginous sites such as axillae, groin, buttocks and inframammary areas
- Associated with severe bacterial infections, tremendous QoL impairment and functional disability

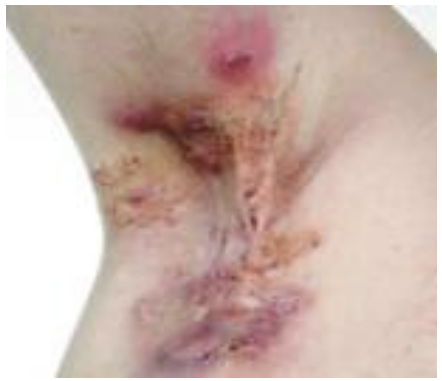
Epidemiology

- Prevalence in the US and EU is estimated to be 0.7% - 1.2%
- Though estimates vary widely, we estimate there are clearly more than 200,000 moderate to severe HS patients in the US alone

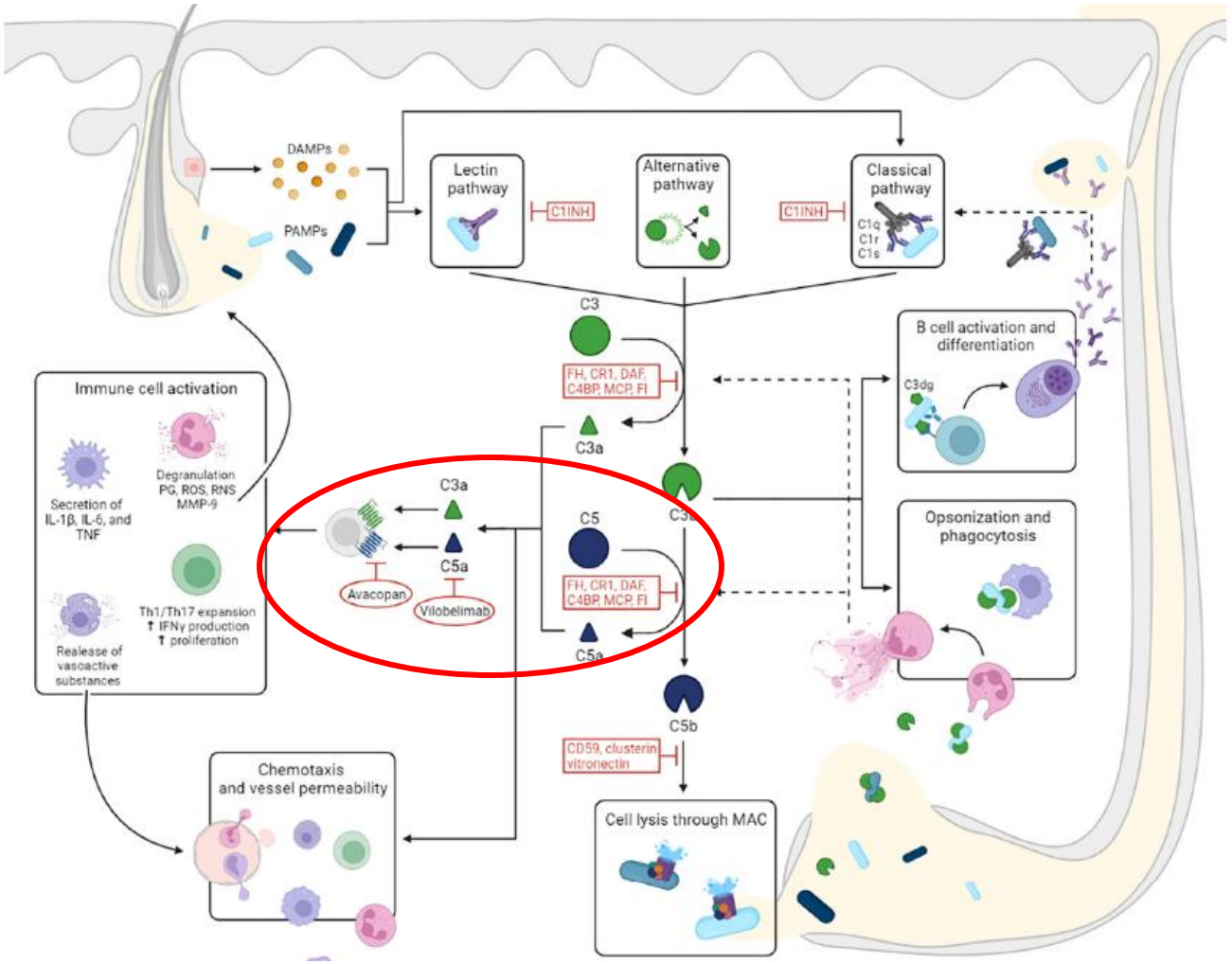
Current treatment and medical need

- Current treatments including pain management, antibiotics, corticosteroids and biologics
- Current approved therapies have shown a waning of effect in a significant number of patients over time
- In addition, high-unmet medical need exists in affected patients with active draining disease





An important role for C5a/C5aR is recognized in HS pathogenesis



van Straalen KR Front. Immunol. 13:953674.doi: 10.3389/fimmu.2022.953674

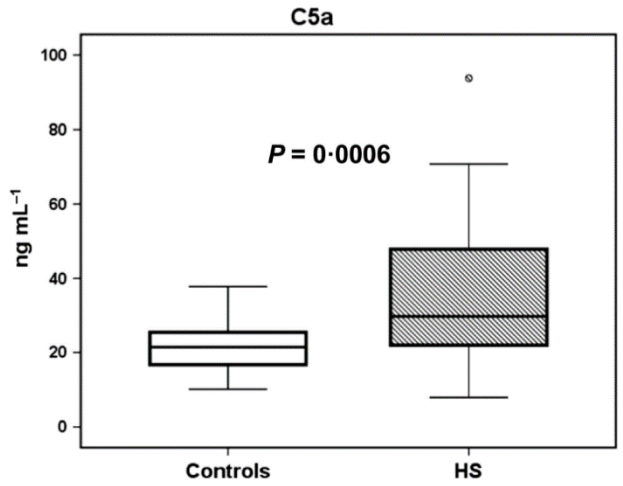
Mechanism in HS development

Follicular occlusion of the folliculo-pilosebaceous unit, followed by follicular rupture, leading to immune responses which involve complement activation including C5a/C5aR engagement, resulting in the development of clinical HS lesion

Strong rationale for developing an anti-C5a/C5aR in HS

HS Patients Have Elevated C5a, a Major Neutrophil Activator That Can Be Blocked by an Anti-C5a/C5aR

HS patients have **significant complement activation** with elevated C5a levels



Concentrations of C5a in the plasma of 14 healthy controls and of 54 patients with HS. P-values symbolize significant differences between patients and controls.

Kanni et al, 2018

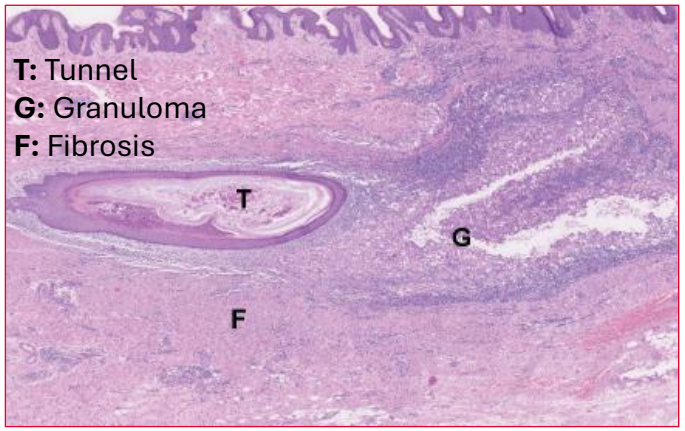
C5a/C5aR activation is a key neutrophil activator in HS patient plasma

