



HANSA

B I O P H A R M A

Investor Presentation

Guggenheim Healthcare Talks:
Genomic Medicines and Rare Disease Days

April 4, 2023

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Global Franchise Lead Gene Therapy



Forward-looking statements

This presentation may contain certain forward-looking statements and forecasts based on our current expectations and beliefs regarding future events and are subject to significant uncertainties and risks since they relate to events and depend on circumstances that will occur in the future. Some of these forward-looking statements, by their nature, could have an impact on Hansa Biopharma's business, financial condition and results of operations [or that of its parent, affiliate, or subsidiary companies]. Terms such as "anticipates", "assumes", "believes", "can", "could", "estimates", "expects", "forecasts", "intends", "may", "might", "plans", "should", "projects", "will", "would" or, in each case, their negative, or other variations or comparable terminology are used to identify forward-looking statements. There are a number of factors that could cause actual results and developments to differ materially from those projected, whether expressly or impliedly, in a forward-looking statement or affect the extent to which a particular projection is realized. Such factors may include, but are not limited to, changes in implementation of Hansa Biopharma's strategy and its ability to further grow; risks and uncertainties associated with the development and/or approval of Hansa Biopharma's product candidates; ongoing clinical trials and expected trial results; the ability to commercialize imlifidase if approved; changes in legal or regulatory frameworks, requirements, or standards; technology changes and new products in Hansa Biopharma's potential market and industry; the ability to develop new products and enhance existing products; the impact of competition, changes in general economy and industry conditions and legislative, regulatory and political factors.

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Successful track record...
Strong momentum...
Promising future...

A validated technology

VALIDATION ACROSS THREE AREAS

- ✓ Approval in kidney transplantations
- ✓ Proof of concept in autoimmune diseases
- ✓ Partnerships to explore gene therapy

Idefirix® is our first approved drug in Europe*

EUROPE KIDNEY TRANSPLANTS

For highly sensitized patients in Europe

Broad pipeline in transplantation and autoimmunity

PROGRAMS IN CLINICAL DEVELOPMENT

US kidney transplants
Anti-GBM
Guillain-Barré syndrome (GBS)
Antibody mediated kidney transplant rejection (AMR)

Established a high-performance organization

NEW COMPETENCIES ADDED

150 employees Dec 31. 2022
(~3x in 3 years)

Highly qualified team with 20 years on average in life science
Purpose driven culture

With current cash position Hansa is financed into 2025

FINANCIALS

SEK ~1.5bn in Cash and short term investments (USD ~143m) December 2022

Created shareholder value and diversified our ownership base

MARKET CAPITALISATION (USD): ~350 Feb 1, 2023

Listed on Nasdaq Stockholm
19,000 shareholders
Foreign ownership make up ~47% through leading international life science specialist funds



*Idefirix approved in EEA under conditional approval for kidney transplantation

**Actual patient has given consent to provide images

Our unique antibody cleaving enzyme technology may have relevance across a range of indications

