Polaris

Leading the way to new and better metabolic treatment

> Investor Conference 2024/04/01



Disclaimer

By attending the meeting where this presentation is made, or by reading the presentation materials, you agree to be bound by the following limitations:

The information in this presentation has been prepared by Polaris Group (the "**Company**") for use at a non-deal road show presentation by the Company and does not constitute a recommendation regarding the securities of the Company.

This presentation does not constitute a prospectus, a statement in lieu of prospectus, offering circular or offering memorandum, private placement offer letter, an advertisement, and should not be construed as an offer, or a solicitation of any offer, or invitation of any offer to purchase, subscribe for or sell any securities of the Company in any jurisdiction. This presentation should not be considered as a recommendation that any investor should subscribe for or purchase any securities of the Company nor shall it or any part of it or the fact of its distribution form the basis of, or be relied on in connection with, any contract or commitment. This presentation is for general information purposes only, without regard to any specific objectives, financial situations or informational needs of any particular person. This presentation should not be used as a basis for any investment decision or be relied upon in connection with, any contract, commitment or investment decision whatsoever. This presentation does not constitute financial, legal, tax or other product advice. You will be solely responsible for your own assessment of the market and the market position of the Company and you will conduct your own analysis and be solely responsible for forming your own view of the potential future performance of the business of the Company. It should be understood that subsequent developments may affect information contained in this presentation, which neither the Company, nor its affiliates, advisors or representatives are under an obligation to confirm.

No representation or warranty, express or implied, is made as to, and no reliance should be placed on, the fairness, accuracy, completeness or correctness of the information or the opinions contained herein. Neither the Company nor any of the Company's advisors or representatives shall have any responsibility or liability whatsoever (for negligence or otherwise) for any loss howsoever arising from any use of this presentation or its contents or otherwise arising in connection with this presentation. The information set out herein may be subject to updating, completion, revision, verification and amendment and such information may change materially.

This presentation is based on the economic, regulatory, market and other conditions as in effect on the date hereof. It should be understood that subsequent developments may affect the information contained in this presentation, which neither the Company nor its advisors or representatives are under an obligation to update, revise or affirm.

The information communicated in this presentation contains certain statements that are or may be forward-looking. These statements typically contain words such as "will," "expects" and "anticipates" and words of similar import. By their nature forward-looking statements involve risk and uncertainty because they relate to events and depend on circumstances that will occur in the future. Any investment in the Company will also involve certain risks. There may be additional material risks that are currently not considered to be material or of which the Company and its advisors or representatives are unaware. Accordingly, you should not rely on these forward-looking statements. The Company assumes no responsibility to update forward-looking statements or to adapt them to future events or developments.

This presentation is not an offer of securities for sale in the United States. Any securities referred to herein have not been and will not be registered under the United States Securities Act of 1933, as amended (the "Securities Act") or any United States state securities laws, and may not be offered or sold in the United States except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act and in accordance with any applicable United States state securities laws. There is no intention to register any securities referred to herein in the United States or to make a public offering of the securities in the United States.

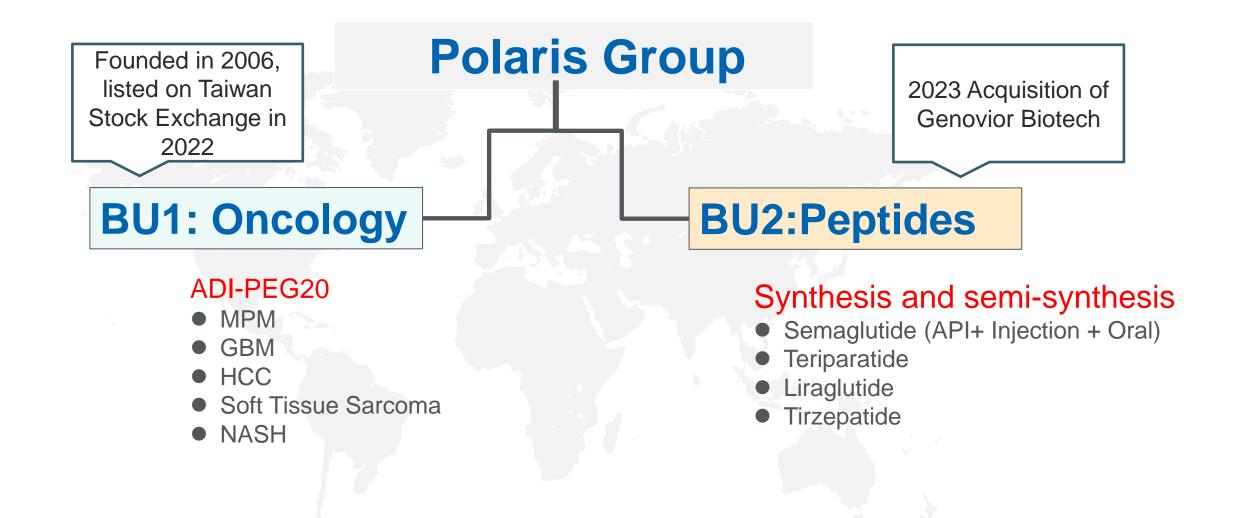
This presentation and the information contained herein is being furnished to you solely for your information and may not be reproduced or redistributed by you to any other person, in whole or in part. Neither the information contained herein nor any copy hereof may be, directly or indirectly, transmitted into or distributed in the United States or to any U.S. person (as defined in Regulation S under the Securities Act), including their U.S. branches or affiliates, except (i) to "qualified institutional buyers" as defined under Rule 144A of the Securities Act ("**U.S. QIBs**") or (ii) in compliance with applicable securities laws, or transmitted into or distributed in jurisdiction which prohibits such transmission or distribution. Any failure to comply with this restriction may constitute a violation of the securities laws of the United States or other jurisdictions. No money, securities or other consideration is being solicited, and, if sent in response to this presentation or the information contained herein, will not be accepted.







