



# **Nanoform - Q2 Interim Report 2025**

**Conference call and webcast for investors and analysts**

**August 21<sup>st</sup>, 2025**



# Disclaimer

## Forward-Looking Statements

This presentation contains forward-looking statements, including, without limitation, statements regarding Nanoform's strategy, business plans and focus. The words "may," "will," "could," "would," "should," "expect," "plan," "anticipate," "intend," "believe," "estimate," "predict," "project," "potential," "continue," "target" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Any forward-looking statements in this presentation are based on management's current expectations and beliefs and are subject to a number of risks, uncertainties and important factors that may cause actual events or results to differ materially from those expressed or implied by any forward-looking statements contained in this presentation, including, without limitation, any related to Nanoform's business, operations, clinical trials, supply chain, strategy, goals and anticipated timelines, competition from other companies, and other risks described in the Report of the Board of Directors and Financial Statements for the year ended December 31, 2024 as well as our other past disclosures. Nanoform cautions you not to place undue reliance on any forward-looking statements, which speak only as of the date they are made. Nanoform disclaims any obligation to publicly update or revise any such statements to reflect any change in expectations or in events, conditions or circumstances on which any such statements may be based, or that may affect the likelihood that actual results will differ from those set forth in the forward-looking statements. Any forward-looking statements contained in this presentation represent Nanoform's views only as of the date hereof and should not be relied upon as representing its views as of any subsequent date.



# Introduction & Key Business Highlights

CEO Edward Hæggström



# Nanoform key strategy

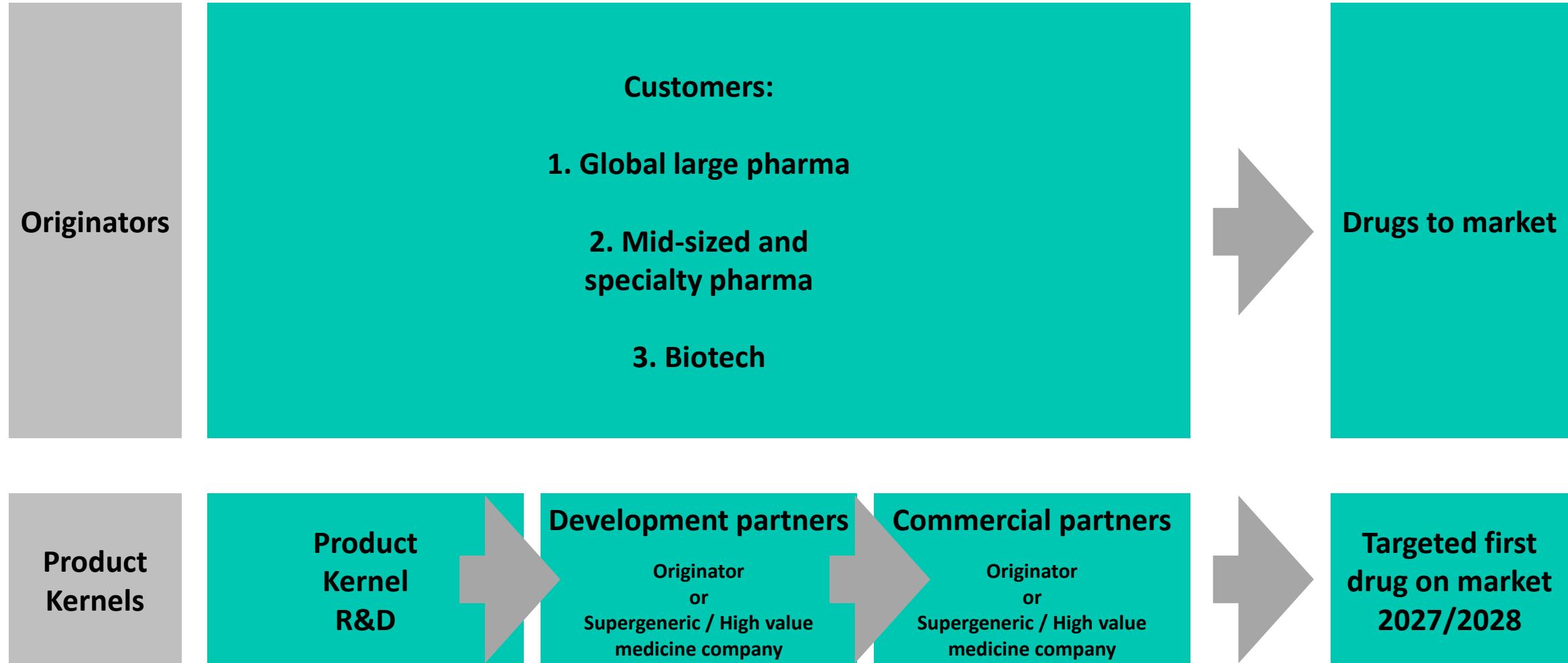
**All  
active pharmaceutical  
ingredients (API's)  
should be Starmapped (AI)**

**Nanoform work with  
customers/partners to  
enable novel & existing  
molecules to become new  
and improved medicines**

**In parallel, to show a  
conservative industry the  
power of nanoforming, we  
create up to a dozen  
'product kernels'**



# Nanoform Technology – route to market





# Proprietary technology platforms

## ***Small molecules***

Proven CESS®\* nanotechnology enables new medicines through ***improved bioavailability, higher drug load & novel formulations***

## ***Large molecules***

Unique BIO nanoparticles enable improved routes of administration with ***high drug load and long-acting delivery***

## ***Formulation***

Highly differentiated ***novel formulations*** and ***unique drug delivery opportunities*** drive optimized therapeutic potential & patient convenience

## ***AI***

STARMAP® 2.0 online ***picks best candidates and accelerates development*** by integrating deep expertise with sparse data AI

[www.nanoform.com/en/technologies-and-services/small-molecules/](http://www.nanoform.com/en/technologies-and-services/small-molecules/)

[www.nanoform.com/en/technologies-and-services/biologics/](http://www.nanoform.com/en/technologies-and-services/biologics/)

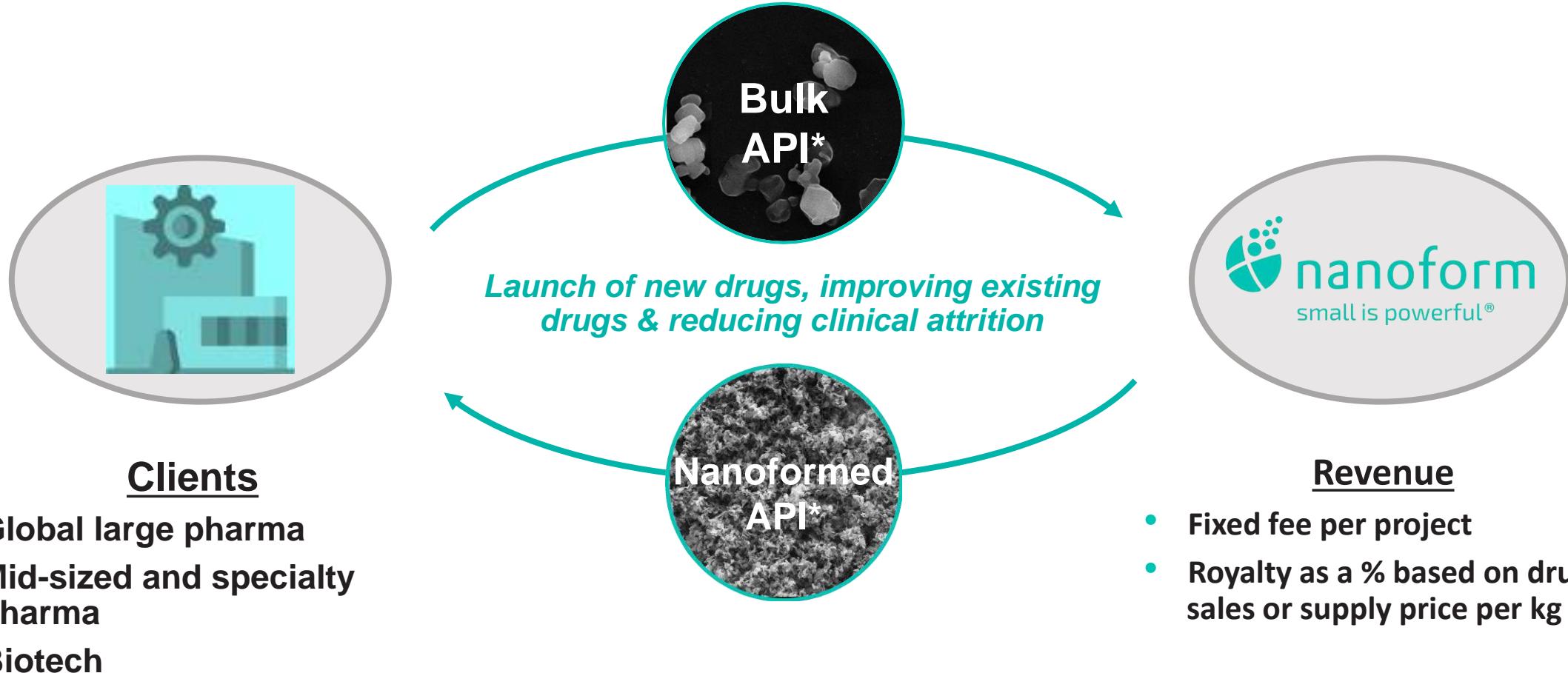
<http://www.nanoform.com/en/technologies-and-services/formulation/>

<http://www.nanoform.com/en/technologies-and-services/starmap/>



# Simplified value chain

## *High level overview of Nanoform's value chain and business model*



*\* API = Active Pharmaceutical Ingredient*



# Nanoform key business highlights

I

First preliminary pivotal study results supportive for project Nanoenzalutamide to continue to progress towards the markets

II

Growth in number of signed new projects, revenue and other operating income has continued, while operating costs fell slightly, leading to improved cash flow

III

Customer payments year-to-date already exceed last years revenue

IV

The discussions and work around our product kernels continue with existing and prospective partners (first license and supply agreement deal signed)

V

Fimea inspection date for commercial license set for end of 3Q

VI

All 2025 near term business targets are on track

The background of the slide is a wide-angle aerial photograph of a large, shallow lake. The lake is dotted with numerous small, green, tree-covered islands of various shapes. In the foreground, a dense, dark green forest covers a hillside. The sky above is a clear blue with scattered white and grey clouds.

