Investment process in Orion

Aalto University School of Business

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Jari Karlson

Chief Financial Officer

Orion as company

Jari Karlson / Orion

Orion at a glance
(2023)

Net sales
EUR **1,190** million

Operating profit
EUR **275** million

6 Production sites in Finland,
1 in France and
1 in Belgium

Established in
1917

Personnel **3,632**

R&D investments
127 EUR million

Sales network in Europe and own sales unit in **5** Asia-Pacific countries

Building well-being

Inspired by our Nordic heritage, we strive to empower people around the world to live their lives to the fullest – today and tomorrow.

Build a customer-driven portfolio:

- Innovative Medicines for Oncology and Pain
- Brand products for Respiratory, Central Nervous System, and Women's Health
- Complementing strong generic portfolio with complex and value-add generics, and consumer health products with value proposition
- Portfolio for companion and livestock animals

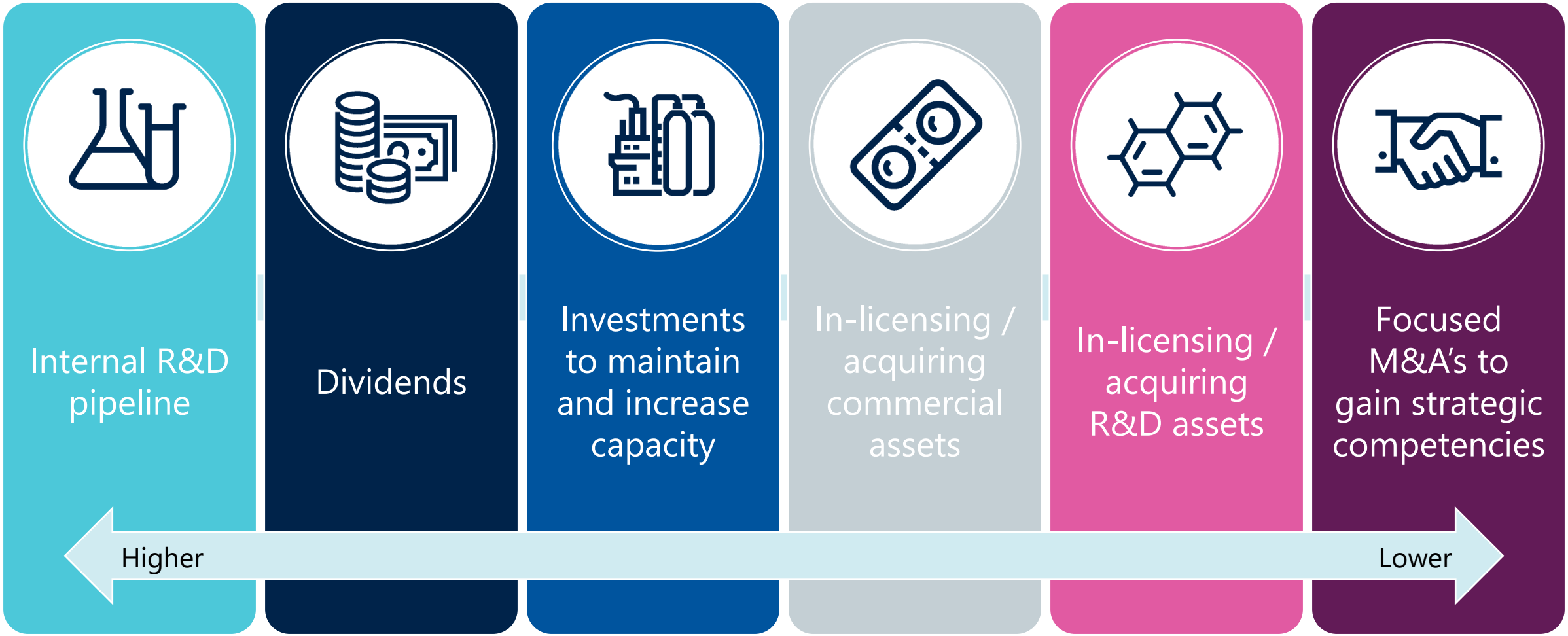
Expand to new geographies and strengthen global partnerships:

- Strengthen European market position
- Strengthen and expand APAC presence, including Japan
- Establish presence in USA step by step

Develop growth enablers:

- Competences and Culture
- Safety and Sustainability
- Global commercialisation capabilities
- Data driven execution excellence
- Master End-to-End value chain

Capital allocation focus



Orion’s Sustainability Agenda

Patient safety as a top priority

Patient safety has been a priority for us for a hundred years and it continues to be the cornerstone of our daily operations.

We play a significant role in ensuring reliable supply of medications – even in the wake of a crisis.

Active work for a better environment

We want to be the environmental leaders in our industry.

We continuously raise the bar in climate and environmental responsibility, and we challenge others to follow.

We are strongly heading towards achieving carbon-neutrality in our own operations by 2030.

Care for well-being professionals

We want to take care of Orionees – professionals who put their heart and expertise in everything they do.

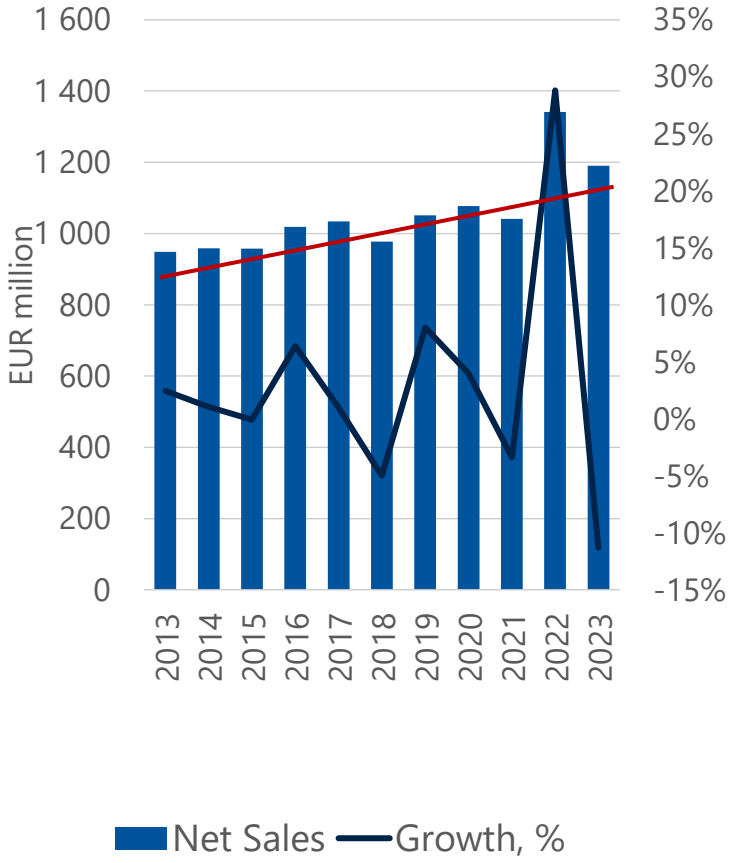
Our workplace is inspiring. We want our people to feel well.

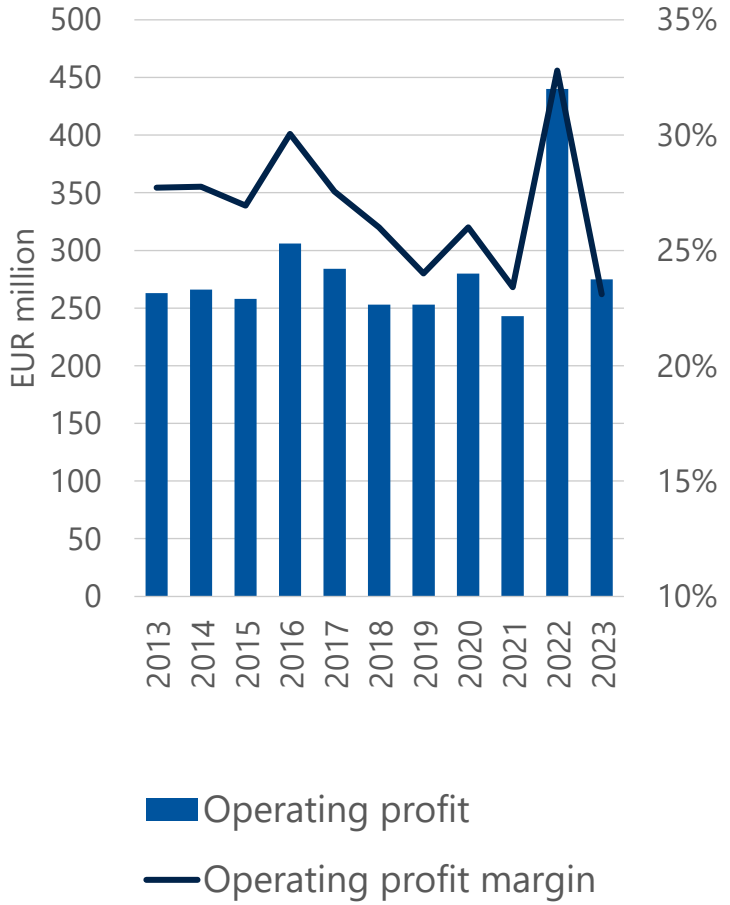
Ethics at the core of our business

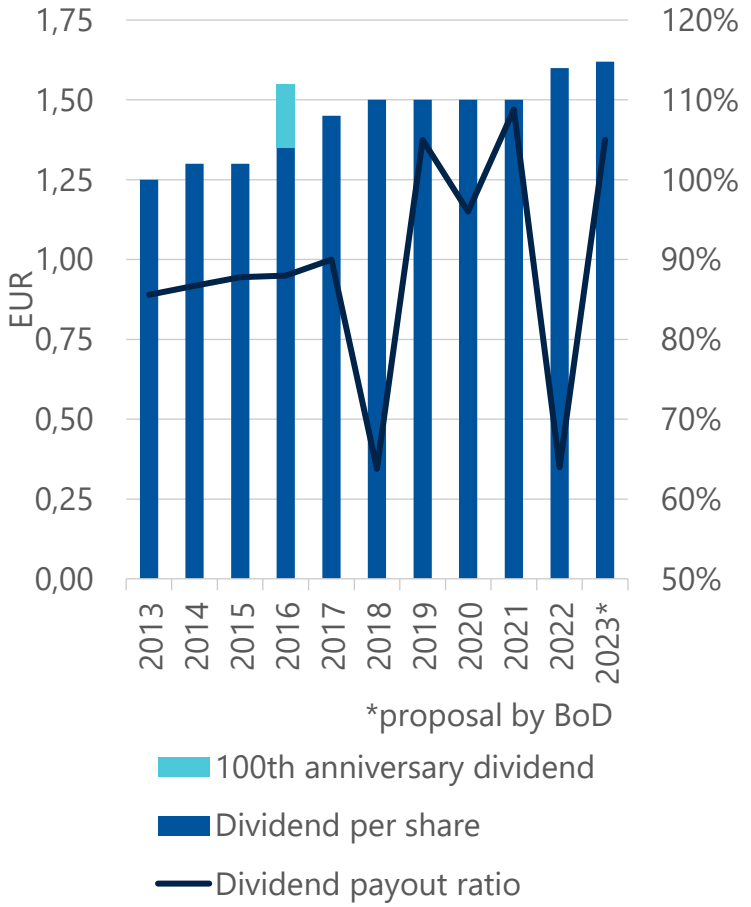
We maintain strict ethical standards and act responsibly in all situations.

Together with our partners we are building a transparent and sustainable business.

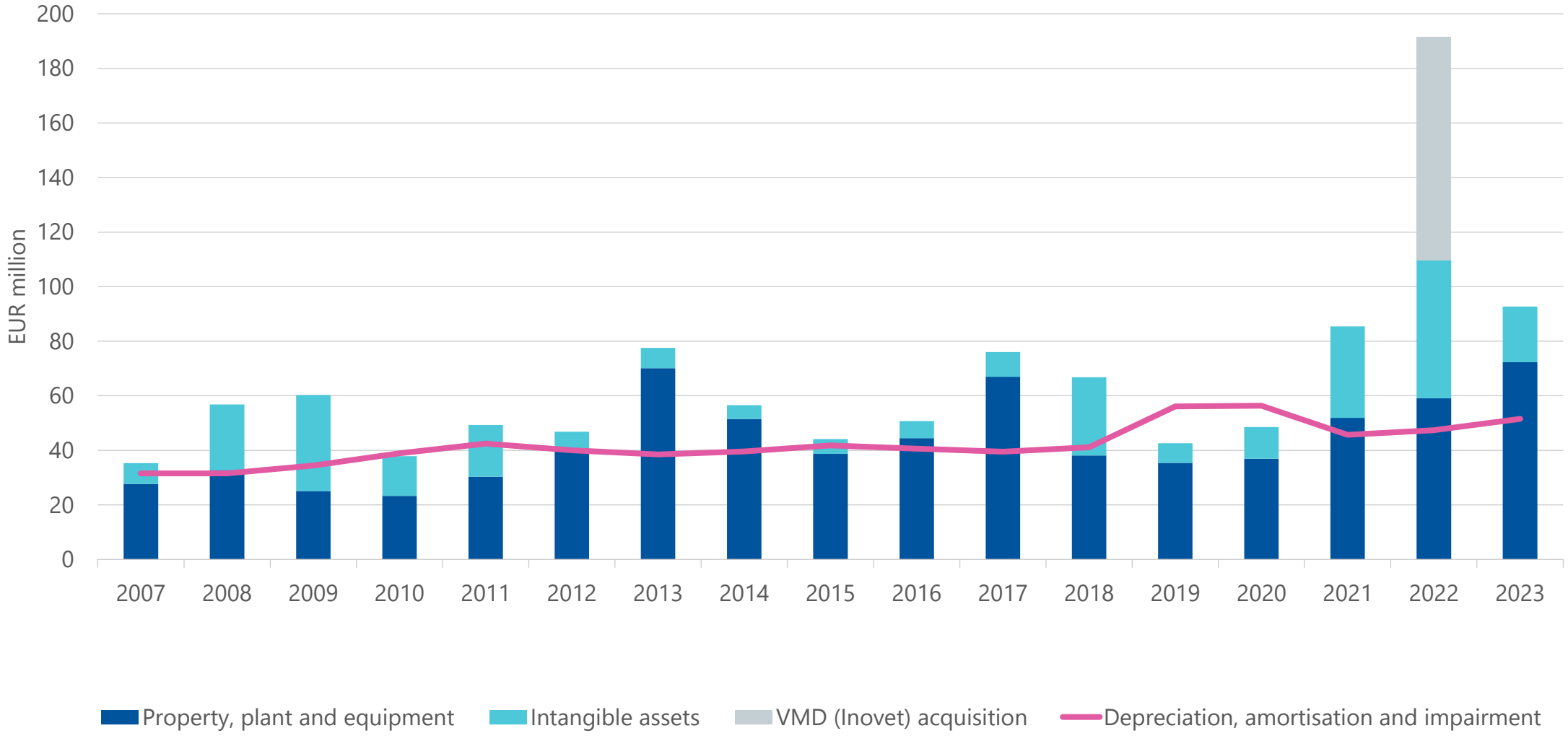
Financial development 2013-2023
- Solid financial performance despite significant Loss of exclusivities