Polaris Group snapshot





Polaris: Leading the Way to New and Better Metabolic Treatments





BU 2: Peptide Product Expertise

Polaris

		Peptide Product expert	ise	
Peptide Design	Robust Synthesis and Manufacturing	Comprehensive analytical capabilities	Regulatory Compliance	Collaborative Research an Development
Innovative Design Strategies: Polaris employs cutting-edge methodologies for peptide design, ensuring optimal functionality and specificity.	• State-of-the-Art Facilities: Polaris operates advanced peptide synthesis and manufacturing facilities, guaranteeing high- quality and scalable production.	• Advanced Analytical Techniques: Polaris utilizes advanced analytical tools for in-depth characterization of peptides, ensuring purity and integrity.	• Regulatory Standards: Polaris maintains <u>strict</u> compliance with international regulatory standards, providing confidence in the safety and efficacy of our peptide products.	• Partnership Opportunities: Polaris welcomes collaborations for joint research and development projects, fostering innovation and expanding peptide
Tailored Solutions: Our team excels in creating customized peptides to meet diverse therapeutic needs.	• Stringent Quality Control: Rigorous quality assurance protocols ensure the delivery of consistently superior peptide products.	• Quality Assurance: Our commitment to quality extends to thorough analysis at every stage of the production process.	• Documentation Excellence: Robust documentation practices ensure transparency and facilitate regulatory approvals.	applications.

Proven track record of success: Polaris has a successful history of developing and commercializing peptide products across various therapeutic areas, including Octreotide (TFDA approved), Teriparatide under regulatory fling and 5 other products in the development pipeline.

Polaris

Seasoned Management Team with Visionary Leadership and Extensive Industry Experience



Polaris

Polaris

02. New Drug Development

Our Pipeline

Indication	Line of Therapy	Therapy	Regulatory Body	Commercial Rights	Pre- Clinical	IND	Ph1	Ph2	Ph3	BLA	Approval / Launch	Next Milestone
Malignant Pleural Mesothelioma (MPM)	1L	Combo w/ SoC Chemo	FDA MRCT	Global		ADI-PEG 20) + Cisplatin +	Pemetrexed				Complete BLA Submission to FDA
Soft Tissue Sarcoma (STS)	2L / 2L+	Combo w/ Chemo	FDA	Global	ADI-P	EG 20 + Gem						Interim data readout
Hepatocellular Carcinoma (HCC)	1L	Mono Precision Treatment	TFDA	Global			I-PEG 20					Interim data readout
Glioblastoma (GBM)	1L	Combo w/ SoC Chemo + Radiotherapy	FDA	Global	ADI-PEG 20	+ Temozolom EG 20 + Temo	nide + Radiatio	n	(1)			Interim data readout
Acute Myeloid Leukemia (AML)	1L + Relapsed	Combo w/ SoC Chemo	FDA	Global		20 + Venetoc Azacitidine	J. S.					Interim data readout
NASH/NAFLD	1L	Mono	TFDA	Global		ADI-PEG 20						Interim data readout
Multiple Preclincal Pipelines	-	-	-	Global	2nd Gen ADI-PEG 20							IND



Source: Company information, FDA Note: 1. GBM AGILE Platform in the U.S. As the best companion drug

MPM : ADI-PEG 20 + Cisplatin + Pemetrexed **STS** : ADI-PEG 20 + Gemcitabine + Docetaxel