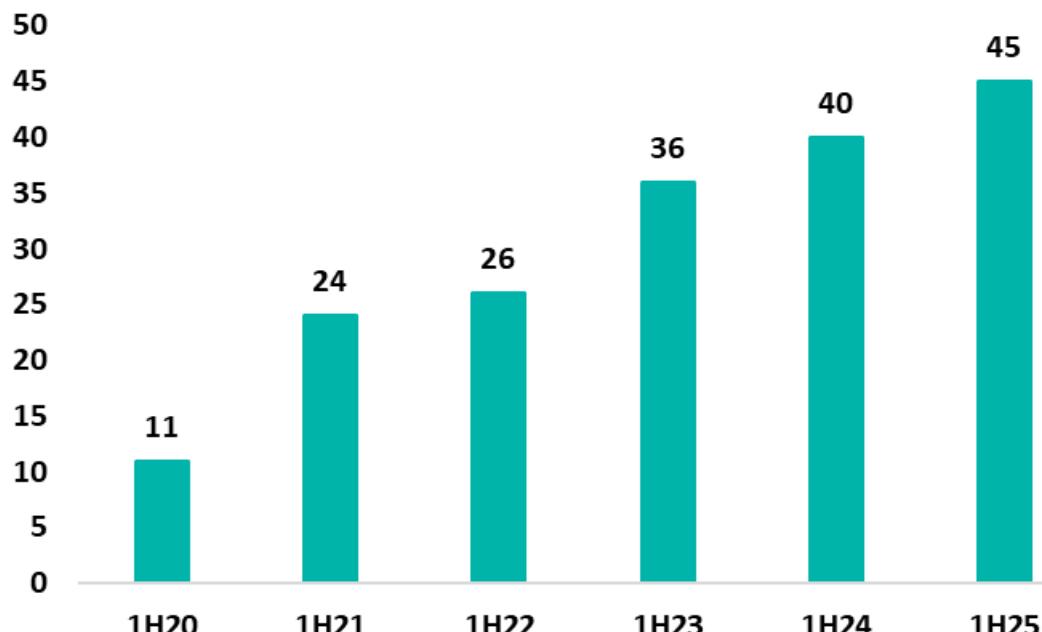
# Financials

CFO Albert Hæggström

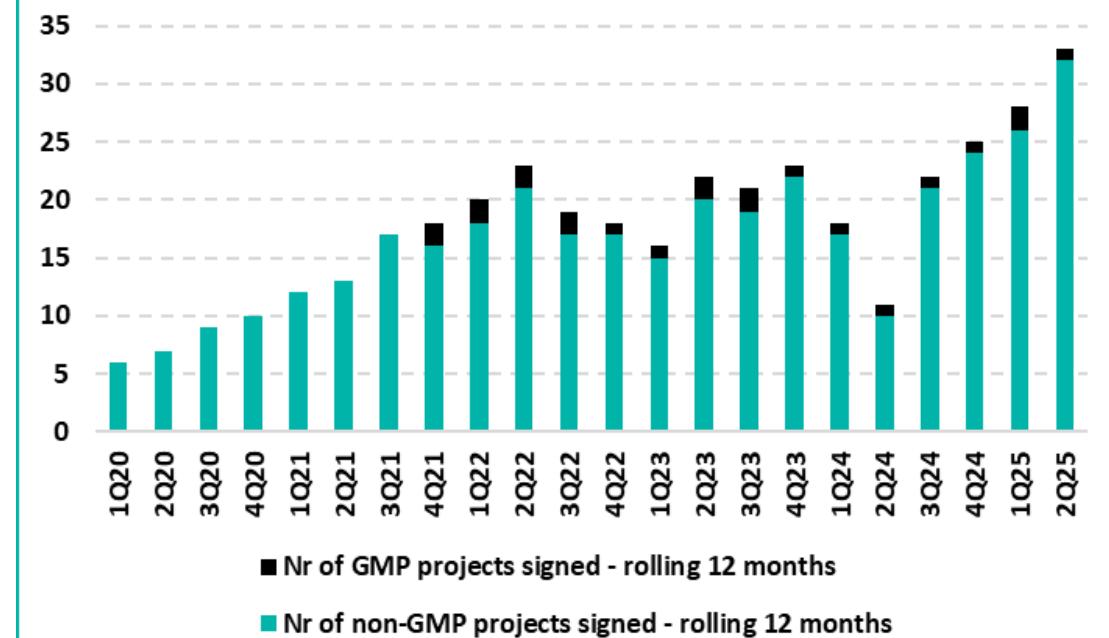


# Nr of proposals sent and projects signed continues to grow

Nr of proposals sent

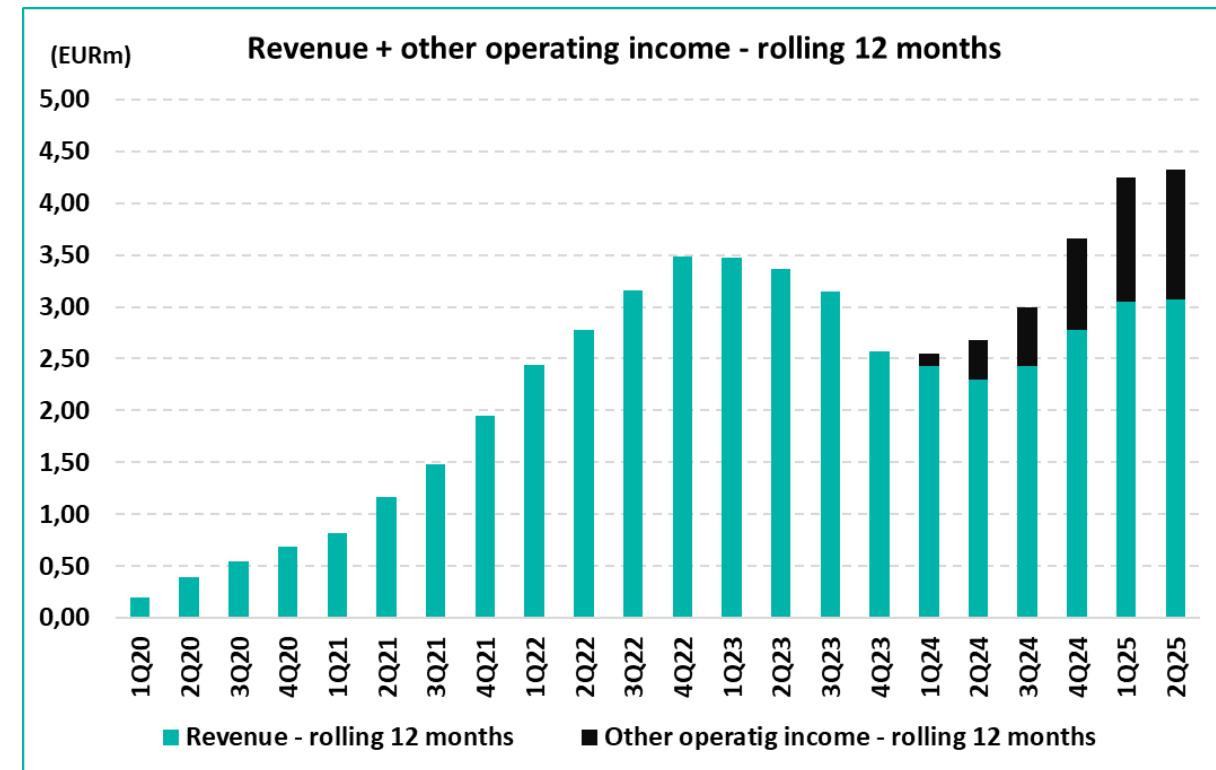
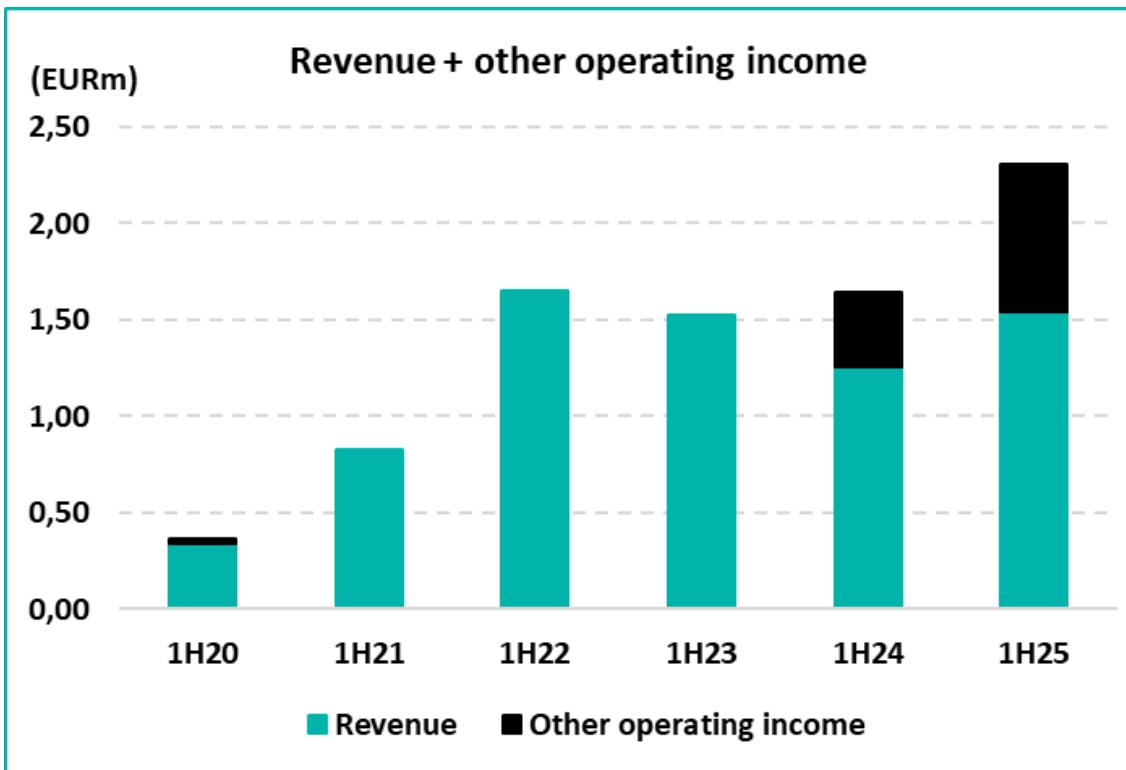


Nr of projects signed - rolling 12 months



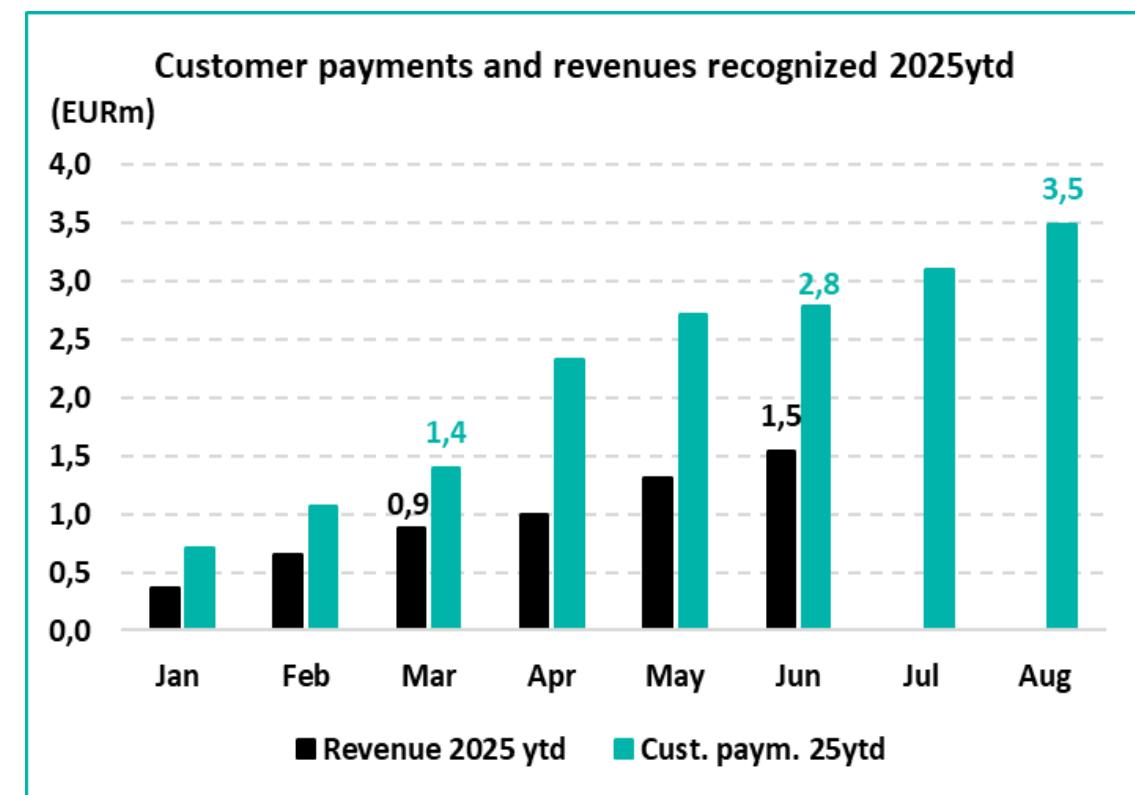
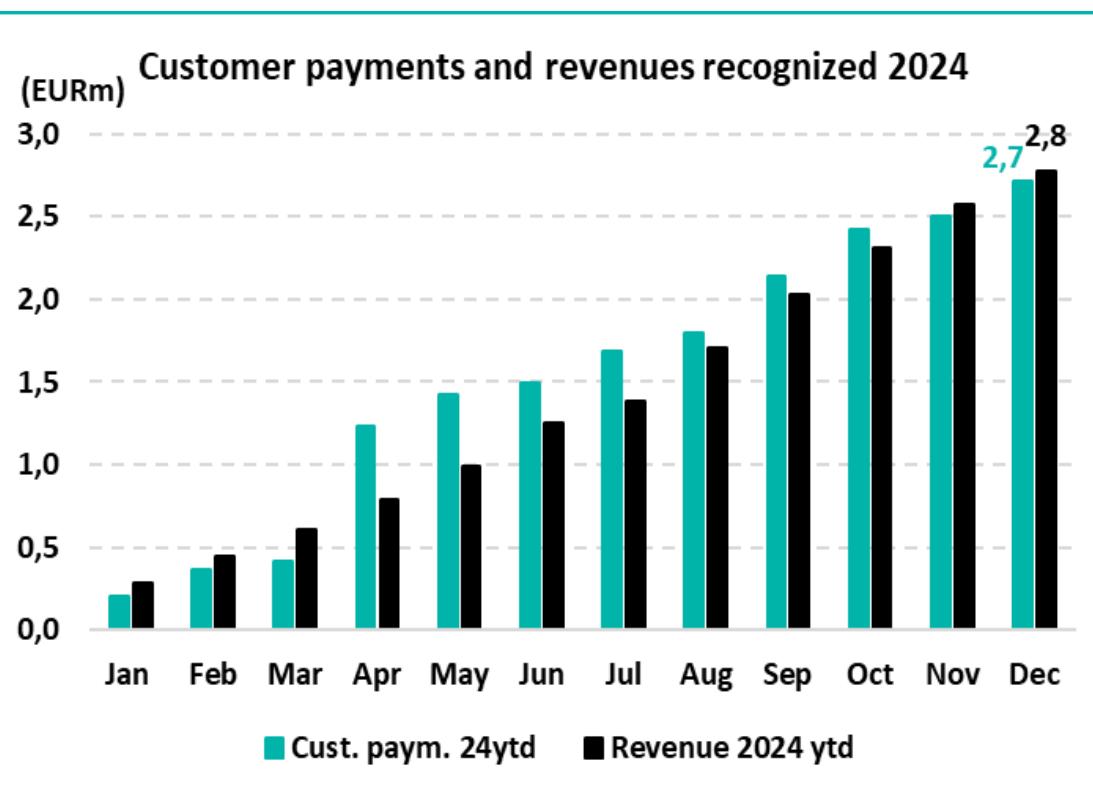


