

### **Nanoform Management Presentation**

**Online presentation and conference call** 

August 26<sup>th</sup> - 2021, 15.00 Helsinki time

Nanoform is an innovative nanoparticle medicine enabling company. Nanoform works together with pharma and biotech partners globally to provide hope for patients in developing new and improved medicines utilizing Nanoform's platform technologies. The company focuses on reducing clinical attrition and on enhancing drug molecules' performance through its nanoforming technologies and formulation services. Nanoform's capabilities include GMP manufacturing, and its services span the small to large molecule development space with a focus on solving key issues in drug solubility and bioavailability and on enabling novel drug delivery applications. Nanoform's shares are listed on the Premiersegment of Nasdaq First North Growth Market in Helsinki (ticker: NANOFH) and Stockholm (ticker: NANOFS). Certified Adviser: Danske Bank A/S, Finland Branch. For more information please visit http://www.nanoform.com

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#### Disclaimer

#### **Forward-Looking Statements**

This presentation may contain 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 specified in Nanoform's prospectus published (on May 22, 2020) in connection with Nanoform's initial public offering (the "Prospectus") under "Risk Factors" and in our other filings or documents furnished to the Finnish Financial Supervisory Authority in connection with the Prospectus. 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.





# **Short introduction to Nanoform**



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### Nanoform in a Snapshot

#### **The Share**

- Listed June 4<sup>th</sup>, 2020 on Nasdaq First North Premier Growth Market in Helsinki and Stockholm
- > Tickers: NANOFH and NANOFS
- Significant Nordic, European and US institutional ownership
- > All press releases: https://nanoform.com/en/s ection/media/pressreleases/

#### **Nanoform**

- Global experts in nanotechnology and drug particle engineering
- ~110 employees and growing, 37 with PhD degree and 25 nationalities
- Headquartered in Finland with additional senior staff and board members in Denmark, Portugal, Sweden, UK and US
- > >3000m<sup>2</sup> manufacturing site in Helsinki for nanoforming API's
- Strong balance sheet, EUR 88m in cash, no debt

#### **Platform Technology**

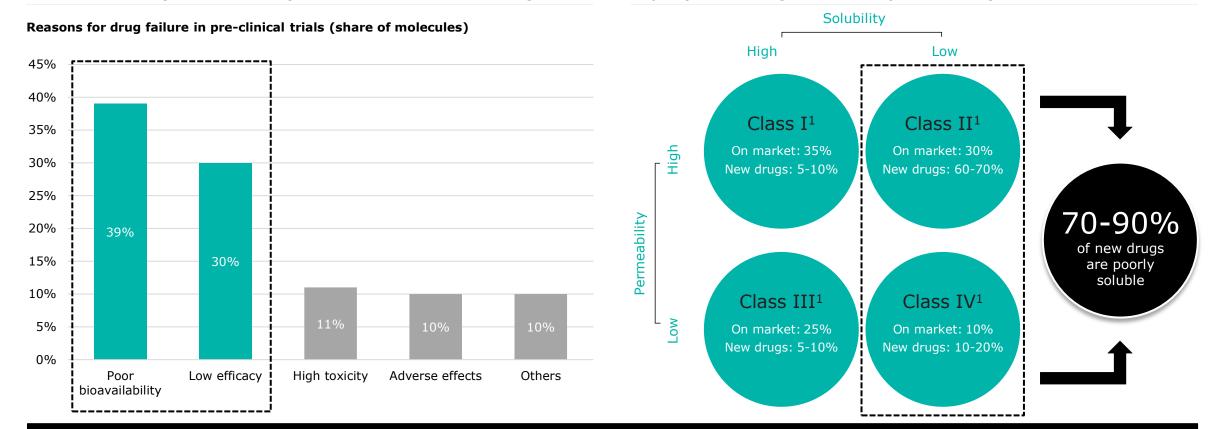
- CESS<sup>®</sup> technology for small molecules (chemical compounds) discovered in 2012
- Technology for large molecules (biological compounds) launched in 2020
- Nanoform's clinical results confirm value proposition to the pharma industry



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API = Active Pharmaceutical Ingredient CESS<sup>®</sup> = Controlled Expansion of Supercritical Solutions GMP = Good Manufacturing Practice

### Low bioavailability is the key issue



Poor bioavailability and low efficacy most common reasons for drug failure

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



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1) Classification of drug substance according to Biopharmaceutics Classification System (BCS)

Majority of new drugs suffer from poor solubility

### Nanoform is here to fill the gap

## The solution to low bioavailability is to decrease the particle size of the Active Pharmaceutical Ingredient (API)



#### Nanoform's CESS<sup>®</sup> is the only technology that can manufacture nanoparticles without solvents, excipients and complex production processes

