

# Q1 2020

*Interim Results as of March 31, 2020*

*Less risk,  
more memories*



BAVARIAN NORDIC



# Disclaimer

*This presentation includes forward-looking statements that involve risks, uncertainties and other factors, many of which are outside of our control that could cause actual results to differ materially from the results discussed in the forward-looking statements. Forward-looking statements include statements regarding our short-term objectives and opportunities, financial expectations for the full year and financial preparedness as of year end, as well as statements concerning our plans, objectives, goals, future events, performance and/or other information that is not historical information. All such forward-looking statements are expressly qualified by these cautionary statements and any other cautionary statements which may accompany the forward-looking statements. We undertake no obligation to publicly update or revise forward-looking statements to reflect subsequent events or circumstances after the date made, except as required by law.*

# Our strategy

*By 2025, we aspire to be one of the largest pure play vaccine companies improving and saving lives by excelling in R&D innovation, manufacturing and commercialization*

## Develop innovative life-saving vaccines

Expand and advance portfolio of pipeline projects



## A company driven by commercial excellence

Establish a full-scale commercial operation to expand the business and drive profitable growth



## Best in class vaccine manufacturer

Expand manufacturing expertise and capacity

# Q1 2020 highlights

Continued progress on strategic priorities

- ✓ Rights issue of DKK 2.8 billion completed, securing funds for acquisition from GSK
- ✓ New smallpox vaccine order from U.S. government valued up to USD 202 million
- ✓ COVID-19 vaccine agreement with AdaptVac
- ✓ Strong cash position after Q1; maintains full year financial guidance

## Update on strategic priorities



Establish a full-scale commercial operation to expand the business and drive profitable growth

- ✓ Commercial leadership team in place
- ✓ Establishment of full commercial infrastructure progressing in line with plans including preparations to take over distribution of Rabipur/RabAvert and Encepur in first markets during H2 2020



Expand and advance portfolio of pipeline projects

- ✓ Ongoing clinical studies largely unaffected by COVID-19 situation
- ✓ New CMO, Laurence De Moerlooze has taken up position



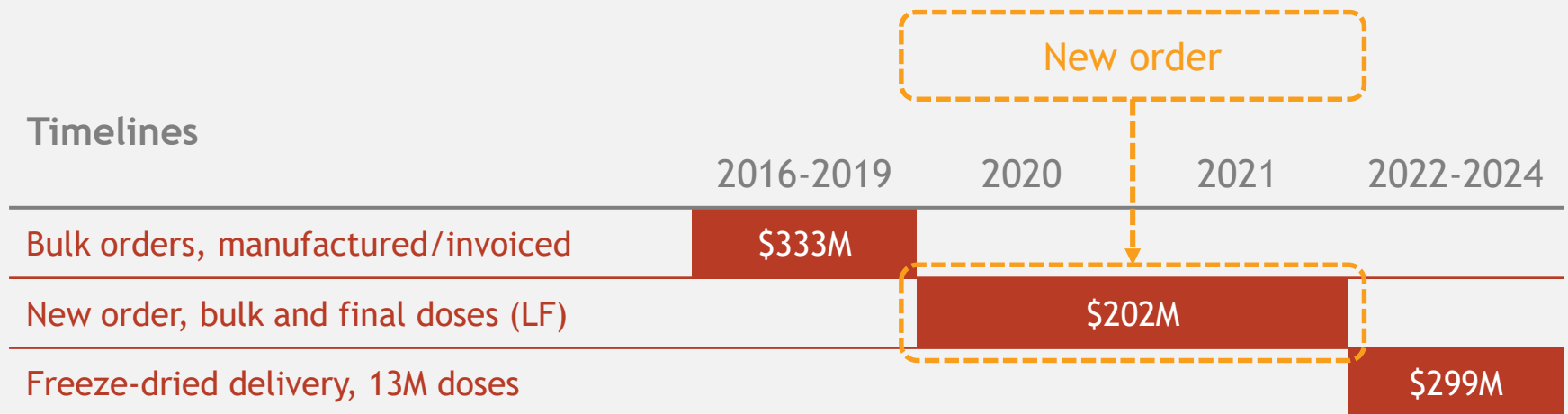
Expand manufacturing expertise and capacity