# Revenue +23% y/y in 1H25 at the same time as other income also grew



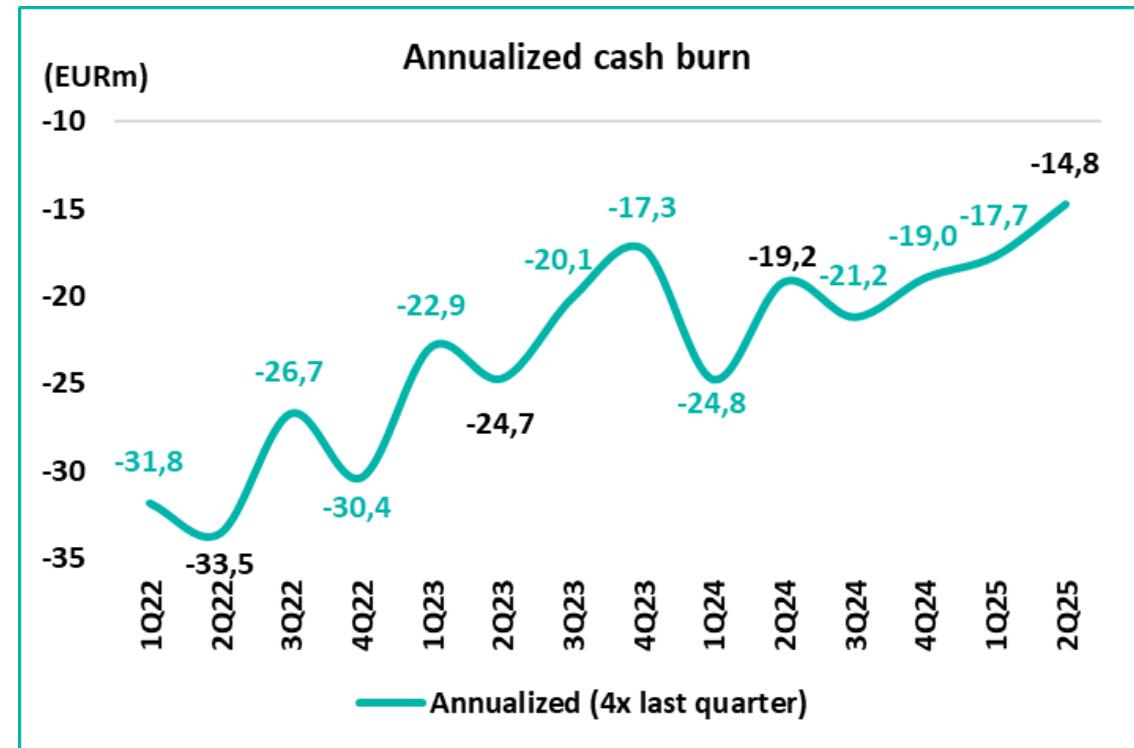
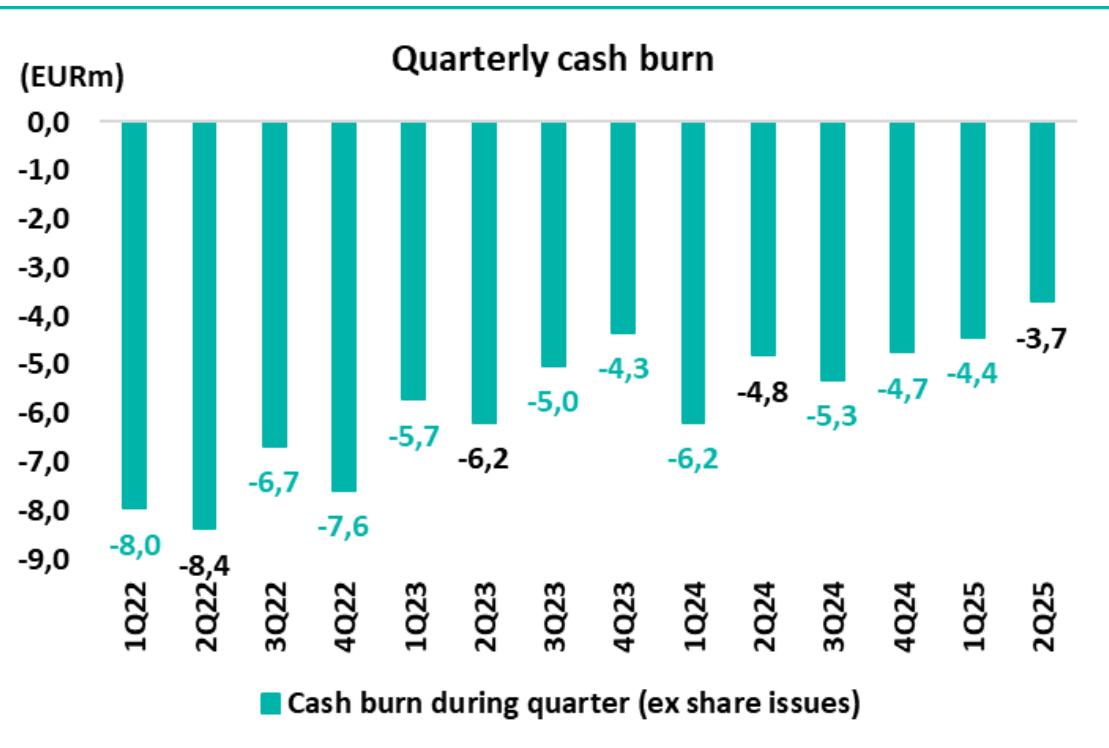


# Customer payments ytd exceed last year's payments and revenues recognized





# Improvement in cash flow continued



At the end of 2Q25, Nanoform had some EUR 33m in cash



# Update on dealmaking around our leading product kernels

## NANOENZALUTAMIDE\*

Germany	License and supply agreement signed
France	Term sheet agreed
Japan	Term sheet agreed
US	Term sheet agreed
Spain	Term sheet negotiations ongoing
UK	Term sheet negotiations ongoing
Canada	Term sheet negotiations ongoing
Italy	Discussions initiated
Brazil	Discussions initiated
South Korea	Discussions initiated
Rest of EU	Discussions initiated
MENA	Discussions initiated
RoW	Discussions initiated

## **Total financial potential of nanoenzalutamide project**

EUR 10m+ in potential development milestones 2025-2028

EUR 25m+ in potential sales milestones after launch

Some regions have profit share post launch between NF+ONConcept & commercialisation partners

Market share estimates 10-30% => potentially 1000kg+ peak demand

Supply price varies between markets and whether profit share or not

\*Today NF owns 25% of the nanoenzalutamide project

## NANOENCORAFENIB\*\*

Term sheets signed with two specialist investors to invest EUR 3-5m into development of nanoencorafenib  
Investment will finance the clinical development until commercialization of the kernel  
Pre-money valuation of nanoencorafenib kernel = EUR 5m  
Nanoform can receive low-single-digit EUR million milestones and mid-single-digit royalties  
Nanoform will own close to 50% of the project after investments

\*\*Today NF owns 100% of the nanoencorafenib project

## NANOAPALUTAMIDE\*\*\*

EU	Term sheet negotiations ongoing
US	Term sheet negotiations ongoing
Global	Term sheet negotiations ongoing

## **Financial potential of nanoapalutamide deals**

Details to follow after term sheets/deals signed

\*\*\*Today NF owns 100% of the nanoapalutamide project



# Nanoform near-term business targets 2025 – all on track

I

**To sign several license/commercial supply agreements on several product kernels during 2025**

II

**First pivotal bioequivalence clinical study with a nanoformed medicine**

III

**Increased number of non-GMP and GMP projects signed in 2025 vs 2024**

IV

**Improved free cash flow in 2025 vs 2024**

The background of the slide is a wide-angle aerial photograph of a large, shallow lake. The lake is dotted with numerous small, green, tree-covered islands of varying sizes. In the foreground, a dense, dark green forest covers a hillside that slopes down towards the water. The sky above is a clear, pale blue with a few wispy white clouds.

# Commercial

CCO Christian Jones  
CDO Peter Hänninen



# Nanoform commercial highlights

I

**Continued growth in customers and projects in a tough CDMO environment (6 new customers and 13 new customer projects in H1)**

II

**Strong pharma interest in Nanoform's high drug load biologics platform**

III

**Takeda presented positive data on respiratory nanoformulations of their A1AT protein at the Drug Delivery Forum in Berlin**

IV

**Nanotrastuzumab single subcutaneous injection greater than 400mg/ml presented at the Drug Delivery Forum in Berlin**

V

**Continued strong interest in our small molecule product kernels - first LSA signed for Nanoenzalutamide - Nanoencorafenib and Nanoapalutamide progressing well too**

VI

**Fast traction with Japanese partner CBC - several projects already signed**



## ***June 2024***

**Nanoformed high-concentration biologics formulation for subcutaneous delivery results presented by Takeda at Drug Delivery and Formulation Sumit in Berlin**

## ***August 2024***

**Nanoform and Takeda initiates collaboration on Takeda's plasma-derived therapy development**

## ***June 2025***

**Positive Nanoform biologics respiratory data presented by Takeda at Drug Delivery and Formulations Summit in Berlin**

## ***Sep & Oct 2025***

**Takeda to present on both high concentration subcutaneous data and respiratory data with Nanoformed Plasma Derived Therapies in September at DDF Boston and in October at PODD Boston**





# Nanoform Product Kernel overview\*

			Nanoform Product Kernels					Nanoform Pre-Clinical (non-GMP)				Nanoform Clinical (GMP)		Nanoform at Market
Originator	Indication	Expected originator peak sales	Nanoformed API	Delivery route / dosage form	Nanoform ownership today	Development partnering status	Targeted commercial partnering	PoC*	Pre-formulation + in-vitro	Dosage form development + in vivo	PoP* / Dosage form development	Phase 1 / Pilot clinical trial	Pivotal - final - clinical trial	Targeted market launch
Astellas/ Pfizer	XTANDI®/Prostate cancer	~\$5bln	Nanoenzalutamide	Oral / Tablet	25 %	OnConcept Consortium	Ongoing							2027 US & 2028 EU
Johnson & Johnson	ERLEADA®/Prostate cancer	~\$5bln	Nanoapalutamide	Oral / Tablet	100 %	Ongoing	Ongoing					2025-2026	2026-2027	2032 US & EU
Pfizer	BRAFTOVI®/Melanoma and colorectal cancer	~\$800mln	Nanoencorafenib	Oral / Tablet	45 %	LOI announced	Ongoing					2026	2027	2030 US & 2033 EU
Undisclosed	Inflammation		Undisclosed	Oral / Tablet	100 %	Partnered	2025							
Undisclosed	Oncology		Undisclosed	Oral / Tablet	100 %	2026	2027-28							
Undisclosed	Prostate cancer		Undisclosed	Long Acting	100 %	2025	2026-27							
Undisclosed	Oncology		Undisclosed	Long Acting	50 %	Partnered	2026							
Undisclosed	Oncology		Undisclosed	High Conc. Sub.Cut. Bio	100 %	2025	2026-27							
Undisclosed	Obesity		NanoGLP-1	Inhaled	100 %	2026	2027-28							

\* Only Product Kernel pipeline, i.e. not including customer projects

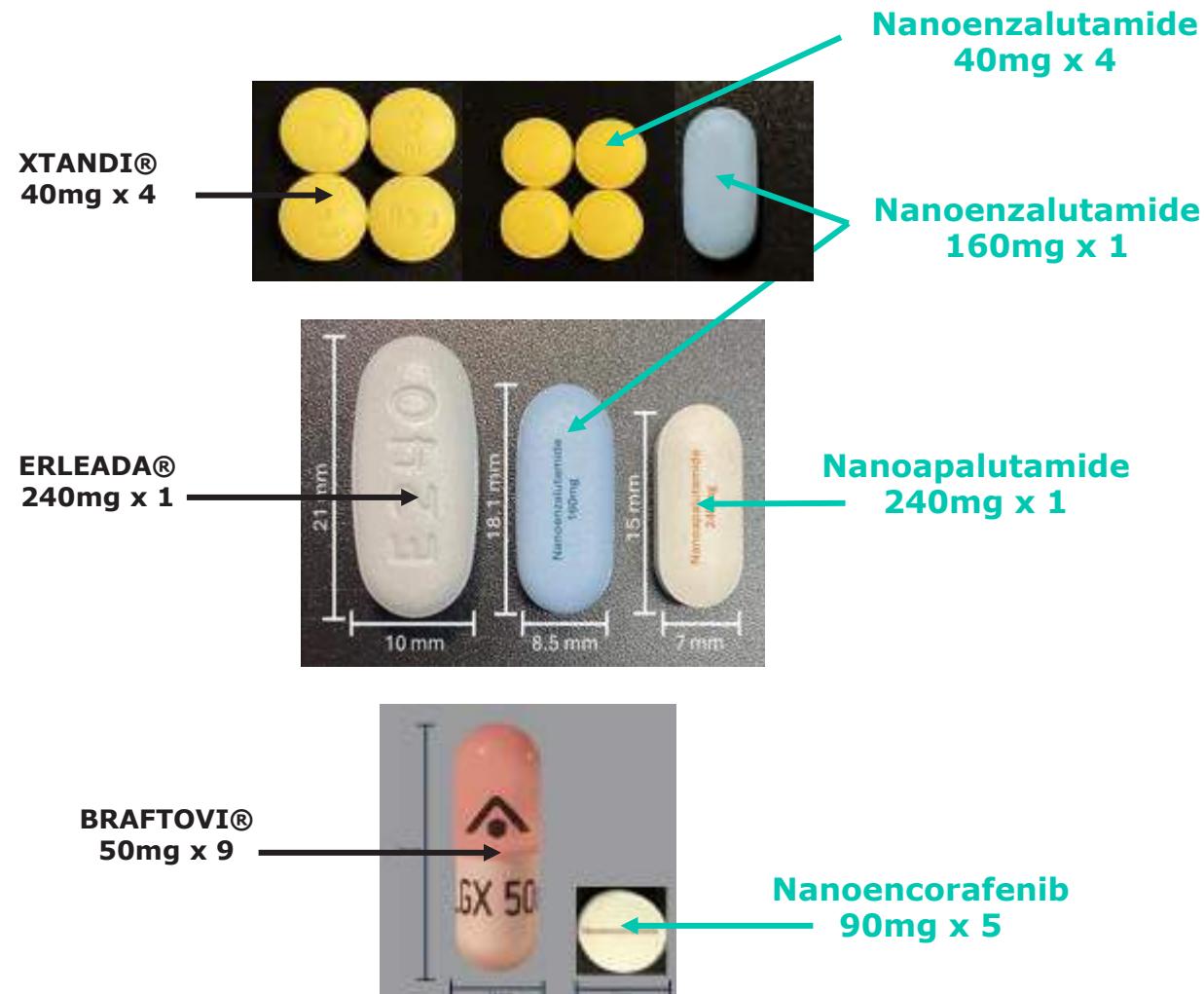
\* PoC = Proof of Concept

\* PoP = Proof of Process



# Small molecules – Nanoform enables small/single pill strategy

<u>Existing drug</u>	<u>Nanoformed version</u>
Formulation	XTANDI®
Drug load 160mg (x1)	ASD
Drug load 40mg (x4)	-
Size 160mg (x1)	12 %
Size 40mg (x4)	-
	Nanoenzalutamide
	Crystalline Nanoparticle
	40 %
	40 %
	18.1 x 8.6 mm
	8.0 mm
Formulation	ERLEADA®
Drug load 240mg (x1)	ASD
Drug load 60mg (x4)	21 %
Size 240mg (x1)	7 %
Size 60mg (x4)	21 x 10 mm
	Nanoapalutamide
	Crystalline Nanoparticle
	42 %
	42 %
	15 x 7 mm
	8 mm
Formulation	BRAFTOVI®
Drug load 90mg (x5)	ASD
Drug load 75mg (x6)	-
Drug load 50mg (x9)	12 %
Drug load 45mg (x10)	12 %
Size 90mg (x5)	-
Size 75mg (x6)	23 x 8.5 mm
Size 50mg (x9)	22 x 7.6 mm
Size 45mg (x10)	-
	Nanoencorafenib
	Crystalline Nanoparticle