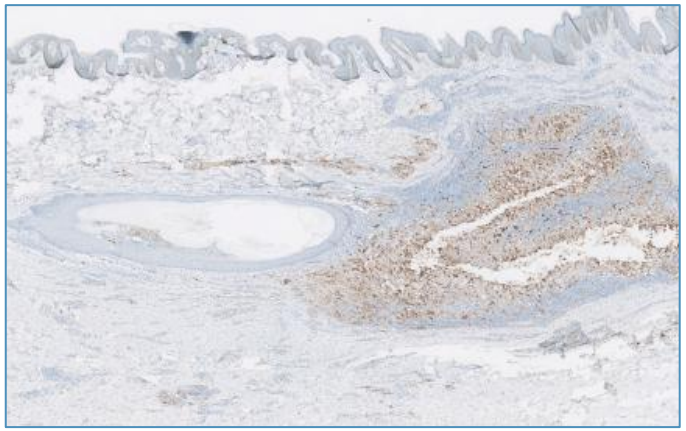
HS patient plasma strongly provokes neutrophil activation in healthy donor blood: this effect could be completely blocked by the addition of:

- Vilobelimab (anti-C5a antibody) and
- INF904 (anti-C5aR inhibitor)

Guo et al. 2019 Aug. US Patent No. 10,376,595
Source: InflaRx in house data on file

Neutrophils play a critical role in HS pathogenesis especially in draining tunnels (DTs)



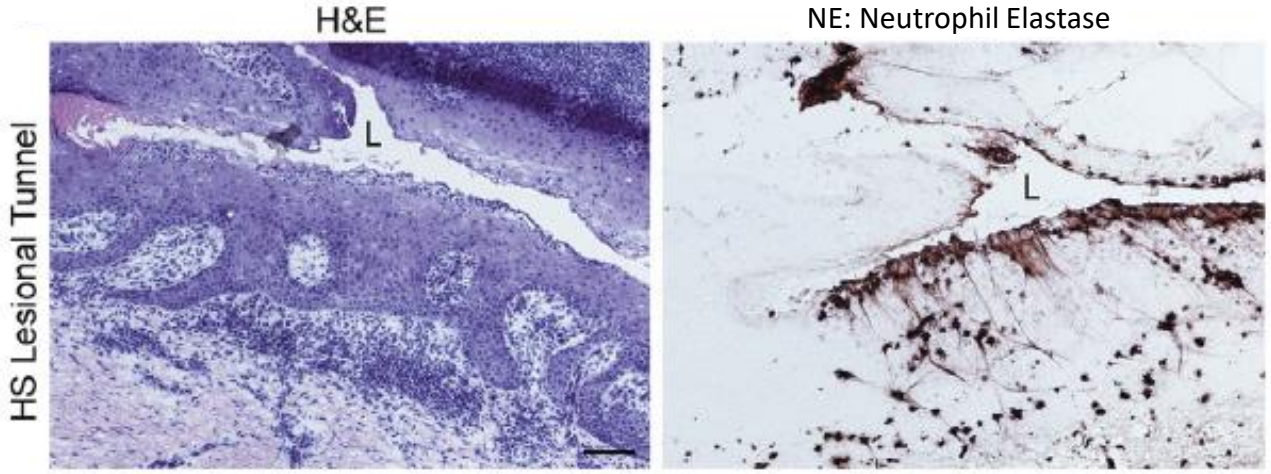


Van Straalen et al. 2022. Front Immunol 21.

Hurley stage III patient with tunnel formation and surrounding **granulomatous** inflammation with foreign body giant cells. **C5aR1 staining positive – neutrophils, histiocytes and giant cells**

Of note: C5aR positive staining on neutrophils is found in all 3 Hurley stages

› C5a is a key Chemoattractant and a strong activator of neutrophils (which have high C5aR density) leading to Neutrophil Extracellular Traps (NET) which are believed to be a disease driver in HS



Navrazhina et.al, *J Allergy Clin Immunol,* 2021

Neutrophils infiltrate inflammatory lesions in HS, including within tunnels and the surrounding tissue

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Clinical evidence for the role of C5a/C5aR signaling in HS

Vilobelimab (anti-C5a mAb)

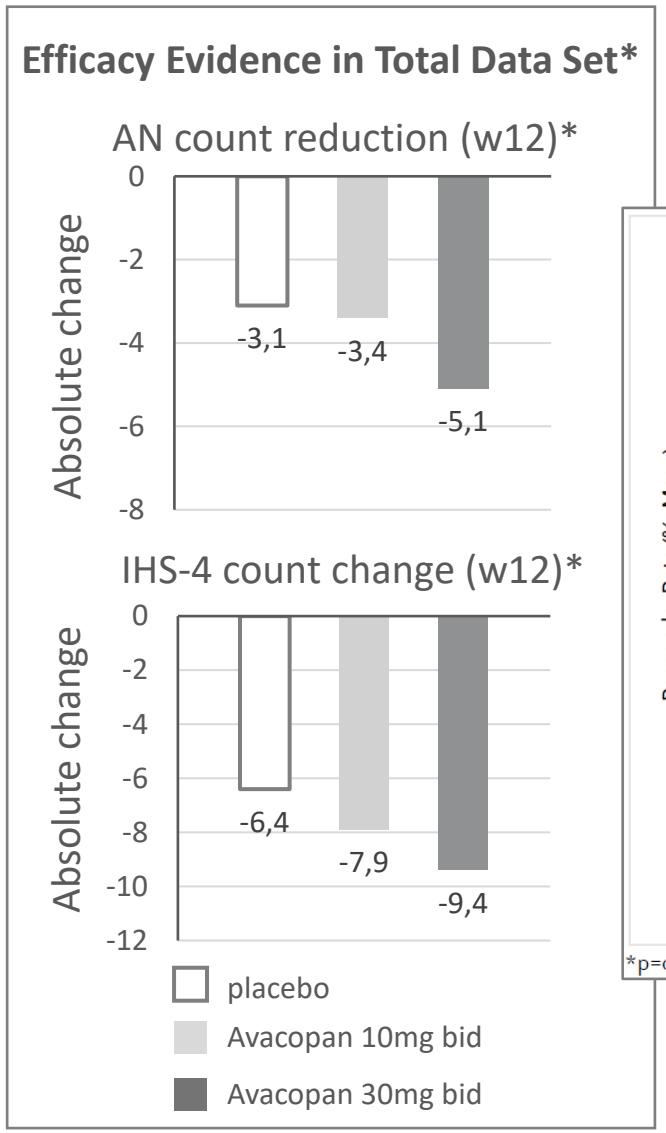
- SHINE Phase 2b study in moderate-severe HS patients resulted in various signals of efficacy for high dose treatment group (1200mg EOW) including an overall inflammatory lesion reduction *
- In SHINE, dT reduction was higher in patients with tightly controlled C5a levels *
- Key learning from SHINE: **a higher dose of vilobelimab was needed to adequately control C5a/C5aR signaling and increase efficacy in lesion reduction**

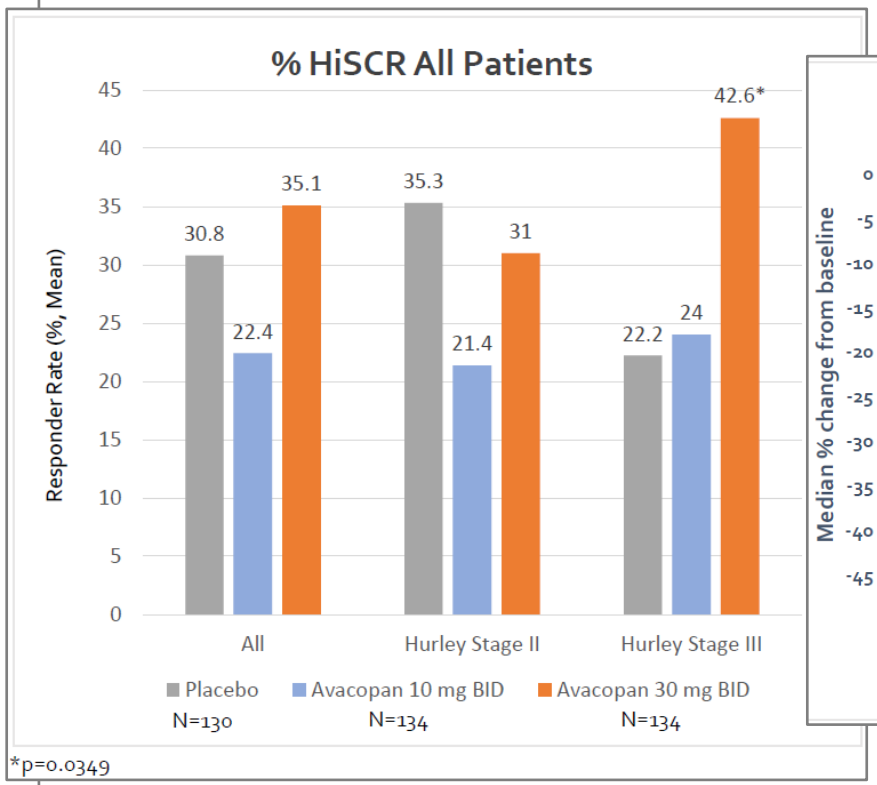
Avacopan (oral C5aR inhibitor)