Precision Medicine

HCC: ADI-PEG 20 Monotherapy for WWOX GG genotype and high Arginine level

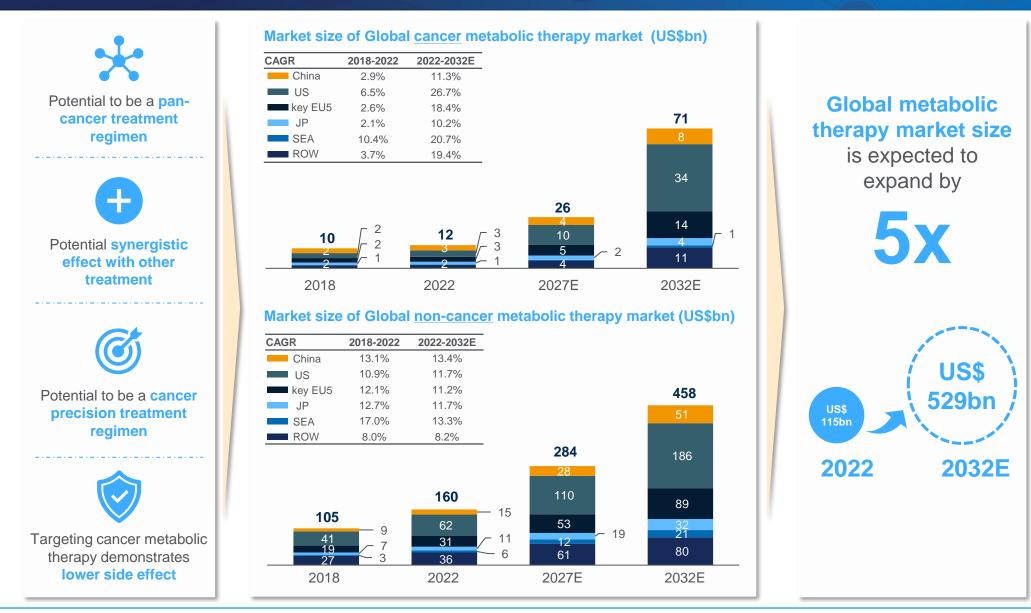
Synergy to combine with radiotherapy

GBM : ADI-PEG 20 + TMZ + Radiation

•Pursue a bigger market indication: NASH



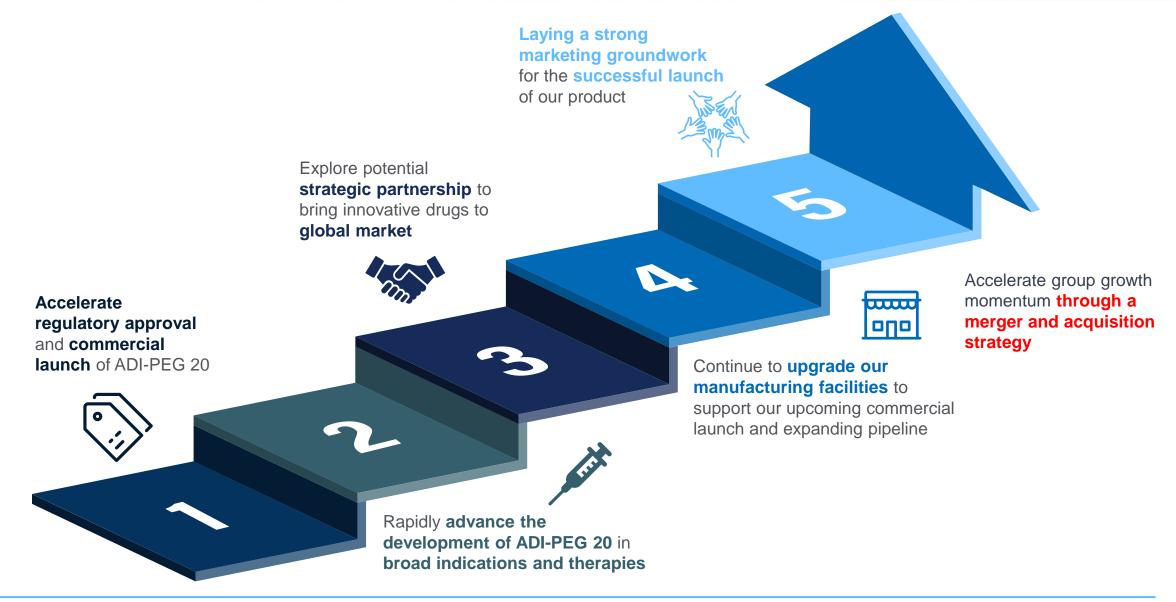
Market Size of Global Metabolic Therapy Market with Key Drivers



Polaris

Source: China Insights Consultancy.

Our Growth Strategies



Polaris

Source: Company information.

Polaris

O3. Genovior: peptide pipeline and products

Product Pipeline

Туре	Key product	API	Injectable form	Oral form
Biologic	ADI-PEG 20	V	V	
Complex generics: peptide drug	Semaglutide Tirzepatide	V	V	\vee
Complex generics: Anti-cancer drug	Carfilzomib	V	V	
CDMO	 Biologics Injectables Peptide injectables Anti-cancer injectables Exosome injectables 	V	V	



Technology Development

Product Type	Process/Technology/Know-how in Hands or under Development
Microbial-based API (B)	 Microbial fermentation and purification related Exosome process
High-Barrier API (O)	Total synthesisColumn purification
Peptide API(P)	 Solid-phase synthesis Column purification Lyophilization
Specially formulated injectables and oral drugs (IO)	 Sterile technology Slow release technology Lyophilization know-how in regulation requirement for combination of drug and medical devise New formulation capable of filing 505.B.2.