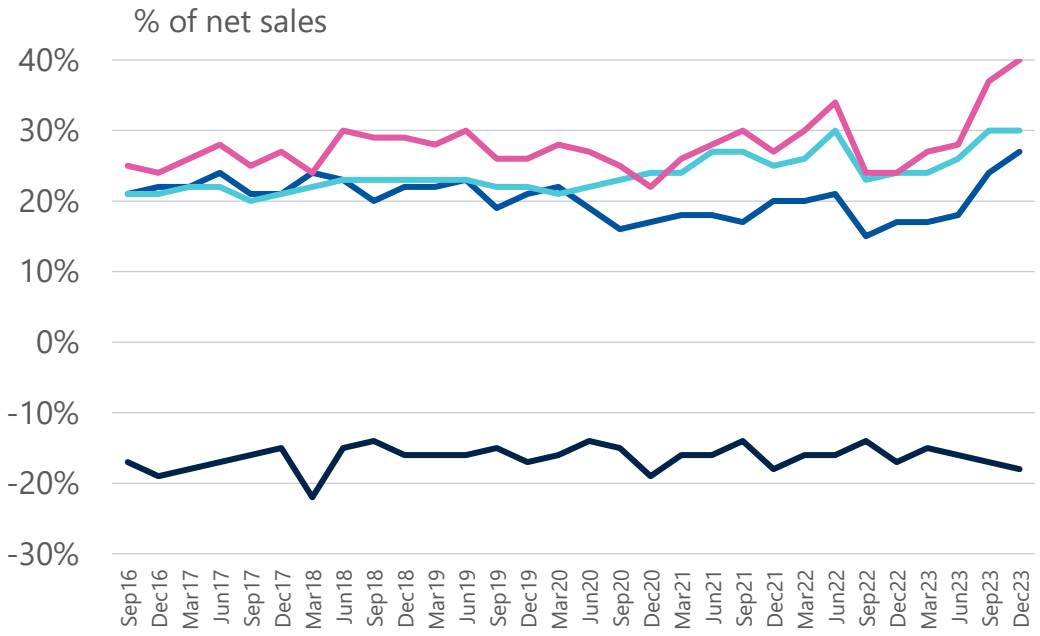


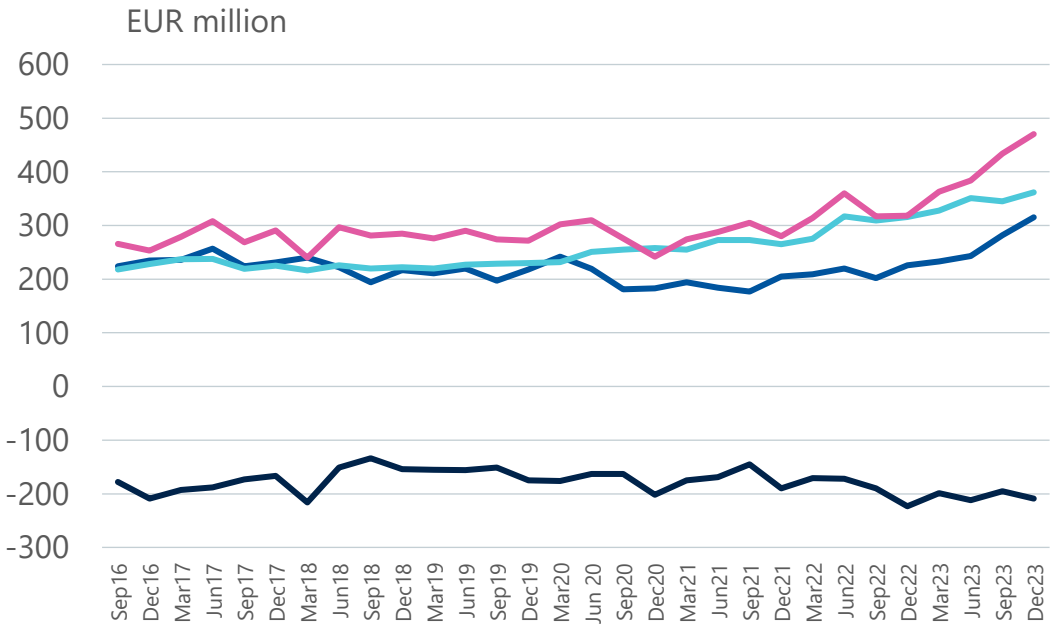


Development of capital expenditure



Development of net working capital
- clear increase in 2023





Key figures

Orion's key figures	2019	2020	2021	2022	2023	Change vs. 2022
Net sales, EUR million(1	1,051	1,078	1,041	1,341	1,190	-11.3%
EBITDA(1	309	337	289	487	326	-33.0%
Operating profit, EUR million(1	253	280	243	440	275	-37.5%
R&D expenses, EUR million	119	123	118	136	127	-4.7%
Capital expenditure, EUR million (2	43	49	85	192	93	-51.6%
Depreciation and amortization, EUR million	56	56	46	47	52	+8.4%
Equity ratio, %	77%	67%	68%	61%	62%	
Gearing, %	-18%	-25%	-15%	-13%	11%	
ROCE (before taxes), %	30%	35%	29%	45%	25%	
Return on equity, %	26%	29%	26%	42%	24%	
Basic earnings per share, EUR (1	1.43	1.56	1.38	2.49	1.54	-37.8%
Interest bearing net debt, EUR million	-139	-186	-108	-119	93	
Dividend per share, EUR	1.50	1.50	1.50*	1.60	1.62(3	+1.3%

1) Net sales in 2022 includes EUR 228 million milestones income with EUR 208 million positive impact on EBITDA and EBIT and EUR 1.48 positive impact on EPS
2) 2022 capital expensidture includes 82 million acquisition
3) Proposal by the Board of Directors

Investment process

Investment process
- General (1)

- Corporate Governance defines the approval authorities based on the size of the investments
  - In principle all investments require approval at least by a member of the Group management team
- Formal and standardized investment proposal is prepared for approval
  - Preparation and approval processes vary based on the nature of the investments

- Approval stages at Orion
  - Board of directors
  - CEO (supported by management team)
  - Management team members
  - Other (as authorized by management team members)

Investment process
- General (2)

- Strategy/Long term planning defines the overall framework
  - Development plans of the business units and resources needed to execute them
  - Balance sheet structure impacts due to the investments
  - Integration of the investments and the business strategies
  - Investment Roadmaps for the areas with largest investments (Global operations/production, Fermion)
- 5-year top level investment plan by function is updated whenever there are major changes identified
  - Gives a high-level view of the investment needs for next years
- Based on the strategy and 5 –year plans CEO typically defines an annual investment cap for those functions that make most of the investments
- Rolling planning cycles include project level estimates for investments to be started and executed during the next 18 months
  - Investment need (€ and resource FTE) and timing are estimated.
  - Investment plans can be updated all the time to the rolling planning system unlike cost plans that are updated on quarterly
  - Not yet detailed and final project plan
  - Final approvals separately by project following the approval guidelines. Being included in rolling forecast does not mean automatic approval.
  - M&A projects are not typically included in the plan but are handled separately

Investment process
- General (3)

- Investment classes in this presentation are based on nature of the investments (-> this is not accounting classification)
  - Traditional building and machinery investments
  - Information technology investments
  - Acquisition/in-licensing of new products
    - Large typically patent protected products (seldom, major process/project)
    - Small generic products (large number, often, straight forward process)
  - Development of new pharmaceuticals (booked as cost in P&L, not activated in balance sheet)

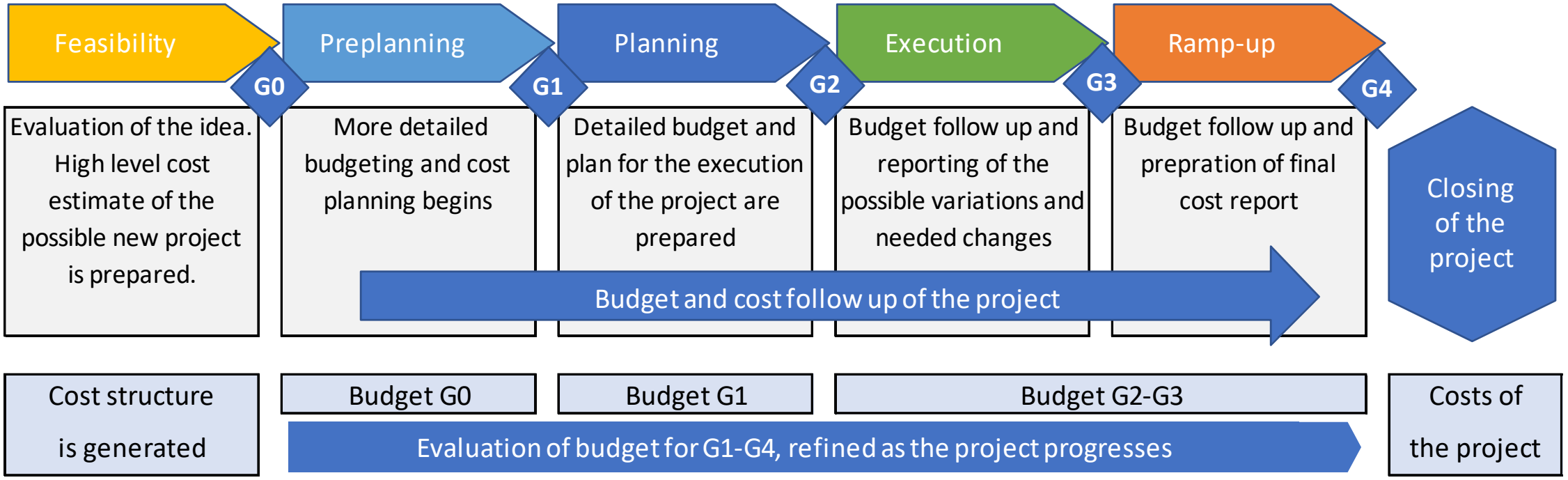
- Company acquisitions are unique investment projects
  - Basic process defined
  - Each case is different and typically these are large projects

Investment process
- Buildings and machines (1)

- Majority of these investments are relatively small ones
- As a consequence, the preparation work is typically done within the function and not in company wide cross functional teams
- 80/20 however applies also here. Most of the total value of the investments is coming from the large ones
- These investments typically also involve only one function within company

- Process
  - The starting point in major investments, like expansion of production capacity, is the long-term plan (investment road maps)
  - The preliminary plans are prepared during the rolling planning
  - The execution starts with a detailed investment plan and proposal which is approved according to the authorization guidelines

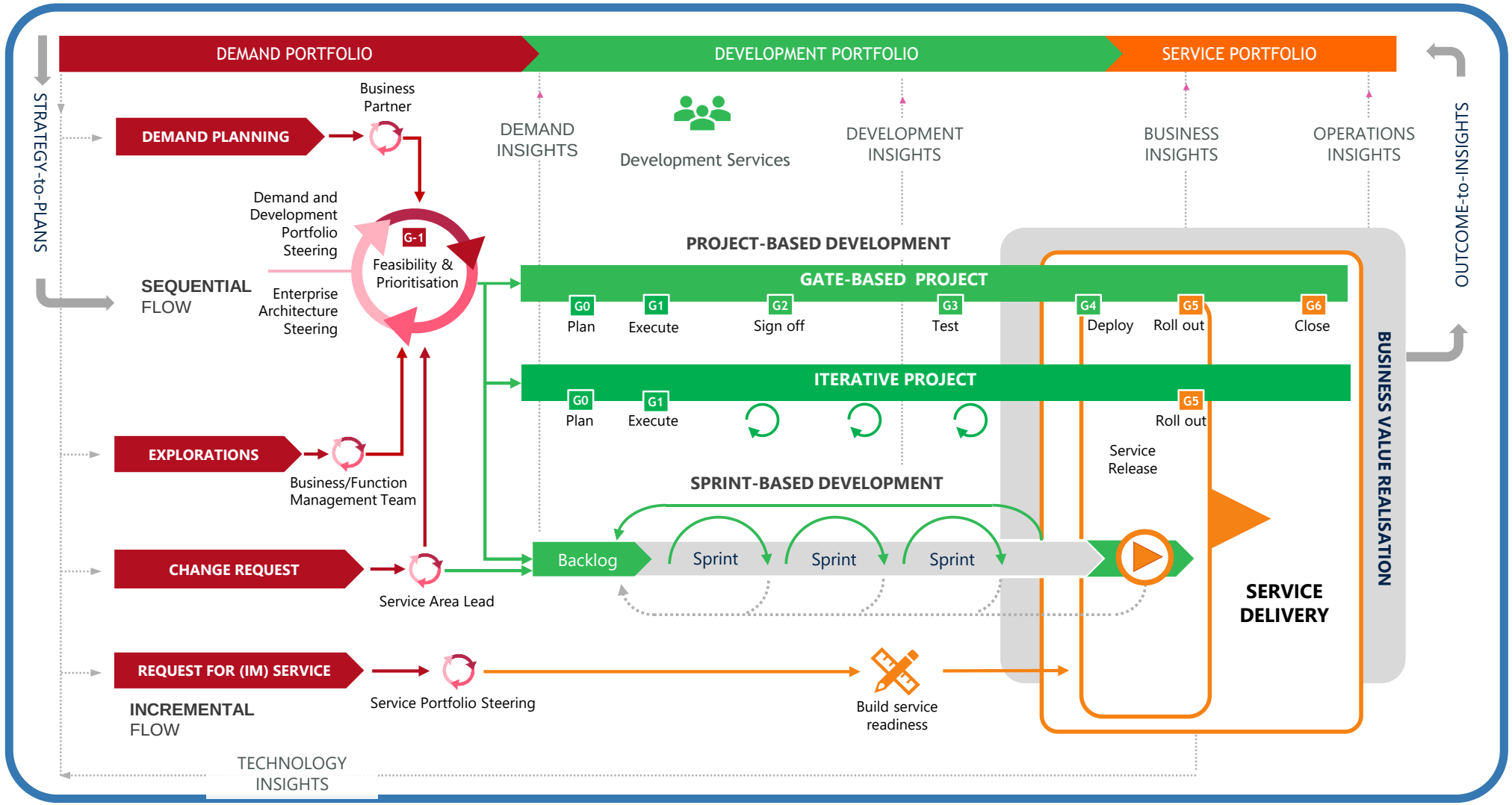
Investment process
- Buildings and machines (2)



