# Q1 2017

*INTERIM RESULTS AS OF MARCH 31, 2017*

BAVARIAN NORDIC

# FORWARD-LOOKING STATEMENTS

*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.*

# SAVE THE DATE
# SEPTEMBER 21, 2017

**BAVARIAN NORDIC CAPITAL MARKETS DAY**

LE PARKER MERIDIEN HOTEL

NEW YORK CITY

# HIGHLIGHTS
## FOR THE FIRST QUARTER 2017 AND UP TO DATE

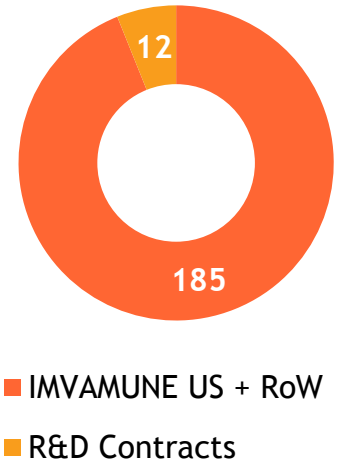
- Phase 2 combination study of PROSTVAC, ipilimumab and nivolumab initiated at the NCI.
- Drug supply agreement with Roche, providing Tecentriq® (atezolizumab) for a planned Phase 2 combination trial of CV301 in bladder cancer.
- Updated Phase 1 data for MVA-BN RSV
    - *Durable immune response lasting at least 6 months; a period spanning a normal RSV season.*
    - *Additional T cell responses show that MVA-BN RSV induced a strong (3-5 fold) booster response to all five RSV proteins included in the vaccine.*
- Henrik Birk appointed Chief Operating Officer

# FINANCIAL SUMMARY AND OUTLOOK

## Q1 financials as expected

- Revenues in Q1 2017 were largely derived from the sale of IMVAMUNE bulk drug substance to U.S. Government
- Remaining ~600mDKK related to IMVAMUNE expected over Q2 and Q3
- FY revenue and EBIT expectations maintained

## Revenue Q1 2017




| | mDKK | | | mUSD | | |
|---|---|---|---|---|---|---|
| | 3m 2017 | 3m 2016 | FY2017E | 3m 2017 | 3m 2016 | FY2017E |
| Revenue | 198 | 23 | 1,300 | 28 | 3 | 187 |
| EBIT | (3) | (153) | 350 | 0 | (22) | 50 |
| Cash preparedness at year-end | 2,448 | 1,365 | 2,400 | 352 | 196 | 345 |

*Cash preparedness includes cash, cash equivalents, investments in securities and the aggregate amount of undrawn credit lines.*
*USD/DKK = 6.96 (as of March 31, 2017)*
*All numbers are approximate.*

# FINANCIAL STATEMENTS

| mDKK | 3m 2017 | 3m 2016 | FY 2016 |
|---|---|---|---|
| Revenue | 198 | 23 | 1,007 |
| Production costs | 50 | 19 | 298 |
| **Gross profit** | **148** | **4** | **709** |
| Research and development costs | 100 | 104 | 463 |
| Distribution and administrative costs | 50 | 52 | 213 |
| **Total operating costs** | **151** | **156** | **676** |
| **Income before interest and taxes (EBIT)** | **(3)** | **(153)** | **33** |
| Financial income/loss | (3) | (16) | 7 |
| **Income before company tax** | **(6)** | **(169)** | **40** |
| Tax | - | (40) | 9 |
| **Net profit for the period** | **(6)** | **(129)** | **31** |
| | | | |
| **Cash preparedness (end of period)** | **2,448** | **1,365** | **2,292** |

*USD/DKK = 6.96*

# BAVARIAN NORDIC'S GOAL

**To develop innovative and safe therapies against cancer and infectious diseases; to improve the health and quality of life for children and adults.**

| *CANCER* | |
|---|---|
| PROSTVAC | *improving survival* |
| HPV | *preventing cancer before it starts* |
| CV301 & Brachyury in combination therapies | *potentially curing cancer* |

| *INFECTIOUS DISEASES* | |
|---|---|
| RSV | *protecting the broader population against diseases with no approved therapies* |
| Smallpox / Ebola | *preparation and protection against global pandemic threats* |