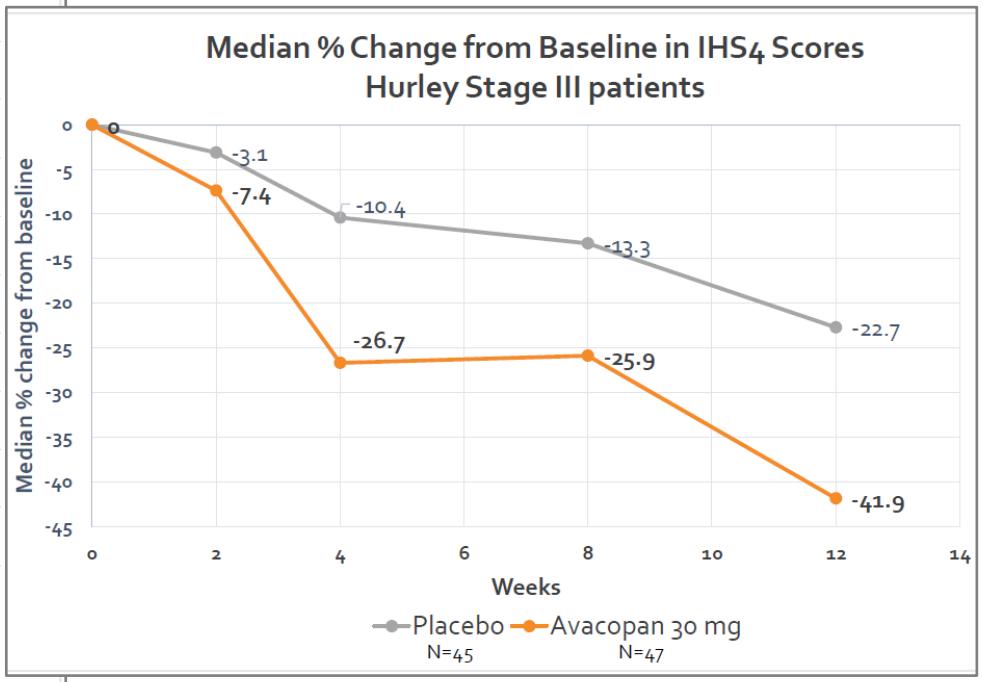
- At standard dose of 30 mg BID, **a p-value positive efficacy signal was detected in severe HS patients (Hurley III) on HiSCR** with clear separation from placebo group emerging at week 12 **
- Of note: in ANCA vasculitis patients steady-state levels of avacopan at 30 mg BID were only reported to be achieved at approx. 3 months ***
- **30 mg BID dosing regimen may have been too low for adequate HS treatment and late accumulation of avacopan may have prevented earlier onset of efficacy**

* InflaRx data on file
** Data from Chemocentryx presentation on AURORA trial results, October 28, 2020: note: overall results were not stat. significant for HiSCR in all moderate to severe HS patients (primary endpoint)
*** Data from avacopan NDA filing for ANCA-associated vasculitis

Evidence for efficacy of C5aR inhibition in HS: Avacopan data







* Reported outcome results at clinicaltrials.gov, Chemocentryx, Avacopan HS Phase 2 trial (AURORA)
** Data from Chemocentryx presentation on Avacopan HS Phase 2 trial (AURORA) results, October 28, 2020: note: overall results were not stat. significant for HiSCR in all moderate to severe HS patients (primary endpoint)

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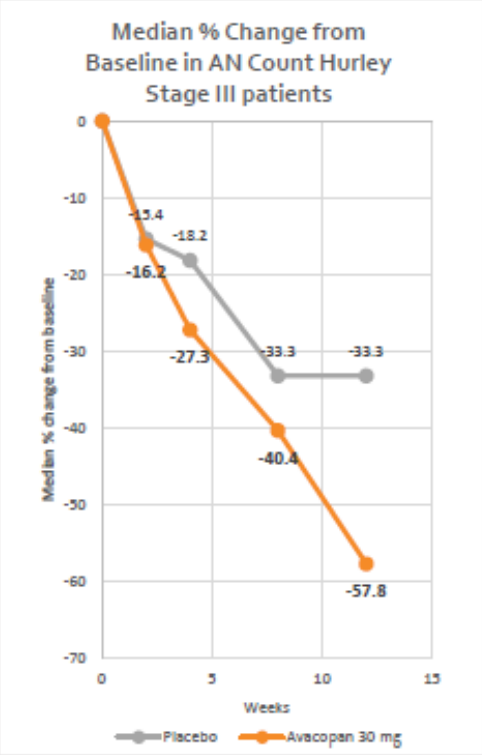
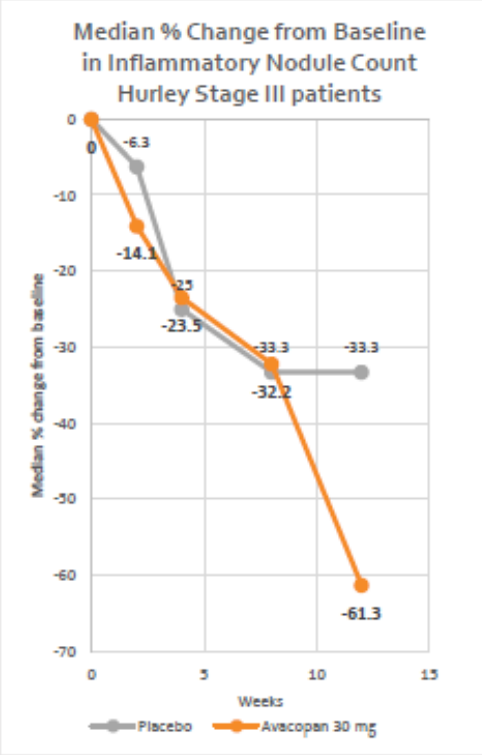
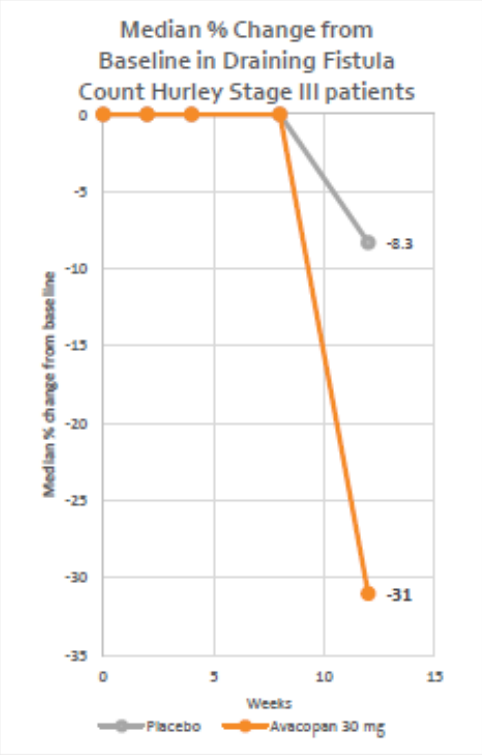
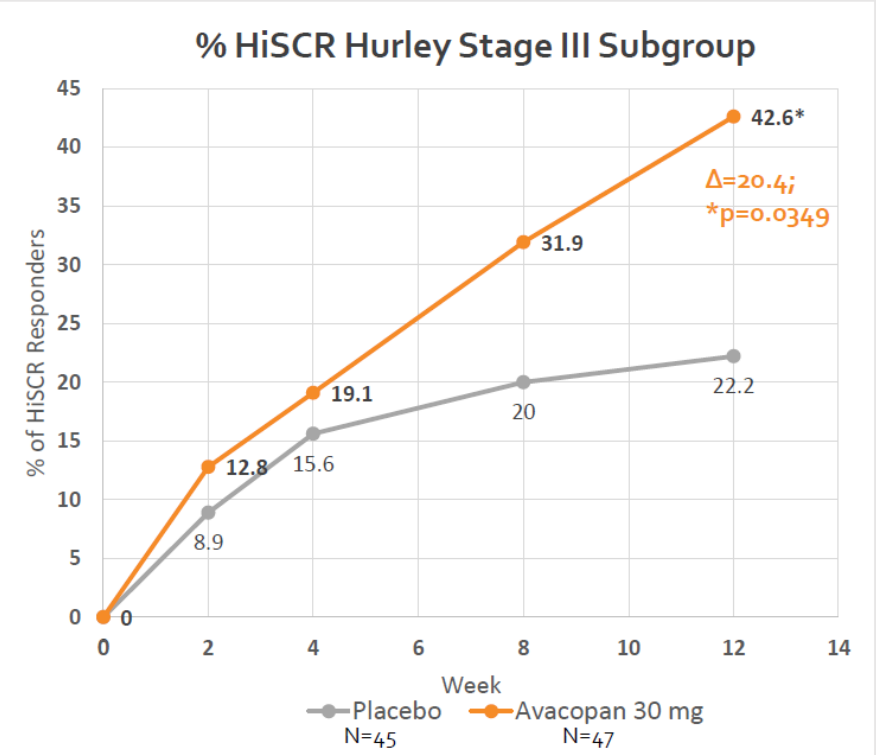
Avacopan data in Phase 2 showed efficacy emerging only at week 12