- ✓ Qualification and validation of fill and finish facility progressing in line with plans
- ✓ Moving forward plans to expand bulk manufacturing
- ✓ Technology transfer for manufacturing of Rabipur/RabAvert and Encepur progressing in line with plans

# Smallpox vaccine contract with USG

## New JYNNEOS order from the U.S. government valued up to USD 202 million

- Placed under existing contract, awarded in 2017, for the manufacturing and supply of JYNNEOS.
- Covers two years of performance and includes the manufacturing of additional bulk vaccine and the supply of up to 1.4 million doses of liquid frozen JYNNEOS.
- USD 106 million secured with majority being revenue recognized in 2020
- Ensures the availability of a licensed, non-replicating smallpox vaccine in the U.S. Strategic National Stockpile (SNS) for potential use by first-line responders.



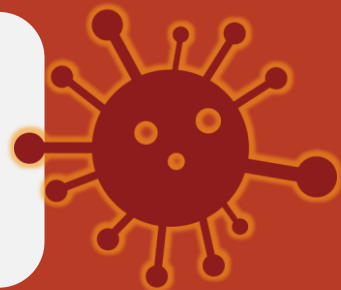
# Advancing COVID-19 vaccine program with AdaptVac

- BN has entered a heads of agreement with **AdaptVac**, a joint venture between ExpreS2ion Biotechnologies and NextGen Vaccines (spin-out from University of Copenhagen), to license their capsid virus like particle (VLP) based SARS-CoV-2 subunit vaccine.
- AdaptVac is part of the international **PREVENT-nCoV** consortium that has received EU funds to rapidly advance the vaccine into the clinic.
- Bavarian Nordic will support work to achieve clinical proof of concept and takes responsibility for clinical development and global commercialization of the vaccine.
- Current plan is to initiate a clinical study later in 2020.
- Final license agreement being negotiated.



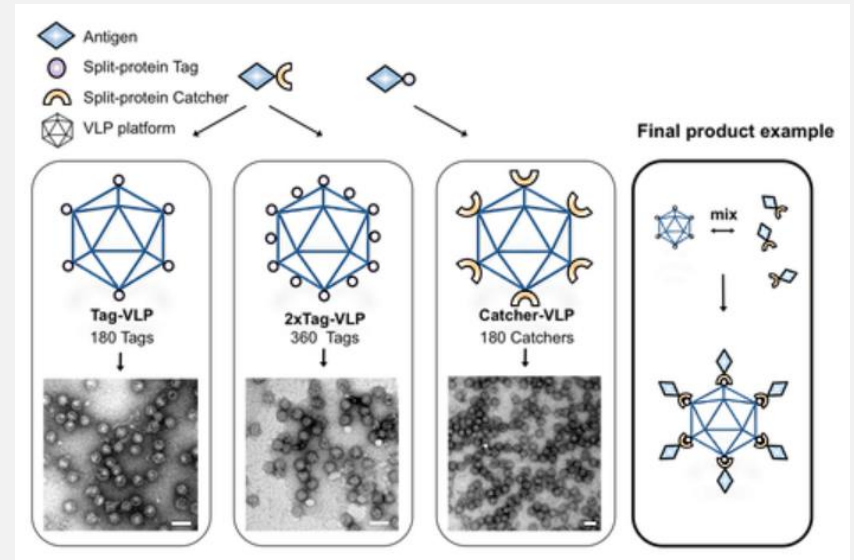
## ***WHO's criteria for a COVID-19 vaccine during outbreak:***

- *Suitable for all ages*
- *Single-shot*
- *Prevention of infection with SARS-CoV-2*
- *Rapid onset of protection (<2 weeks)*

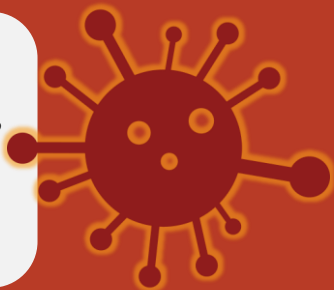


# Virus-like particle (VLP) technology

- Virus-like particles (VLPs) represent a significant advance in the development of subunit vaccines, combining high safety and efficacy.
- Their particulate nature and dense repetitive subunit organisation makes them ideal scaffolds for display of vaccine antigens.