Peptide Products

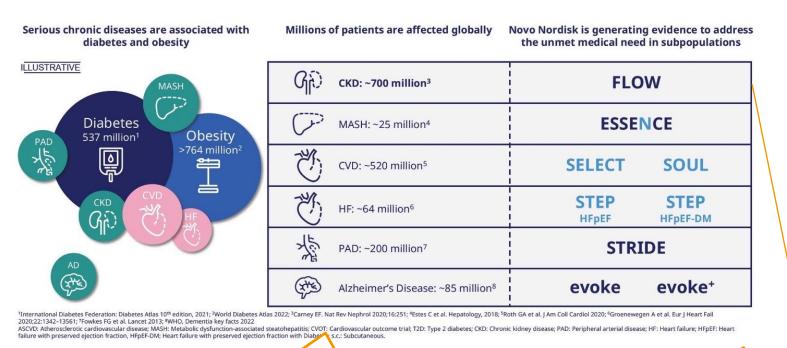
			Key Features				
Peptide		difficulties in imp acid inherited in 2. Finished goods r with medical dev	mostly shown as injectables with special formulation or combination				
Industry Shift Before 2023		Number of amino acid is around 10. Annual demand in quantity is relatively small. Most finished goods have formulation forms of slow release.					
Industry Shift After 2023				f amino acid > 30. Au Product applications in	to injection pen of finished good		
Peptide Name			Amino acid	API	Formulation		
Semaglutide	T	2 diabetes,obesity	35	Total synthesis	Injection pen/cartridge, oral		
Teriparatide	0	steoporosis	34	Total synthesis	Injection pen/cartridge		
Liraglutide	T	2 diabetes,obesity 32		Semi-synthesis Injection pen/cartridge			

Polaris

Novo Nordisk⁴

Investor presentation First nine months of 2023

Generating evidence with the semaglutide molecule beyond glycaemic control and weight loss



Semaglutide shortage has raised dual concerns for Diabetes and Obesity treatment

expanding indications lead to Potential massive market

- FDA Approves Ozempic (Semaglutide) Injection For the Treatment of Adults with Type 2 Diabetes in 2017.
 - Rybelsus (Semaglutide) received FDA approval as first oral GLP-1 treatment for type 2 diabetes in 2019.
 - In 2020, FDA approves Ozempic (Semaglutide) for cardiovascular risk reduction in adults with type 2 diabetes and known heart disease.
 - Wegovy (Semaglutide) received FDA approval for treating adult obesity in 2021.
 - In 2022, a higher-dose formulation of Ozempic (Semaglutide) received FDA approval for treating type 2 diabetes. Additionally, in 2022, Wegovy (Semaglutide) gained FDA approval for treating obesity in adolescents aged 12 and above.
 - In October 2023, Novo Nordisk announced to stop the once-weekly injectable semaglutide kidney outcomes trial, FLOW, based on interim analysis

Source: Novo Nordisk Corporate deck and annual report, FDA website, Klein, H. E. (2023, December 21). An Ongoing Crisis: Semaglutide Shortage Raises Dual Concerns for Obesity and Diabetes Treatment

Featured Peptide Product

Semaglutide

- Indications : Type 2 diabetes, Obesity
- RLD dosage form :
 - Injection pen (Subcutaneous) ; Tablet (Oral)
- RLD patents : Denmark's Nova Nordisk, global core compound patents will expire on March 20, 2026.
- RLD global sales :
 - From 2022 to 2023, Novo Nordisk's total global revenue of Semaglutide were from US\$11.145 bn(2022) to <u>US\$21.272 bn.(2023)</u>
 - Rybelsus (oral, type 2 diabetes) US\$1.63 billion, to US\$2.735billion (yoy+66%)
 - Ozempic (injection, type 2 diabetes) US\$8.622 billion, to <u>US\$13.965</u> <u>billion(yoy 71%)</u>
 - Wegovy (injection, Obesity) \$893 million to <u>\$4.572 bn (yoy +407%)</u>
- API production process : Chemical Synthesis





Polaris

Key Challenges in GLP-1 Drugs

- Technical attention required in producing API and Injectables: combination of chemistry, chem.engineering, biology, and/or medical devise design
- In-house production of raw materials required to lower production cost
- Measures to reduce CoGs is highly required. Example: solvent recovery
- Factors of Competitiveness: <u>sufficient manpower</u> and <u>funding</u> to <u>timely</u> implement <u>cost effective</u> production process
- Special attention required in regulation of world-wide registration



Capacity expansion in Mass Production

Facility	3-year Planning	Operational
Genovior Facility	 An acquisition of new facilities completed in Q1, 2024. New set-ups: (A) injectable plants of vial, pre-filled, and cartridges and (B) a GLP-1 API plant of 75 kg/year. Expandable to 1,000 kg API per year to meet future demand. 	2H, 2024
Chengdu Facility	 Expansion of the ADI-PEG 20 plant and Construction of a GLP-1 API plant of 75kg/year. 	2H, 2024
Vacaville Facility	 Adjust to provide commercial quantity in 1st phase, up to 130,000 vials/year 	
Southeast Asia Facility(TBD)	 Planning phase Flexible and adjustable depends on different type of partnership 	2025/2026



Semaglutide capacity expansion and product timeline

Year	2024	2025	2026	2027
API Phase 1	Chengdu plant expansion , 75kg/ annual Taiwan Zhunan plant expansion , 75 kg/ annual	API registration (regulatory approval), sales and distribution	Sales and distribution	Sales and distribution
API Phase 2	Plant civil engineering execution	Taiwan Zhunan plant expansion, 800 kg/ annual	API registration, sales and distribution	Sales and distribution
Injection	Chengdu plant expansion Taiwan plant expansion	registration	Sales	Sales
Oral tablets	Taiwan plant expansion	RD/clinical development	clinical development	505(b)2 registration
Nasal Spray	RD	plant expansion	clinical development	505(b)2 registration