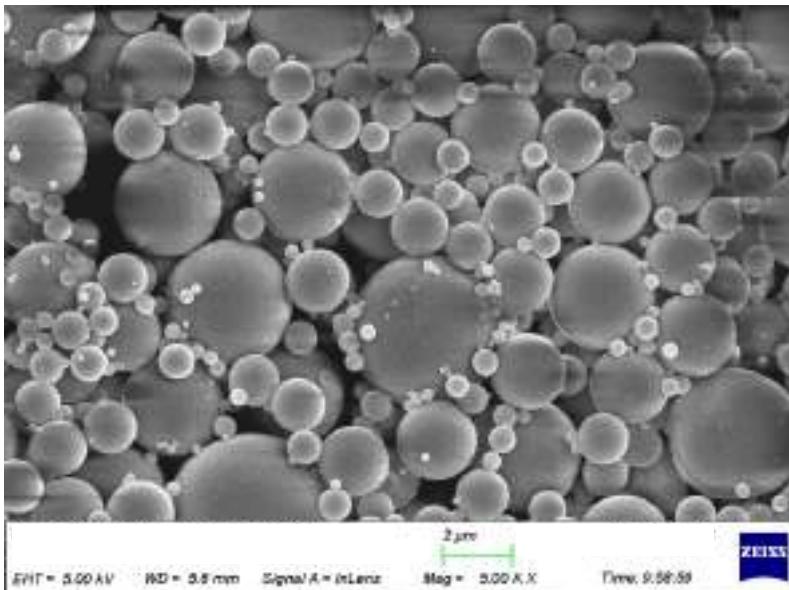


XTANDI®: Prostate cancer, Astellas/Pfizer  
 ERLEADA®: Prostate cancer, Johnson & Johnson  
 BRAFTOVI®: Melanoma and colorectal cancer, Pfizer

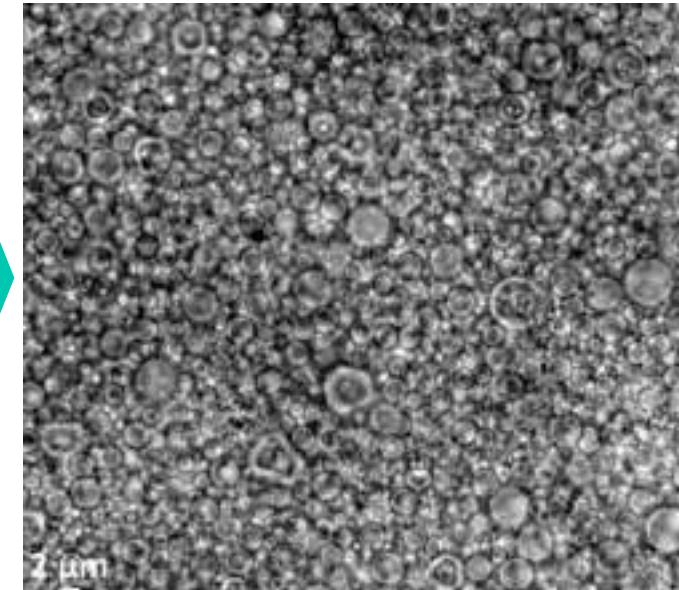


# Biologics - Game changing high drug load subcutaneous delivery (400-500 mg/ml)

Nanoformed monoclonal antibody in dry powder



Nanoformed high drug load monoclonal antibody in non-aqueous suspension



High drug load suspension in a prefilled syringe (400-500mg/ml)



## *Nanoforming enables IV to SubQ switches and multiple injections to a single injection*

- Non-aqueous suspension enables high protein load in a low volume (400-500 mg/ml)
- Intact and stable protein particles in suspension
- Good injectability of suspension with injection force below 20 N using a 27G needle

IV = Intravenous  
SubQ = Subcutaneous



# Nanotrastuzumab press release June 3, 2025

## Trastuzumab (Herceptin®)

- Genentech/Roche
- Monoclonal antibody (mAb)
- Breast and stomach cancer
- Intravenous administration
- In 2019, a hyaluronidase-enabled subcutaneous (SubQ) formulation (Herceptin HYLECTA™) of the product was approved, using Halozyme's ENHANZE® drug delivery technology<sup>1</sup>

## Nanotrastuzumab

- Nanoform Finland Plc
- A high concentration (HC) nanoformulation of trastuzumab
- Proof-of-concept pre-clinical study
- Suitable for subcutaneous (subQ) injection/administration
- Above 400 mg/mL dosing
- Hyaluronidase-free
- Full dose in a single 2mL syringe

1) Herceptin® is administered with 600mg every week intravenously (173min at oncology unit) Herceptin® HYLECTA™ is administered with 600mg subcutaneously every three weeks (53min at oncology unit)

## Nanoform HC-SubQ benefits

- Potential to transform the industry of administration of biologic medicines
- Nanoform's formulation platform enables high concentration subcutaneous (SubQ) administration
- Replacing intravenous administration
- Significantly reduced healthcare costs, better patient experience and quality of life
- Potentially complementing Halozyme's technology



## Selection of upcoming events

<b>September 15-16</b>	<b>DDF American Summit, Boston</b>
<b>September 16</b>	<b>Pareto Securities' 16<sup>th</sup> Annual Healthcare Conference 2025, Stockholm</b>
<b>October 13-14</b>	<b>Nordic Life Science Days, Gothenburg</b>
<b>October 16-17</b>	<b>13<sup>th</sup> PhysChem Forum, Kanagawa</b>
<b>October 27-28</b>	<b>PODD, Boston</b>
<b>October 27-31</b>	<b>Particle Design Symposium, Japan</b>
<b>October 28-30</b>	<b>CPHI, Frankfurt</b>
<b>November 3-5</b>	<b>Bio Europe, Autumn, Vienna</b>
<b>November 9-12</b>	<b>AAPS PharmaSci 360, Texas</b>
<b>November 13-14</b>	<b>SEB Healthcare Seminar, Stockholm</b>
<b>November 20</b>	<b>Nanoform Q3 2025 report</b>
<b>November 25</b>	<b>Aktiespararna - Stora Aktiedagarna, Stockholm</b>
<b>December 10-12</b>	<b>DDL, Edinburgh</b>

# Q & A



**Edward Hæggström**  
CEO



**Albert Hæggström**  
CFO



**Christian Jones**  
CCO

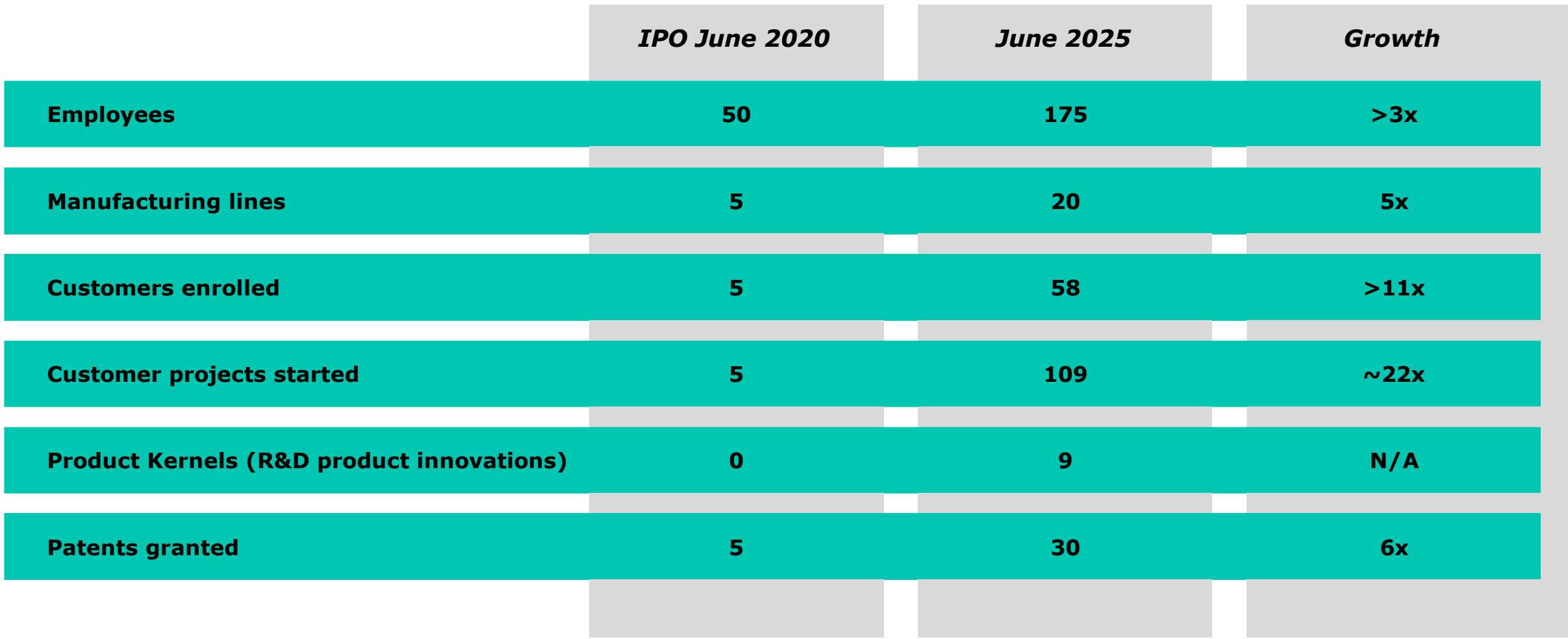


**Peter Hänninen**  
General Counsel &  
Chief Development  
Officer

An aerial photograph of a modern industrial or research facility. The complex features several large, rectangular buildings with dark, textured facades and glass-enclosed sections. One building has a prominent glass-enclosed entrance. The facility is surrounded by a parking lot with several cars and is situated in a green, landscaped area with trees and grass. In the background, there are more buildings, fields, and a body of water. A teal-colored rectangular overlay is positioned in the center of the image, containing the word "APPENDIX" in white, bold, sans-serif capital letters.

# APPENDIX

# Nanoform's Assets





## Interesting short videos:

**Drug Delivery Leader Chief Editor Tom von Gunden sits down with Christian Jones, FRSC, Chief Commercial Officer at Nanoform, to discuss how nanoparticle technology is driving innovation in drug and biologics delivery:**  
<https://www.drugdeliveryleader.com/doc/leveraging-nanoparticles-for-high-drug-load-delivery-with-nanoform-s-christian-jones-0001>

**Nanoform high dose subcutaneous delivery of biologics:**  
<https://nanoform.com/en/nanoform-high-dose-subcutaneous-delivery-of-biologics/>

**Discover how Nanoformed API outperform traditional solid dispersions:**  
<https://nanoform.com/en/nanoform-cphi-milan-2024-tamas-solymosi/>

**Nanoform's best-in-class nanodevelopment capabilities:**  
<https://nanoform.com/en/nanoform-development-capabilities/>

**Nanoform's advanced nanoformulation, nanoanalytical, and best-in-class capabilities:**  
<https://nanoform.com/en/nanoform-formulation-and-analytical-tour/>

**Nanoform's state-of-the-art manufacturing capabilities:**  
<https://nanoform.com/en/nanoform-dr-david-rowe-manufacturing-with-drone/>