Results From Avacopan in HS Patients (Hurley III)*









- Avacopan's efficacy (separation from placebo group) in HS only starts to emerge at W12 – please note: steady state reported from ANCA patients was only reached at approx. 3 months due to prolonged drug accumulation (x4)
- Avacopan's 30mg BID dosing regimen may be too low to show adequate clinical efficacy in HS

*Data from ChemoCentryx presentation on AURORA trial results, October 28, 2020: note: overall results were not stat. significant for HiSCR in all moderate to severe HS patients (primary endpoint)

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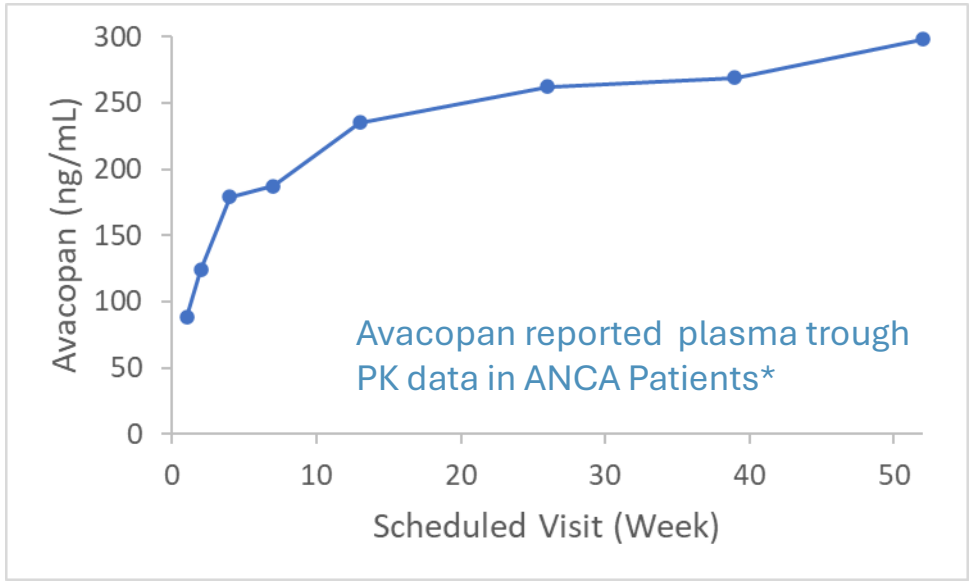
Avacopan data in ANCA patients show steady state reached by 13 weeks

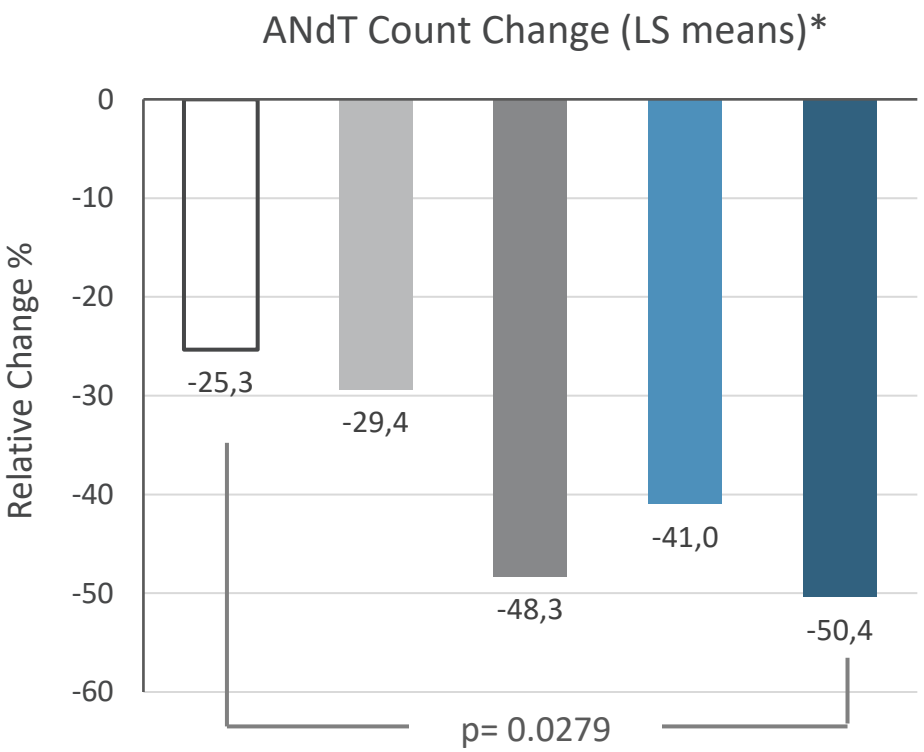


*Data from avacopan NDA filing for ANCA-associated vasculitis: represented graphically.