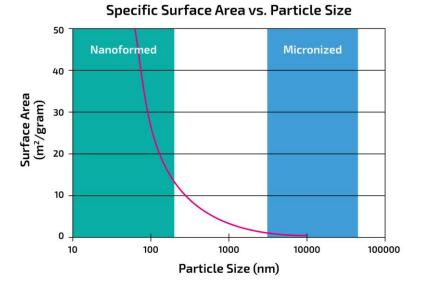


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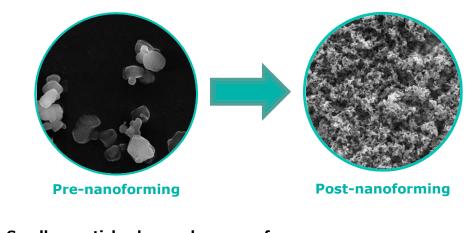
API = Active Pharmaceutical Ingredient CESS<sup>®</sup> = Controlled Expansion of Supercritical Solutions \*Source: Nanoform and Pharmaprojects® | Informa, 2021

### Particle size is key

#### Smaller particle size can improve a drug's bioavailability



- The surface area increases 30 fold from a 10 micron<sup>1</sup> 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



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

#### > CESS<sup>®</sup> produced nanoparticles have a larger surface area and as such improved bioavailability



Source: Company information 1) 1 micron = 1,000nm

### Small is powerful<sup>®</sup>





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#### Nanoforming a potential game-changer in Biologics too





### Nanoform the stars that will shine the brightest with...

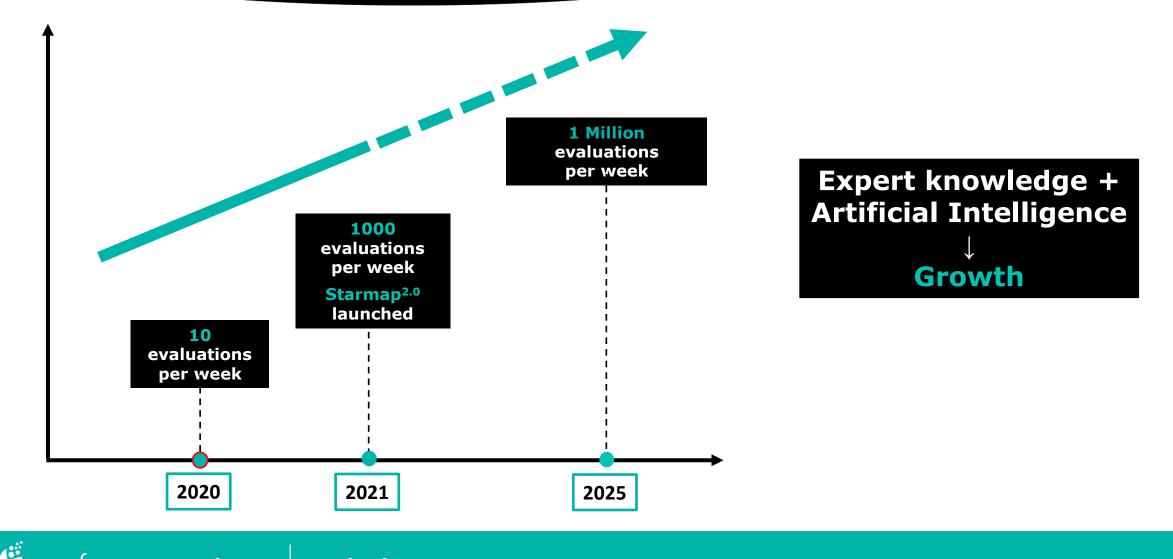


- Enables in silico experiments in large quantities, creating fast predictions of which molecules should be nanoformed
- Helps pharma partners to pick suitable drug candidates for further development from their large libraries
- Applicability in drug discovery, development and in lifecycle management for existing marketed drugs





### Logarithmic growth



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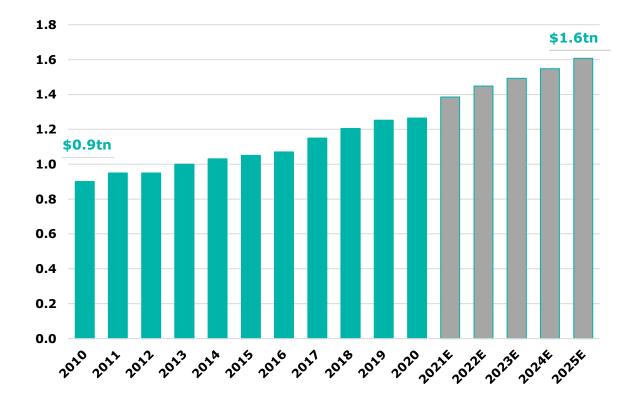
# **Market overview**



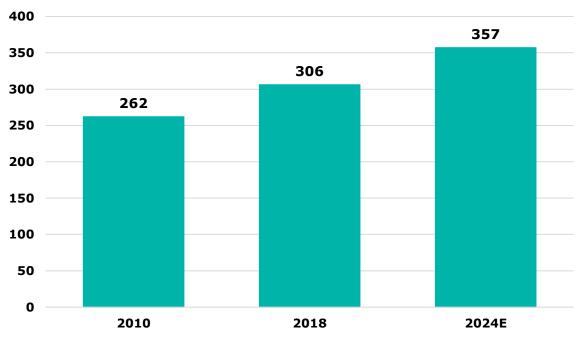
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#### Global pharma market projected to reach USD 1.6tn by 2025

Global medicine spending 2010-2025E (USDtn)