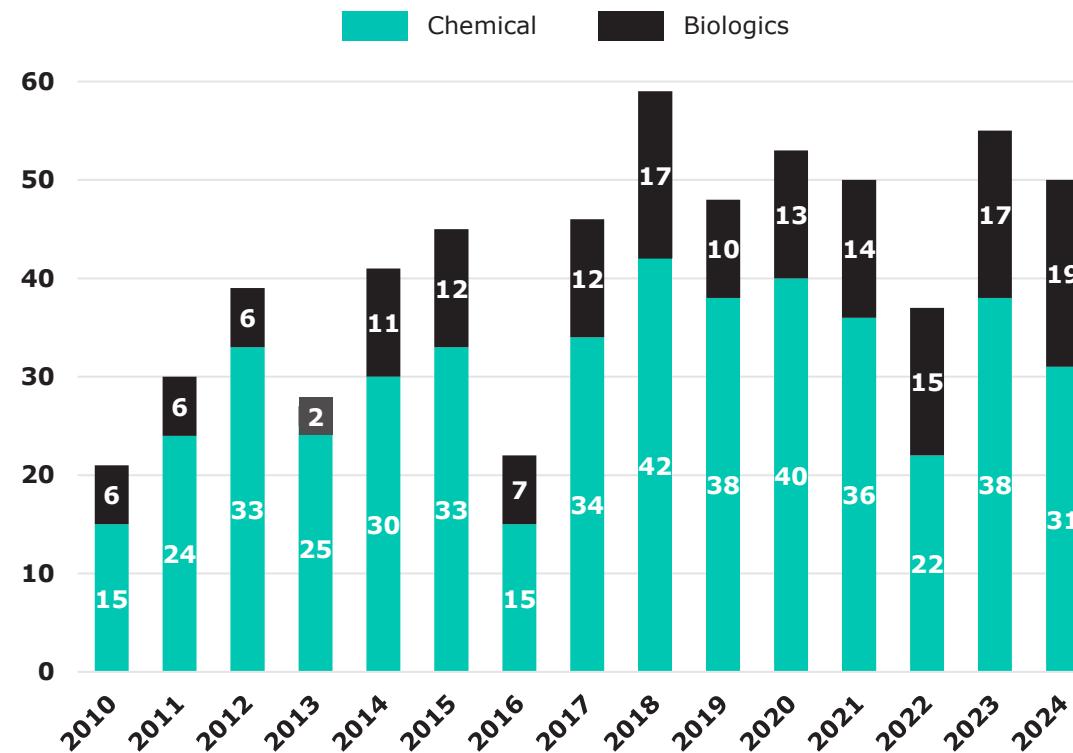




# The structural pharma R&D problem in the pharma industry

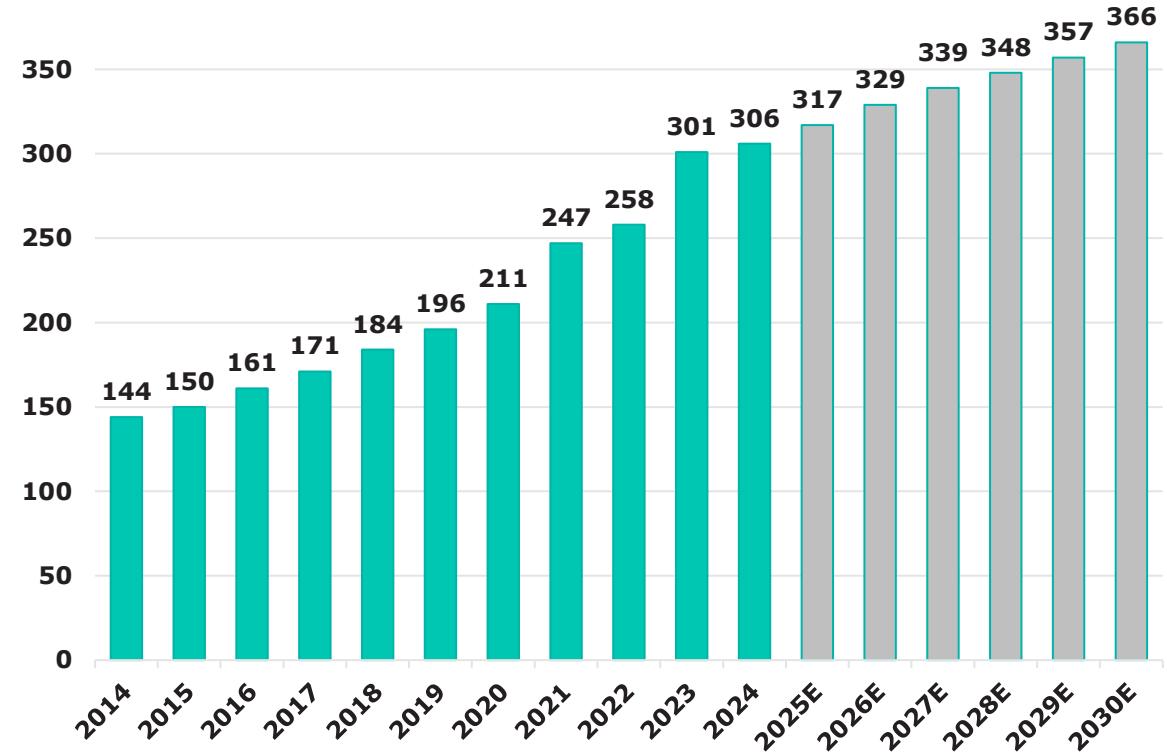
Fewer than 50 drugs approved in the US annually on average...

Annual number of novel drug approvals by FDA 2010-2024



...while the global pharma industry R&D expenditure exceeds \$300B

Global pharmaceutical R&D spending 2014-2030E (USDbn)



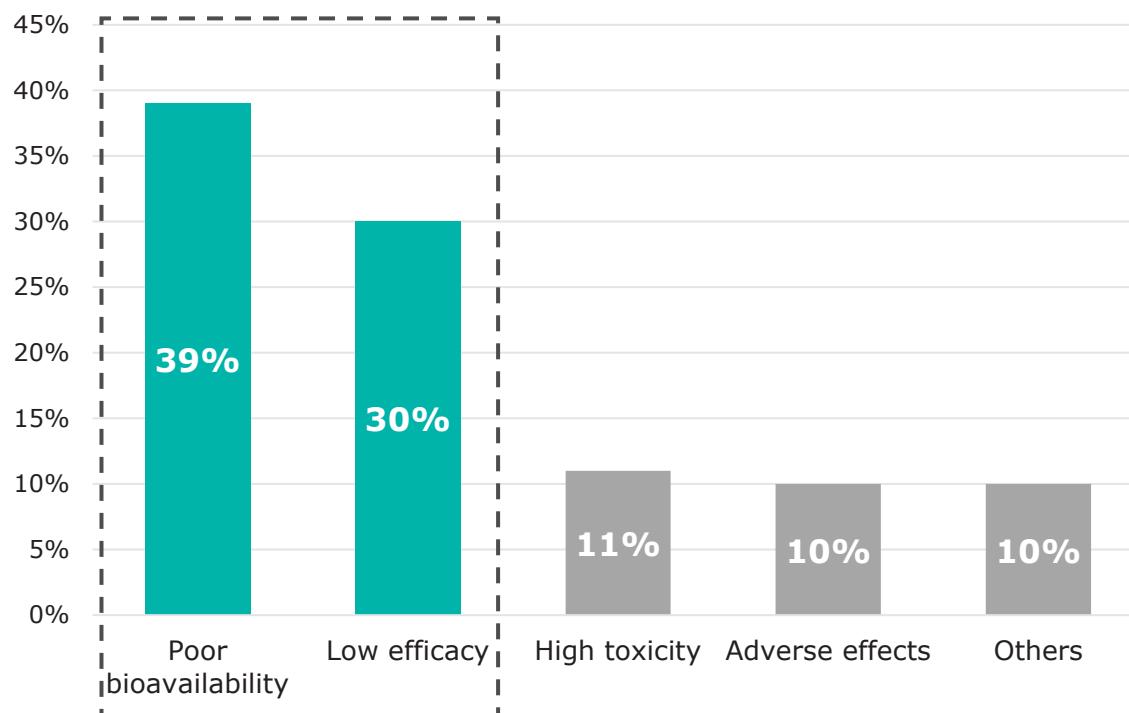
➤ A game changer is needed to improve R&D yield



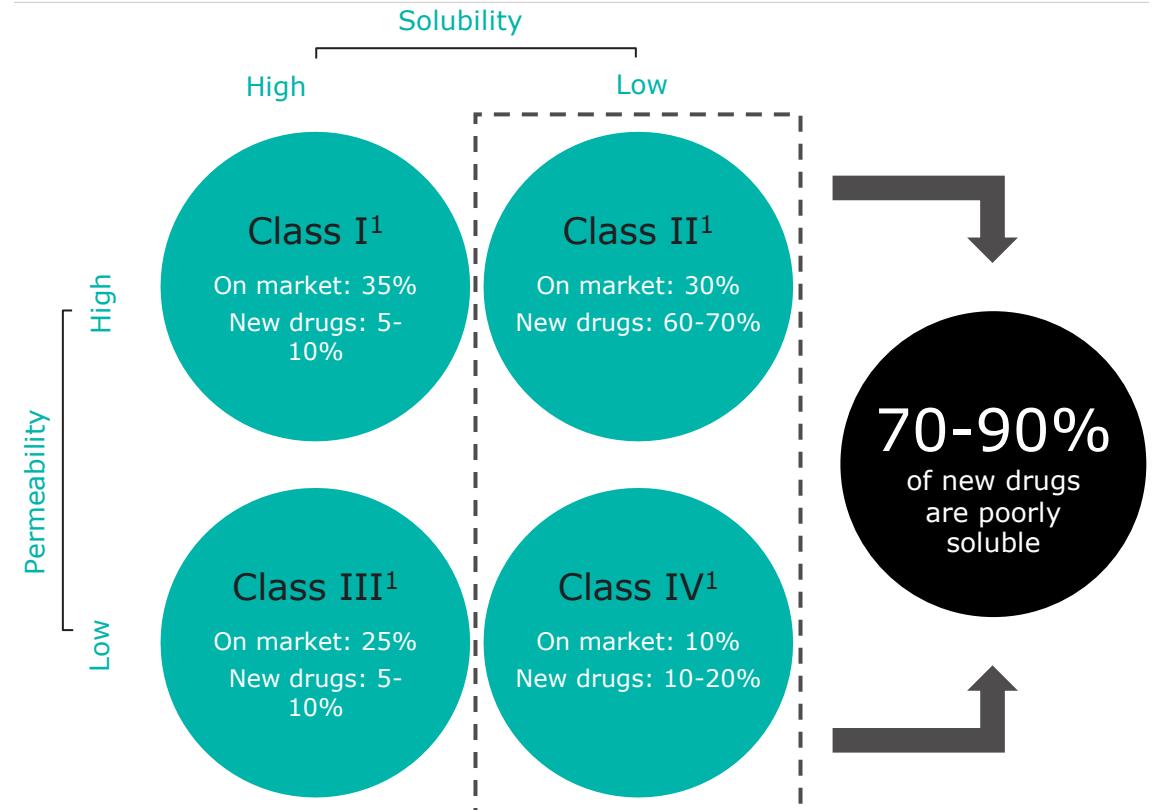
# Low bioavailability is the key issue

Poor bioavailability and low efficacy most common reasons for drug failure

Reasons for drug failure in pre-clinical trials (share of molecules)



Majority of new drugs suffer from poor solubility



➤ Nanoform can enhance the pharma industry output by targeting poorly soluble drugs

Source: GlobalData 2009, Cutting Edge Water-based Nanotechnology in Drug Development (Reasons for drug failure); Nikolakakis & Partheniadi (2017), Self-Emulsifying Granules and Pellets: Composition and Formation Mechanisms for Instant or Controlled Release (Share of poorly soluble drugs) 1) Classification of drug substance according to Biopharmaceutics Classification System (BCS)

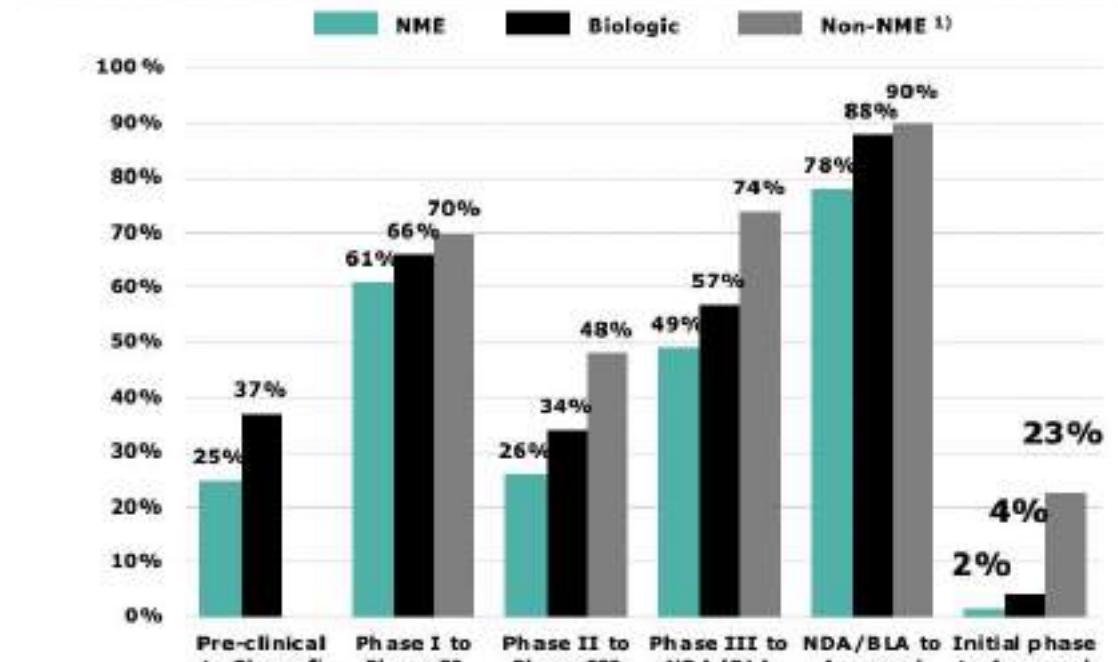


# Revenue drivers & industry attrition rates

## Nanoform pre-clinical and clinical revenue drivers

	Non-GMP	GMP
Proof of Concept (PoC)	<ul style="list-style-type: none"> <li>➢ # of active customers</li> <li>➢ # of APIs per customer</li> <li>➢ Price per PoC per API</li> </ul>	<ul style="list-style-type: none"> <li>➢ Attrition between previous and current phase</li> <li>➢ Price per phase per API</li> <li>➢ Time lag between previous and current phase</li> <li>➢ # of customers with 505(b)(2) strategy</li> <li>➢ Proportion of new drug candidates and 505(b)(2) APIs</li> </ul>
Proof of Process (PoP)	<ul style="list-style-type: none"> <li>➢ Attrition between PoC and PoP</li> <li>➢ Price per PoP per API</li> <li>➢ Time lag between PoC and PoP</li> </ul>	<ul style="list-style-type: none"> <li>➢ # of drugs on the market using CESS®</li> <li>➢ License fee &amp; royalty level per drug</li> <li>➢ Net revenues per drug</li> <li>➢ Time lag Phase II and market (505b2)</li> <li>➢ Time lag Phase III and market</li> <li>➢ Speed of uptake on market</li> </ul>