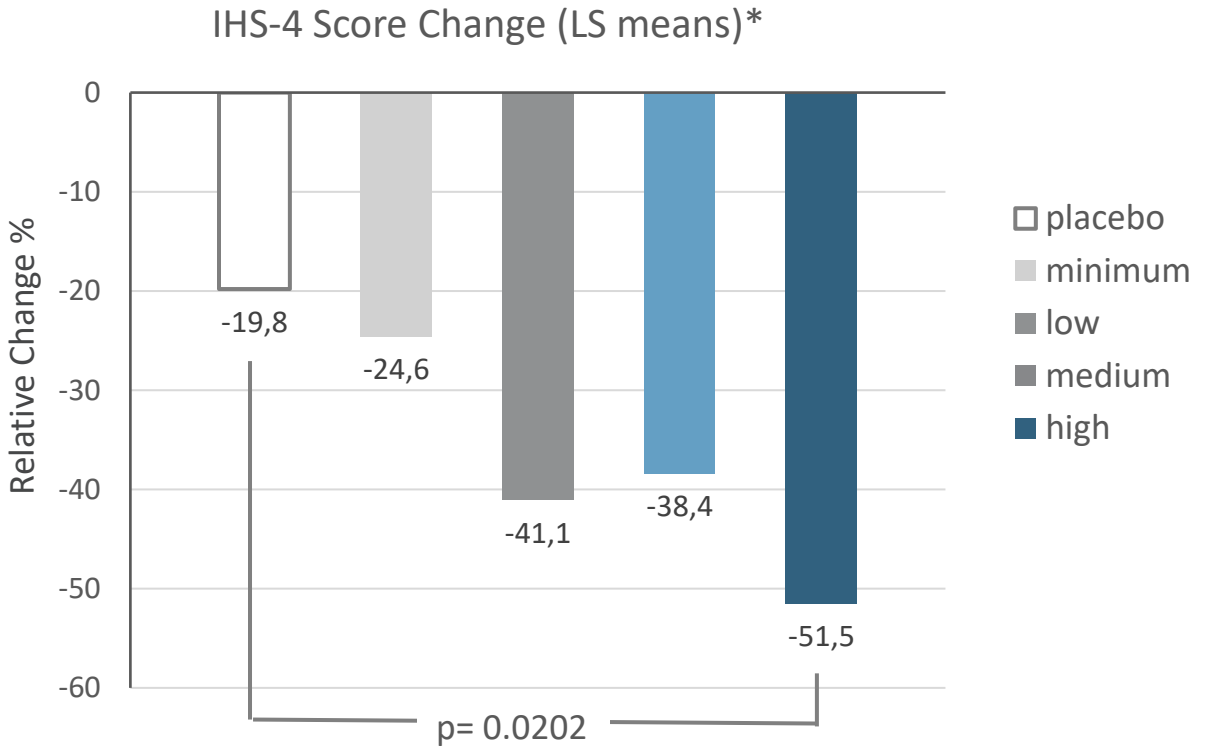
- Steady state plasma levels of avacopan 30mg BID are reached by 13 weeks and the accumulation is approximately 4-fold
- Mean steady state plasma exposure estimates of avacopan are: **3466 h*ng/mL for the ($AUC_{0\text{-}12hr}$)** in ANCA patients receiving 30 mg BID

Plasma accumulation may be a prerequisite for reaching blocking activity of C5aR1 on neutrophils, to sufficiently prevent activation and migration into tissue in order to show clinical efficacy

Vilobelimab - SHINE STUDY: outcome of ANdT count and IHS4 score (week 16)



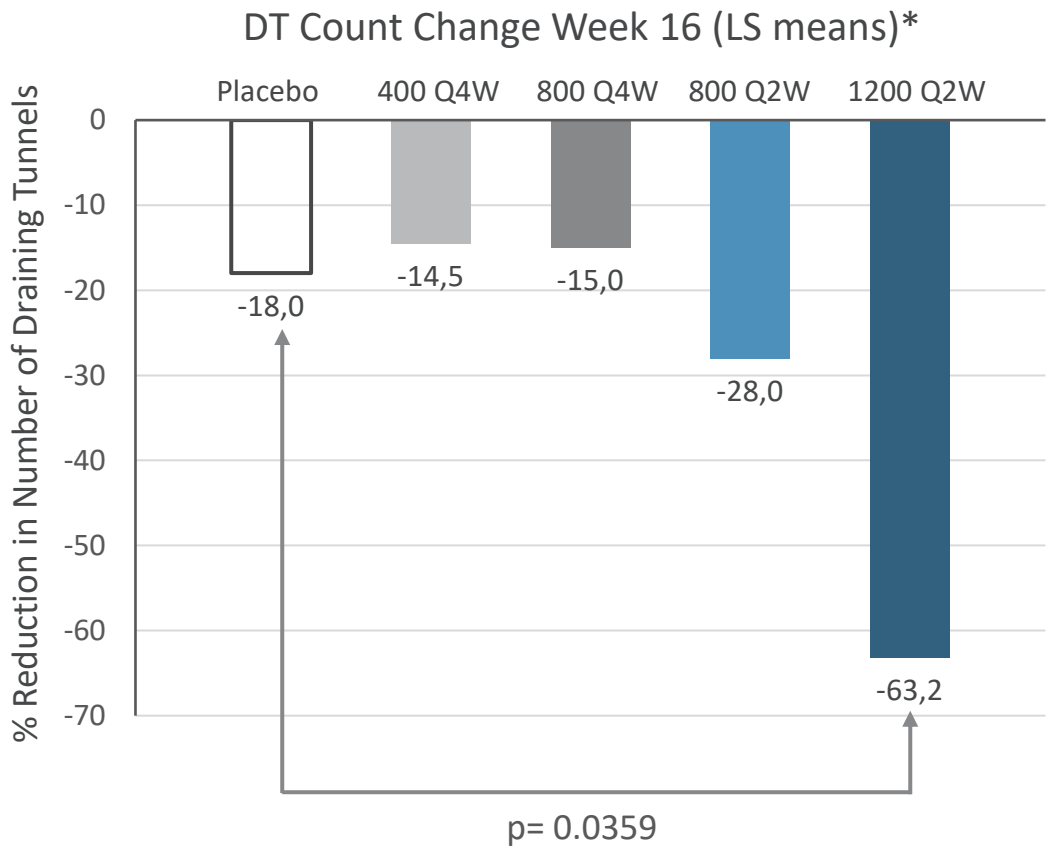
n = 32-36 patients/group

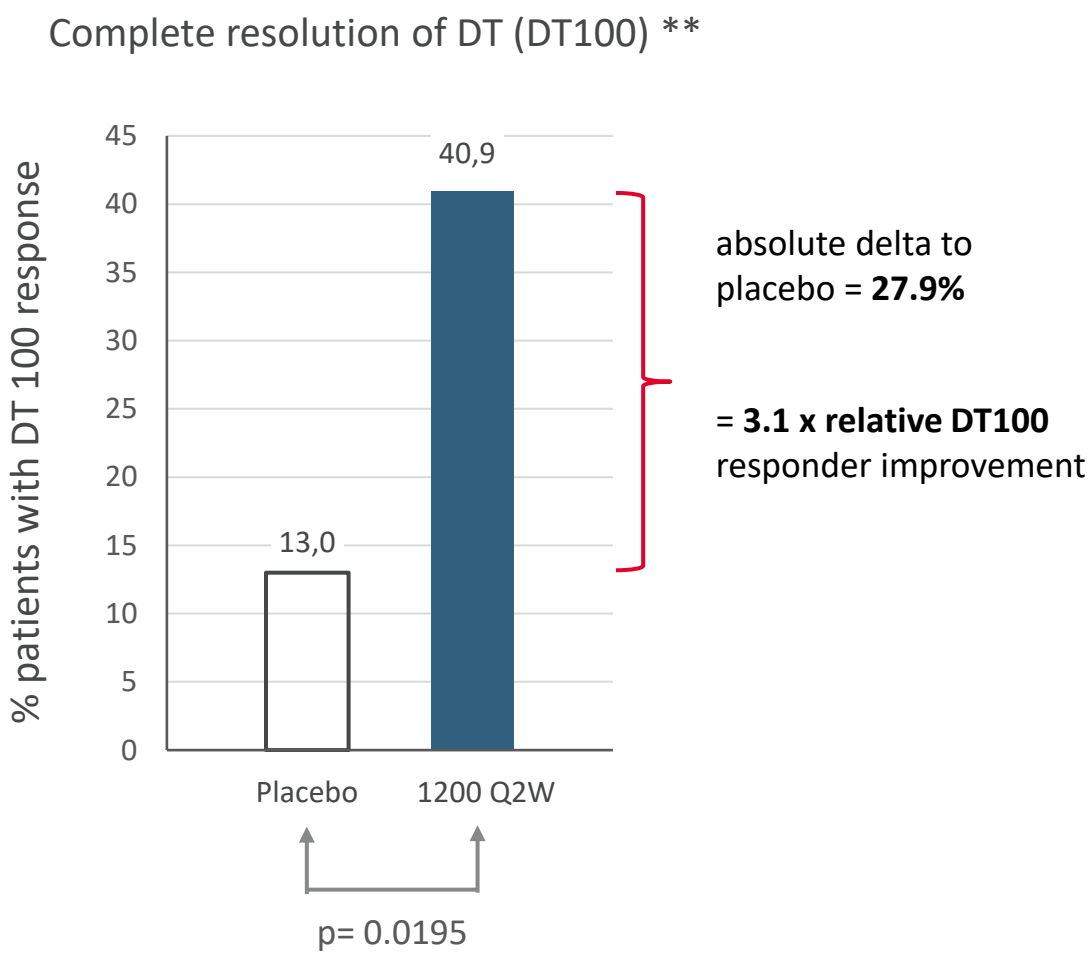


* Full analysis set baseline adjusted

InflaRx data on file

Vilobelimab - SHINE STUDY: Evidence of inflammatory lesion reduction under C5a inhibition