# PIPELINE

| PRODUCT | INDICATION | ONGOING STUDIES | PRECLINICAL | PHASE 1 | PHASE 2 | PHASE 3 | MARKET | COMMERCIAL RIGHTS |
|---|---|---|---|---|---|---|---|---|
| **INFECTIOUS DISEASES** | | | | | | | | |
| IMVAMUNE liquid-frozen [1)] | *Smallpox* | 1 | | | | | | BAVARIAN NORDIC |
| IMVAMUNE freeze-dried | *Smallpox* | - | | | | | | BAVARIAN NORDIC |
| MVA-BN Filo | *Ebola/Marburg* | 10 | | | | | | janssen |
| MVA-BN RSV | *RSV* | 1 | | | | | | BAVARIAN NORDIC |
| MVA-BN HPV | *Chronic HPV Infection* | - | | | | | | janssen |
| **CANCER IMMUNOTHERAPY** | | | | | | | | |
| PROSTVAC mono | *Prostate Cancer* | 1 | | | | | | Bristol-Myers Squibb |
| PROSTVAC mono/combo | *Prostate Cancer* | 10 | | | | | | Bristol-Myers Squibb |
| CV301 + nivolumab | *Lung Cancer (NSCLC)* | 1 | | | | | | BAVARIAN NORDIC |
| MVA-BN Brachyury | *Metastatic Tumors* | - | | | | | | BAVARIAN NORDIC |

1) Approved in the European Union under the trade name IMVANEX® and in Canada under the trade name IMVAMUNE®. Phase 3 registration studies are ongoing in the United States.

# MOVING TOWARDS FINAL DATA FOR PROSTVAC

## ADDITIONAL COMBINATION STUDIES CONTINUES TO EXPAND POTENTIAL

- 4 new Phase 2 studies of PROSTVAC were initiated during 2016 and until today
- Now 11 ongoing trials and additional trials are in the planning
- Data from combination studies are expected from 2017 and onwards

### PROSPECT Phase 3 Trial

A Randomized, Double-blind, Global Phase 3 Efficacy Trial of PROSTVAC in Metastatic Castration-Resistant Prostate Cancer (N=1,297)

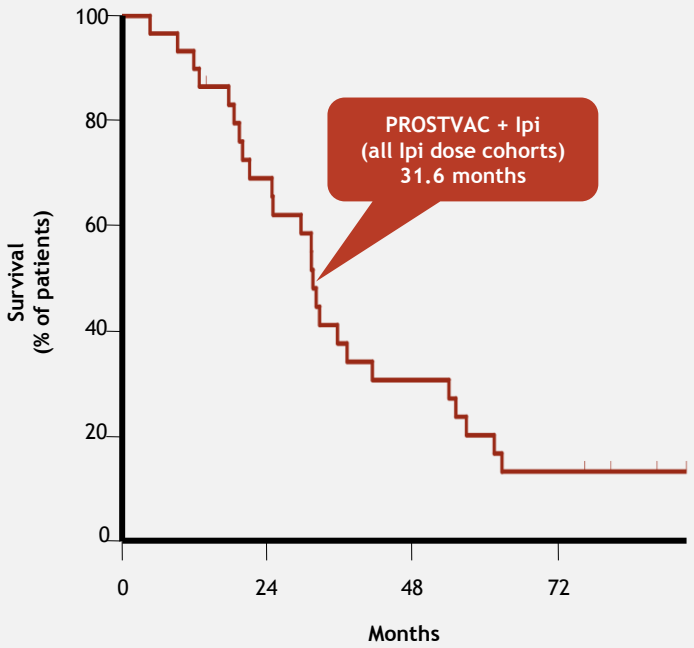
Primary endpoint: Overall survival

| | | | |
|---|---|---|---|
| **Interim Analysis #1** | 214 events | 40% | ✓ |
| **Interim Analysis #2** | 321 events | 60% | ✓ |
| **Interim Analysis #3** | 427 events | 80% | Mid-2017 |
| **Final Analysis** | 534 events | 100% | 2H 2017 |

*Estimated timing of events*

# DEMONSTRATED POTENTIAL AS A COMBINATION THERAPY WITH BMS' IPILIMUMAB

## PROSTVAC + ipilimumab Phase 1 Trial




**30 mCRPC Patients:**

- Predicted survival average: 18.5 months
- 2 Phase 3 studies of Ipilimumab in prostate cancer **did not** show significant OS benefit

Gulley J, NCI. Madan RA, et al. *Lancet Oncol*. 2012;3:501-508.