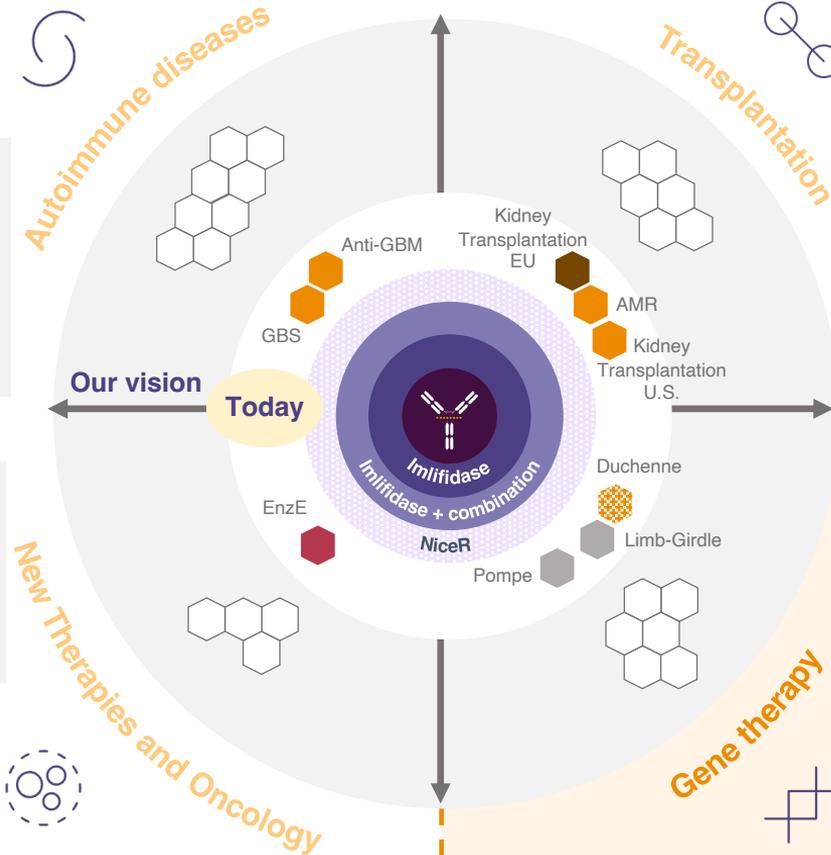
Targeting rare IgG mediated diseases

Anti-GBM paves the way for development in other autoimmune diseases

- Rapidly progressive glomerulonephritis
- Neurological disorders
- Skin and blood disorders

IgG-cleaving enzymes to enable or even potentiate cancer therapy

- Allogenic stem cell (bone marrow) transplantation (HSCT)
- Enzyme-based antibody Enhancement (EnzE)



Expanding our commercial franchises

- Regulatory approval (conditional)
- Clinical development
- Planned clinical trial
- Partnership (preclinical development)
- Preclinical development
- Potential indications (currently not pursued)

Shaping a new standard for desensitization will help enable new indications in transplantations

- Antibody mediated rejection (AMR) in kidney transplantation
- Other transplantation types

Exploring opportunities in gene therapy

- Encouraging preclinical data published in Nature
- Validation through collaborations with Sarepta and AskBio
- Wide indication landscape beyond

Gene Therapy



Exploring opportunities in gene therapy

Exploring the opportunities in systemic administration of gene therapy for our unique antibody cleaving enzyme platform to potentially enable gene therapy treatment in Nab+ patients



A
revolutionary
approach



Significant
unmet need



Encouraging
pre-clinical
data



Partnership
strategy

Tropism and target tissue

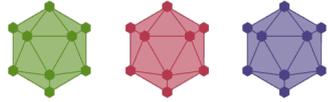
AAV subtypes target different tissues



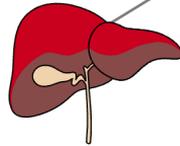
AAV 1, 2 & 5



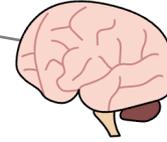
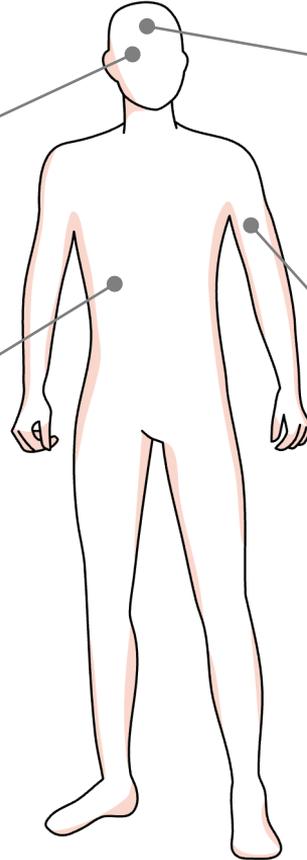
Eye (local target)
 $\sim 1 \times 10^{11}$ vg



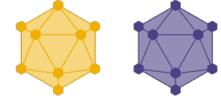
AAV 3, 7 & 8



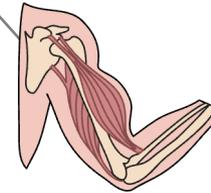
Liver (systemic)
 $\sim 1 \times 10^{14}$ vg