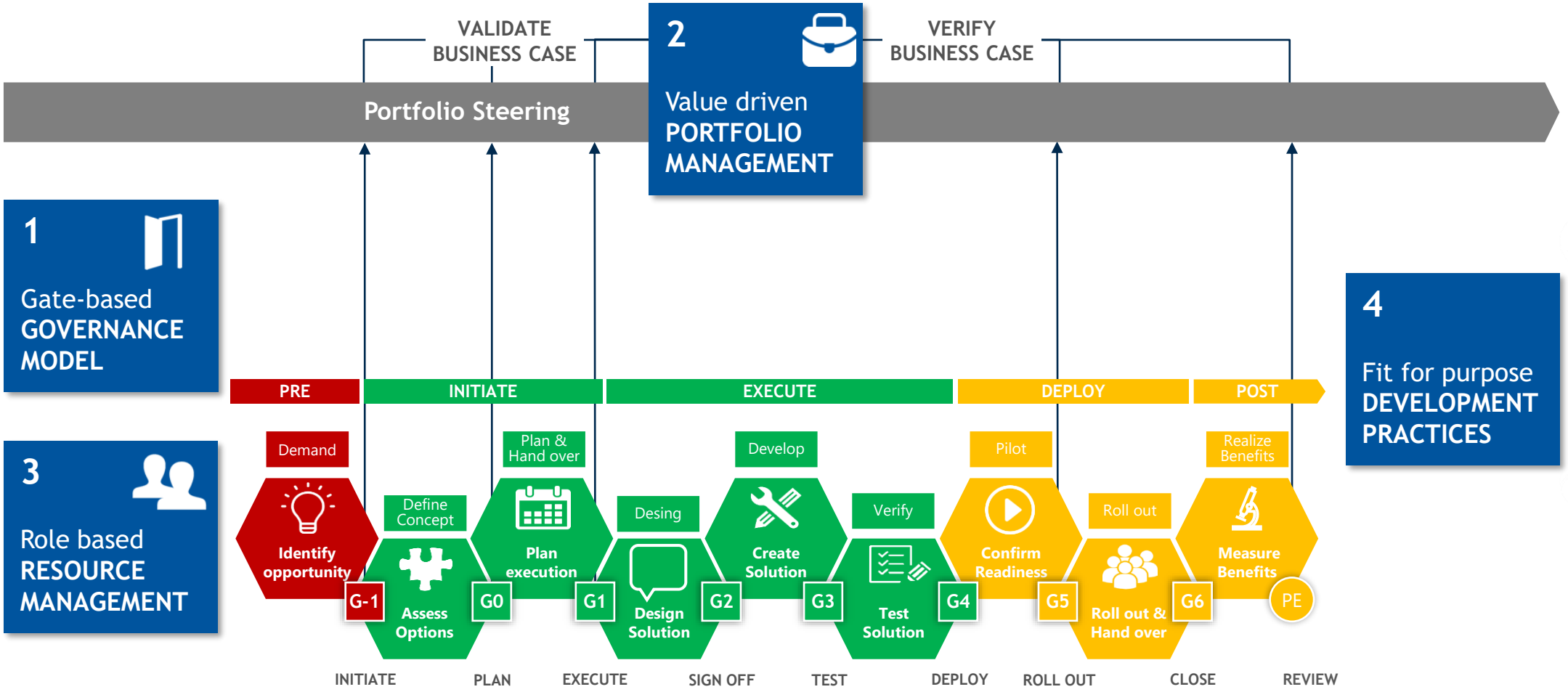
Rolling planning for Investments:

1. 0-18 months plan: monthly cost estimates for investments
2. 19-60 months plan: quarterly/annual cost estimates for investment ideas / projects

IM projects: End-to-End development



Principles for the IM adaptable project model

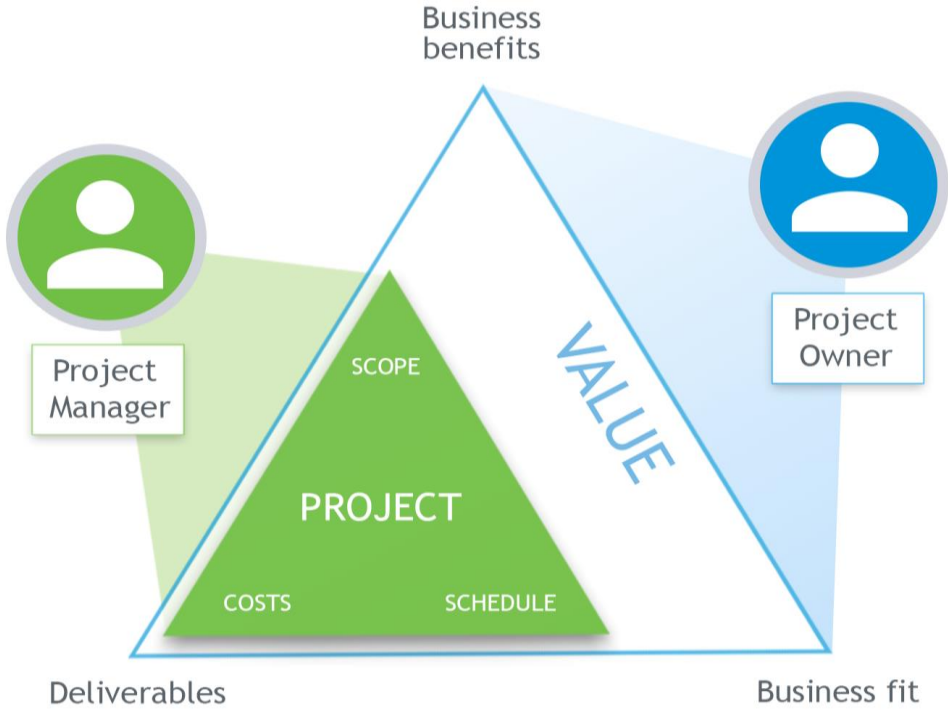


IM projects
- A Value-driven approach to Project Steering

The Project Model promotes a value-driven approach to Project and Portfolio Management:

- The business case sums up the business goals, justification and high-level delivery approach of a project.
- **Business takes over responsibilities from the project in order to obtain benefits.**
- The progress of the project is validated against goals and resource commitments throughout the project lifecycle, continually aligning the justification and viability to potentially changing internal and external factors.

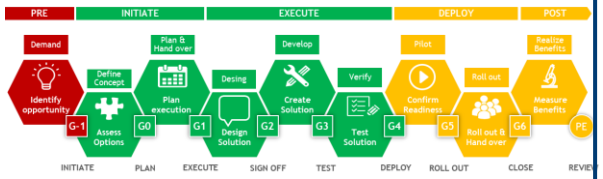
A value-driven approach ensures that any project is actually required and that it can be delivered in budget, schedule and scope. Limited resources are focused in a manner that optimally supports business an creates value. **The two key roles *Accountable* and *Responsible* are the *Project Owner (Business Owner)* and the *Project Manager*.**

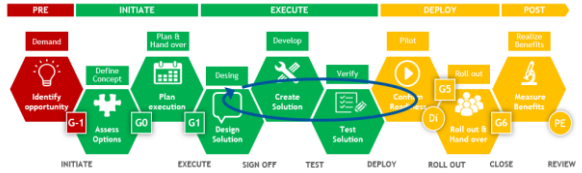


IM projects: Development alternatives

Major SAP renewal program going on

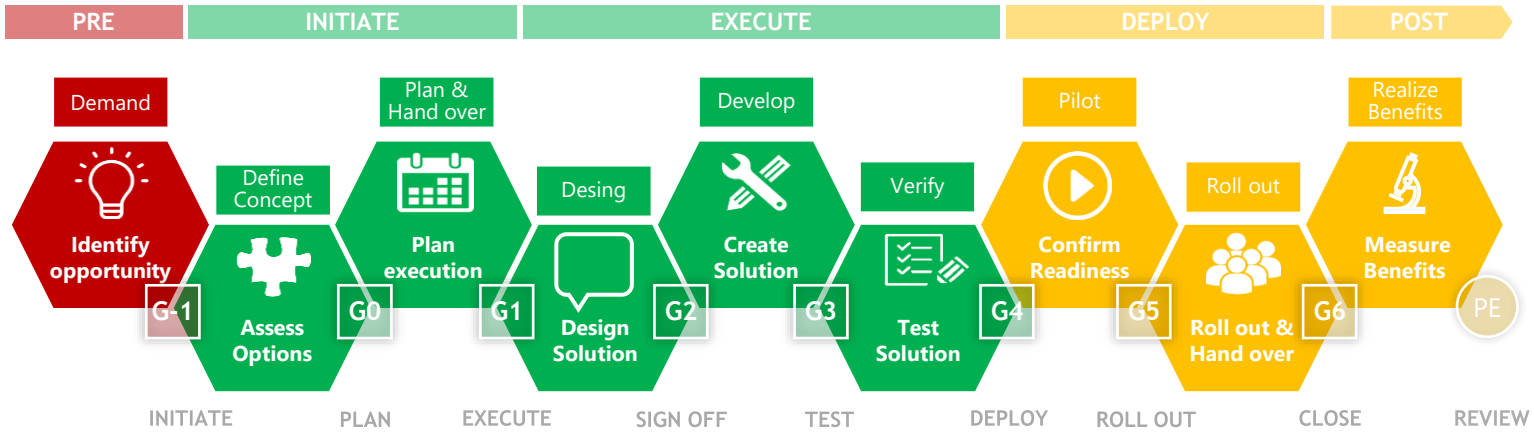
Most of the development still done with this method





Program	Gate-Based Project	Iterative Project	Sprint-Based Development
Transformation	Sequential development	Hybrid development	Incremental development
Program organization	Project organization	Project organization	Dedicated capacity
Yearly clock	Gate-based stages	Iterations between G1 – G5	Continual sprint-based flow
Separately decided milestones	All project gates	Only the main gates	Sprint-based cadence with decision points
”Large enterprice level transformation”	**“Traditional project”**	**“Agile project”**	**“Agile development”**

IM project stages



Demand
Pre-project refinement – Identify and review of an opportunity. Target is to understand the demand and to prepare a proposal for initial development prioritization decision with focus on business justification.

Define concept
Investigate the business case, project delivery strategy and make any ne cessary formal approaches to prospective suppliers or delivery partners assessing options.

Plan & handover
Agree the project structure and potential combined stages. Finalize the project business case and plan the execution; schedule and Scope including requirements, objectives, resources and finances. Agree the governance a nd commit to the detailed plan.

Design
The solution design is defined in detail and translated into detailed work units. Objective is to ensure the design does not have functional or technical gaps.

Develop
The solution is implemented according to the design specification and documented properly. The solution is prepared for validation stage. In agile project delivery, there can be several development cycles.

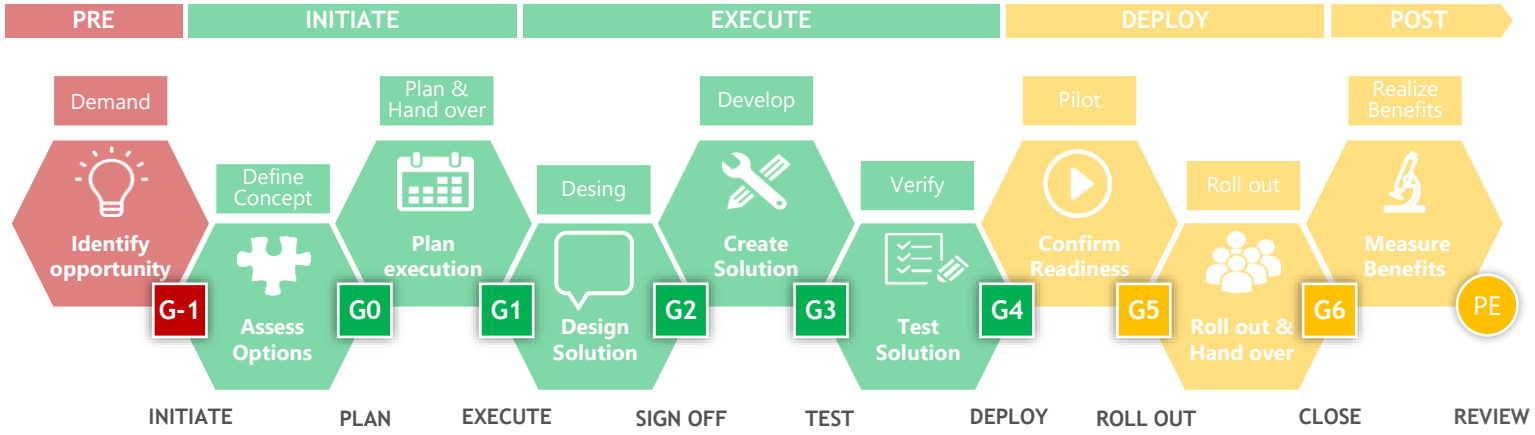
Verify
Integration and user acceptance testing the design and implementation of the solution to the specification. Confirm alignment of the solution with business case, design and release acceptance criteria.