* Full analysis set baseline adjusted, LS Means

InflaRx data on file

** Patients with at least 1 DT at baseline, placebo n=23, vilobelimab n=22

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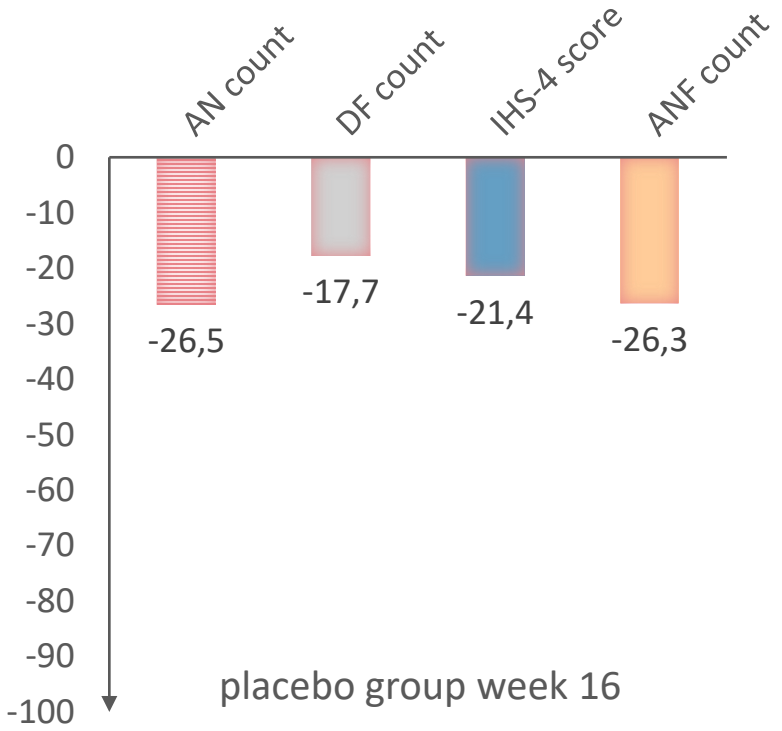
Vilobelimab – SHINE study patients who completed OLE phase (w 40)

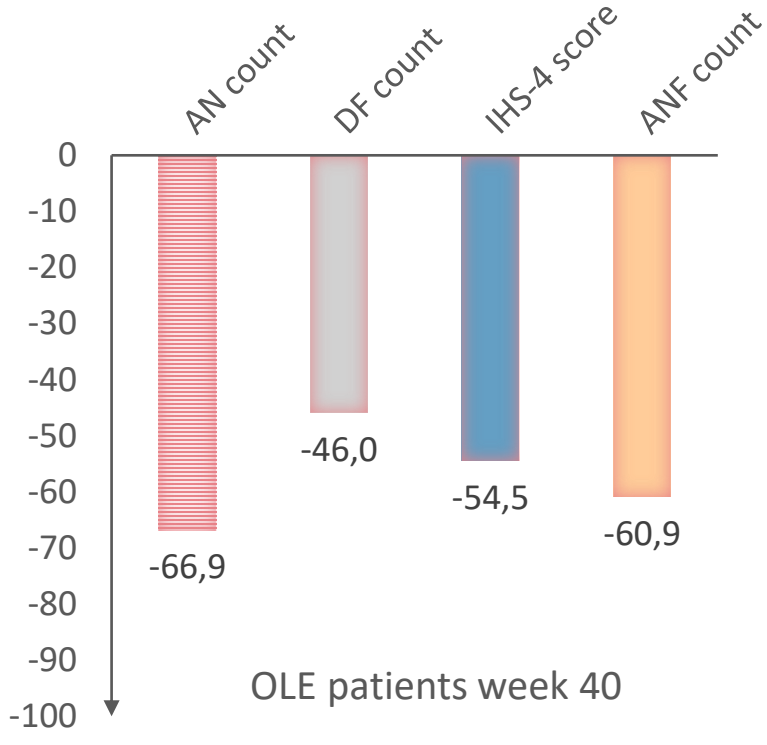
Substantial inflammatory lesion reductions when compared to placebo from the double-blind main period (w 16)

Relative reduction (% mean) of counts / scores compared to respective baseline (Day1)*

Placebo patients on week 16



All OLE patients on week 40 (n=116)



* Full analysis set (unadjusted)
InflaRx data on file

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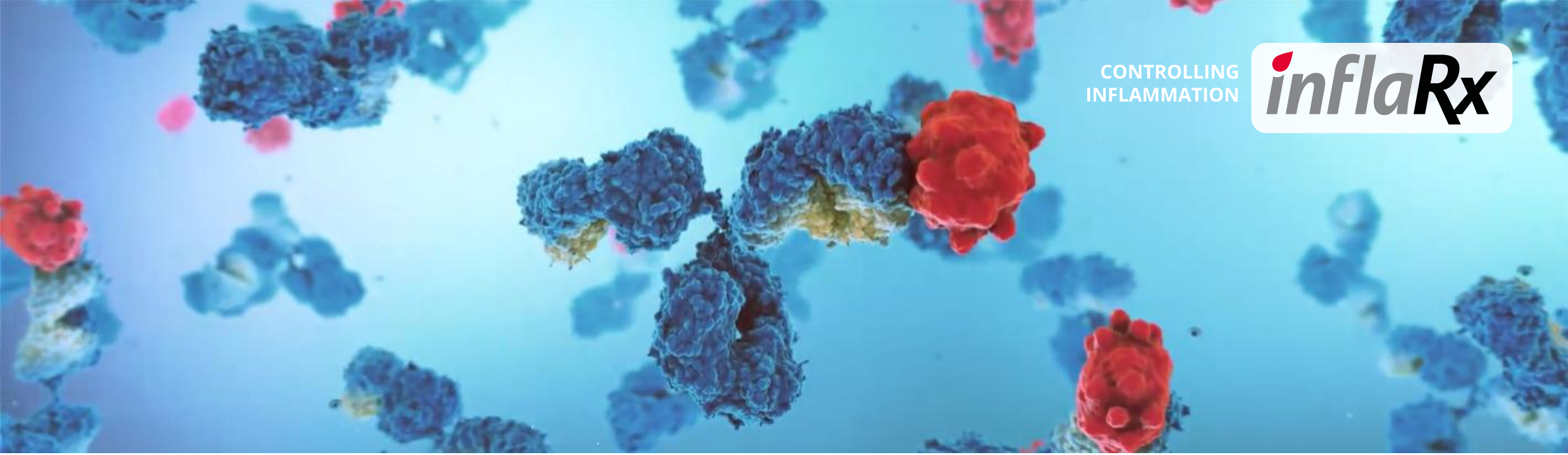
Summary and rationale for developing INF904 as a potent oral C5aR inhibitor in HS

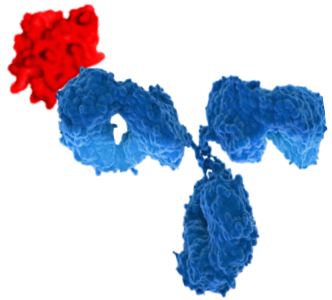
Learnings

- Both C5a as well as C5aR signaling inhibition have resulted in clear signals of efficacy (reduction of inflammatory lesions + established scores) in moderate to severe HS patients
- Both treatment attempts (vilobelimab and avacopan) were likely underdosed. Of note: avacopan has been reported to have a long accumulation pattern, reaching steady state only at week 13*
- **INF904 is ideally positioned as an oral C5aR inhibitor with optimized PK / PD profile to address C5aR signaling in HS**

* Source: Data from avacopan NDA filing for ANCA-associated vasculitis.



