Third Quarter 2019

Highlights operational progress and financial results

November 14, 2019

BIONTECH

Forward-looking statements

Various statements in this slide presentation concerning the future expectations of BioNTech, its plans and prospects, including the Company's views with respect to the potential for mRNA therapeutics, its expectations with respect to the timing and results of clinical trials and release of clinical data (both in respect of its proprietary product candidates and of product candidates of its collaborators), the development of commercial capabilities and the transition of BioNTech to a fully integrated biopharmaceutical company, its expectations with respect to interactions with regulatory authorities such as FDA and EMA, including the potential approval of BioNTech's or its collaborators' current or future drug candidates, and expected royalty and milestone payments in connection with BioNTech's collaborations, constitute forward-looking statements. Words such as "expects," "plans," "potential," "target," "continue" and variations of these words or similar expressions are intended to identify forward-looking statements. Such statements are based on the current beliefs and assumptions of the management team of BioNTech and on the information currently available to the management team of BioNTech, and are subject to change. The Company will not necessarily inform you of such changes. These forward looking statements are subject to known and unknown risks, uncertainties, assumptions and other factors that could cause the Company's actual results, performance or achievements to be materially different than any future results, performance or achievements expressed or implied by the forward-looking statements. Actual results may differ materially from those indicated by these forward-looking statements as a result of various important factors, including the Company's ability to discover and develop its novel product candidates, successfully demonstrate the efficacy and safety of its product candidates, the pre-clinical and clinical results for its product candidates, which may not support further development of product candidates; actions of collaborators regarding continued product development and product commercialization; actions of regulatory authorities, which may affect the initiation, timing and progress of clinical trials or the ability of the Company to obtain marketing authorization for its product candidates; the Company's ability to obtain, maintain and protect intellectual property, the Company's ability to enforce its patents against infringers and defend its patent portfolio against challenges from third parties; competition from others using technology similar to the Company's and others developing products for similar uses; the Company's ability to manage operating expenses; the Company's ability to obtain additional funding to support its business activities and establish and maintain its existing and future collaborations and new business initiatives; the Company's dependence on collaborators and other third parties for development, manufacture, marketing, sales and distribution of products; the outcome of litigation, and unexpected expenditures. Any forward-looking statements represent the Company's views only as of today and should not be relied upon as representing its views as of any subsequent date. The Company explicitly disclaims any obligation to update any forward-looking statements. The mRNA vaccines and other product candidates discussed in this slide presentation are investigational products being developed by BioNTech and its collaborators and are not currently approved by the FDA, EMA or any other regulatory authority.