Pilot
Secure the readiness of service operations and support to scale for the planned number of users. Release the service and carry out go-live activities.

Rollout
Focus is to ensure that the desired business benefits of the project will be achieved, and the business changes will be operating as intended. Handover to service is finalized.

Realize Benefits
Desired business benefits of the project are achieved, and the business changes are operating as intended.

IM project gates



G-1 AUTHORISE INITIATION

Initiate
Decide whether initiation of the identified demand or opportunity is justified, and outcomes of the project are required and viable. Decide development model to be used for the initiative

G0 READY FOR PLANNING

Plan
Decide whether the business case and the delivery strategy of the suggested solution are sound and justified. Approve the proposed solution, including e.g. its legal, security and enterprise architecture alignment.

G1 AUTHORISE EXECUTION

Execute
Approve project's business case, scope, schedule, the governance arrangements. Confirm and validate project planning outcomes and project has prerequisites to continue and success. Take the investment decision on selected supplier(-s), funding and resources committed.

G2 DESIGN SIGN-OFF

Sign off
Confirm validity of the business case against possible internal and external changes and project's prerequisites to continue and success. Confirm design covers all requirements and IM's practices set and the technology and platforms to be used. Approve design of the solution.

G3 TEST

Test
Confirm validity of the business case and project's prerequisites to continue and success. Confirm solution has been developed according to the specifications and IM's practices set. Approve implementation with it's documentation and sing-off the test plan.

G4 DEPLOY

Deploy
Confirm validity of the business case and project's prerequisites to continue and success. Confirm test coverage meets requirements and IM practices and solution is ready for deployment. Approve tests in its documentations. Approve the deployment plan and the pilot (if applicable). Authorize singing a supplier contract is applicable

G5 ROLL OUT

Roll out
Confirm validity of the business case and project's prerequisites to continue and success. Confirm service readiness to go live with the solution. Approve the pilot and authorize the release.

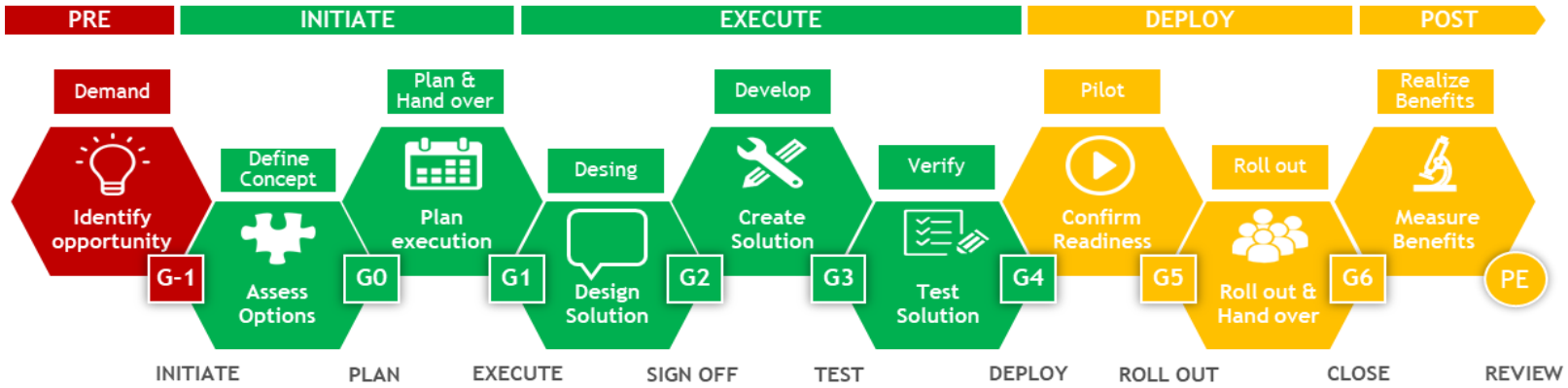
G6 CLOSURE

Closure
Validate the business case and benefits are achievable. Confirm evaluation of the results and learnings have been spread to organization. Approve handover to service and closure of the project approved and the project is closed.

PE REVIEW

Review
Validate and evaluate realized benefits. Confirm benefits have been measures as planned and results with learnings have been fed back to the stakeholders.

Project Gate Approvals: The involved decision-making bodies



Decision-making body / Gate	G-1	G0	G1	G2	G3	G4	G5	G6	PE
Project Steering Group	-	Concept Approval	Project Approval	Project Approval	Project Approval	Project Approval	Project Approval	Project Approval	-
Demand and Development Portfolio Steering	IM Approval	IM Approval	IM Approval	Informed	Informed	Informed	IM Approval	Informed	IM Review
Business / Function Management Team	Informed	Informed	Business Approval	Informed	Informed	Informed	Business Approval	Informed	Informed
IIT Steering Committee			Informed					Informed	Informed

Business / Function Management Team approves at the gates G1, G5 and G6 – that is:

- G1: Approve the project plan and confirm total investment*
- G5: Approve successful pilot and give permission to start roll-outs
- G6: Confirm project closing

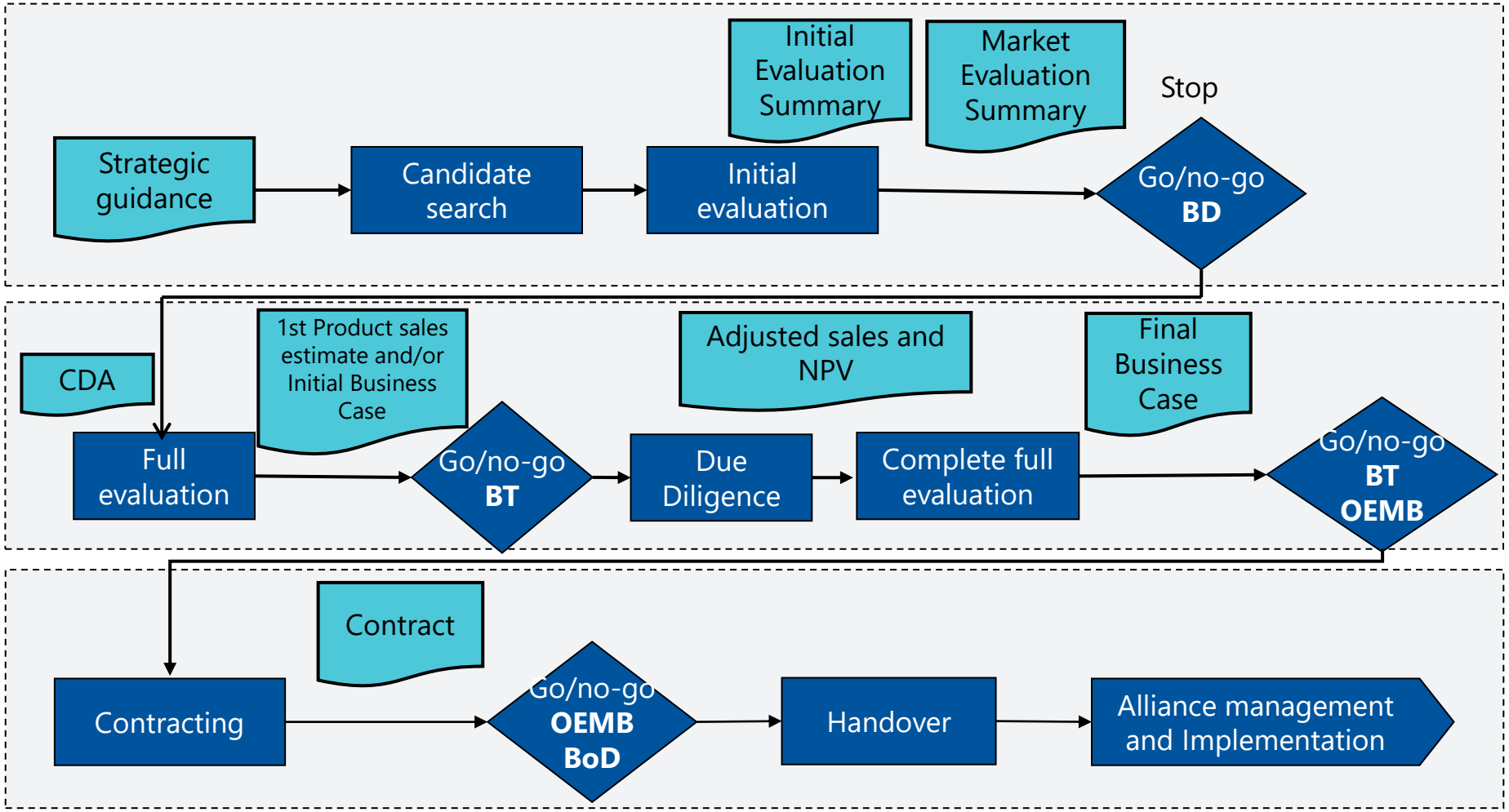
IM projects
- Business case

- Business case is required for each investment
  - First preliminary and later the final one after the detailed plan is available
- Business case is typically prepared using standard template
  - Project summary (Project background, Objectives, Benefits, Strategic fit)
  - Project scope (Scope, Risks/Dependencies/Constraints, Governance, Timeline)
  - Cost/Benefits analysis (Tangible, Intangible, Solution lifecycle costs)
- Typical Key focus/discussion areas during approval process
  - Are benefits well enough defined
  - Are there real business improvement benefits and not only (often theoretical) estimates of saved work time
  - How are processes planned to change
  - Do we have sufficient IM and Business resources to actually execute the project as planned
  - Other risk management areas

Licensing/Acquiring a major product
- Top level responsibilities

- Business teams which are headed by business directors and have members from various functions (R&D, business development, sales, marketing, supply chain, registration, etc.)
  - Mid/Long term plans for business units -> Business driven needs for new products (“wish list”)
  - Evaluation of the feasibility of the products identified by business development
  - Decision to take the investment decision proposal to Orion management team
- Business development
  - Screens new products globally from other pharmaceutical companies and negotiates the terms
  - Presents the investment proposal to business team and presents it with the Business director to Orion management team
- Orion management team
  - Approves the investment or decides to take it to the Board of Directors for approval depending on the size and nature of the investment

Licensing/Acquiring a major product
- Process



BD = Business development function
BT = Business team

OEMB = Orion management team
BoD = Orion board of directors

Licensing/Acquiring a major product
- Key items in evaluation summary

- Evaluation summary (incl. IPR, production options)
- Target Product Profile (TPP) – no sales estimates without this description!
- Relevant customer perspective (Key Opinion Leaders – KOL's!)
- Assessment of unmet needs/product benefits/unique selling points
- Market evaluation summary including:
  - target population and relevant segmentation (disease prevalence and incidence trends etc.)
  - competitor products on the market
  - pipeline information
  - price references incl. reimbursement projections
- Sales estimates for the proposed product (price, market share,S&M costs)
- Launch estimate by region (Quarter/Year)
- Possible development program including costs
- Financial Evaluation using NPV´s
- Risk assessment and scenarios

Licensing/Acquiring a major product
- Financial evaluation

CASH FLOW		CASE X										
Period		Break even					Maturity					Terminal
Year		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033 -n
EBITDA Growth%			-100,0 %	37,0 %	30,1 %	10,4 %	10,7 %	10,3 %	10,2 %	10,1 %	9,9 %	2,3 %
Market sales		*8,8*	*9,9*	*10,7*	*11,6*	*12,5*	*13,5*	*14,6*	*15,8*	*17,1*	*18,5*	
Growth%			***13,3 %***	***8,0 %***	***8,1 %***	***8,1 %***	***8,1 %***	***8,1 %***	***8,2 %***	***8,2 %***	***8,2 %***	
Product sales - Partner	65 %	3,8	4,3	4,6	5,0	5,5	5,9	6,4	7,0	7,6	8,2	
Product sales - Own/Captive	35 %	2,2	2,5	2,6	2,8	3,0	3,2	3,4	3,7	3,9	4,2	
Royalties receivable	0 %											
GROSS SALES		**6,0**	**6,7**	**7,3**	**7,8**	**8,5**	**9,1**	**9,9**	**10,6**	**11,5**	**12,4**	**0,0**
Discounts		0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
NET SALES		**5,9**	**6,7**	**7,2**	**7,8**	**8,4**	**9,1**	**9,8**	**10,6**	**11,5**	**12,4**	**0,0**
COGs		2,9	3,3	3,6	3,9	4,2	4,6	5,0	5,4	5,8	6,3	
COGs fixed												
GROSS PROFIT		**3,0**	**3,4**	**3,6**	**3,9**	**4,2**	**4,5**	**4,8**	**5,2**	**5,6**	**6,0**	**0,0**
GP%		**51 %**	**50 %**	**50 %**	**50 %**	**50 %**	**50 %**	**49 %**	**49 %**	**49 %**	**49 %**	
Distribution costs	3 %	0,2	0,2	0,3	0,3	0,3	0,3	0,3	0,4	0,4	0,4	
Royalty payable	0 %	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
M&S	8 %	0,5	0,8	0,7	0,7	0,6	0,7	0,7	0,7	0,7	0,7	
R&D	4 %	0,3	0,3	0,3	0,3	0,4	0,4	0,4	0,4	0,4	0,4	
Admin	3 %	0,4	0,7	0,4	0,2	0,2	0,2	0,2	0,2	0,2	0,2	
FIXED COSTS	**18 %**	**1,4**	**2,0**	**1,7**	**1,4**	**1,5**	**1,5**	**1,6**	**1,6**	**1,6**	**1,7**	**0,0**
EBITDA		**1,6**	**1,3**	**1,9**	**2,4**	**2,7**	**3,0**	**3,3**	**3,6**	**4,0**	**4,4**	**0,0**
EBITDA%		**27 %**	**20 %**	**26 %**	**31 %**	**32 %**	**33 %**	**34 %**	**34 %**	**35 %**	**35 %**	
Change on NWC	30 %	1,8	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,3	0,3	
Investments/milestones		16,6										
NET CASH FLOW		**-16,8**	**1,1**	**1,8**	**2,3**	**2,5**	**2,8**	**3,1**	**3,4**	**3,7**	**4,1**	**4,1**
CUMULATIVE CASH FLOW		**-16,8**	**-15,7**	**-13,9**	**-11,6**	**-9,1**	**-6,3**	**-3,3**	**0,1**	**3,8**	**7,9**	**12,0**
PAID BACK YEAR	**2030**											
Discount rate%	10 %	0,909	0,826	0,751	0,683	0,621	0,564	0,513	0,467	0,424	0,386	
DISCOUNTED CF		**-15,3**	**0,9**	**1,3**	**1,6**	**1,6**	**1,6**	**1,6**	**1,6**	**1,6**	**1,6**	**30,1**
CUMULATIVE DCF		**-15,3**	**-14,3**	**-13,0**	**-11,5**	**-9,9**	**-8,3**	**-6,8**	**-5,2**	**-3,6**	**-2,0**	**28,0**
NET PRESENT VALUE	**28,0**	**-9,9**					**7,9**					**30,1**
NPV SHARE		**-41 %**					**135 %**					**107 %**
IRR		**9 %**										