Polaris

Tirzepatide capacity expansion and product timeline

Year	2024	2025	2026	2027
API	RD	RD	Scale-up Manufacturing, Three-batch Validation, Registration	Registration Manufacturing Sales and Distribution
API				Plant expansion



Capital investment for Setting up Semaglutide API & Injectable Plants



- Acquisition of 27,000 m2 factory and 2 hectares of science park land
- Completion of 4 production lines for injections and 4 lines for API (Chengdu plant + Taiwan plant)
- Upon completion of Phase 1, the annual production capacity of Semaglutide API is expected to reach 150 kg (75 kg/year in Chengdu and Taiwan each).
 Expected to be completed in Q3, 2024.
- Initiate Phase 2 expansion construction project.



Phase 2 Capital US\$25 m

With phase 1 capital investment and completion of the project, with additional USD\$ 25 millions we can expand production capacity for Semaglutide API to 600kg/annual.



• With another USD\$40 millions capital investment, we are able to expand annual production for GLP-1 API to 1,500kg/annual.

Phase 3

Capital

US\$40 m

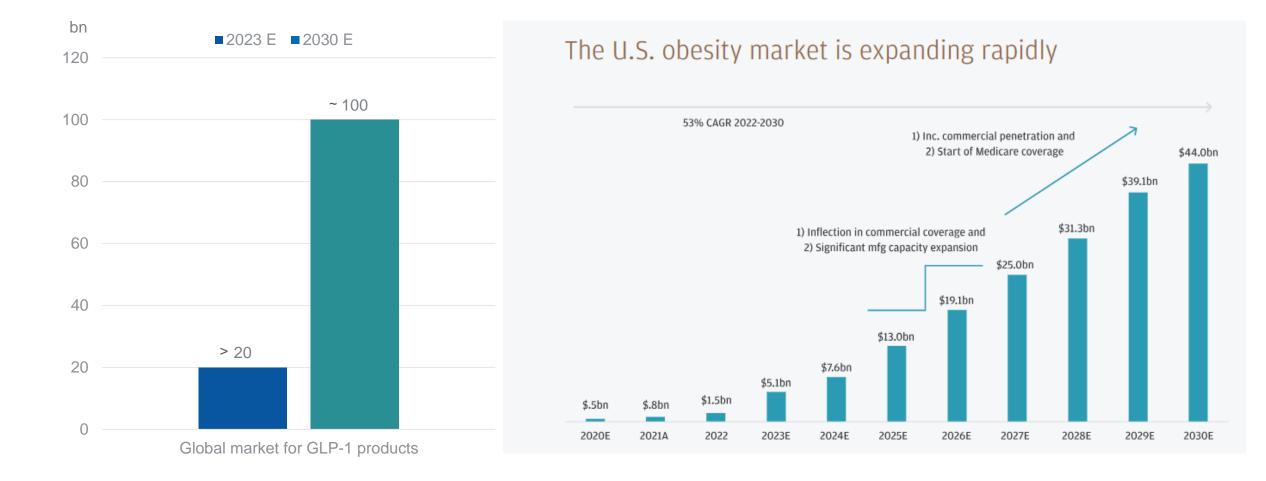
Upon securing confirmed orders, production capacity can be scaled up to 1,500 kg annually



Polaris

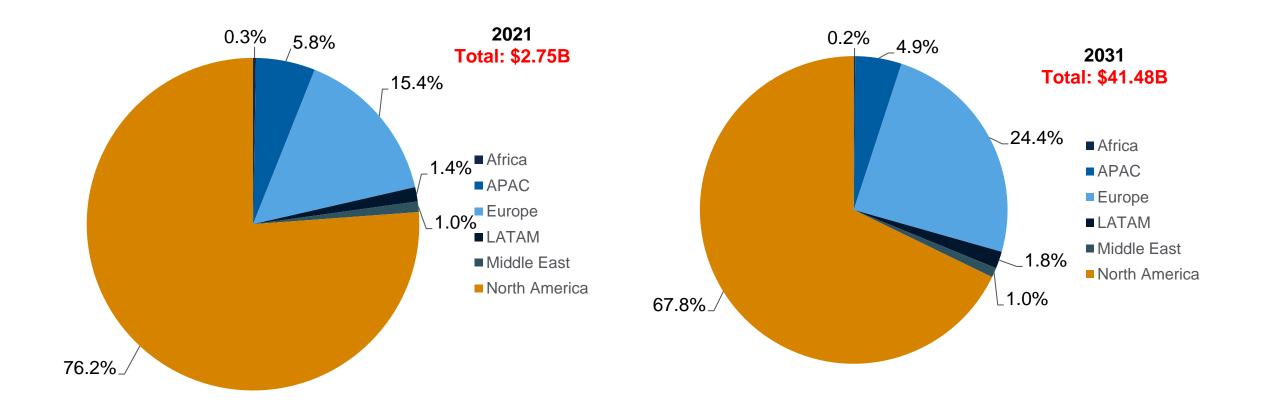
04. Market outlook and competitive analysis