#### **Global prescription drug sales from top 100 products (USDbn)**



Significant market potential in improving the properties of existing drugs



### The structural pharma R&D problem

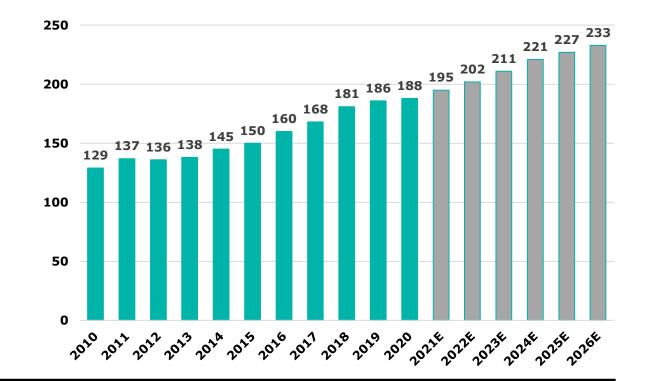
#### Less than 50 drugs approved in the US annually on average...

Annual number of novel drug approvals by FDA 2010-2020

#### Chemical Biologics 2012 2013

#### ...while the global pharma industry R&D expenditure exceeds \$180B

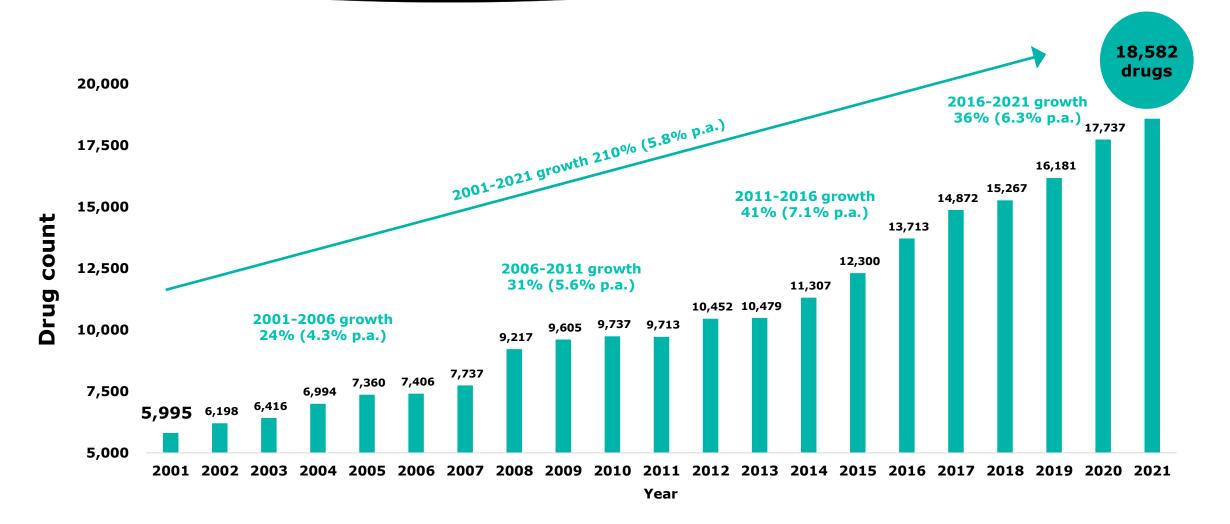
#### Global pharmaceutical R&D spending 2010-2026E (USDbn)