A couple of relatively large deals (for Orion) have been done during last years

5/6/2022

Orion enters into exclusive agreement with Jemincare for novel non-opioid drug candidate for the treatment of pain

Orion enters into exclusive agreement with Jemincare for novel non-opioid drug candidate for the treatment of pain

ORION CORPORATION
PRESS RELEASE
6 MAY 2022 at 9.00 EEST

Orion enters into exclusive agreement with Jemincare for novel non-opioid drug candidate for the treatment of pain

Orion Corporation has entered into an agreement with Chinese Jemincare, through which Orion will receive exclusive global development and commersialisation rights, excluding the Greater China area (mainland China, Hong Kong, Macau and Taiwan), for a potent and selective NaV 1.8 blocker for the treatment of acute and chronic pain. Orion will also receive ownership to certain key patent applications relating to the compound within its own territory.

According to the agreement, Orion has the right to develop and commercialise the asset in its territory. Orion will be fully responsible for its own development and commercialisation costs. In addition, Orion will manufacture the products, including active pharmaceutical ingredient, for its markets.

Under the terms of the agreement, Orion will pay Jemincare a EUR 15 million upfront payment, in addition to which Jemincare is upon achievement of certain development, commercialisation and sales targets entitled to receive milestone payments, which may be significant. In addition, Jemincare is eligible to receive tiered royalty of 8% to 15% on future sales in Orion territory.

- Molecule has now entered ph I stage development
- Orion owns assets/rights outside of China
- High market need for non-opioid treatment for pain
- Orion made EUR 15 million upfront payment

1/4/2023

Orion and Amneal enter strategic partnership - Orion receives exclusive licence to commercialise Amneal's generic products in Europe, Australia and New Zealand

Orion and Amneal enter strategic partnership – Orion receives exclusive licence to commercialise Amneal's generic products in Europe, Australia and New Zealand

ORION CORPORATION
PRESS RELEASE
4 JANUARY 2023 at 16.00 EET

Orion and Amneal enter strategic partnership – Orion receives exclusive licence to commercialise Amneal's generic products in Europe, Australia and New Zealand

Orion Corporation today announced it has signed a long-term license agreement with Amneal Pharmaceuticals, Inc. to commercialise Amneal's generic products in Orion territories.

Under the terms of the agreement, Orion is granted exclusive licence to commercialise and sell Amneal's generic products in most parts of Europe as well as in Australia and New Zealand. The initial portfolio will include a mix of generic products commercially available in the U.S. today, as well as selected pipeline products currently under development. Initial products will be registered throughout Europe, Australia and New Zealand starting in 2023, with launches expected over the coming years.

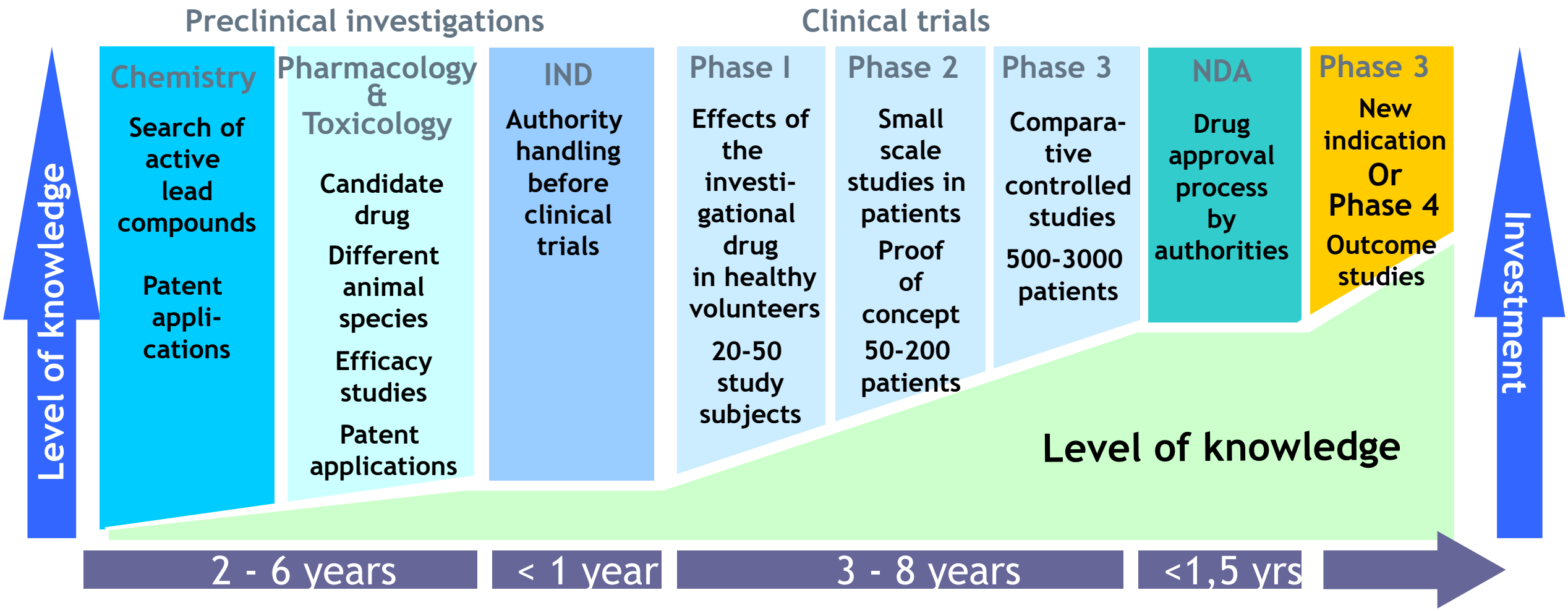
- Amneal has a large generic portfolio of products already commercialized in US. Orion will co-develop and commercialize their products in Europe, Australia and New Zealand
- Orion made EUR 25 million upfront payment

Research and development

Aalto University / 19 Mar 2024

Jari Karlson / Orion

R&D investments
- a very long process in pharmaceutical industry



R&D investments
- Largest investments of Orion

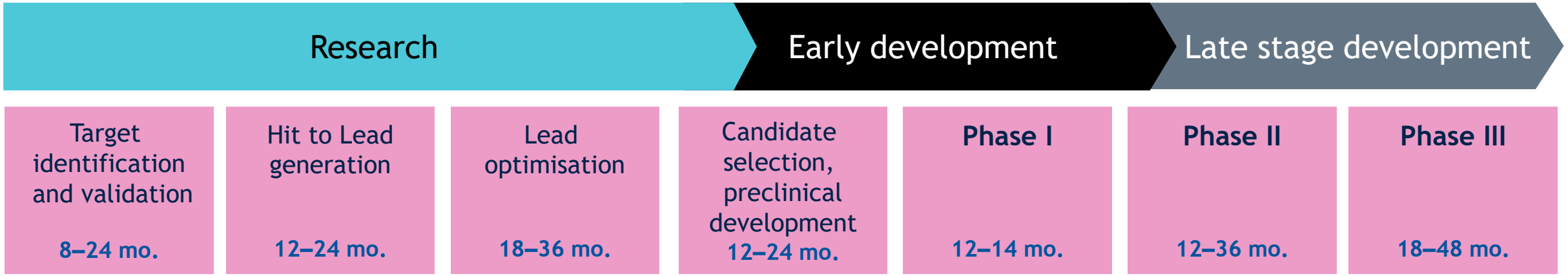
- 12-15 years from idea to market
- Successful development of a new product (new chemical entity = NCE) costs typically several hundred million euros
- Only very few new molecule/product will enter the clinical studies (=drug is given to people) and only about 1/10 of molecules that have reached this stage will finally get marketing approval
- Despite the constantly increased spending on research the number of new pharmaceuticals that have received market authorization has decreased during last decade
  - There are though some signs of a growing trend again due to e.g. technological development
- Large investment are currently being made in pharma industry in A.I. technologies, which are hoped to shorted development times

- Decisions about new drug development projects are the most important ones made in research based pharmaceutical companies

➢ **Really long-term investments**

R&D investments

- Collaborative networks across the R&D value chain



Collaboration with partners

Early-stage pharma partnering in Orion

- Partner has early-stage research data from a new molecule, or some technical expertise Orion does not have
- Risk and reward sharing, partner typically gets milestone payments based on reaching agreed research and sales targets and small royalty of the future sales
- Partner has limited or no commercial capabilities

Collaboration with partners

Late-stage pharma partnering in Orion

- Late-stage partnering typically after Phase II (i.e. after proof of concept, PoC)
- Risk and reward sharing (milestone payments, sharing of R&D costs, royalties, possible sales & manufacturing co-operation)
- Partner has commercial capabilities in regions where Orion is not present, especially in USA
- Potential for income before commercial sales in form of milestones

R&D investments
- Evaluation of the profitability of the investment

- At early stages the emphasis is on
  - Ideas about potential new innovative mechanisms of action
  - Ideas about possible target diseases and unmet medical needs
  - Technical feasibility including IPR
  - Evaluation of competition

  and not yet very much on profitability calculations due to HUGE uncertainties

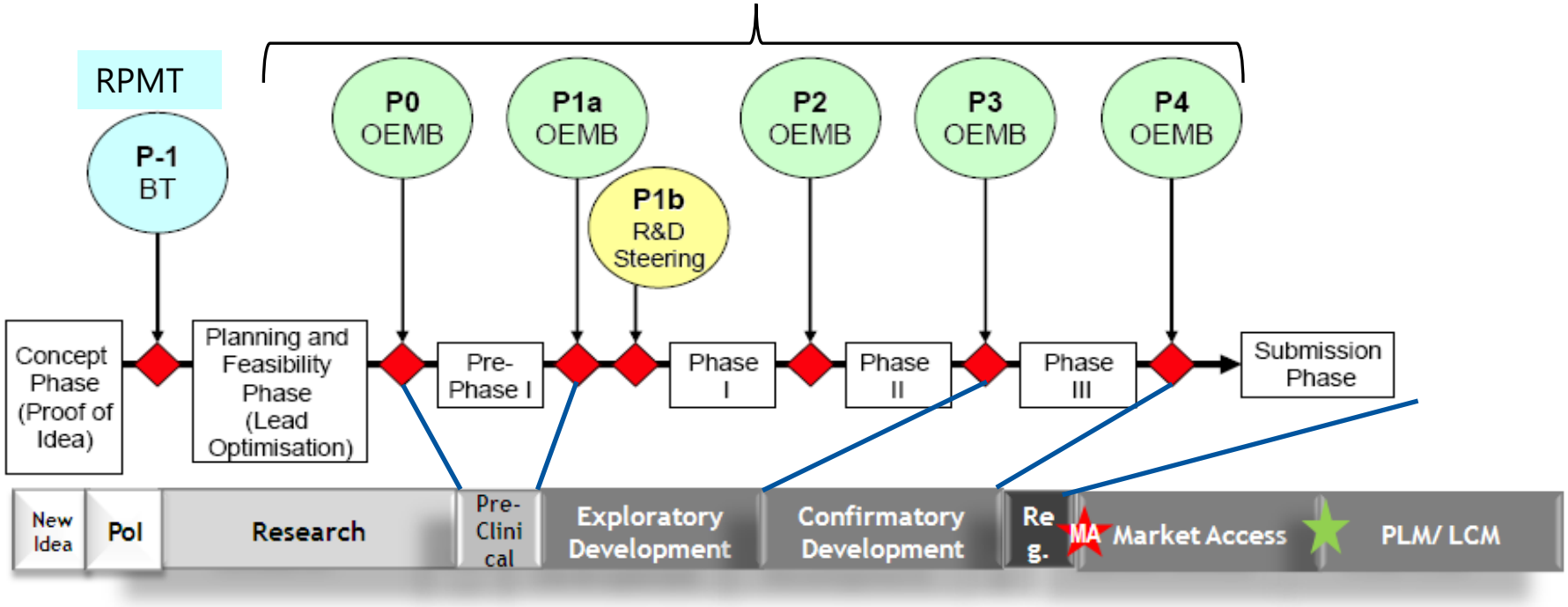
- NPV is built only when development costs and sales forecasts can be defined to somewhat reliable degree
  - When the final target disease has been decided (sometimes only on phase 2)
  - When development program design is becoming more clear
  - When partnering strategy is getting more clear
  - Evaluation criteria is more or less the same as in in-licensing calculations

5T framework is used to evaluate the success factors of development programs

Target Confidence	• Mechanism of action which provides a link between the target and disease driver (in-house data) • Treatment modality / Druggability
Target Engagement	• Target engagement biomarker to verify the biological modulation of the target pathway in vivo
Target Patients	• Patient selection biomarker to identify the right patients for the drug modulating the target pathway
Target Safety	• Summary of the safety aspects (based on the literature in idea phase and experiments or trial data in later phases)
Target Competition	• Unmet medical need • Competitive landscape