Our speakers

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Co-founder and CMO

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Agenda

#1 Overview of BioNTech

#2 Highlights of Q3 and subsequent

#3 Financials update

#4 Outlook

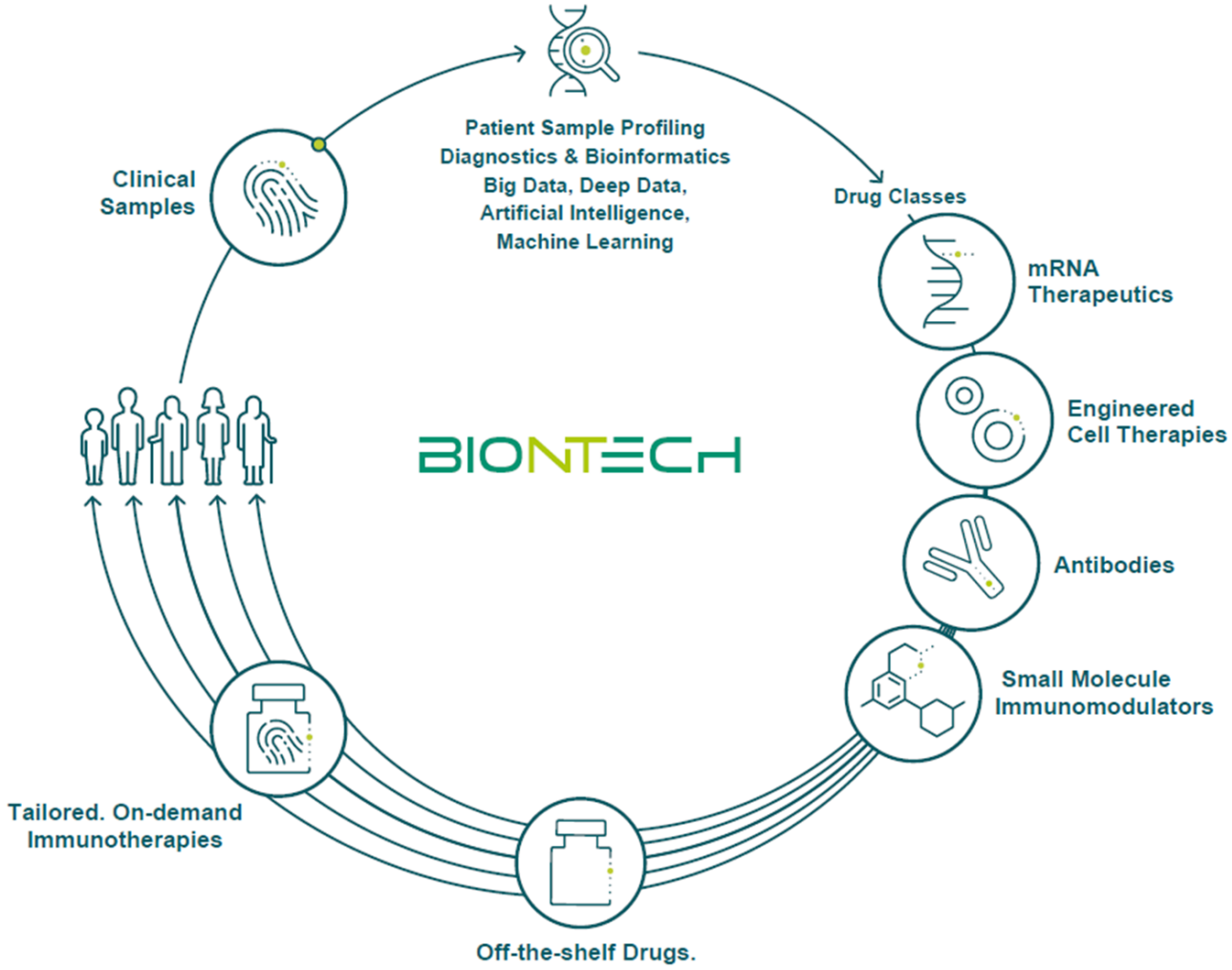
#5 Closing remarks | Q&A

Our strategy to individualize cancer medicine and beyond

Next generation of immunotherapies

1. **Rapidly advance our potential first-in-class product candidates** in oncology toward market approvals.
2. **Leverage our multiple drug classes and the synergies between them** to expand our pipeline.
3. **Build a fully integrated global biotechnology company** to produce and deliver our products.

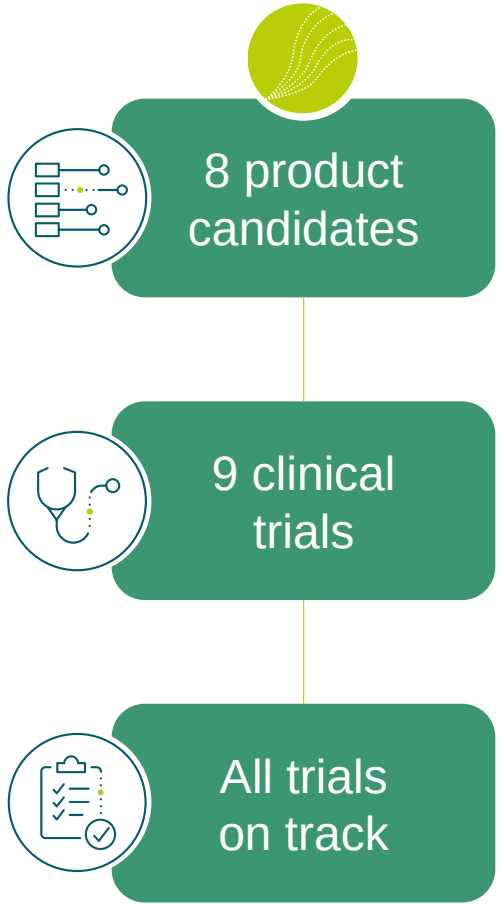
Our unique approach



- Harnessing the full potential of the immune system
- Broadening the universe of patients
- Improving the treatment success rate
- Focusing on curative approaches

Our clinical pipeline includes 8 product candidates in 9 clinical trials

	Platform	Candidate	Indication *(Target)*
mRNA	**FixVac**	BNT111	Advanced Melanoma
		BNT112	Prostate Cancer
		BNT113[1]	HPV+ H&N Cancer
		BNT114	Triple Negative Breast Cancer
	iNeST	RO7198457 (BNT122)	1L Melanoma with CPI
			Multiple ST[2] (basket trial)
	Intratumoral Immunotherapy	SAR441000 (BNT131)	ST *(IL-12sc, IL-15sushi, GM-CSF, IFNα)*
	RiboMabs	BNT141	Multiple ST
		BNT142	Multiple ST *(CD3+CLDN6)*
	RiboCytokines	BNT151	Multiple ST *(Optimized IL-2)*
		BNT152	Multiple Solid Tumors *(IL-7)*
Others	**CAR-T Cells**	BNT211	Multiple ST *(CLDN6)*
	Next-Gen CP[3] Immunomodulators	GEN1046 (BNT311)	Multiple ST *(PD-L1x4-1BB)*
		GEN1042 (BNT312)	Multiple ST *(CD40x4-1BB)*
	Antibodies	BNT321 (MVT-5873)	Pancreatic Cancer *(CA19-9)*
	TLR7 Ligand	BNT411	Multiple ST *(TLR7)*



[1]BNT113 is currently being studied in an investigator-initiated Phase 1 trial; [2]Solid tumors; [3]Checkpoint Inhibitor.