#### > A game changer in particle design is needed to improve R&D yield

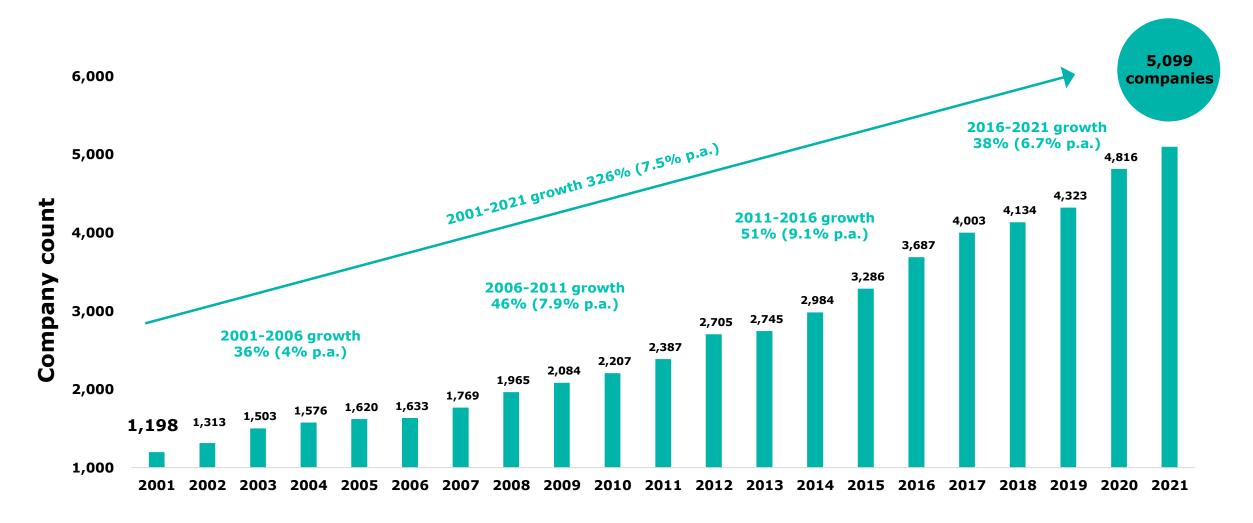


### Global drug R&D pipeline size and growth



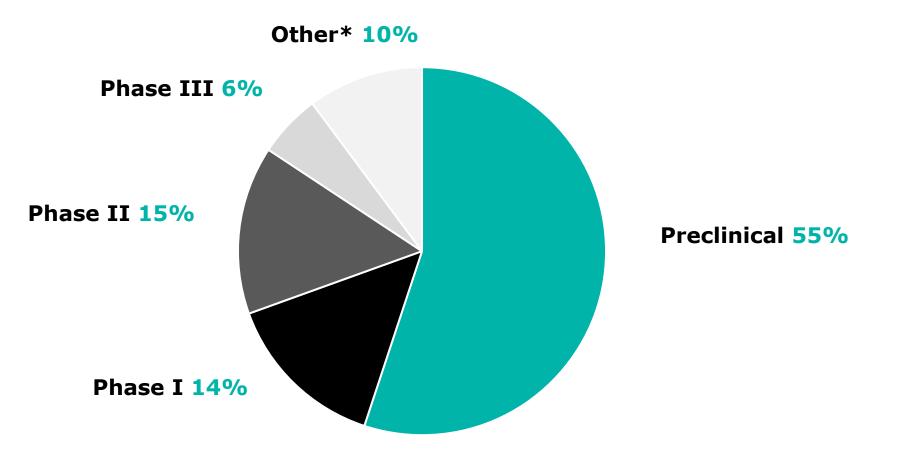


### Global number of companies with active pipelines





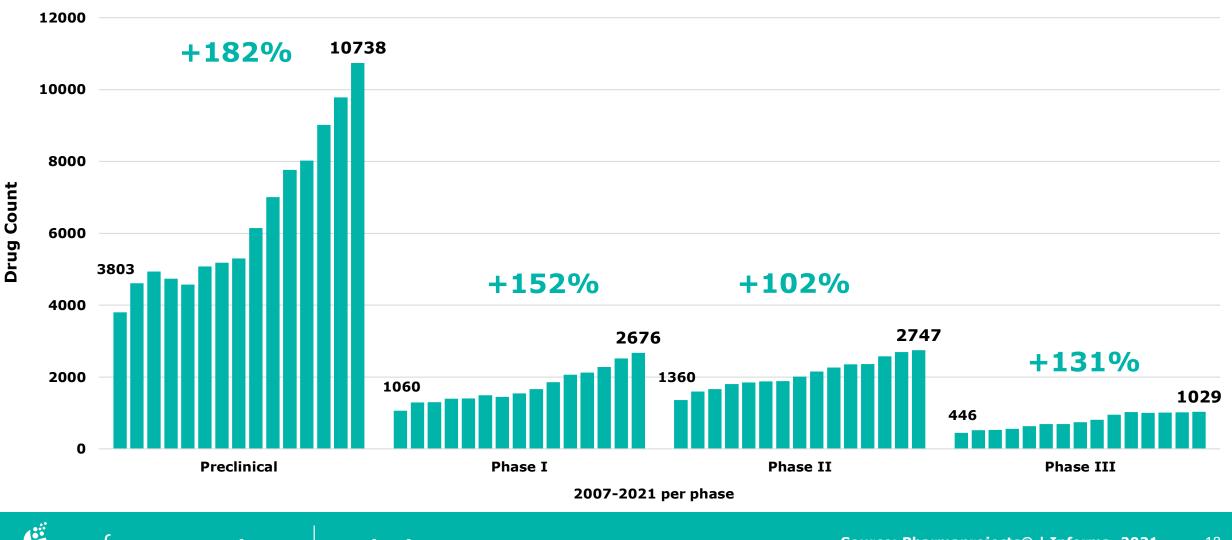
### Global drug development by phase, 2021



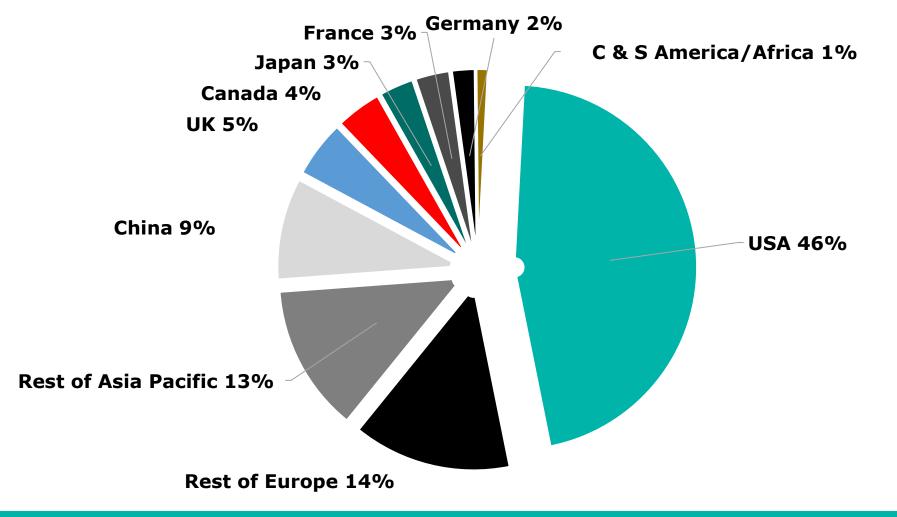
\*Launched and in development (7%), Pre-registered (1%), Registered (1%) and Suspended & N/A (1%)