Brain (local target)
 $\sim 1 \times 10^{12}$ vg



AAV 4 & 8



Muscle (systemic)
 $\sim 1 \times 10^{15}$ vg



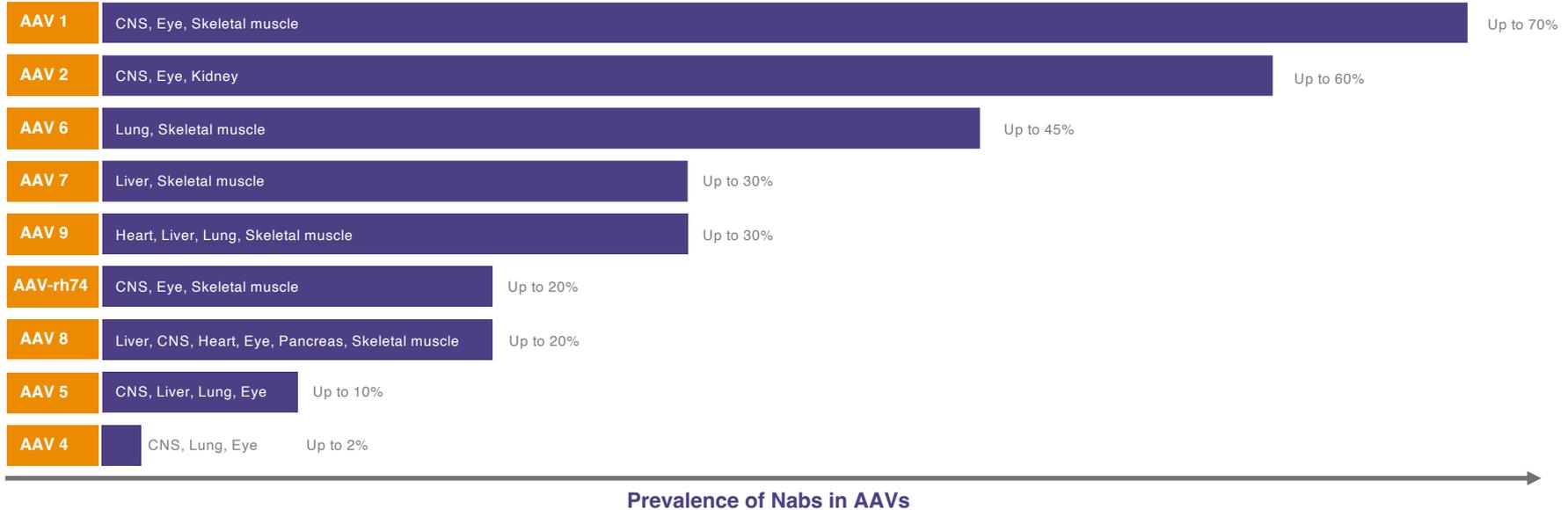
AAV 6, 7, rh74

Target tissues

Dose of gene therapy (vg)

Neutralizing antibodies are a barrier that precludes gene therapies

from working in a large group of patients. The prevalence of nabs varies significantly across the different vectors

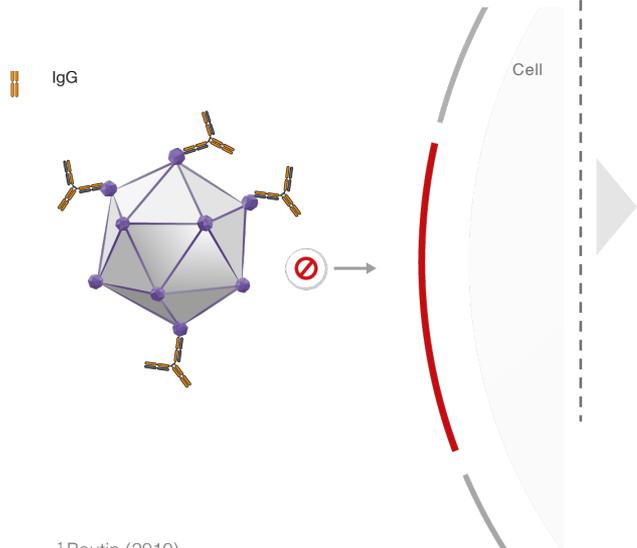


Source: Boutin et al (2010), Griffin et al (2019), Wang et al (2018), Calcedo & Wilson (2013), Falese et al (2017), Haiyan et al (2017), Ellsworth et al (2018), Greig et al (2017)