GLP-1 Market outlook(for obesity and T2D)





Global Obesity Market outlook





Global Market Size for Semaglutide

- Novo Nordisk's financial report reveals that in the first half of 2023, among the three products, the antidiabetic drug Semaglutide injection Ozempic ranked first with sales of US\$6.077 billion, a year-on-year increase of 58%; the oral antidiabetic drug Semaglutide tablet Rybelsus ranked last with sales of US\$1.215 billion, a year-on-year increase of 97%; while sales of Semaglutide injection Wegovy for weight loss were US\$1.759 billion, a year-on-year increase of 367%.
- **Novo Nordisk raised its sales forecast for 2023 from the 13%-19% set at the beginning of the year to 24%-30%, and its operating profit growth forecast from 13%-19% to 28%-34%

		First half of 2023	2023	2024	2025	2026	Remarks
RLD Sales	Injection	78.36	157	204	265	344	RLD sales forecast for 2023 is still underestimated.
in USD Billion	Tablet	12.15	24	32	41	53	Forecast is based on 30% growth
		2027	2028	2029	2030	2031	Remarks
Global dema injection AP		1,147	3,441	5,735	9,176	9,176	
Global dem oral API(K		2,485	7,455	12,425	19,880	19,880	The demand for API in the first year of generic drug is based on the RLD sales, and it will increase by 3 times year-on-year in the next year, 5 times in the third year, 8 times in the fourth
Global dem all dosage (ton)		3.6	10.9	18.2	29.1	29.1	year, and remains stable at the peak.
				global API m the market	-		

Competitive landscape of the peptide industry chain

• The GLP-1 drug drives the explosion of demand in the peptide industry: CDMO companies directly benefit from the surge in pharmaceutical market demand

HigherProfit sources: Midstream to upstream from supply orders, downstream
from R &D development, and approved product launches.Lower

Upstream: reagents, consumables, equipment	lidstream: API, and DMO	Downstream: R&D pharma companies
Peptide Synthesis Reagents:Merck MilliporeIris BiotechHighfineSolid Phase Synthesis Carriers:Dow ChemicalSunresinSynthesis Equipment:CSBioInjection Pens:Ypsomed and etc	achem olypeptide orden Pharma onza atalent(acquired by ovo Feb 2024) YuXi AppTec angsu Sinopep-Allsino opharm ansoh Pharma, and etc	Novo Nordisk Eli Lily Pfizer Sanofi GSK Innovent Biologics Huadong Medicine, and etc



3-year strategic goal and expected milestone



BU1- New Drug Development

Actively advancing clinical trials and global regulatory submissions, accelerating negotiations for global and regional partnership, and progressing with market approval plan

Milestone and key catalyst timeline:

- **2024:** Complete Submission of MPM (Malignant Pleural Mesothelioma) BLA to FDA, advancing global and regional licensing negotiations.
- **2025:** Obtain the first BLA approval and launch the drug in the market.
- 2026-2027: Phase III clinical data for GBM, LMS and HCC.

BU-2 Peptide product pipeline and development

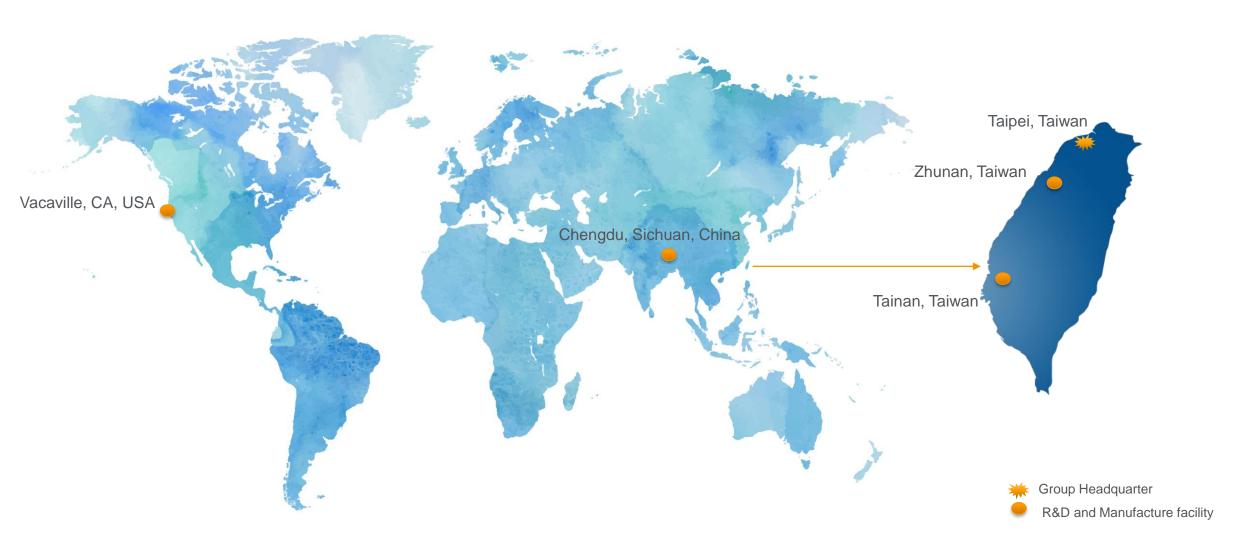
Continuously investing in technology and products, efficiently leveraging existing business platforms, and expanding growth momentum.