### Global clinical drug development phase trends, 2007-2021

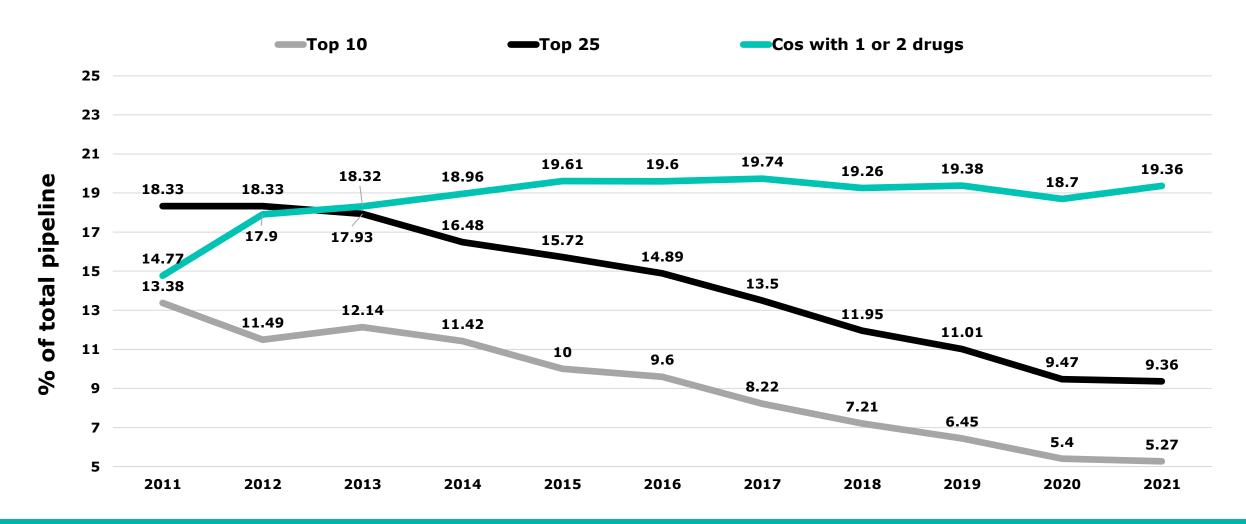


Distribution of R&D companies by HQ country/region, 2021





Share of pipeline contributed by top 10 companies, top 25 companies and companies with just 1 or 2 two drugs, 2011-2021



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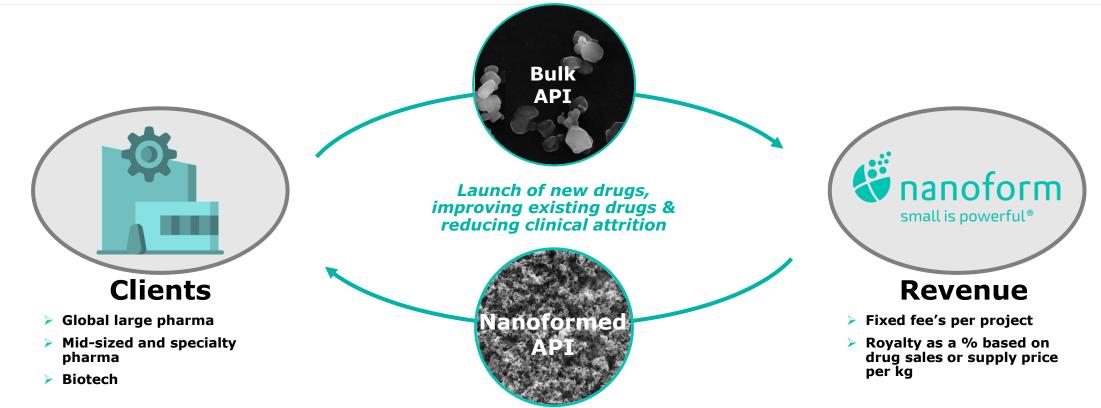
# Nanoform Business Model



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### Simplified value chain

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



> Nanoform nanoforms APIs for the pharma and biotech industry using its patented CESS® technology



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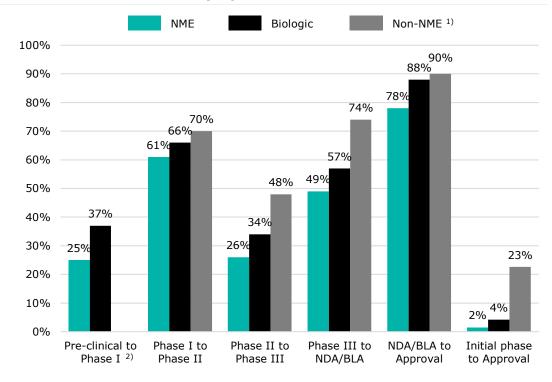
API = Active Pharmaceutical Ingredient CESS<sup>®</sup> <sup>=</sup> Controlled Expansion of Supercritical Solutions GMP = Good Manufacturing Practice