## Additional Phase 2 Combination Studies

Neoadjuvant Prostate cancer

**Phase 2** (n=75)

- PROSTVAC
- ipilimumab
- PROSTVAC + ipi

**Ongoing**
Sponsor: UCSF
NCT02506114

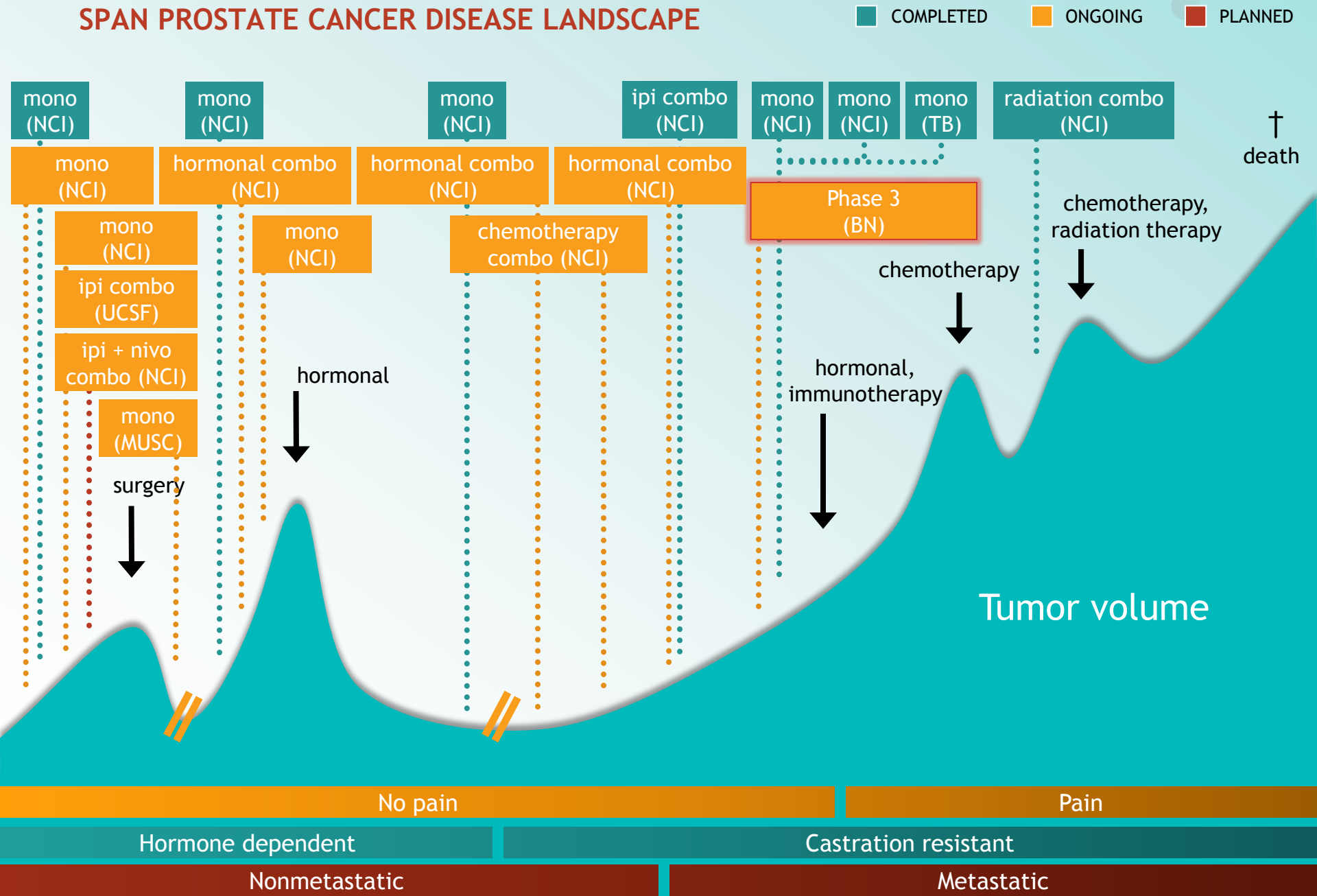
**Phase 2** (n=65)