*AdaptVac's **cVLP** technology has the potential to mimic a virus to the body's immune system, giving the optimal stimulus to generate a fast, long-lasting immune response that offers a highly efficacious protection. Importantly, the production of the vaccine technology can be readily scaled to commercial quantities.*



# Pipeline



Phase 1

Phase 2

Phase 3

## **Smallpox**

**MVA-BN freeze-dried**

*Phase 3 lot-consistency study ongoing with anticipated completion in 2021*

## **Respiratory Syncytial Virus (RSV)**

**MVA-BN RSV**

*Phase 3 planned to initiate in 2021. Initial data read-out in 2022*

## **Ebola**

**MVA-BN Filo**

*Janssen has filed MAA in Europe with potential approval in 2020*

## **Equine encephalitis**

**MVA-BN WEV**

*Phase 1 dose finding study ongoing, topline results anticipated in 2020*

## **HPV**

**MVA-BN HPV**

*Licensed to Janssen. Phase 1/2a study ongoing*

## **Chordoma**

**BN-Brachyury**

*Initial ORR results from Phase 2 study in chordoma during 2020*



# MVA-BN WEV - Equine encephalitis an emerging disease

- A new vaccine program targeting three separate strains of the **equine encephalitis virus**
  - Eastern (EEEV)
  - Venezuelan (VEEV)
  - Western (WEEV)
- Multi-year agreement with U.S. Department of Defense of up to USD 36m
- A Phase 1 dose-ranging trial is ongoing (N=45) with data anticipated in 2020
- A successful Phase 1, based on demonstrating a favorable safety and immunogenicity could lead to follow-on funding to support further preclinical, clinical development and manufacturing to support licensure in the U.S.

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## The virus

Transmitted to humans via mosquitos

While EEEV, VEEV and WEEV vary in infection rates and severity of disease, all three pathogens are associated with risks of flu-like symptoms, potential central nervous disorders, and death



## No vaccine

Currently no preventative vaccines available



## U.S. outbreak

In 2019, 38 EEEV cases, including 15 deaths were reported, mostly in north-eastern parts of the U.S., making it the worst outbreak yet

# Brachyury - new frontiers in treating metastatic cancers

## Brachyury



- Tumor-associated antigen that is overexpressed in major solid tumor indications and several ultra-rare orphan cancers
- Expression is highly correlated with metastatic disease, multi-drug resistance and decreased survival rates

- **BN-Brachyury** vaccine candidate utilizes a prime-boost regimen that has been **optimized to include the gene for brachyury** and other molecules known to increase immune activation
- Phase 1 data demonstrated that BN-Brachyury vaccine could **safely target** brachyury and **induce brachyury-specific T-cell** responses
- Ongoing **Phase 2 trial in chordoma** - Trial advanced to Stage 2 after observing a Partial Response in Stage 1. Readout expected in 2020
- Received **orphan drug status** from the FDA
- Potential for **Breakthrough Designation**