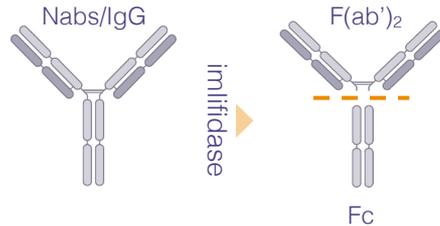
Neutralizing antibodies (Nabs) are immunological barriers in gene therapy; imlifidase may potentially eliminate Nabs

Between approximately 5% and 70%^{1,2} of patients considered for gene therapy treatment carry neutralizing anti-AAV antibodies forming a barrier for treatment eligibility

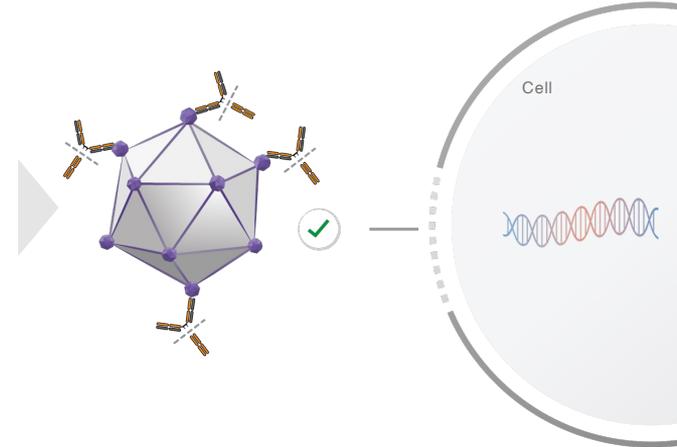
1 Antibodies prevent effective transfer of healthy gene sequence and can be a safety concern



2 Imlifidase is a unique IgG antibody-cleaving enzyme that cleaves IgG at the hinge region with extremely high specificity



3 The idea is to eliminate the neutralizing antibodies as a pre-treatment to enable gene therapy

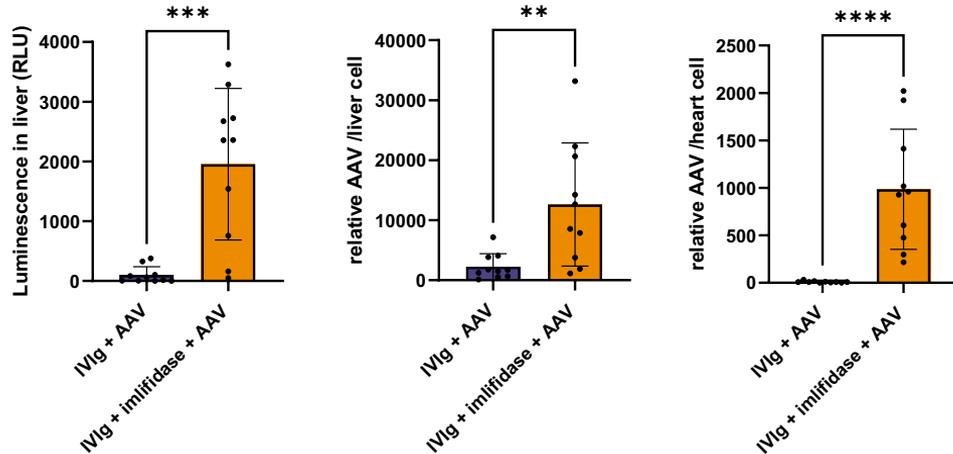


Imlifidase facilitates transduction of AAV8 in a mouse model

Imlifidase treatment neutralises the inhibitory effect of IgG and facilitates AAV8 transduction in target cells

In severe combined immunodeficient mice pre-immunised with human IgG, the AAV transduction is significantly improved in the presence of imlifidase compared to without imlifidase

Imlifidase has previously been highlighted in Nature Medicine¹ with encouraging outcome



Mice administrated with IVIg and AAV8 viral vectors in the absence or presence of imlifidase. Transgene luciferase expression is measured in liver lysates as relative luminescence units (RLU) (a). Transduction was measured in both liver (b) and heart (c) by qPCR analysis of total DNA and calculated as the relative AAV8 genomes/cell using primers specific for viral genomes (ITR) and normalised against a mice reference gene (actin). Mann-Whitney test were performed to evaluate the significance of the difference between the two groups, ** $p < 0.01$, *** $p < 0.001$, **** $p < 0.0001$. Data is presented as mean \pm SD, $n = 10$.