- PROSTVAC + ipi
- PROSTVAC + nivo
- PROSTVAC + ipi + nivo

**Ongoing**
Sponsor: NCI
NCT02933255

# PROSTVAC STUDIES

## SPAN PROSTATE CANCER DISEASE LANDSCAPE



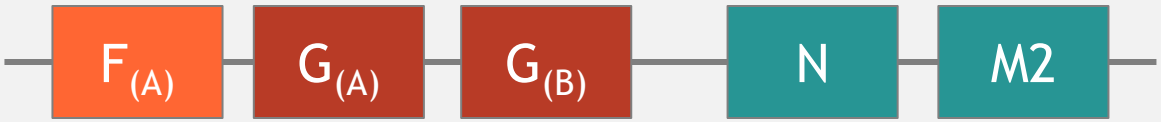
# RSV – WHY ARE WE DIFFERENT?

- RSV represents a high unmet medical need; similar disease burden and death rate in the elderly population as influenza
- Historical vaccine development provided incomplete protection
  - Possibly related to:
    - Lack of T cell production
    - Lack of mucosal protection
    - Poor duration of protection (i.e. not lasting a full season)

- Our platform allows for broad protection against multiple targets

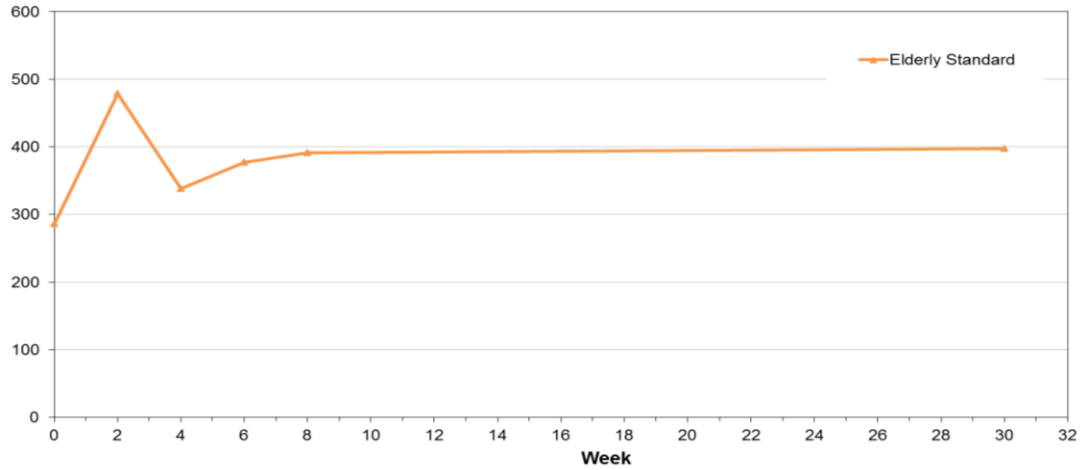
## MVA-BN RSV – a highly differentiated approach

- Encodes two main surface proteins F & G
- Encodes the G surface protein from both RSV subtype A&B – poor cross reactivity between RSV subtypes
- Encodes two highly conserved internal RSV proteins (N & M2) – good inducers of T cell responses