### Revenue drivers and industry attrition rates

#### Nanoform pre-clinical and clinical revenue drivers

	Non-GMP	GMP
Proof of Concept (PoC)	<ul> <li>&gt; Total # of active customers</li> <li>&gt; # of APIs per customer</li> <li>&gt; Price per PoC per API</li> </ul>	<ul> <li>Phase I, II &amp; III</li> <li>Phase I, II &amp; III</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> <li>Attrition between PoC and PoP</li> <li>Price per PoP per API</li> <li>Time lag between PoC and PoP</li> </ul>	<ul> <li>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 deve	lopment for 50	5(b)(2) ~2-5	~1	~3-6



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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

### Nanoform - Attractive revenue model

#### Predictable revenue streams through capitalizing the entire pharmaceuticals value chain

Phase	Proof of Concept / Proof of Process	Phase I – III trials	Drugs on the market
Certification	Non-GMP	GMP	GMP
Description	<ul> <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> <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> <li>Nanoform gets paid regardless of the outcome of the trials</li> </ul>	<ul> <li>Drugs that have passed the trials and reached commercialization</li> <li>In practice, if a company has taken its drug through Phase II trials, it is difficult to switch manufacturer</li> <li>Significant potential from patent extension (505b2 projects) of drugs already on the market offering near-term revenues</li> </ul>
Revenue model	<b>Fixed fee per project</b> Estimated project fee of EUR 50-500k per API per project	<b>Fixed fee per project</b> Estimated project fee of EUR 0.5-10m per API per phase	Royalty as a % based on drug sales or supply price per kg Estimated royalty fee of 1-20%





# Highlights

# **KPI's and Financials**

# Near and mid-term business targets



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### Nanoform highlights year-to-date (2021)

Strong clinical results	Letter of intent for the development, manufacturing, and commercialization of a by nanoforming improved version of a current blockbuster drug signed	7 new clients 3 new collaborations 1 new co-development
Q2 gross margin jumped to 95% as revenue grew by 185 % p.a.	8 new customer PoC projects started in 1H21	4 new non-GMP lines commissioned in 1H taking total to 12
STARMAP <sup>®</sup> v2.0 launched	New raised 'mid-term business targets for 2025' announced in conjunction with CMD June 4, 2021	Headcount increased from 74 to 106 during 1H (37 PhD's and 25 nationalities)
2 'near-term business targets achieved'	Commercial team expanded in US and Europe	Capital raise for Biologics Strong balance sheet (€88m cash, no debt)



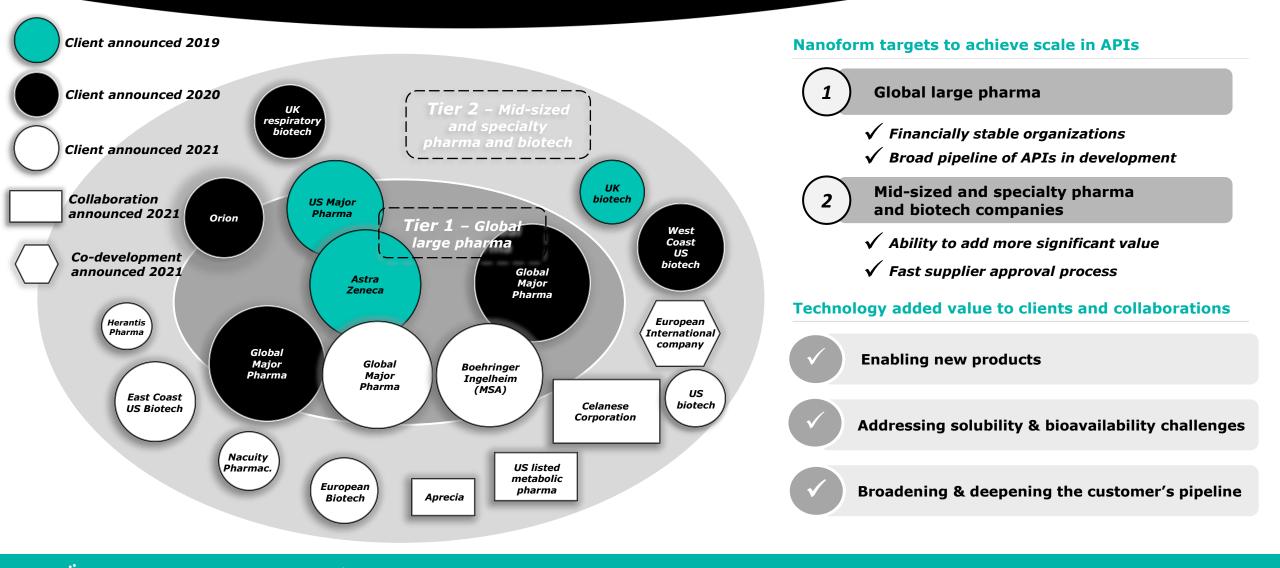
PoC = Proof of Concept GMP = Good Manufacturing Practice CMD = Capital Markets Day