Leborgne et al. Nat Med (2020)

¹ Nature Medicine <https://doi.org/10.1038/s41591-020-0911-7>

Global and exclusive agreement with Sarepta Therapeutics

to develop and promote imlifidase as pre-treatment ahead of gene therapy in select indications



Indication exclusivity:

- Duchenne Muscular Dystrophy (DMD)
- Limb-Girdle Muscular Dystrophy (LGMD)

Hansa's key resources

- Imlifidase validated with positive clinical efficacy and safety data as well as European approval
- Positive preclinical data published in *Nature*
- Clear path to U.S. approval (kidney transplant)



Sarepta's key resources

- World leader within gene therapy targeted at muscular dystrophies
- Pre-clinical plan: PoC and IND-tox
- Clinical / Regulatory
- Promotion

Collaborative research, development and commercialization – working together at every stage



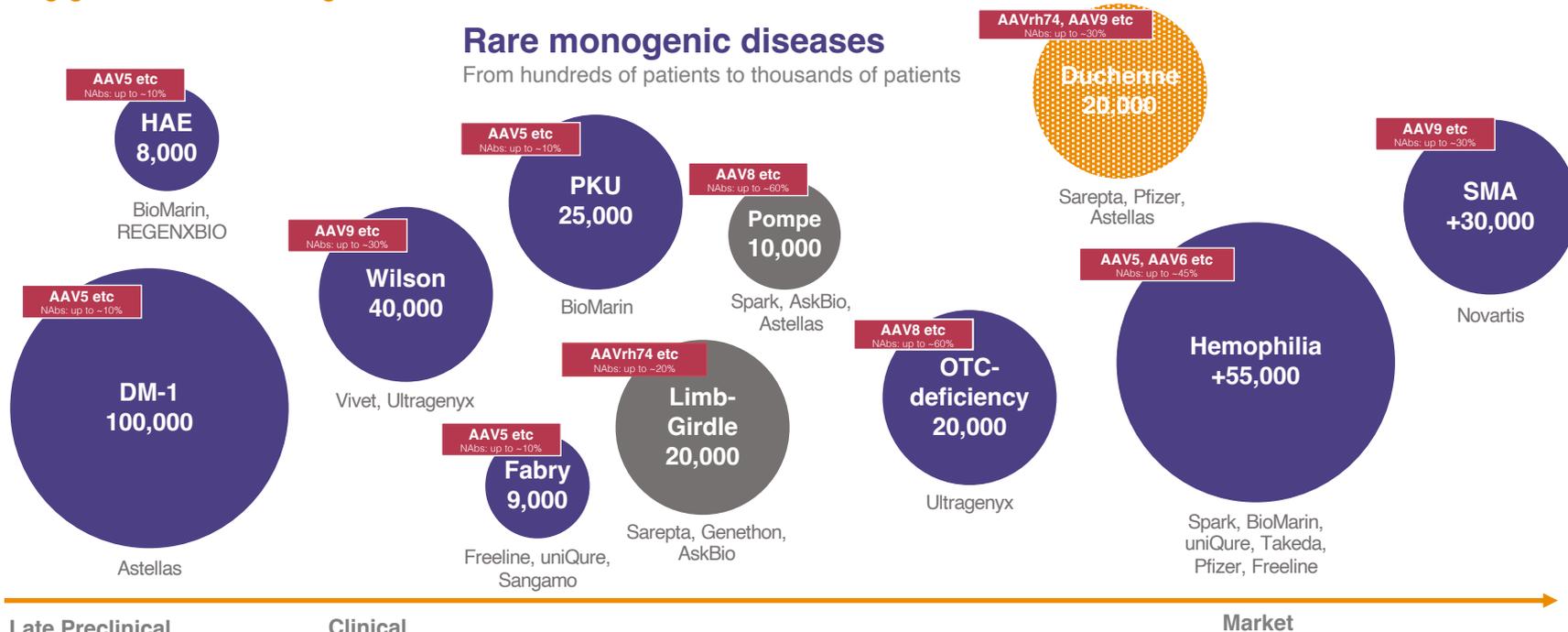
Systemic gene therapy is an emerging opportunity

with a focus on the potential to correct issues causing genes in rare monogenic diseases