Milestone and key catalyst timeline:

- **2024 Q4:** Completion of the peptide production line, advancing research and development projects.
- **2025:** Submission of API (Active Pharmaceutical Ingredient), obtaining certificate, and commencing mass production and shipment. Collaborate on development projects with internationally renowned generic drug manufacturers.
- **2026:** Entry of investigational products into clinical trials.



Polaris Group Vision





Thank you and

Q&A



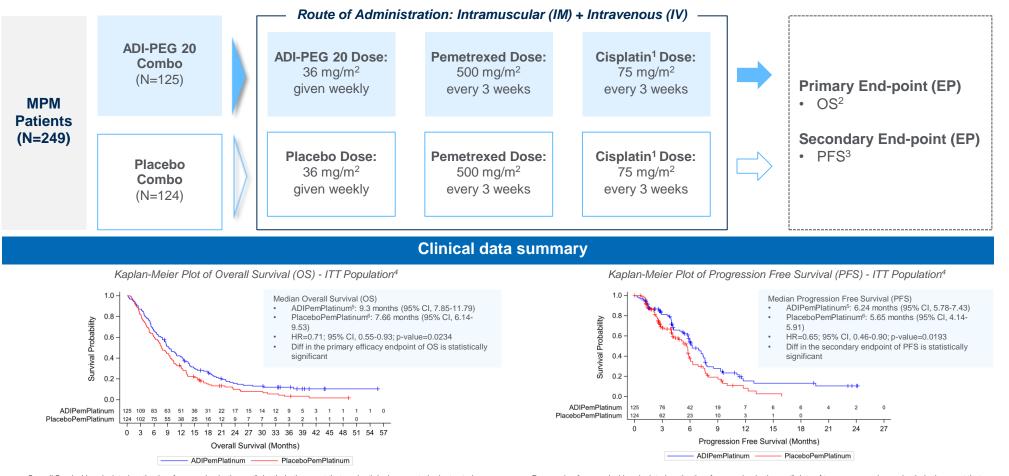
Polaris

Appendix

MPM – Summary of Clinical Design and Clinical Data

Study design - a MRCT, randomized, double-blind, phase 2/3 clinical study

To evaluate ADI-PEG 20 or Placebo with pemetrexed and cisplatin¹ (ATOMIC) in patients with MPM



 Overall Survival is calculated as the time from randomization until death. In the event that no death is documented prior to study termination or analysis cutoff, OS was censored at the last known date the subject is known to be alive (using last contact day or last dose day).

 Total number of subjects from the analysis population is 249, including 25 censored subjects (17 from ADIPemPlatinum, 8 from PlaceboPemPlatinum) and 224 subjects with OS events (108 from ADIPemPlatinum, 116 from PlaceboPemPlatinum). Progression-free survival is calculated as the time from randomization until date of tumor progression or death. In the event that
no tumor progression or death is documented prior to end of treatment, analysis cutoff, or the start of confounding anticancer
therapy, PFS was censored at the date of the last tumor assessment demonstrating no tumor progression.

Total number of subjects from the analysis population is 249, including 104 censored subjects (54 from ADIPemPlatinum, 50 from PlaceboPemPlatinum) and 145 subjects with PFS events (71 from ADIPemPlatinum, 74 from PlaceboPemPlatinum).

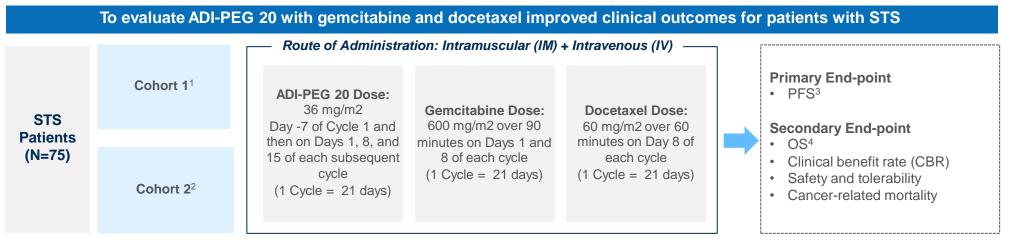
Source: Company information, Literature Review.

Notes: (1) Subjects who did not tolerate cisplatin were allowed carboplatin area under the plasma concentration-time curve (AUC) 5 mg/mL/m². (2) Overall survival. (3) Progression-free survival. (4) ITT = Intent-to-Treat. Analysis population is the ITT Population: Includes all randomized subjects. (5) ADIPemPlatinum refers to the ADI-PEG 20 Group (ADI-PEG 20 + cisplatin + pemetrexed). (6) PlaceboPemPlatinum refers to the Control Group (Placebo + cisplatin + pemetrexed).