## Chordoma

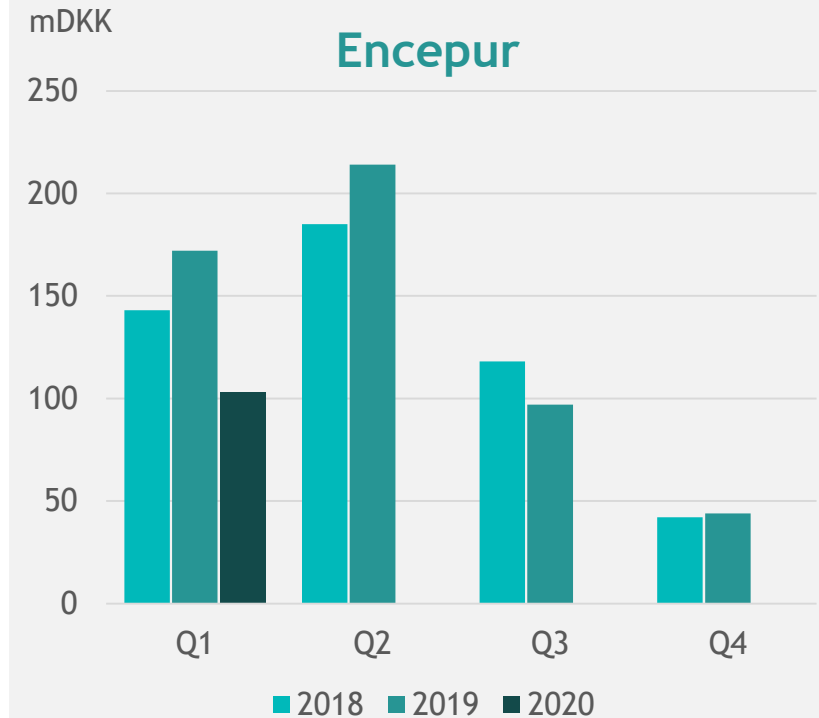
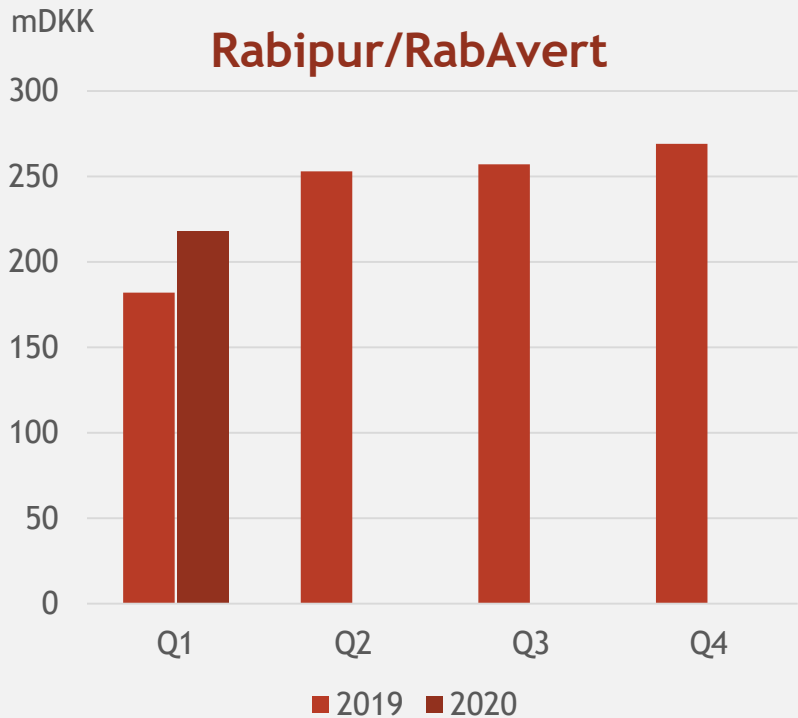
- Rare cancer that occurs in the skull base and spine that universally overexpresses brachyury
- 1,000 new cases in the U.S. and Europe annually<sup>1</sup>
- Historical objective response rate (ORR) with radiation alone <5%