- Preclinical programs with Sarepta and AskBio
- Planned clinical study with Sarepta
- Potential gene therapy indications (currently not pursued)

Rare monogenic diseases

From hundreds of patients to thousands of patients



Late Preclinical

Clinical

Market

● Size of indication (US & EU)

Duchenne Muscular Dystrophy (DMD) SRP-9001

About Duchenne Muscular Dystrophy (DMD)¹

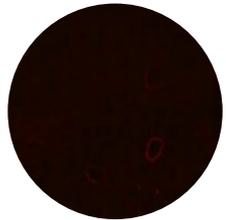
- Rare, fatal neuromuscular genetic disease
- Muscle weakness noticeable by age 3 to 5, and most patients use a wheelchair by the time they are 11
- Cardiac and respiratory muscle deterioration becomes life-threatening
- 1/3,500 to 5,000 male births (worldwide)
- Approximately 15% of patients have pre-existing IgG antibodies to rh74

SRP-9001 micro-dystrophin gene therapy for treatment of DMD

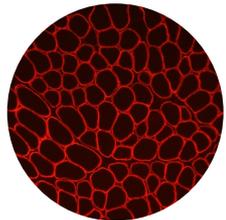
- AAVrh74 vector with micro-dystrophin transgene
- Broad patient experience
- 4 ongoing clinical trials – including recently initiated pivotal study
- Robust micro-dystrophin protein expression with commercially representative process material
- Functional benefits sustained up to 3 years after administration
- Observed safety profile is consistent
- On September 29, 2022, Sarepta announced that it had submitted a Biologics License Application (BLA) to the U.S. FDA for the accelerated approval of SRP-9001 to treat ambulant patients with DMD.
- On November 2, 2022 Hansa and Sarepta announced plan to initiate a clinical study with imlifidase as a pre-treatment to Sarepta's SRP-9001 gene therapy in DMD in 2023

For further information regarding Sarepta's gene therapy programs, please refer to www.sarepta.com

Pre-treatment



Post-treatment



Source:

¹ Sarepta Therapeutics <https://investorrelations.sarepta.com/static-files/e9393c38-646f-45ee-9f56-955f3fbfad71>

² National Institutes of Health. Genetics Home Reference. Duchenne and Becker muscular dystrophy. <https://ghr.nlm.nih.gov/condition/duchenne-and-becker-muscular-dystrophy>. Accessed Jan 2020.

³ Sarepta Therapeutics <https://investorrelations.sarepta.com/static-files/e9393c38-646f-45ee-9f56-955f3fbfad7>



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Contact

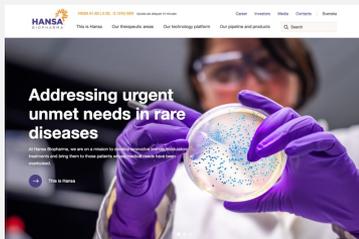


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Visit our new web site

www.hansabiopharma.com

Calendar and events

April 4, 2023	Guggenheim Healthcare Talks Rare Disease Days, virtual
April 20, 2023	Interim Report for January-March 2023
April 20, 2023	Redeye Investor Forum, Gothenburg
April 21, 2023	Redeye Lunch presentation, Stockholm
April 25, 2023	Kempen Life Sciences Conference 2023, Amsterdam
May 11, 2023	Erik Penser Company Day, Malmö
May 11, 2023	Redeye Investor forum, Malmö
May 25, 2023	Erik Penser Company Day, Stockholm
June 14, 2023	Annual General Meeting
July 20, 2023	Half-year Report for January-June 2023
Aug 24, 2023	Erik Penser Company Day, Stockholm
Sept 7, 2023	CITI Annual BioPharma Conference, Boston
Sept 11, 2023	MorganStanley Global Healthcare Conference, NYC
Oct 19, 2023	Interim Report for January-September 2023
Nov 22, 2023	Ökonomisk Ugebrev Life Science event, Copenhagen