## Global Pharmaceutical industry's pre-clinical and clinical success rates



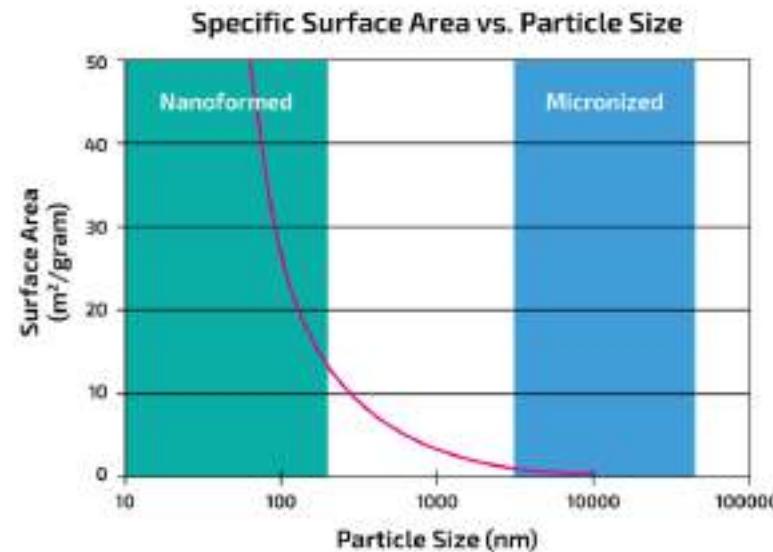
Timeline (years)	Pre-clinical	Phase I	Phase II	Phase III	Approval	Total
New drugs	~1-4	~2	~2	~3-4	~1	~9-13
Existing drugs	-	Clinical development for 505(b)(2) ~2-5			~1	~3-6

Source: Company information; Takebe, Imai & Ono (2018), Clinical and Translational Science (11) (Pre-clinical to Phase I); Biotechnology Innovation Organization, Biomedtracker and Amplion, Clinical Development Success Rates 2006-2015 (Clinical success rates); Kaur, Sharma & Sharma (2014), Journal of Drug Delivery and Therapeutics (4) (Timeline); The Pharmaceutical Journal, Drug Development: The Journey of a Medicine from Lab to Shelf (Timeline); Camargo Pharmaceutical Services, Understanding the 505(b)(2) Approval Pathway (Timeline); 1) Non-NMEs often use 505(b)(2) pathway to gain FDA approval, source: Biotechnology Innovation Organization, Biomedtracker and Amplion 2) Academic drug discovery, NME consisting only of small molecules

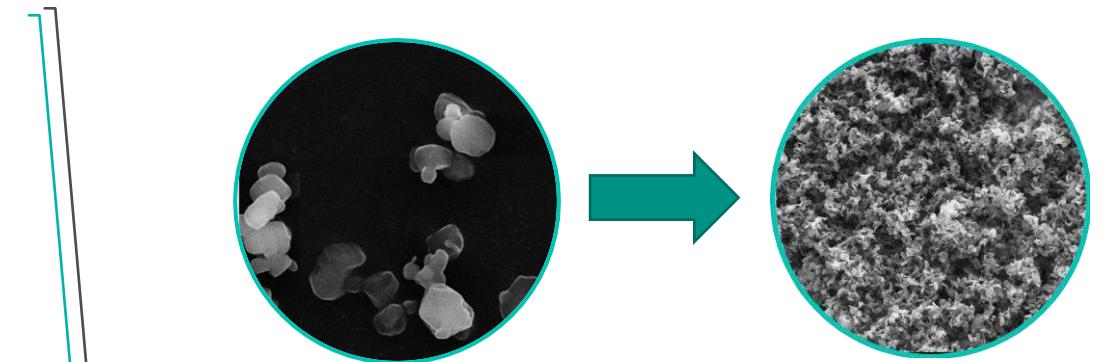


# Particle size is key

Smaller particle size can improve a drug's bioavailability



- The surface area increases 30-fold from a 10 micron sized particle once the particle size is reduced to 100nm
- Reduction of particle size down to 50nm increases the surface area by 1,000-fold



Pre-nanoforming

Post-nanoforming

- Smaller particles have a larger surface area
- Larger surface area of particles enables improved bioavailability of a drug
- Improved bioavailability implies increased absorption of a drug by the body's circular system
- CESS® can produce API with large surface areas which can significantly improve the bioavailability of drugs

➤ CESS® produced nanoparticles have a larger surface area and as such improved bioavailability.

Source: Company information  
1 micron = 1,000nm



# Nanoform is here to fill the gap

Enabling  
new drugs  
**> 20,000**  
drugs in  
development\*

Improving  
existing  
drugs  
**> 5,800**  
existing drugs\*

Giving  
unsuccessful  
drug candidates a  
second chance  
**> 58,000**  
failed drugs in the  
last 40 years\*

\* Source: Nanoform and Pharmaprojects® / Informa, 2022



# Small molecules - Small is powerful®





# Nanoform Product Kernels

## Nanoform internal Product Kernel work

1. Value proposition around a medicine candidate, called 'Product Kernel'

2. New IP that Nanoform owns in an R&D phase

## Development partners

Originator  
or  
Supergeneric / High value medicine company

1. Upfront payments
2. Milestones
3. Revenue from Nanoforming the medicine for clinical trials

## Commercial partners

Originator  
or  
Supergeneric / High value medicine company

1. Upfront payments
2. Milestones
3. Revenue from Nanoforming the medicine for clinical trials and commercial phase
4. Royalties/profit share



# Attractive revenue model with pharma and biotech customers

Phase	Proof of Concept / Proof of Process	Phase I – III clinical trials	Drugs on the market
Certification	Non-GMP	GMP	GMP
Description	<ul style="list-style-type: none"><li>• Proof of concept study - assessment of the possibility to nanoform a specific API</li><li>• Proof of process study - definition of parameters to establish the optimal process and controls for a specific API</li></ul>	<ul style="list-style-type: none"><li>• API for clinical trials are manufactured in Nanoforms GMP facility</li><li>• Supply of material for customers' Phase I, II and III trials</li></ul>	<ul style="list-style-type: none"><li>• Drugs that have passed the trials and reached commercialization</li><li>• Significant potential from patent extension (505b2 projects) of drugs already on market</li></ul>
Revenue model	<u>Fixed fee per project</u>  Estimated project fee of EUR 50-500k per API per project	<u>Fixed fee per project</u>  Estimated project fee of EUR 0.5-10m per API per phase	<u>Royalty as a % on drug sales or supply price per kg</u>  Estimated royalty fee of 1-20%



# Commercial Relationships 2019 – Q2 2025

## Customer mix

12  
**major  
pharma**

47  
mid-sized,  
specialty  
pharma &  
biotech  
companies

## Selection of partners

Takeda



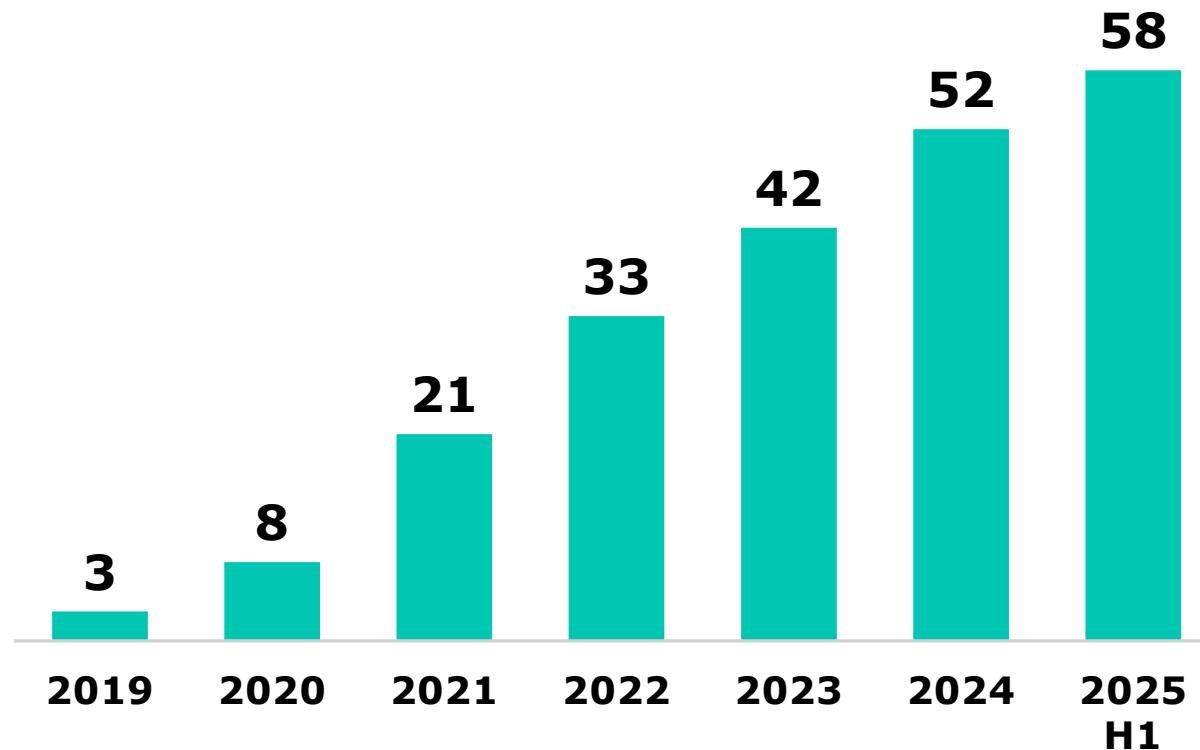
BILL & MELINDA  
GATES foundation





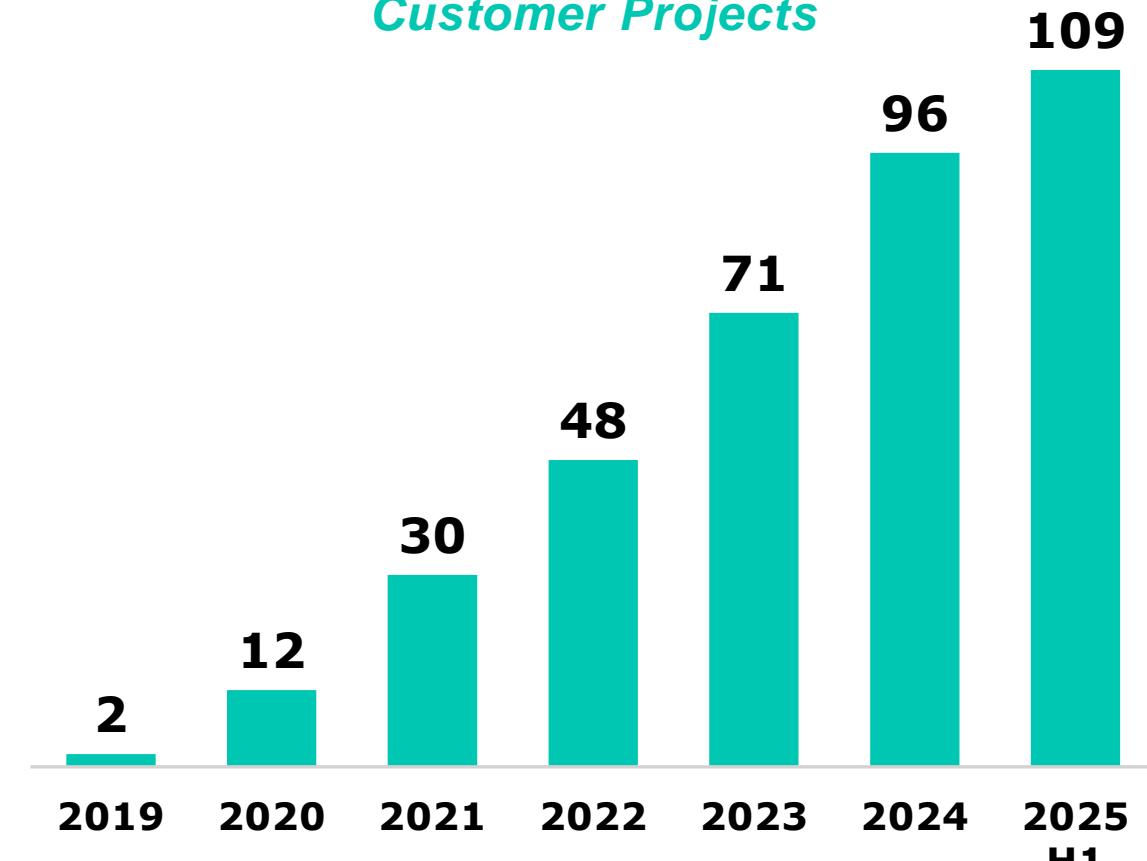
# Cumulative number of customer and customer projects signed

*Customers*



Q1: 3 new, Q2: 3 new

*Customer Projects*



Q1: 4 new, Q2: 9 new



# Nanoform customer projects – therapy area overview\*

Pre-Clinical	Phase I	Phase II & III	Marketed/505b2
<b>Cardiology</b> (e.g. Anemia)	<b>Immunology/Inflammation</b> (e.g. Cystic Fibrosis)	<b>Metabolism and Endocrinology</b> (e.g. Adrenal Hyperplasia)	<b>Infectious Disease</b> (e.g. HIV)
<b>Gastroenterology</b> (e.g. Microbiome)	<b>Dermatology/Oncology</b> (e.g. Basal Cell Carcinoma)	<b>Neurology</b> (e.g. Schizophrenia)	<b>Immunology/Inflammation</b> (e.g. HEP B)
<b>Immunology/Inflammation</b> (e.g. Psoriasis)	<b>Neurology</b> (e.g. Parkinsons)	<b>Oncology</b> (e.g. lung cancer)	<b>Immunology/Inflammation</b> (e.g. Cystic Fibrosis)
<b>Infectious Disease</b> (e.g. HIV)	<b>Oncology</b> (e.g. Solid Tumors)		<b>Oncology</b> (e.g. Prostate Cancer)
<b>Metabolism and Endocrinology</b> (e.g. Diabetes)	<b>Ophthalmology</b> (e.g. Cataract)		<b>Ophthalmology</b> (e.g. Glaucoma)
<b>Neurology</b> (e.g. Parkinsons)	<b>Pain</b> (e.g. Post Operative Pain)		
<b>Oncology</b> (e.g. Multiple Myeloma)	<b>Infectious Disease</b> (e.g. HIV)		
<b>Ophthalmology</b> (e.g. Glaucoma)			
<b>Respiratory</b> (e.g. COPD)			

\* Shows the stage of customer molecule, not in which phase the project is at Nanoform (non-GMP, GMP, at market)



# Nanoform has made substantial progress in Nanoforming solutions with in-vitro, in-vivo, and clinical study results

## Oncology:

**Replaced amorphous solid dispersion (ASD) formulations with nanocrystalline high drug load formulations**, matching bioequivalence for Enzalutamide and Apalutamide where life cycle management **opportunities to reduce tablet burden to a single, smaller, easier-to-swallow tablet** as well as working on Aprepitant in partnership with PlusVitech for lung cancer to develop a regimen with substantially fewer tablets.