# Q1 sales - key products and markets

		Q1 2020	Q1 2019	Growth
<b>Rabipur/RabAvert</b>	<i>mDKK</i>	<b>218</b>	<b>182</b>	<b>20%</b>
	<ul style="list-style-type: none"> <li>➕ Competitors were out-of-stock in the beginning of the year</li> <li>➕ Launch of Rabipur in Japan during Q3 2019.</li> <li>➕ Post-exposure segment is expected to be more resilient and is not expected to suffer from the COVID-19 situation.</li> <li>➖ Pre-exposure (travel) market is expected to decline until global travel starts resuming back to normal levels.</li> </ul>			
<b>Encepur</b>	<i>mDKK</i>	<b>103</b>	<b>172</b>	<b>-40%</b>
	<ul style="list-style-type: none"> <li>➖ Year-over-year decline was caused mainly by inventory movements in the supply chain and some market decline in key markets.</li> <li>➖ Limited access to physicians in March due to the COVID-19 situation.</li> <li>➕ Market share in key markets were unchanged.</li> <li>➕ Underlying demand for TBE vaccines remains, and a catch-up effect could be seen once restrictions are lifted, if this happens before the end of the tick season</li> </ul>			

Sales figures from Q1 2019 have been provided by GSK and are presented for comparison only.

# Development in Rabipur / Encepur sales by quarter



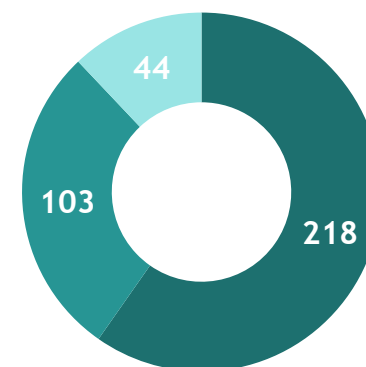
Source: Historical data provided by GSK. For Rabipur/RabAvert, 2018 quarterly figures are not available



# Financial results and outlook

- **Revenue** was DKK 365m
  - Primarily driven by sale of new products
- **Other operating income** of DKK 628m
  - Sale of Priority Review Voucher
- **EBITDA** was DKK 641m
- **Full year guidance maintained**
  - COVID-19 may affect certain markets, however the increased uncertainties are expected to be offset by other parts of the business (i.e. smallpox vaccines)

Revenue Q1 2020  
DKK million



■ Rabipur/RabAvert ■ Encepur ■ Contract work

mDKK	Q1 2020	Q1 2019	FYE 2020
Revenue	365	127	1,900
EBITDA	641	(90)	675
Cash position (securities, cash and cash equivalents)	2,205	1,928	1,350

# Financial position

## Continued strong financial position

- Sale of Priority Review Voucher (DKK 628 million) and net proceeds from recent rights issue (DKK 2,724 million) have considerably strengthened the financial position
- Bridge loan from Citi and Nordea has been repaid

mDKK	Q1 2020	YE 2019
Cash position (securities, cash & equivalents)	2,205	472
Unutilized credit lines	244	244
<b>Total cash preparedness</b>	<b>2,449</b>	<b>716</b>
Mortgage	25	25
EIB loan	372	372
Bridge loan	-	1,373
<b>Total debt</b>	<b>397</b>	<b>1,770</b>

# Key strategic activities and milestones in 2020



## A company driven by commercial excellence

- Assume full sales and marketing responsibility for Rabipur/RabAvert and Encepur from GSK
- Establish a full commercial organization to support Rabipur/RabAvert, Encepur and JYNNEOS for the monkeypox indication
- Take over physical distribution of Rabipur/RabAvert and Encepur in selected markets
- Increase awareness and establish a new market for the monkeypox indication



## Develop innovative life-saving vaccines

- Continue preparations for initiation of the Phase 3 trial of MVA-BN RSV in the elderly in 2021
- Advance the Phase 3 trial of smallpox MVA-BN freeze-dried formulation
- Obtain successful marketing authorization of Ebola vaccine MVA-BN Filo in the EEA (partnered with Janssen)
- Top-line results from MVA-BN WEV (equine encephalitis) Phase 1 study
- Establish proof-of-concept for BN-Brachyury in chordoma
- Explore intra-tumoral/intravenous administration within immunotherapy.



## Best in class vaccine manufacturer

- Complete the qualification and validation of the newly built fill and finish facility
- Commence investment in expansion of vaccine bulk manufacturing
- Commence the manufacturing technology transfer of Rabipur/RabAvert and Encepur



**Q&A**