R&D investments
- Governance structure/R&D steering process

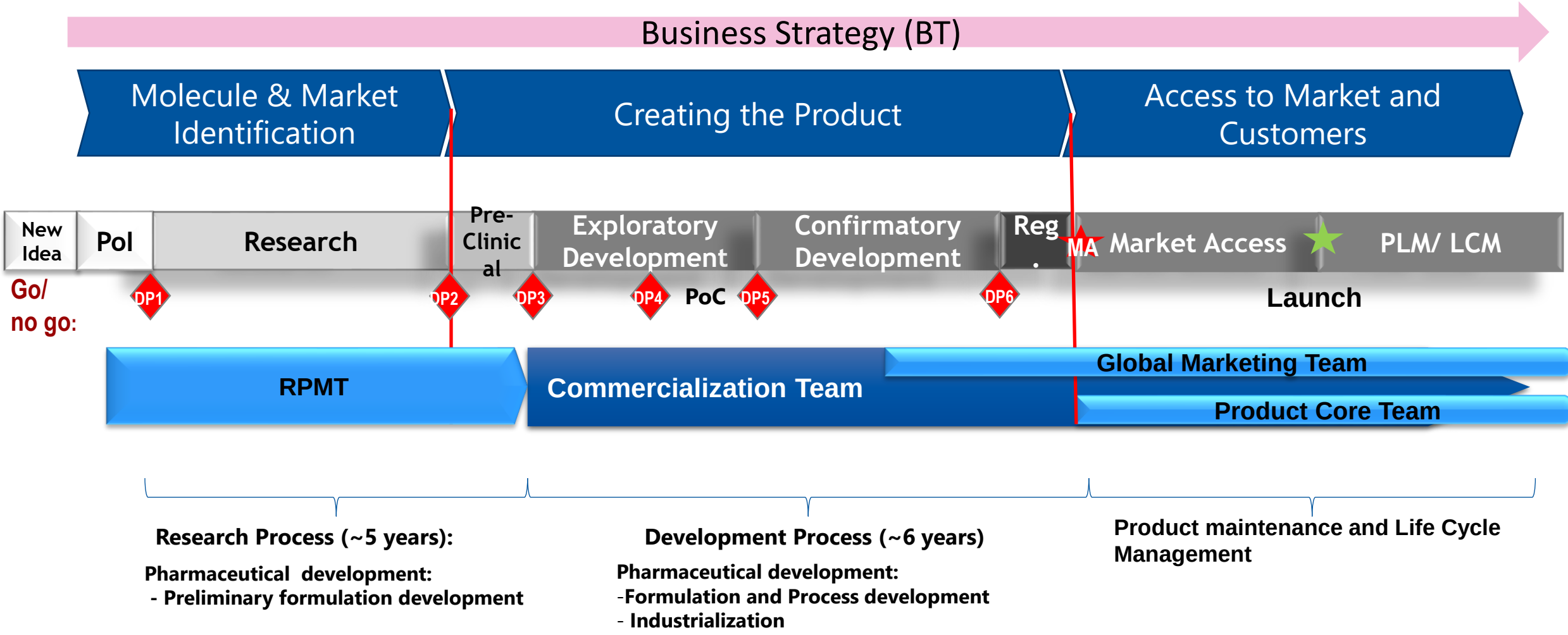
Because of the size of the investment/cost commitment
Board of Directors approval is needed in most cases at least in these stages



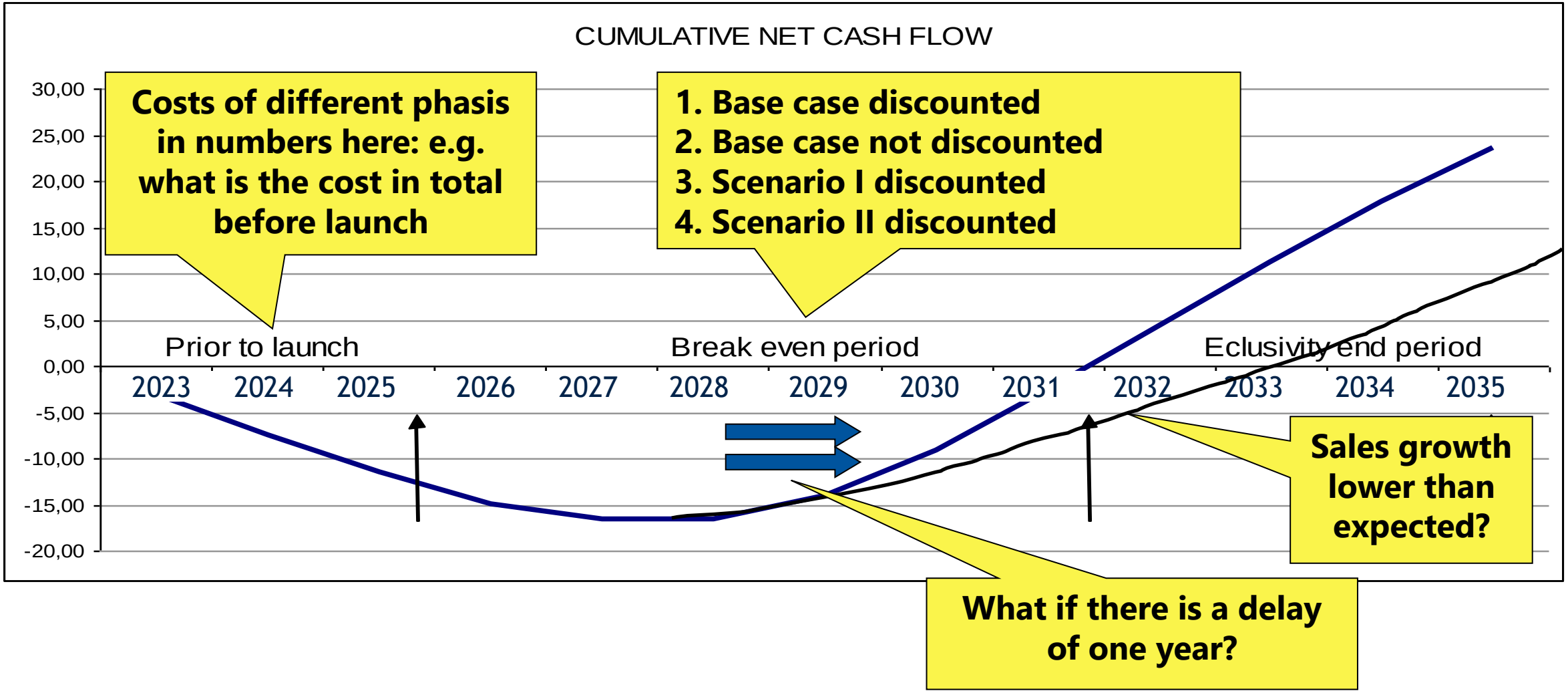
BT = Business Team ->Business Division level decisions
OEMB= Orion Executive Management Board -> Corporate level decisions
PLM/LCM = Product Lifecycle Management
MA = Market Authorization

R&D investments

- Commercialization work starts long before approval and actual launch



R&D investments
- Cumulative Cash flow



R&D investments
- Financial evaluation (1)

Base case NPV: Project X

Million €	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
GROSS SALES	**0,0**	**0,0**	**0,0**	**1,8**	**7,3**	**22,3**	**33,7**	**37,8**	**38,2**	**38,6**	**39,0**	**39,4**	**19,9**	**10,0**	**10,1**
Milestone payments	0,0	0,0	0,0	3,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sales to a partner	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Royalty receivable	0,0	0,0	0,0	0,6	2,4	7,4	11,2	12,6	12,7	12,9	13,0	13,1	6,6	3,3	3,4
Sales correction items	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
NET SALES	**0,0**	**0,0**	**0,0**	**5,4**	**9,8**	**29,7**	**45,0**	**50,5**	**51,0**	**51,5**	**52,0**	**52,5**	**26,5**	**13,4**	**13,5**
Royalty payable	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Production variable costs	0,0	0,0	0,0	0,1	0,2	0,7	1,1	1,3	1,3	1,3	1,3	1,3	0,7	0,3	0,3
Other variable costs	0,0	0,0	0,0	0,0	0,0	0,0	0,1	0,1	0,1	0,1	0,1	0,1	0,0	0,0	0,0
GROSS MARGIN	**0,0**	**0,0**	**0,0**	**5,4**	**9,5**	**28,9**	**43,8**	**49,1**	**49,6**	**50,1**	**50,6**	**51,1**	**25,8**	**13,0**	**13,2**
%	**0 %**	**0 %**	**0 %**	**99 %**	**97 %**	**97 %**	**97 %**	**97 %**	**97 %**	**97 %**	**97 %**	**97 %**	**97 %**	**97 %**	**97 %**
Production fixed costs	0,0	0,0	0,0	0,1	0,4	1,3	1,9	2,2	2,2	2,2	2,2	2,2	1,1	0,6	0,6
Marketing	0,0	0,5	5,1	12,2	12,1	10,1	9,1	9,1	8,0	7,5	7,0	6,5	3,5	0,5	0,0
Research and development	11,2	10,7	5,8	0,2	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Administration	0,0	0,0	0,0	0,0	0,1	0,4	0,7	0,8	0,8	0,8	0,8	0,8	0,4	0,2	0,2
OPERATING MARGIN	**-11,2**	**-11,2**	**-10,9**	**-7,2**	**-3,1**	**17,1**	**32,1**	**37,1**	**38,7**	**39,6**	**40,6**	**41,6**	**20,8**	**11,8**	**12,4**
%	**0 %**	**0 %**	**0 %**	**-132 %**	**-32 %**	**58 %**	**71 %**	**74 %**	**76 %**	**77 %**	**78 %**	**79 %**	**78 %**	**88 %**	**92 %**
Change on net working capital	0,0	0,0	0,0	0,5	1,7	4,5	3,4	1,2	0,1	0,1	0,1	0,1	-5,8	-3,0	0,0
Investments in fixed assets	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
NET CASH FLOW	**-11,2**	**-11,2**	**-10,9**	**-7,7**	**-4,8**	**12,6**	**28,6**	**35,9**	**38,6**	**39,5**	**40,5**	**41,5**	**26,6**	**14,7**	**12,4**
CUMULATIVE NET CASH FLOW	**-11,2**	**-22,5**	**-33,4**	**-41,1**	**-45,8**	**-33,2**	**-4,6**	**31,3**	**69,9**	**109,4**	**149,9**	**191,4**	**218,0**	**232,7**	**245,1**

NPV 12% (2023-2027)	**-34,3**
NPV 12% (2023-2032	**26,1**
IRR (2023-2032	**23,6%**
NPV 12% (2023-2037	**59,8**
IRR 2023-2037	**29,5%**
In Black	**2030**

royalty **35 %** received from partner

FOR INFORMATION			
MS	30 %		
Price	16	per vial	**130** EUR/day
Days	4		

R&D investments
- Financial evaluation (2)

… if market prices are 25% lower

Million €	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
GROSS SALES	**0,0**	**0,0**	**0,0**	**1,4**	**5,5**	**16,7**	**25,3**	**28,4**	**28,7**	**29,0**	**29,2**	**29,5**	**14,9**	**7,5**	**7,6**
Milestone payments	0,0	0,0	0,0	3,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sales to a partner	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Royalty receivable	0,0	0,0	0,0	0,5	1,8	5,6	8,4	9,5	9,6	9,7	9,7	9,8	5,0	2,5	2,5
Sales correction items	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
NET SALES	**0,0**	**0,0**	**0,0**	**4,8**	**7,3**	**22,3**	**33,7**	**37,8**	**38,2**	**38,6**	**39,0**	**39,4**	**19,9**	**10,0**	**10,1**
Royalty payable	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Production variable costs	0,0	0,0	0,0	0,1	0,2	0,7	1,1	1,3	1,3	1,3	1,3	1,3	0,7	0,3	0,3
Other variable costs	0,0	0,0	0,0	0,0	0,0	0,0	0,1	0,1	0,1	0,1	0,1	0,1	0,0	0,0	0,0
GROSS MARGIN	**0,0**	**0,0**	**0,0**	**4,8**	**7,1**	**21,5**	**32,5**	**36,5**	**36,9**	**37,2**	**37,6**	**38,0**	**19,2**	**9,7**	**9,8**
%	**0%**	**0%**	**0%**	**99%**	**96%**	**96%**	**96%**	**96%**	**96%**	**96%**	**96%**	**96%**	**96%**	**96%**	**96%**
Production fixed costs	0,0	0,0	0,0	0,1	0,4	1,3	1,9	2,2	2,2	2,2	2,2	2,2	1,1	0,6	0,6
Marketing	0,0	0,5	5,1	12,2	12,1	10,1	9,1	9,1	8,0	7,5	7,0	6,5	3,5	0,5	0,0
Research and development	11,2	10,7	5,8	0,2	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Administration	0,0	0,0	0,0	0,0	0,1	0,3	0,5	0,6	0,6	0,6	0,6	0,6	0,3	0,2	0,2
OPERATING MARGIN	**-11,2**	**-11,2**	**-10,9**	**-7,7**	**-5,5**	**9,8**	**21,0**	**24,7**	**26,1**	**27,0**	**27,8**	**28,7**	**14,3**	**8,5**	**9,1**
%	**0%**	**0%**	**0%**	**-161%**	**-75%**	**44%**	**62%**	**65%**	**68%**	**70%**	**71%**	**73%**	**72%**	**84%**	**89%**
Change on net working capital	0,0	0,0	0,0	0,4	1,2	3,4	2,6	0,9	0,1	0,1	0,1	0,1	-4,4	-2,2	0,0
Investments in fixed assets	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
NET CASH FLOW	**-11,2**	**-11,2**	**-10,9**	**-8,2**	**-6,8**	**6,4**	**18,4**	**23,8**	**26,0**	**26,9**	**27,7**	**28,6**	**18,6**	**10,7**	**9,0**
CUMULATIVE NET CASH FLOW	**-11,2**	**-22,5**	**-33,4**	**-41,5**	**-48,3**	**-41,9**	**-23,4**	**0,3**	**26,4**	**53,2**	**81,0**	**109,5**	**128,2**	**138,8**	**147,9**