## Inhalation:

**Engineering nanoformulations of both small and large molecules** with excellent fine-particle dose (FPD) and fine-particle fraction (FPF) performance in comparison to spray drying technologies. In biologics, Nanoform has shown FPF >95% vs 50% with spray drying for delivering **high drug load** to the lungs.

## Biologics:

Demonstrated in partnership, with Takeda and other companies, **ultra-high concentrations for subcutaneous drug delivery** with acceptable viscosity for injection (Takeda – Plasma Derived Therapies).

## Ophthalmic:

**Multiple projects where nanoparticles have shown improved delivery potential. High drug load** to the eye enabling smaller implants with no requirement for mesh membranes, eye drop suspensions and ophthalmic inserts.

## Hydrogels:

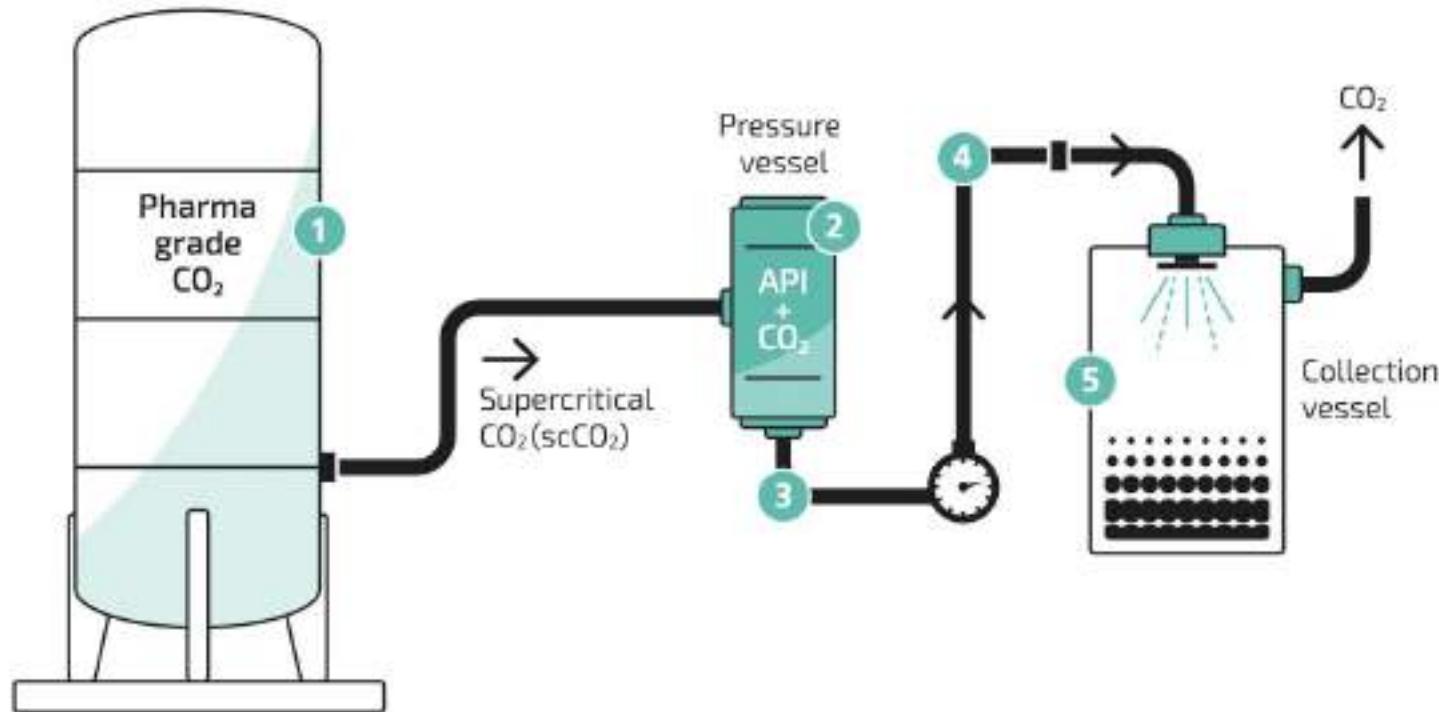
**Shown high drug load** applications (5 x more than nanomilling) for post-surgical glioblastoma drug delivery and deep penetration across the brain parenchyma **enabling non-recurrence of glioblastoma** where other formulations failed.

## IP:

**Novel technologies, processes and formulations** can enable market opportunities, lifecycle management and strong launch strategies



## Controlled Expansion of Supercritical Solutions - CESS®



- 1 Supercritical CO<sub>2</sub> is guided into a pressure vessel loaded with API
- 2 Increasing the pressure and temperature in the vessel dissolves the API in supercritical CO<sub>2</sub>
- 3 The CO<sub>2</sub> and the API are released from the pressure vessel and the flow, pressure and temperature profiles are accurately controlled
- 4 The pressure and temperature is controlled to achieve a stable nucleation phase and formation of nanoparticles
- 5 In a collection vessel the CO<sub>2</sub> is sublimated resulting in final nanoparticles ready for collection and formulation

➤ Relatively simple process developed through combining deep knowledge in physics, chemistry, and pharma

The CESS® technology platform was described in detail in the IPO prospectus (offering circular) on pages 76-80.  
The prospectus can be found via the following link: <https://nanoform.com/en/ipo-materials/>



# CESS® Superior to Existing Technologies

	Controlled Expansion of Supercritical Solutions (CESS®)	Solid dispersion (e.g. spray drying)	Jet milling	Nanomilling
Description	Extracts API from supercritical CO <sub>2</sub> by applying controlled reduction in pressure	API is dispersed into a solid material, which dissolves when exposed to an aqueous media	Application of energy to physically break down API particles to finer ones	API particle size is reduced in a liquid vehicle via grinding
Particle size	Down to 10nm	300nm-25μm	800nm-10μm	>150nm
Particle formation	Controlled crystalline or amorphous and stable	Amorphous (unstable without excipients)	Unstable (crystalline and amorphous structures)	Unstable (crystalline and amorphous – needs excipient to stabilise)
Ease of formulation	✓	✗	✗	✗
Reproducibility	✓	✓	✗	✗
Free from excipients and solvents	✓	✗	✓	✗
Yield	High	Low	High	Low
Investment	Low	High	Low	Low

Source: Company information; Chimica Oggi: Chemistry Today; Roots Analysis, Pharmaceutical Spray Drying Market, 2014-2024

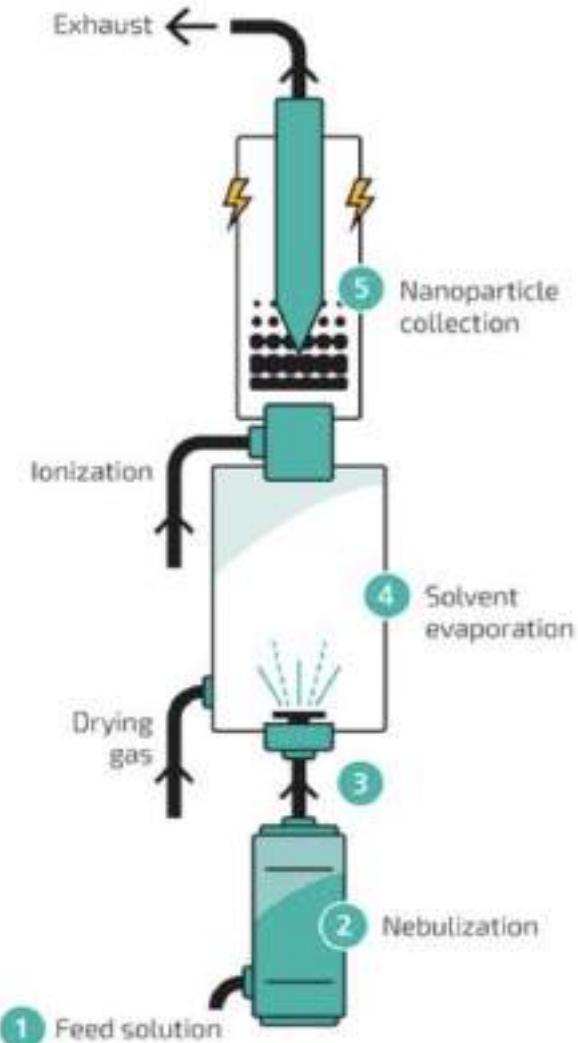


# Large molecules - Proprietary technology

Green  
technology

## Nanoforming process for biologics

- 1 API containing feed solution is pumped into the nebulizer
- 2 Feed solution is nebulized into a carrier gas
- 3 Mist is transported into the drying chamber via a connection pipe
- 4 Mist is dried using low-temperature drying gas
- 5 Dried particles are charged by the ionizer and collected using electrostatic precipitation



API = active pharmaceutical ingredient

Nebulization = turns liquid into mist

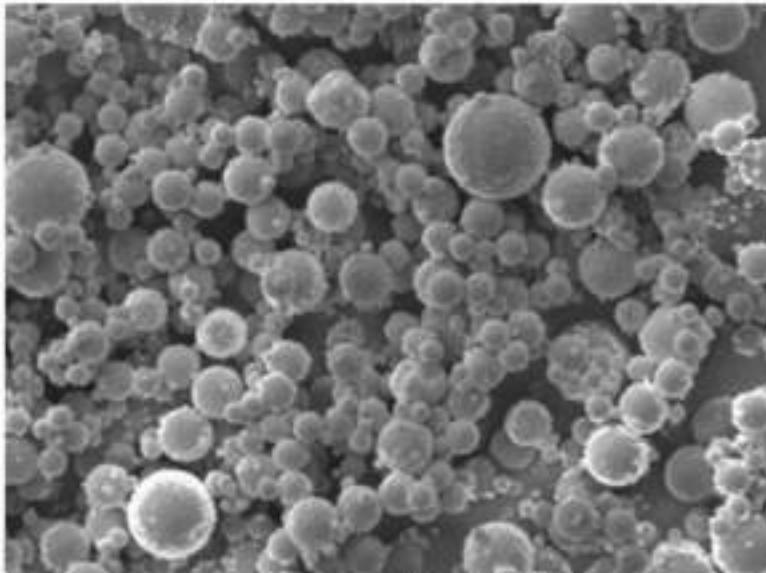
Ionization = particles electrically charged



# Comparison of Nanoform's proprietary biologics technology vs existing technologies

## Nanoformed

Perfect spheres, highly flowable and aerodynamic, great packing and injection properties