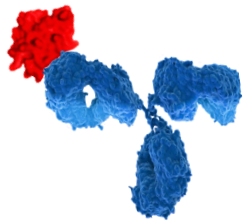
Gohibic (vilobelimab)
Critical COVID-19 & ARDS



Gohibic

Emergency Use Authorization (EUA) granted for Gohibic

Gohibic (vilobelimab)

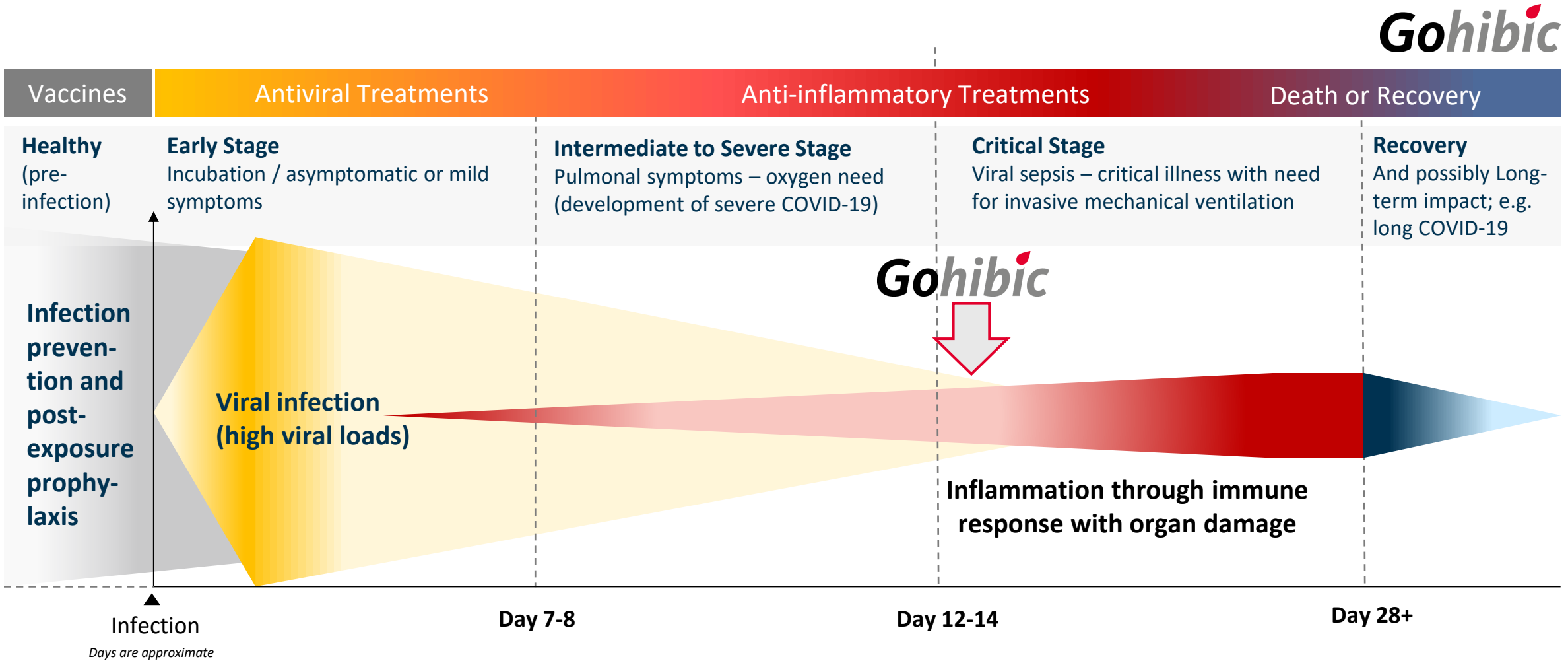


- Gohibic (vilobelimab) has not been approved, but has been authorized for emergency use by FDA under an EUA*, for the treatment of COVID-19 in hospitalized adults when initiated within 48 hours of receiving IMV**, or ECMO**
- Authorization granted based on results from a Phase III clinical trial in critically ill, mechanically ventilated COVID-19 patients in which Gohibic treatment reduced mortality by 23.9% vs. placebo.
- Gohibic is the first authorized therapeutic targeting C5a as potential key player in the inflammatory host response
- Positive opinion adopted by the CHMP in Europe, discussions with US FDA ongoing related to future BLA submission
- Gohibic has been launched by InflaRx in the US under the EUA:
  - Building an experienced and highly focused commercial team and creating awareness with different healthcare players
  - Building a robust supply chain to allow for uninterrupted supply of Gohibic to US hospitals
- Phase 2 ”Just Breathe” ASPR/BARDA clinical platform study for broader ARDS

For additional and important safety information, please visit www.gohibic.com

* The emergency use of GOHIBIC is only authorized for the duration of the declaration that circumstances exist justifying the authorization of the emergency use of drugs and biological products during the COVID-19 pandemic under Section 564(b)(1) of the Act, 21 U.S.C. § 360bbb-3(b)(1), unless the declaration is terminated or authorization revoked sooner
** IMV = invasive mechanical ventilation, ***ECMO = extracorporal membrane oxygenation

COVID-19: Disease progression and therapeutic interventions



GOHIBIC IS AUTHORIZED FOR THE TREATMENT OF COVID-19 IN HOSPITALIZED ADULTS WHEN INITIATED WITHIN 48H OF RECEIVING IMV OR ECMO

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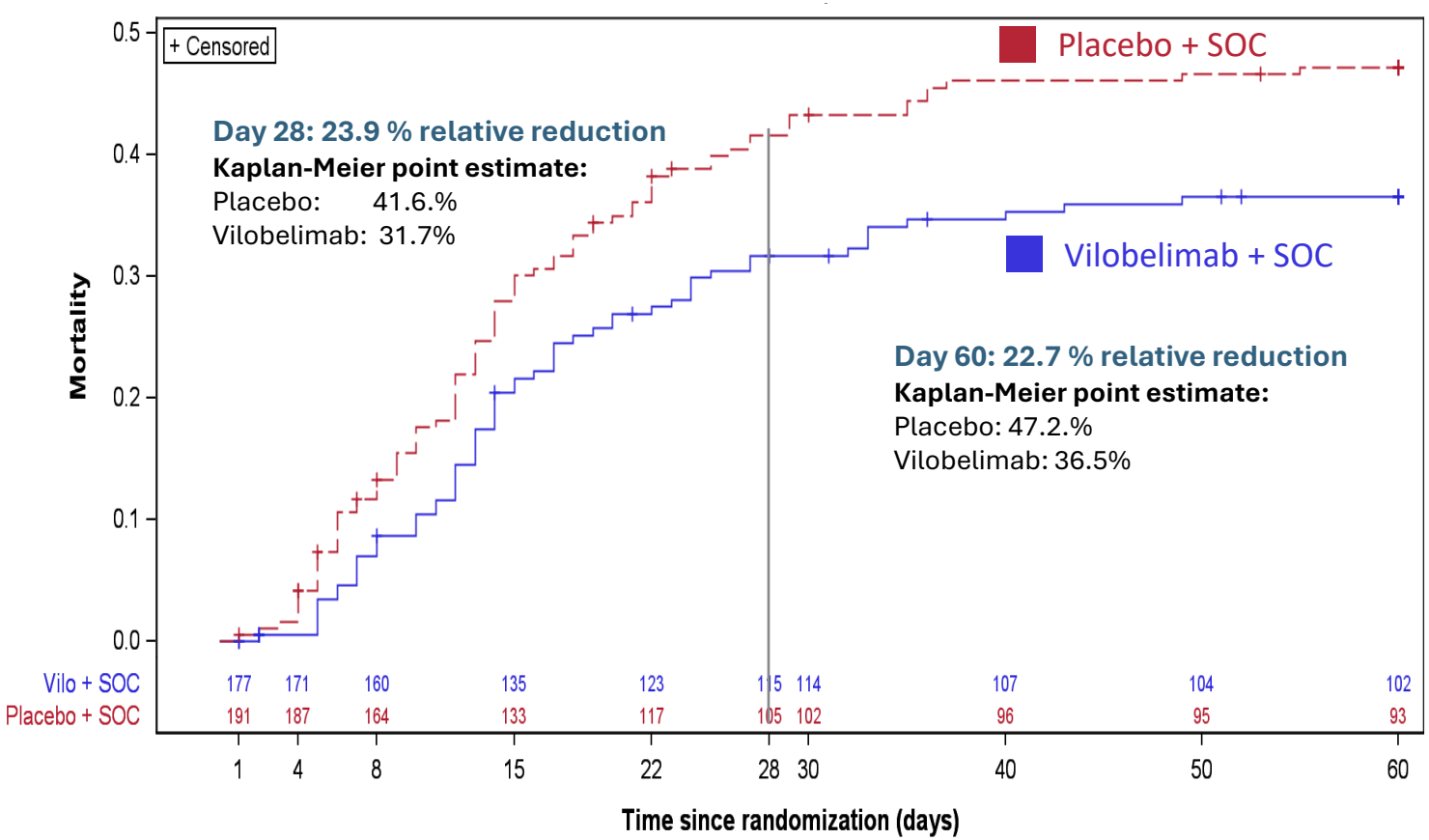
PANAMO Phase 3 primary endpoint: 28-day all-cause mortality