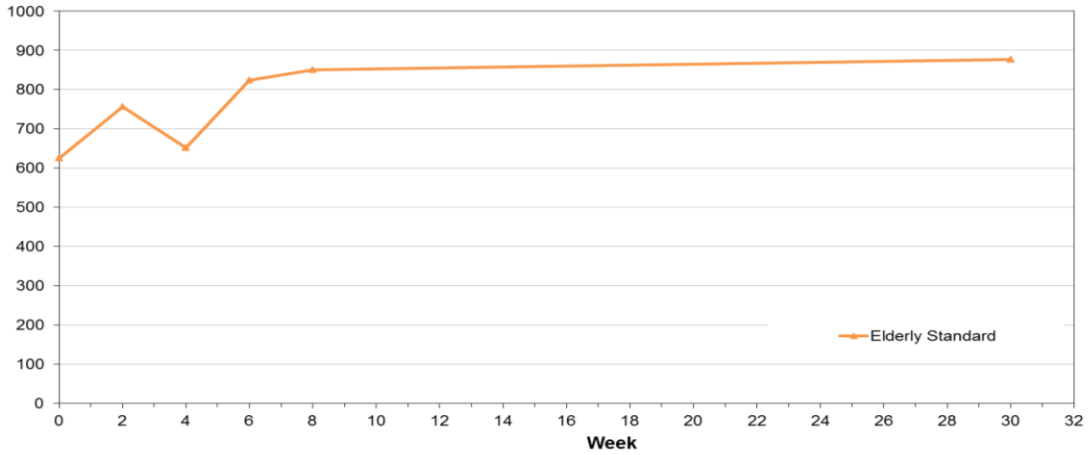


# MVA-BN RSV - PHASE 1 FOLLOW-UP DATA

## RSV antibody response by IgA ELISA (GMT)




## RSV antibody responses by PRNT (A strain)




vaccinations given at week 0 and week 4

# MVA-BN RSV PHASE 2 PROOF OF CONCEPT STUDY

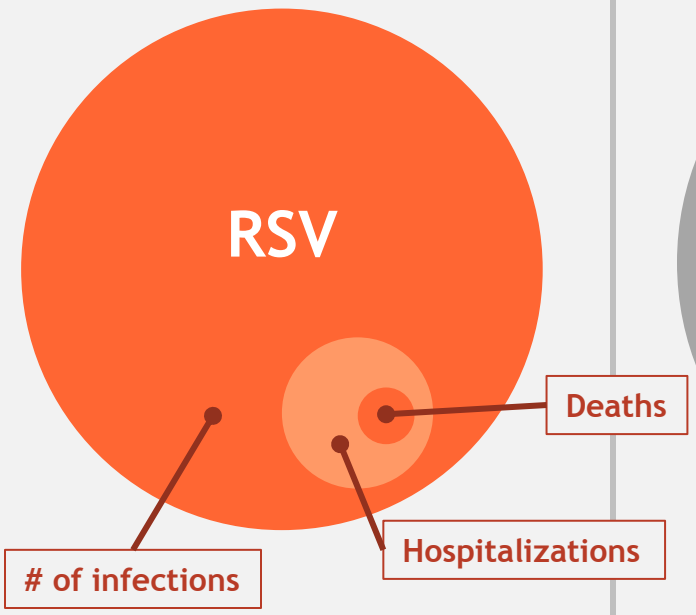
## Randomized, blinded, placebo-controlled study

- 400 healthy subjects (≥55 years old)
- Study expected confirm results seen in phase 1 and help identify optimal dose and schedule
- Optimal group will be carried forward into 2017 RSV season with a booster dose

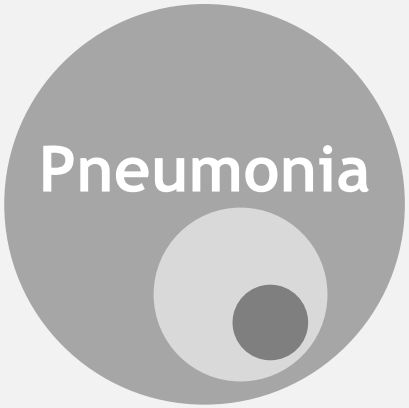
| Groups | N | Vaccine Dose | Schedule (Day) | | Route |
|---|---|---|---|---|---|
| | | | 0 | 28 | |
| 1 | 80 | Low | MVA-BN RSV | Placebo | IM |
| 2 | 80 | Low | MVA-BN RSV | MVA-BN RSV | IM |
| 3 | 80 | High | MVA-BN RSV | Placebo | IM |
| 4 | 80 | High | MVA-BN RSV | MVA-BN RSV | IM |
| 5 | 80 | - | Placebo | Placebo | IM |
| **Total** | **400** | | | | |

# RSV – A LARGE UNMET MEDICAL NEED

## DEATH RATE OF RSV SIMILAR TO THAT OF INFLUENZA








No approved prophylactic vaccine

$5.4B USD global market

~$6B USD global annual sales (Prevnar)

# CV301
## IMMUNOTHERAPY FOR MULTIPLE CANCERS

### Exploring synergies in combination with checkpoint inhibitors

**Non-small cell lung cancer** — BN sponsored

- Ongoing proof-of-concept study of CV301 plus OPDIVO
- Collaboration with BMS to supply OPDIVO at no cost

Bristol-Myers Squibb

**Bladder cancer** — BN sponsored

- Collaboration with Roche to supply TECENTRIQ at no cost for planned Phase 2 study