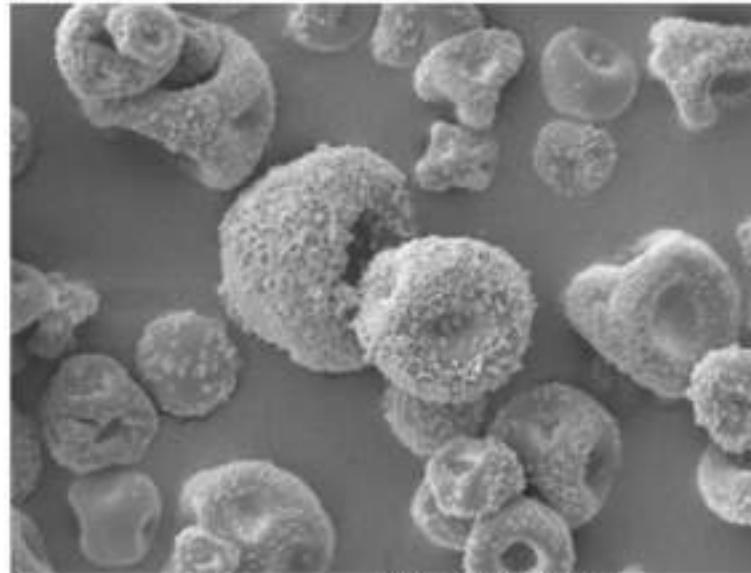


8  $\mu$ m

24NP0065 (LTW002) x8000

## Spray dried

Sticky, poor flowability, raisin shaped

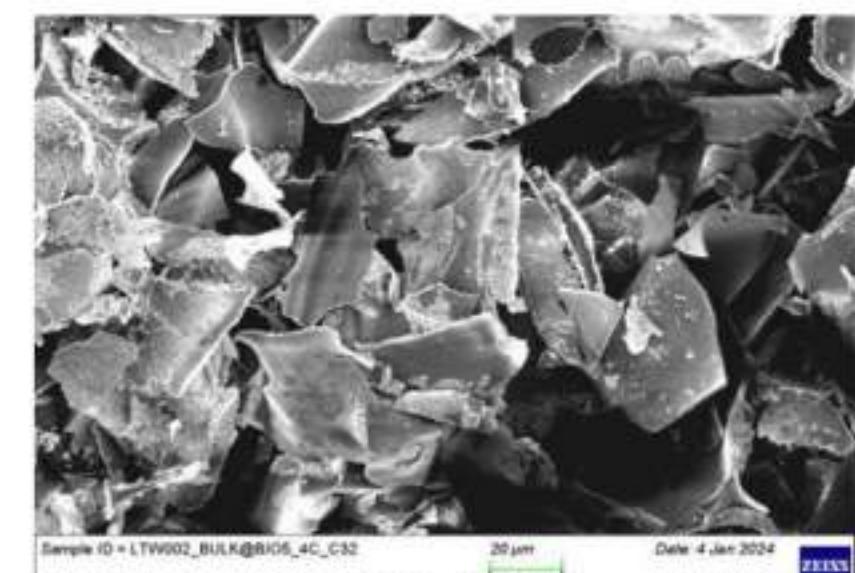


8  $\mu$ m

24NP0064 (N11SD) x8000

## Lyophilized / freeze dried

Flaky morphology, dry cake, no flowability



20  $\mu$ m

Sample ID = LTW002\_BULK@B105\_4C\_C32

EHT = 5.00 kV WD = 4.8 mm Signal A = ImLens

Date: 4-Jan-2024

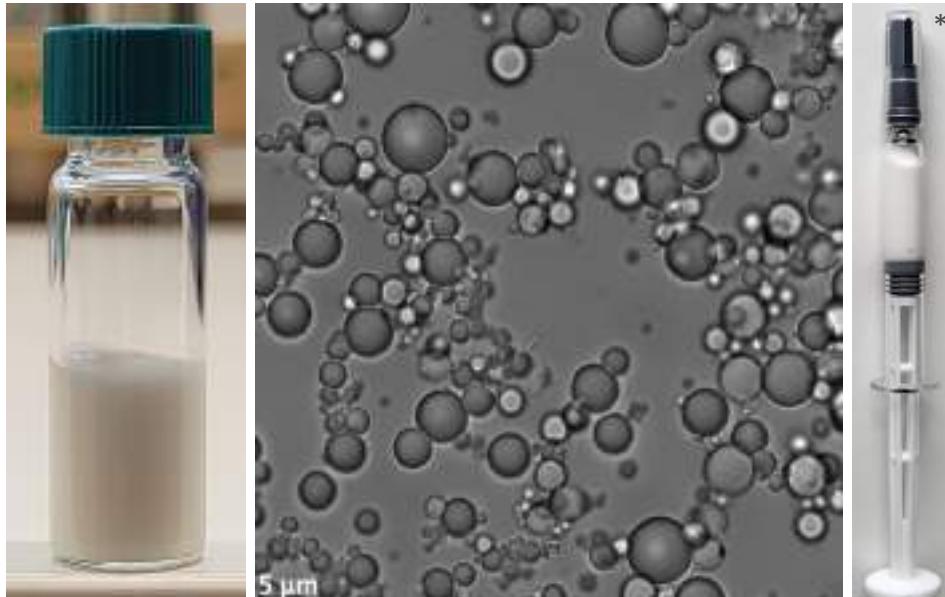
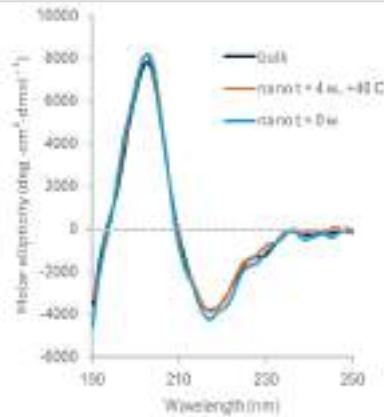
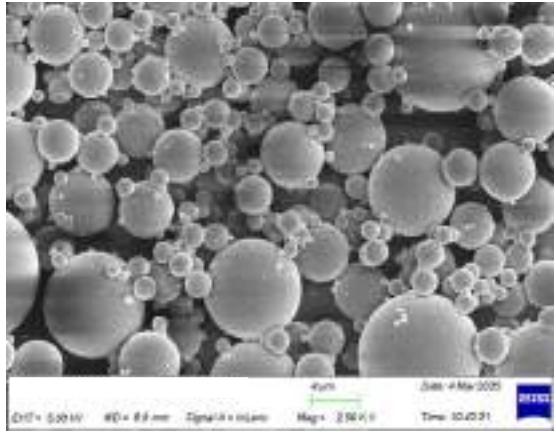
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**Nanoforming biologics: Superior flowability, aerodynamic performance, high density packing, lower injection force properties, improved material quality and stability properties vs spray drying and lyophilization**



# Nanoformed Trastuzumab SubQ Suspension Formulation



From dry particles to 440 mg/ml stable Trastuzumab in suspension

\*Syringe reference: Courtesy of Stevanato Group

- **No significant changes** can be detected in Trastuzumab primary or higher order structures and nanoformed mAb remains fully functional
- **Up to 650 mg/ml** of dry mass was reached with an injection force of **below 10N**
- **Particles remain intact in the suspension** after 4 weeks at +4°C and +25°C
- **No sedimentation** detected by Turbiscan technology at +4/+25C for 4 weeks
- **Injection force remain stable** after storing suspension in syringes at +4/+25C for 4 weeks



# Business case Amorphous Solid Dispersions (ASDs)

Amorphous solid dispersion (ASD) medicines are currently the leading formulation strategy for poorly soluble APIs and there are ~50 marketed medicines globally that are ASDs and sell for ~\$50bln annually

**Nanoformed and nanocrystalline medicines (e.g. nanoenzalutamide etc) offer an attractive alternative to ASD medicines (and other) with the following benefits to originators and supergeneric/high value medicines companies:**

- **green manufacturing process**
- **substantially higher drug load in the final drug product**
- **reduced pill burden for the patient**
- **opportunity to extend IP protection for the reformulated and improved product**
- **opportunity for earlier market entry**
- **possibility for fixed dose combinations**



## Project Glioblastoma (hydrogel for central nervous system cancer)

Nanoform customer TargTex S.A. was granted **Orphan Drug Designation** by FDA for its nanoformed drug candidate TTX101 to be used in patients with malignant gliomas (October 2023). The orphan drug designation follows the generation of a preclinical rodent data package in which a **survival advantage** was shown for this nanoform-enabled medicine candidate.

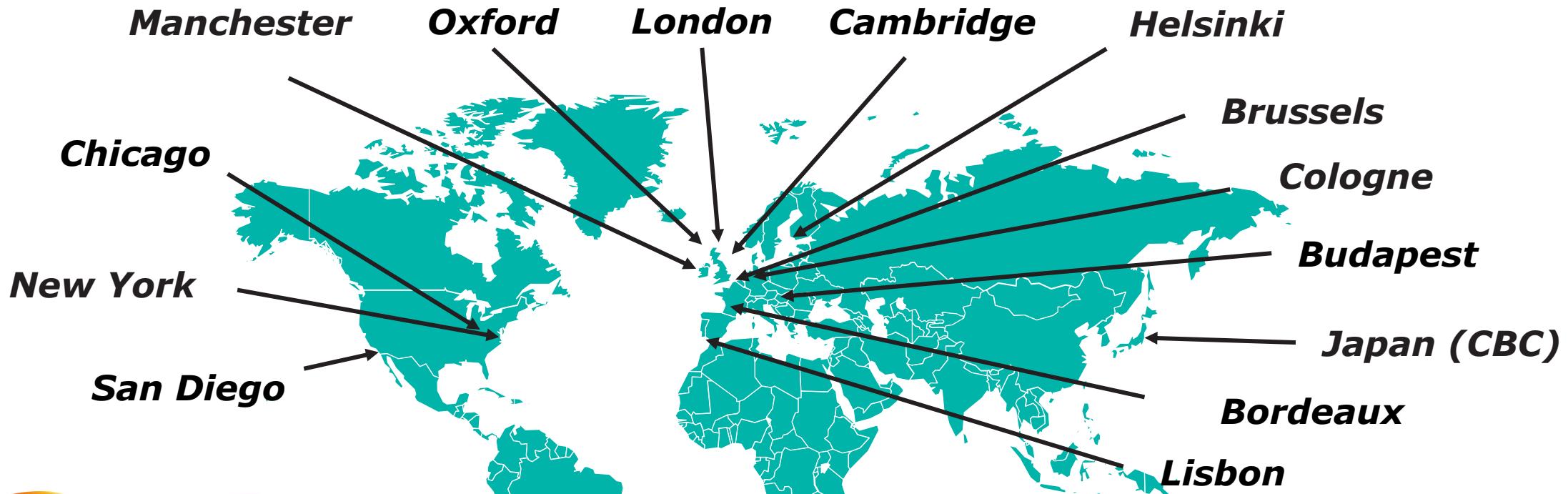
The hydrogel **nanoformulation developed by Nanoform enabled a 200-fold increase** in drug load compared to bulk and a 5-fold increase in drug load compared to nanomilling.

In November 2023, the **European Innovation Council and SMEs Executive Agency (EISMEA)** awarded **TargTex €14m in funding**.

TargTex is currently raising additional funds to take this innovative treatment to clinic and is planning a phase 1/2a **clinical trial in recurrent glioblastoma (GBM) patients across the US and EU**, in which nanoformed TTX101 is applied as adjunct to surgery after tumour excision.



# Experienced global sales team driving commercialization – Locations and previous experiences



Bristol Myers  
Squibb™



Hovione



Johnson Matthey  
Inspiring science, enhancing life

Siegfried



Lonza



I-N-N-O  
S-Y-N



CAMBRIDGE MAJOR  
LABORATORIES





# Management team: Multi-disciplinary with international merits

## **CEO & Co-founder; Ph.D. (Applied physics), MBA**

### **Edward Häggström**

- Professor at the University of Helsinki, Head of Electronics Research Lab. within the Dept. of Physics
- Previously visiting professor at Harvard Medical School, visiting scholar at Stanford University and project leader at CERN
- Has led large number of scientific projects
- *Current ownership: 5,409,405 shares and 408,000 options*



## **CCO; M.Sc. (Chemistry)**

### **Christian Jones**

- Previously Commercial Director and member of the Senior Leadership Team for the Global Health Sector at Johnson Matthey
- Senior roles at Dr. Reddy's Global Custom Pharma Solutions and Prosonix
- **Key area of responsibility:** Commercial strategy and business development
- *Current ownership: 284,000 options*



## **General Counsel & Chief Development Officer; LL.M**

### **Peter Hänninen**

- Previously Attorney, Borenius Attorneys
- Successful track-record of advising technology companies from founding to exit in key transactions and collaborations
- **Key area of Responsibility:** Legal, Compliance, IPR, HR, IT
- *Current ownership: 173,125 shares and 580,000 options*



## **Chief Quality Officer, M.Sc. (Pharmacology)**

### **Johanna Kause**

- Previously Head of Quality, Regulatory and Safety for Finland and the Baltics at Takeda Pharmaceuticals
- 25 years of experience in Quality Management in the Pharma sector
- **Key area of responsibility:** Quality Management, GMP, GDP
- *Current ownership: 130,000 options*



## **CFO and member of the Board; B.Sc. (Economics)**

### **Albert Häggström**

- 20 years of finance and investing experience
- Prior roles include positions at Alfred Berg, BNP Paribas, Nordea and SEB
- *Current ownership: 805,779 shares and 690,000 options*



## **Head of Manufacturing; Ph.D. (Chemistry)**

### **David Rowe**

- Previously Particle Size Reduction Lead for GlaxoSmithKline
- Chaired the PSR Centre of Excellence
- **Key area of responsibility:** Technical leadership within new chemical entities and commercial assets
- *Current ownership: 313,720 options*



## **Chief of Business Operations (Chemistry and Quality)**

### **Antonio da Silva**

- Degree in Chemistry from Lisbon University and Master degree in Quality from the University Aberta of Lisbon
- Extensive background in the CDMO and particle engineering space (19 years at Hovione)
- **Key area of responsibility:** Pharmaceutical product launches
- *Current ownership: 25,051 shares and 228,032 options*





# Board of directors: Top executives from leading industry positions



## Miguel Calado

### Chairman of the Board



- Previously CFO at international particle engineering CDMO company Hovione Group
- Other previous roles include CFO at PepsiCo International and President International Operations at Dean Foods
- Experienced Board member in both the EU and the US
- *Current ownership: 167,544 shares and 230,000 options*
- **Key experience:**

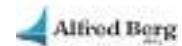


## Albert Hæggström

### CFO and Board Member



- 20 years of finance and investing experience
- Prior roles include positions at Alfred Berg, BNP Paribas, Nordea and SEB
- *Current ownership: 805,779 shares and 690,000 options*
- **Key experience:**



## Jeanne Thoma

### Board Member



- 30+ years of experience in global pharmaceutical and life science leadership
- Prior roles include executive positions at BASF Inc, Lonza AG and SPI Pharmaceuticals
- *Current ownership: 91,263 shares and 38,630 options*
- **Key experience:**



We create chemistry



CEO Edward Hæggström [edward.haeggstrom@nanoform.com](mailto:edward.haeggstrom@nanoform.com) +358 50 317 54 93  
CFO Albert Hæggström [albert.haeggstrom@nanoform.com](mailto:albert.haeggstrom@nanoform.com) +358 40 161 4191  
DIR Henri von Haartman [vhv@nanoform.com](mailto:vhv@nanoform.com) +46 76866 50 11