### **2021 YTD Key milestones**





### **Clients, Collaborations and Co-developments**



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## Nanoform Q2 2021 KPI's

#### **Financial KPI's**

EUR thousand	4-6/2021	4-6/2020	1-6/2021	1-6/2020	1-12/2020	1-12/2019
Revenue	546	191	824	. 342	687	49
Gross profit	518	159	761	262	497	-323
Gross margin	95%	83%	92%	77%	72%	neg.
EBITDA	-4,358	-6,348	-8,283	-10,485	-18,196	-6,900
Operating loss	-4,841	-6,622	-9,203	-10,987	-19,423	-7,344
Loss for the period	-5,340	-6,758	-9,610	-11,345	-19,441	-7,554
Basic EPS (EUR)	-0.07	-0.14	-0.14	-0.23	-0.35	-0.19
Net debt	-82,563	-69,751	-82,563	-69,751	-54,156	-3,640
Net debt excluding lease liabilities	-88,120	-74,101	-88,120	-74,101	-59,977	-6,626
Investments in property, plant and equipment	-1,798	-514	-2,658	-838	-2,336	-1,804
Operative free cash flow	-6,156	-6,863	-10,941	-11,322	-20,532	-8,704
Cash and cash equivalents (end of period)	88,120	75,155	88,120	75,155	61,025	7,303

#### **Operational KPI's**

	4-6/2021	4-6/2020	1-6/2021	1-6/2020	1-12/2020	1-12/2019
Number of new projects started during the period						
Non-GMP	2	1	. 8	5	10	2
GMP	0	C	) 0	0	0	0
Number of lines (end of the period)						
Non-GMP	12	7	12	7	8	4
GMP	1	1	. 1	1	1	0
Number of employees (end of the period)	106	55	5 106	55	74	43



### Nanoform Q2 2021 Income Statement

#### **Consolidated statement of comprehensive income**

EUR thousand	4-6/2021	4-6/2020	1-6/2021	1-6/2020 1	-12/2020	1-12/2019
Revenue	546	191	824	342	687	49
Other operating income		14		27	27	231
Materials and services	-28	-47	-63	-107	-216	-603
Employee benefits	-3,693	-4,609	-6,453	-7,551	-12,526	-4,359
Depreciation, amortization and impairment losses	-483	-274	-920	-502	-1,226	-444
Other operating expenses	-1,183	-1,898	-2,591	-3,195	-6,168	-2,218
Operating loss	-4,841	-6,622	-9,203	-10,987	-19,423	-7,344
Total finance income and expenses	-498	-135	-405	-358	-15	-209
Loss before tax	-5,339	-6,758	-9,609	-11,345	-19,438	-7,554
Income tax	-1		-1		-4	
Loss for the period	-5,340	-6,758	-9,610	-11,345	-19,441	-7,554

#### 1-6/2021 comments

- Revenue stemmed from 16 different customer projects in 1H21 (7 projects in 1H20). Revenues are recognized over the lifetime of the projects, based on hours worked. In 1H21 revenue grew 141% compared with 1H20.
- ➢ The gross profit and margin jumped to EUR 761 thousand and 92% in 1H21 compared with EUR 262 thousand and 77% in 1H20. The operating loss improved to EUR -9.2m from EUR −11.0m (1H20 included 4.6m in IPO related costs). Financial costs in Q2 includes EUR 0.3m from repayments of BF loans.

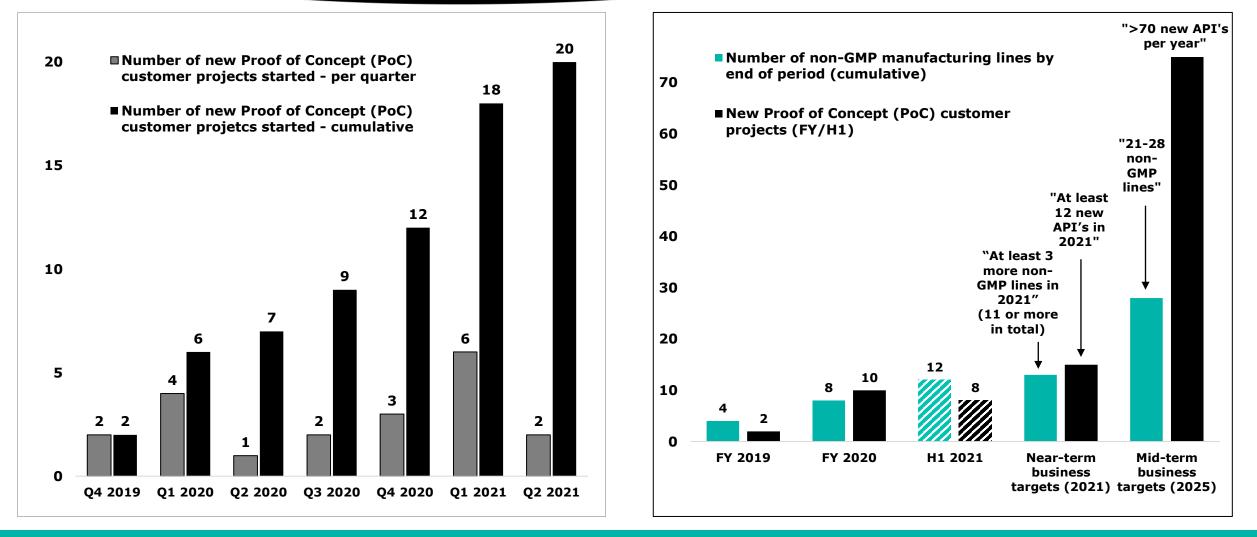
Headcount increased to 106 (55 end of 2Q20).