Roche

**Other indications**

- Bavarian Nordic retains all commercial rights in lung, bladder, colorectal, breast, ovarian, gastric, liver and renal cancer

Exploring combinations in company collaborations or with NCI

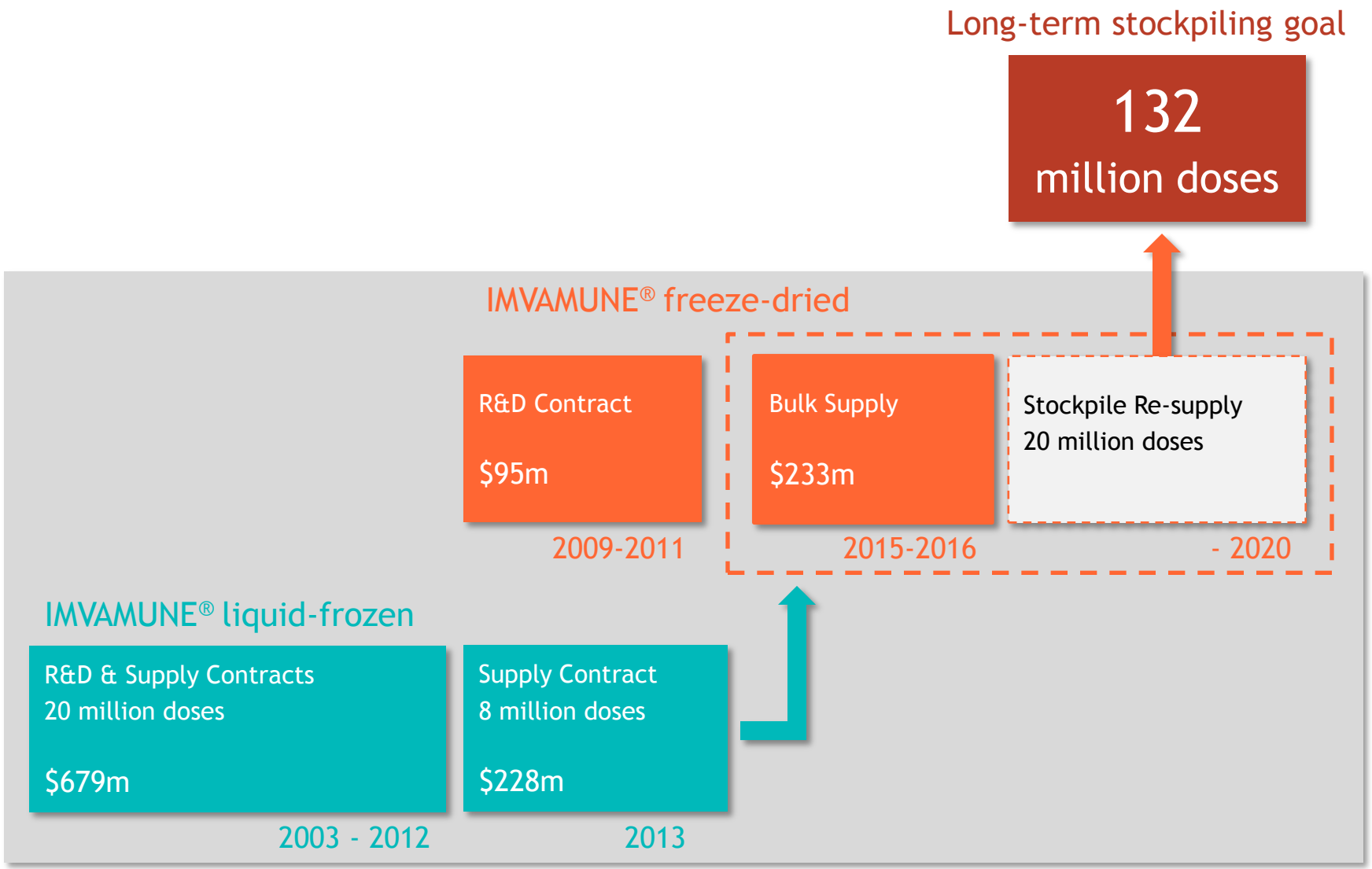
*"Bioterrorism is a much larger risk than a pandemic"*

*"With nuclear weapons, you'd think you would probably stop after killing 100 million.* ***Smallpox won't stop****. Because the population is naïve, and there are no real preparations. That, if it got out and spread, would be a larger number."*