NPV 12% (2023-2027)	**-35,8**
NPV 12% (2023-2032	**3,5**
IRR (2023-2032	**13,8%**
NPV 12% (2023-2037	**26,9**
IRR 2023-2037	**21,2%**
In Black	**2030**

royalty **35%** received from partner

FOR INFORMATION / Segment 1			
MS	30%		
Price	12,2	per vial	**97,5** EUR/day
Days	4		

Research Areas in Orion's R&D

PAIN

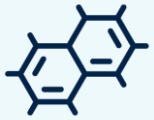
Ion channels and neuro-immune interaction

ONCOLOGY

Immuno-Oncology

- FiCAR T-cell therapy
- 2nd generation immune-checkpoint inhibitors

Cancer genomics and Cell signalling



Antibody drug conjugates

Key clinical development pipeline

Project/compound	Indication	PHASE I	PHASE II	PHASE III	REGISTRATION
ARANOTE / darolutamide [1]	Prostate cancer (mHSPC)			Ongoing	
ARASTEP / darolutamide [1]	Prostate cancer (BCR)			Ongoing	
OMAHA1 / ODM-208 (MK-5684-003) [2]	Prostate cancer (mCRPC)			Initiated	
OMAHA2a / ODM-208 (MK-5684-004) [2]	Prostate cancer (mCRPC)			Initiated	
CYPIDES / ODM-208 [2]	Prostate cancer (mCRPC)		Ongoing		
ODM-105 / tasipimidine	Insomnia		Phase IIa Ongoing		
ODM-111 (NaV 1.8 blocker)	Pain	Ongoing			
ODM-212 (TEAD inhibitor)	Solid tumours	Ongoing			

Oncology | Pain / neurology

[1] In collaboration with Bayer
[2] In collaboration with MSD

Major news in 2022 about products/molecules developed by Orion

2/17/2022

Orion's collaboration partner Bayer upgrades estimate on Nubeqa®'s peak sales potential

Orion's collaboration partner Bayer upgrades estimate on Nubeqa®'s peak sales potential

ORION CORPORATION
INSIDE INFORMATION / STOCK EXCHANGE RELEASE
17 FEBRUARY 2022 at 23.32 EET

Orion's collaboration partner Bayer upgrades estimate on Nubeqa®'s peak sales potential

Orion's collaboration partner Bayer has upgraded estimate on Nubeqa®'s (darolutamide) peak sales potential. According to Bayer's new estimate, Nubeqa's annual global peak sales could exceed EUR 3 billion. Earlier Bayer has anticipated that Nubeqa's annual global peak sales could exceed EUR 1 billion.

Bayer holds global commercial rights to darolutamide and Orion is entitled to receive annually tiered royalties on global darolutamide sales. The total annual royalty rate is approximately 20% including product sales to Bayer. Initially the total annual royalty rate will be slightly lower, and as sales increase, the total annual royalty rate will increase. Orion manufactures the product for global markets and co-promotes the product in Europe with Bayer.

In addition to royalties, Orion is entitled to receive progressive one-off milestone payments from Bayer that may total EUR 280 million, depending on the future sales development of Nubeqa.

At EUR 3 billion market sales royalty for Orion would be about 25% (i.e. 750 million euros)

Orion received USD 290 million upfroint payment from MSD in July

7/13/2022

Orion and MSD announce global collaboration for the development and commercialisation of ODM-208, an investigational steroid synthesis inhibitor for the treatment of metastatic castration-resistant prostate cancer

Orion and MSD announce global collaboration for the development and commercialisation of ODM-208, an investigational steroid synthesis inhibitor for the treatment of metastatic castration-resistant prostate cancer

ORION CORPORATION
STOCK EXCHANGE RELEASE – INSIDE INFORMATION
13 JULY 2022 at 9.00 EEST

Orion and MSD announce global collaboration for the development and commercialisation of ODM-208, an investigational steroid synthesis inhibitor for the treatment of metastatic castration-resistant prostate cancer

- Orion to receive an upfront payment of USD 290 million
- Agreement strengthens and complements MSD's oncology pipeline

Orion Corporation ("Orion") and MSD (tradename of Merck & Co., Inc. Rahway NJ USA) today announced a global development and commercialisation agreement for Orion's investigational candidate ODM-208 and other drugs targeting cytochrome P450 11A1 (CYP11A1), an enzyme important in steroid production. ODM-208 is an oral, non-steroidal inhibitor of CYP11A1 currently being evaluated in a Phase 2 clinical trial for the treatment of patients with metastatic castration-resistant prostate cancer (mCRPC).

Under the terms of the agreement, Orion and MSD, acting through its subsidiary, Merck Sharp & Dohme LLC, will co-develop and co-commercialise ODM-208. MSD will make an upfront payment to Orion of USD 290 million, which will be expensed by MSD in the third quarter of 2022 and included in non-GAAP results. Of this upfront payment, Orion recognises approximately EUR 220 million as income at the time of signing and approximately EUR 60 million is reserved to cover Orion's share of ODM-208 development cost to be accrued in the future. Orion will be responsible for the manufacture of clinical and commercial supply of ODM-208.

Global prostate cancer estimates (GLOBOCAN 2020)

2.

most commonly diagnosed malignancy in men worldwide

5.

leading cause of death from cancer in men

1,4

million men diagnosed with prostate cancer

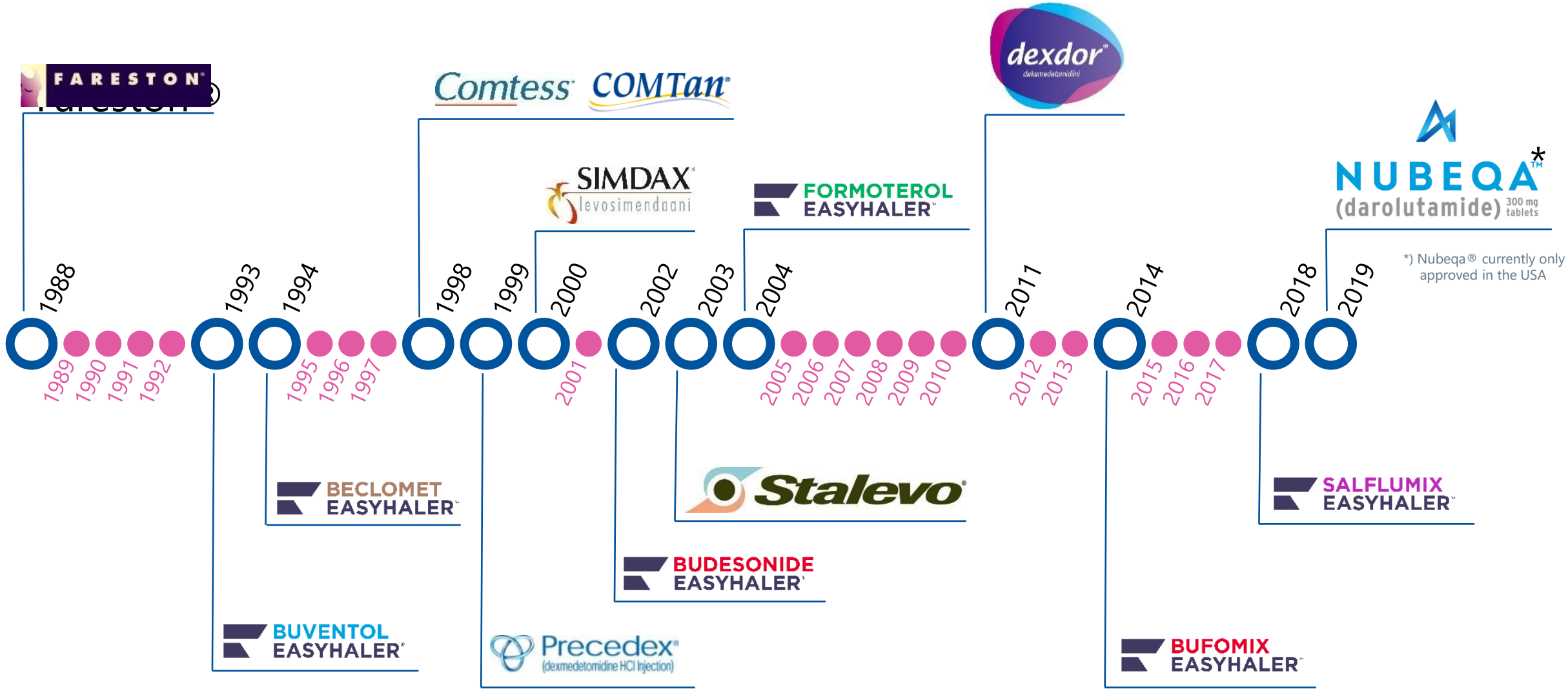
375 000

Died from the disease

50+

Mainly affects men over 50, the risk increases with age

Proprietary human pharmaceuticals developed by Orion



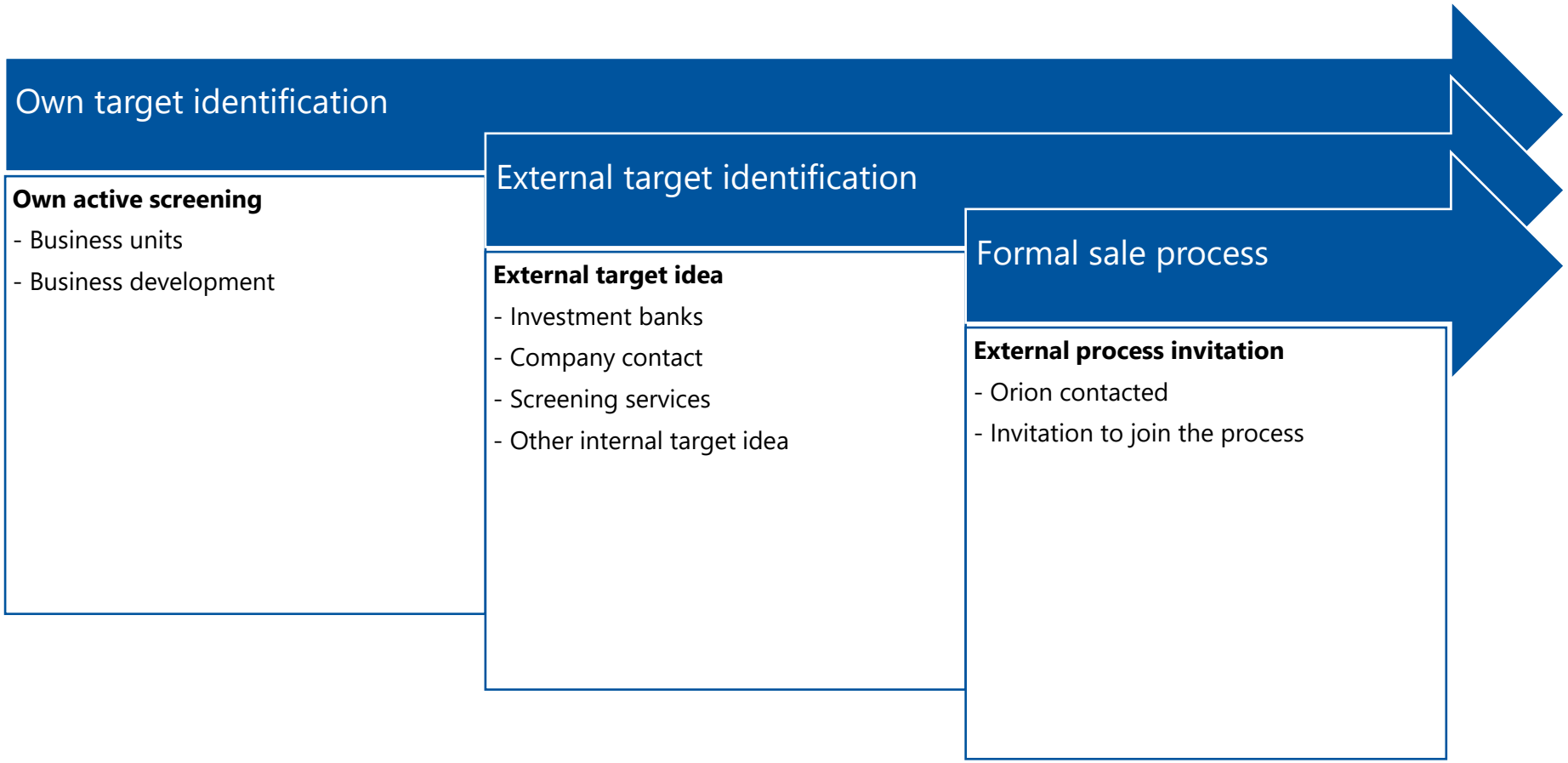
*) Nubeqa® currently only approved in the USA