> Cash position was EUR 88.1 million (EUR 75.2 million).

ther operating expenses	5					
	4-6/2021	4-6/2020	1-6/2021	1-6/2020 1	L-12/2020	1-12/2019
Premises expenses	31	14	52	28	106	66
IT expenses	152	77	234	140	309	202
Marketing and communication expenses	136	55	290	137	427	312
Consultant and professional fees	272	1,124	624	1,898	2,884	858
Travel expenses	18	8	37	65	100	269
Voluntary personnel related expenses	149	128	384	205	532	304
R&D expenses - external	169	430	539	614	1,357	28
Other expenses	256	63	439	107	453	180
Total	1,183	1,898	2,591	3,195	6,168	2,218



#### Number of non-GMP lines and started customer PoC projects





### Nanoform near-term business targets (re-iterated)

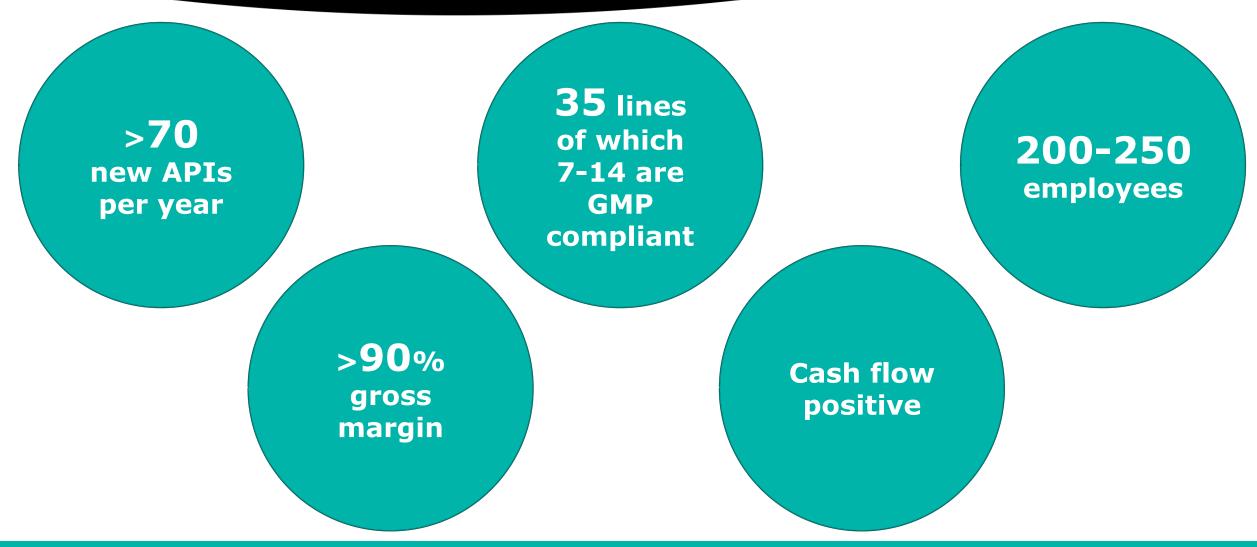
Торіс	Target	Status
GMP Approval	"GMP approval expected no later than Q3 2020"	Achieved - GMP certificate awarded April 2020
Ongoing Client Intake	<i>"For 2020, our ambition is to accelerate our growth by winning more new customers than in 2019"</i>	Achieved – 4 new customers by July 2020
First GMP Project	"Start of first GMP project before year end 2020"	Achieved – First GMP campaign started in October 2020
Clinical Trials	"First dosing in humans in 2021"	Achieved – First dosing in humans announced December 2020
Biologics	"First commercial Biologics PoC project signed in 2021"	Achieved – First Biologics PoC agreement signed February 2021
Non-GMP Line Capacity	"At least 3 new non-GMP lines in 2021"	Achieved – 3 new non-GMP lines ready in Q1 2021
<b>Customer Projects</b>	"At least 12 new non-GMP customer projects and at least one new GMP project in 2021"	New target - Jan 4
<b>GMP Line Capacity</b>	"2 new GMP lines in 2022"	New target – Feb 26

**PoC = Proof of Concept** 

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### Nanoform mid-term business targets 2025 (re-iterated)

- New raised targets were announced June 2<sup>th</sup>, 2021





API = Active Pharmaceutical Ingredient GMP = Good Manufacturing Practice

### A Selection of Nanoform Institutional Shareholders<sup>1</sup>



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Q&A

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#### FURTHER ENQUIRIES

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FINANCIAL CALENDAR

November 25, 2021 - Interim Report for January-September 2021 February 22, 2022 – Full Year 2021 Report

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