PANAMO Phase 3 trial
1:1 randomized, double-blind, placebo-controlled, multi-national trial in (n=369) invasive mechanically ventilated COVID-19 patients

SOC included concomitant use

• Corticosteroid use:	97%
• Anti-coagulant use:	98%
• Prior or concomitant use of other immunomodulators (**tocilizumab** > **baricitinib**):	20%

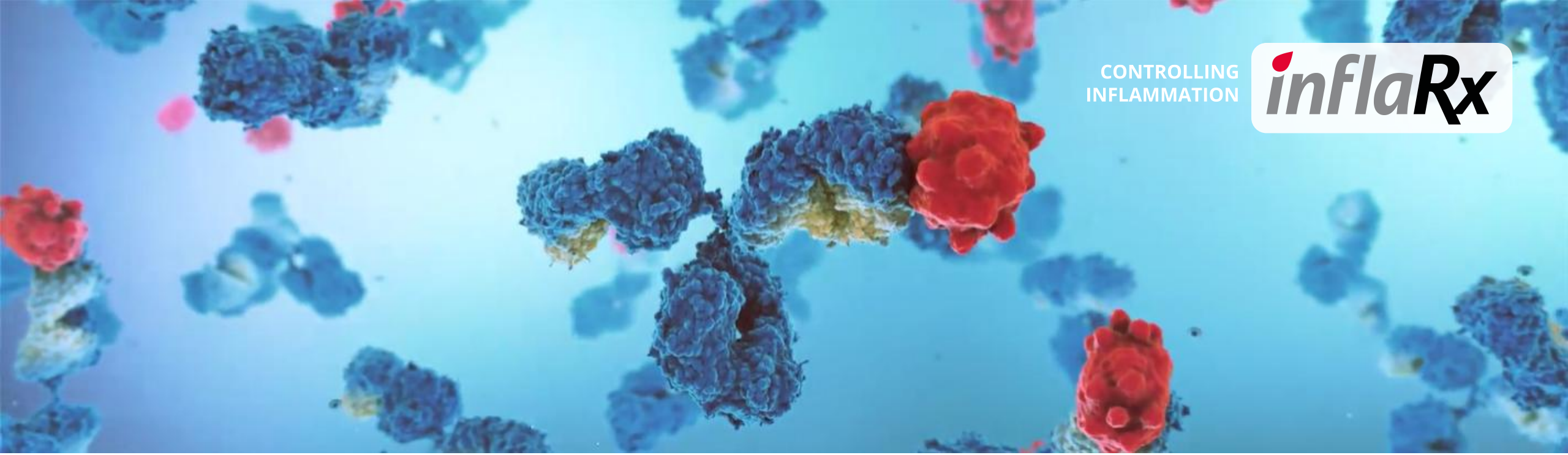
Tocilizumab / baricitinib subgroup analysis* (n = 71)

- 28-day all-cause mortality of **6.3%** for vilobelimab plus tocilizumab or baricitinib versus **40.9%** for placebo
  - Relative risk reduction of 84.6% (p=0.006)
- Co-administration of vilobelimab with baricitinib or tocilizumab not associated with safety concerns
- Demographics of subgroups were generally well-balanced and comparable to the overall study population

Data published in Vlaar, A et al. Lancet Resp Med 2022. https://doi.org/10.1016/ S2213-2600(22)00297-1

* Post-hoc analysis presented at ATS 2024

NUMBER OF PATIENTS NEEDED TO TREAT FOR SAVING ONE ADDITIONAL LIFE = 9



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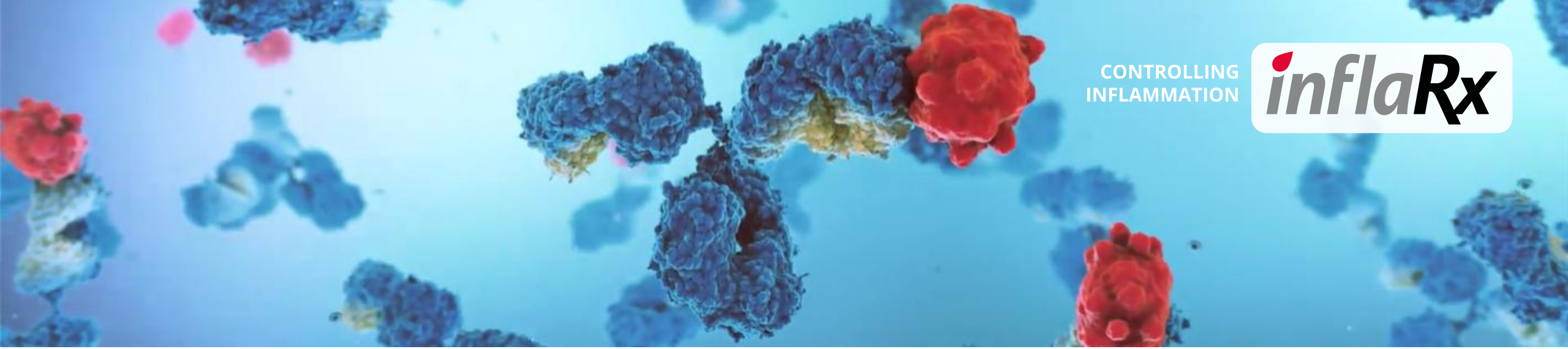

APPENDIX

Main inclusion criteria for CSU

Patients diagnosed with moderate to severe CSU and inadequately controlled by second generation H1-antihistamines at the time of randomization as defined in the following:

1. The presence of itch and hives for ≥6 consecutive weeks prior to screening in spite of use of non-sedating H1-antihistamines according to local treatment guidelines during this time period

2. UAS7 score (range 0-42) ≥16 and UCT7 <12 during 7 days prior to randomization (Day 1)

3. Arm 3: non-responder to Anti-IgE therapy as defined by previous treatment with at least 300 mg (q4w) anti-IgE therapy for at least 4 months (minimum of 4 injections) and who had an inadequate response resulting in anti-IgE therapy discontinuation, as confirmed by investigator assessment

CSU diagnosis for ≥ 6 months

Main inclusion criteria for HS

Moderate or severe hidradenitis suppurativa (with Hurley Stage II or III), and an Abscess and Nodule (AN) count ≥ 5. Inflammatory lesions should affect at least 2 distinct anatomic areas

Diagnosis of HS based on clinical history and physical examination for at least 6 months prior to the Baseline visit; diagnosis must be verifiable through medical notes and documentation

Patients must have had an inadequate response to at least a 3-month (90 days) trial of oral antibiotics for treatment of HS (or demonstrated intolerance to or have a contraindication to oral antibiotics for treatment of their HS)