*"It doesn't take much biology expertise nowadays to assemble a smallpox virus. Biology is making it way easier to create these things."*

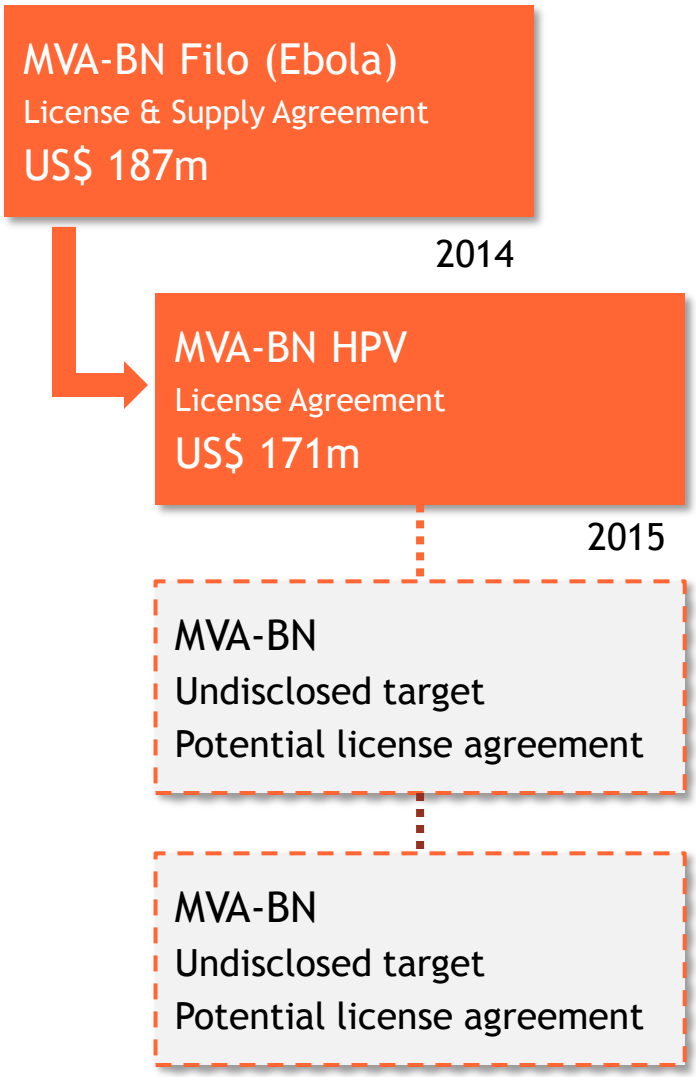
# SUCCESSFUL PARTNERSHIP WITH THE U.S. GOVERNMENT

## MORE THAN $1.2 BILLION IN R&D AND SUPPLY CONTRACTS TO-DATE



# OUR COLLABORATION WITH JANSSEN

- Janssen completed a submission for Emergency Use Assessment and Listing for the Ebola vaccine to the WHO
  - Phase 1, 2 and 3 studies ongoing
- HPV vaccine to start clinical trials in 2017
- Janssen retains option to license two additional disease targets




janssen
PHARMACEUTICAL COMPANIES OF Johnson & Johnson

# ANTICIPATED SELECTED MILESTONES

## IMVAMUNE

- U.S. RFP for freeze-dried IMVAMUNE
- Top-line data for Phase 3 non-inferiority study
- Approval and Priority Review Voucher

## RSV

- MVA-BN RSV Phase 2 dosing study read out
- Select ideal dosing regimen and carry forward into second RSV season
- Establish meeting with FDA to determine appropriate registration pathway

## JANSSEN

- Initiate HPV Phase 1 study in cervical cancer
- Potential expanded collaboration on two additional infectious disease targets
- Data from Ebola prime-boost vaccine regimen
- Ebola vaccine pending approval for emergency use by WHO

## PROSTVAC

- Phase 3 top-line data including interim analyses
- Data from NCI-sponsored Phase 2 trials

## CV301

- Initiate Phase 2 study of CV301 + atezolizumab in bladder cancer
- CV301 + checkpoint inhibitor proof-of-concept studies in additional indications

## BRACHYURY

- MVA-BN Brachyury Phase 2 initiation

# Q&A