Mergers and Acquisitions

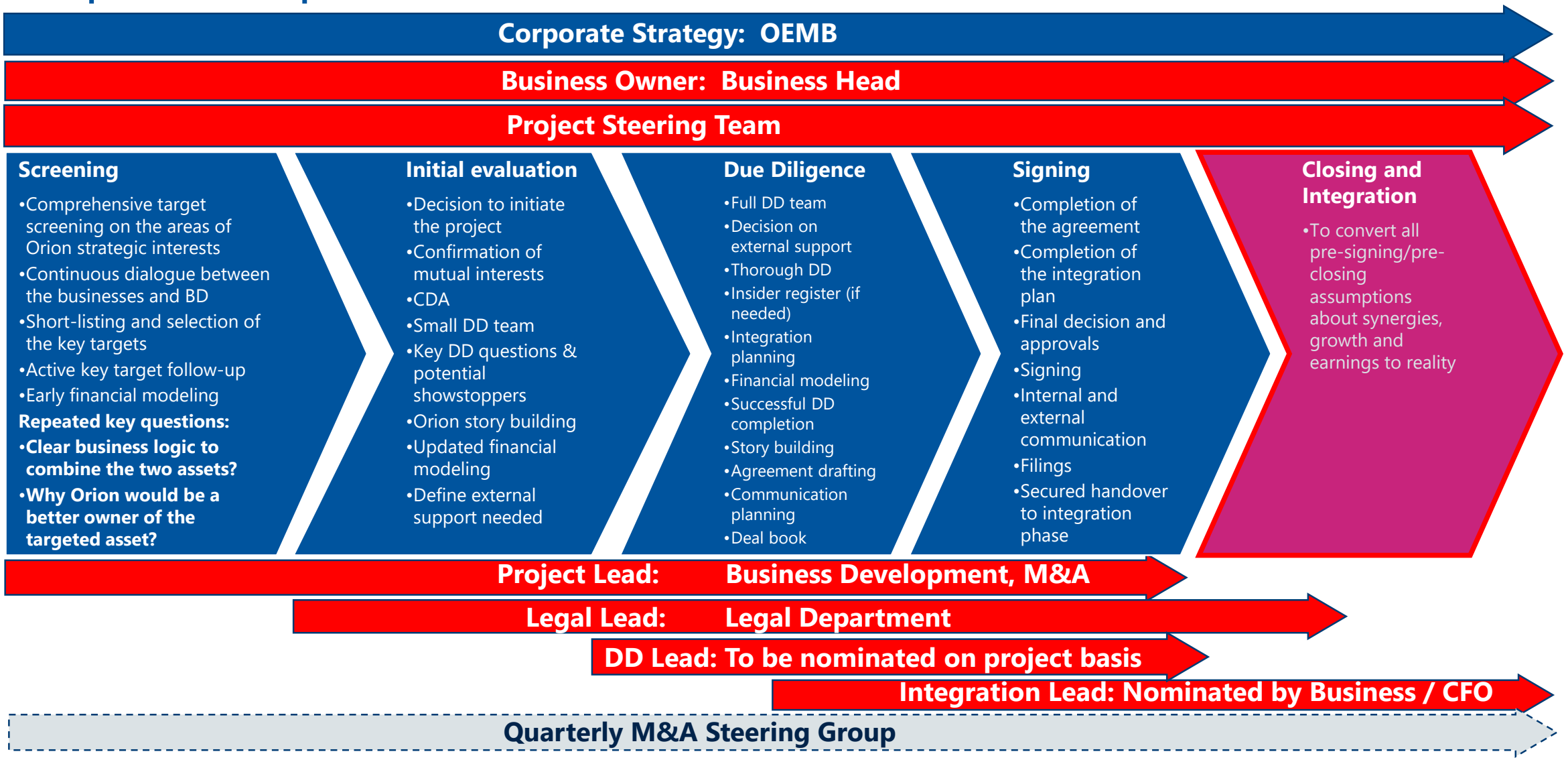
Aalto University / 19 Mar 2024 Jari Karlson / Orion

Acquisition process (1)

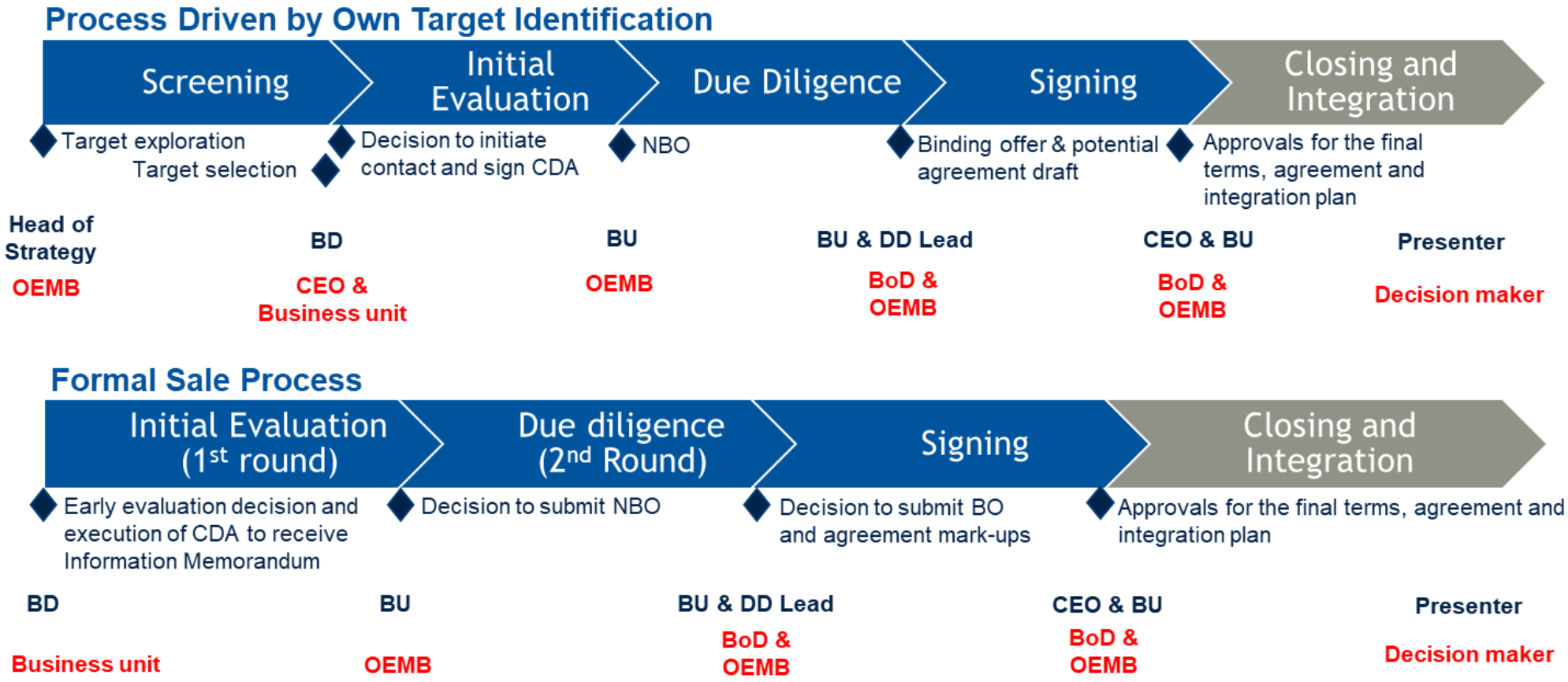
Starting Point Differs based on the Source of the Target Idea



Acquisition process (2)

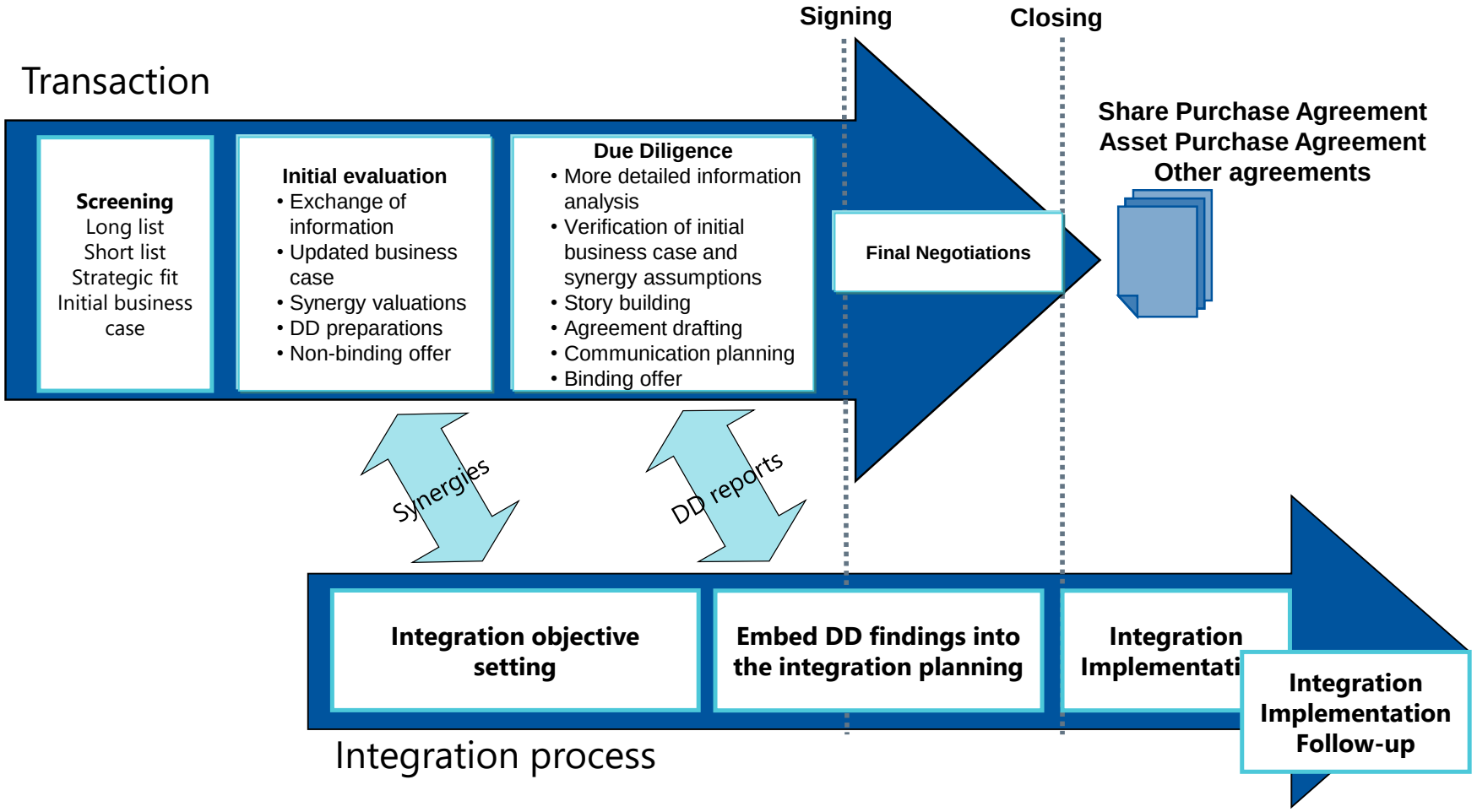


Acquisition process (3)
- Key Decisions Points and Decision Makers



OEMB = Orion Executive Management Board -> Decision to take to **BoD** (= Board of Directors) for final approval

Acquisition process (3)
- Integration



Note: signing and closing can also take place at the same time. Then all integration planning activities coincide with the DD phase. There are also projects where no or very limited integration preparations can be done with the seller before signing.

Orion did in 2022 first acquisition in a long time

6/15/2022

Orion Acquires Inovet's Animal Health Business

Orion Acquires Inovet's Animal Health Business

ORION CORPORATION
STOCK EXCHANGE RELEASE – INSIDE INFORMATION
15 June 2022 at 9.30 EEST

Orion Acquires Inovet's Animal Health Business

Orion Corporation ("Orion") has entered into an agreement with Belgian private company Inovet BV ("Inovet") to acquire its wholly owned subsidiary V.M.D. NV and all companies belonging to V.M.D. NV's group of companies (V.M.D. NV and its subsidiary companies collectively, "VMD"). VMD is a veterinary pharmaceuticals company specialised in medicines and health products for livestock. It also has a product portfolio for companion animals and minor species. VMD is headquartered in Arendonk, Belgium. VMD has production sites in Arques, France (manufacturing) and in Arendonk (packaging) as well as its own sales operations in Belgium, France, Hungary and Vietnam. VMD's revenues in 2021 were EUR 61 million, and the group was profitable. Following this acquisition, the 181 employees of VMD will join the Orion Group.

Through this acquisition, Orion's Animal Health unit will expand its product portfolio and get a foothold in the livestock market, expand its own geographical presence to Western Europe and expand export markets, and gain a production unit that is specialised in manufacturing of veterinary medicines. The acquisition also supports Orion Group's growth strategy.

The transaction price is approximately EUR 130 million debt free. The transaction will be funded from Orion's cash reserves. The immediate cash flow impact of the transaction is approximately EUR 90 million. The transaction will have a positive impact on Orion Animal Health unit's net sales and EBITDA starting from 2022. The impact on Orion Group's net sales and operating profit is not material and the transaction does not impact Orion's outlook for 2022, given on 10 February 2022. Orion will report VMD's net sales as part of Orion Animal Health's net sales as of June 2022.

The agreement was signed and the transaction was completed simultaneously today on 15 June 2022.

Net assets acquired	**17.7**
Goodwill	73.7
Interest accrual on deferred purchase price	2.2
Preliminary purchase consideration including interest	**93.6**
Deferred purchase price and earn-out	11.3
Consideration transferred	**82.3**

Summary

Investment process summary

- Most of the investments are small and thus the planning and execution of them are relatively straight forward processes that are managed by individual functions and departments

- Formal processes have been created for large, strategic and cross functional investments
  - Preparation
  - Proposal
  - Approval

- In addition to financial measures also many other important aspects are taken into account
  - Strategic fit
  - Resources
  - Market situation
  - Risks
  - Financing
  - …

Investment process summary
- Financials measures

- Only quite traditional measures are used in the financial evaluation
  - Discounted net present value
  - Payback time
  - IRR

- Risk is taken into account in the financial analysis by
  - Using especially in R&D project and in-licensing cases a discount interest rate that is a little higher than Orion WACC. In M&A cases the discount rate is quite close to Orion WACC (due to typically more diversified risk profile than in “single” asset investments)
  - Calculating different scenarios using different assumptions for the key parameters
  - Being relatively conservative in the various parameters of the calculation (sales, costs, timing)

Investment process summary
- Why more sophisticated evaluation methods are not used?

- Especially in the evaluation of research programs adaption of more "sophisticated" methods (like real options) have been considered, but they have not been taken into use
- Main reason for continuing with conventional methods is that the advanced ones are often more difficult to comprehend. We do not want to take a risk that people involved in the various stages of making the decision would not be able to understand the rationale behind it.
- In practice, we however are using real option type of approach in making R&D decisions because of the step-by-step process where we consider at each decision-making point several continuation options
- Main consideration when making decisions is in the actual business matters (capabilities, opportunities, risks) not in the accounting techniques
- Numbers are though an integral part of the process of making decisions and the documentation of the business cases for investments

Thank You

Questions?