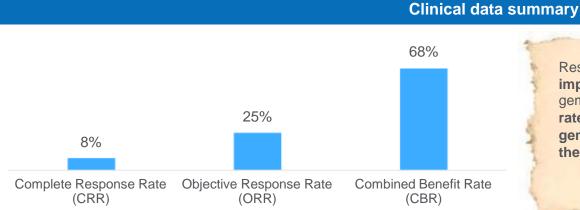


STS – Summary of Clinical Design and Clinical Data

Study design - an open label, non-randomized, phase 2 clinical study



Notes: (1). Cohort 1: Histologically or cytologically confirmed grade 2 or 3 soft tissue sarcoma that is unresectable or metastatic that would be standardly treated with gemcitabine or gemcitabine and docetaxel. For all others, please contact the principal investigator. Prior surgery for primary or metastatic disease after chemotherapy following a response is allowed. Cohort 2: Histologically or cytologically confirmed osteosarcoma, Ewing's sarcoma, or small cell lung cancer that is unresectable or metastatic that have either failed standard of care therapy or would be standardly treated with gemcitabine and docetaxel. Please refer to NCT03449901 for more details. (2). Patients started on gemcitabine at a dose of 900 mg/m2 or 750 mg/m2 or docetaxel at a dose of 75 mg/m2 per previous protocol version will be allowed to continue at that dose level. After Cycle 8, patients may continue on ADI-PEG 20 alone (without gemcitabine and docetaxel) upon request.



Results showed that sarcoma patients **demonstrated improved response rates** when combining docetaxel and gemcitabine with arginine starvation. The **complete response rate tripled** compared to previous trials, and **the amount of gemcitabine required could be reduced by a third**, **reducing the need for high-dose gemcitabine and mitigating toxicity**.

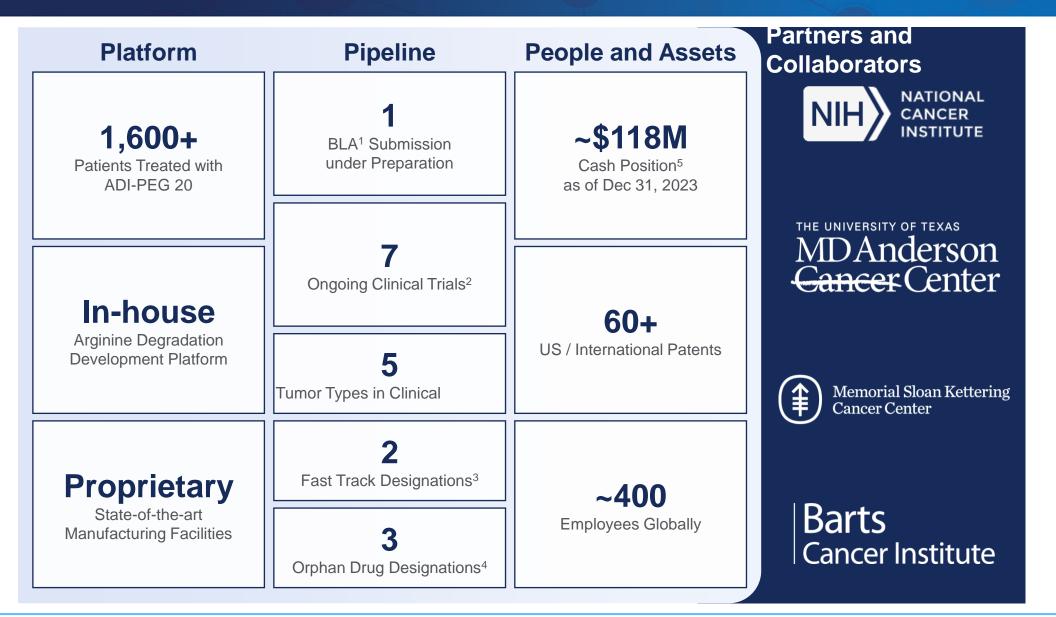
- Interview with Brian A. Van Tine, M.D., Ph.D.⁵

Source: Company information, Literature Review.

Notes: (3). Progression-free survival. (4). Overall survival. (5). Advancing Next-Generation Cancer Metabolic Therapy by Targeting Critical Amino Acid Metabolic Pathways: An Interview with Brian A. Van Tine, MD, PhD

Polaris

Polaris at a Glance



Source: Company information.

Notes: 1. Biologics License Application. 2. Include trials which have enrolled at least one subject or are initiating and included on ClinicalTrials.gov. 3. Granted by FDA. 4. Granted by FDA & EMA . 5. Unaudited.



ADI-PEG 20 Next Steps to Commercialization

Data and Path to Approval

- Completion of filing for Biologics
 License Application (BLA) to
 U.S. Food and Drug
 Administration (FDA) in 2024
- Filings of EU and UK marketing authorization applications planned 2H 2024
- Program has Fast Track and ODD designations

Manufacturing

- Full characterization of Vacaville facility
- State licenses for distribution planned for 1H 2024
- Facility has initial capacity to produce up to 300,000 doses
 PA; sufficient for demand in MPM major markets

Commercialization

- Ongoing evaluation of strategic partnerships and infrastructure required to bring to market
- Continue focus from 2023 on
 Medical Affairs, value and HEOR
 evidence generation
- Focus in 2024 on launch preparation and execution
- Anticipated PDUFA date in 2025