Our pipeline includes updates of several product candidates

	Platform	Candidate	Indication *(Target)*
mRNA	**FixVac**	BNT111	Advanced Melanoma
		BNT112	Prostate Cancer
		BNT113	HPV+ H&N Cancer
		BNT114	Triple Negative Breast Cancer
	iNeST	RO7198457 (BNT122)	1L Melanoma with CPI
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	Antibodies	**BNT321 (MVT-5873)**	Pancreatic Cancer *(CA19-9)*
	TLR7 Ligand	**BNT411**	Multiple ST *(TLR7)*

BNT112

- **Fully-owned cancer vaccine**
- **CTAs for Ph1/2 FIH trial approved in various European countries**

GEN1042 (BNT312)

- **Next generation checkpoint immunomodulator (bispecific)**
- **Collaboration is a 50:50 cost-profit-share with Genmab**
- **First patient dosed in Phase 1/2a**

BNT321 (MVT-5873)

- **Fully-owned asset acquired from MabVax Therapeutics**
- **Targeted cancer antibody against CA19-9 in pancreatic and other GI cancers**
- **IND transfer to BNT achieved July, 2019**

BNT411

- **Fully-owned TLR7 agonist**
- **IND filed on Nov 5, 2019**

[1]Solid tumors

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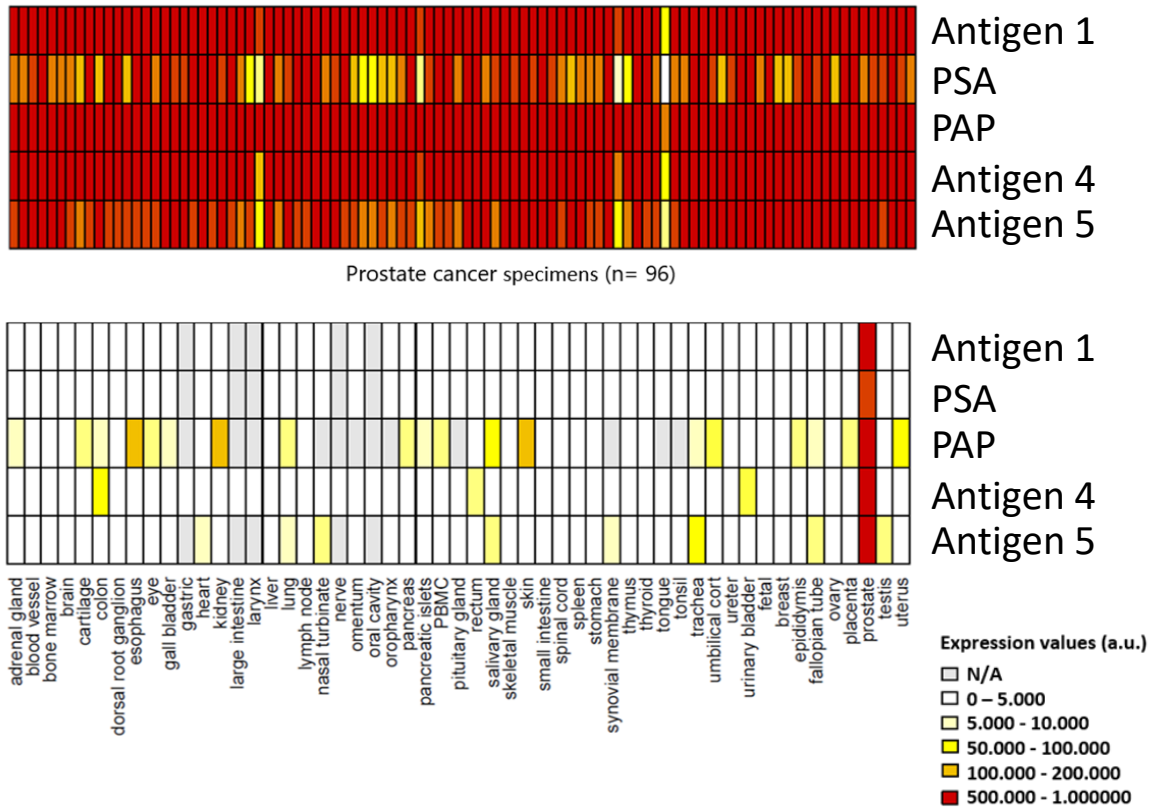
BNT112: FixVac Prostate Cancer



Ph1/2

- Multipronged vaccine: 5 prostate cancer associated antigens (PAP, PSA and 3 undisclosed antigens)
- RNA-LPX vaccine format validated by our FixVac Melanoma program
- Eligible are patients with
  - mCRPC symptomatic patient population after two lines of systemic chemotherapy for treatment with BNT112 alone or in combination with cemiplimab (aPD1, Regeneron)
  - Newly diagnosed high risk localized prostate cancer for treatment with BNT112 in combination with goserelin acetate & cemiplimab (aPD1, Regeneron) followed by surgery

Clinical supply agreement with Regeneron signed in November

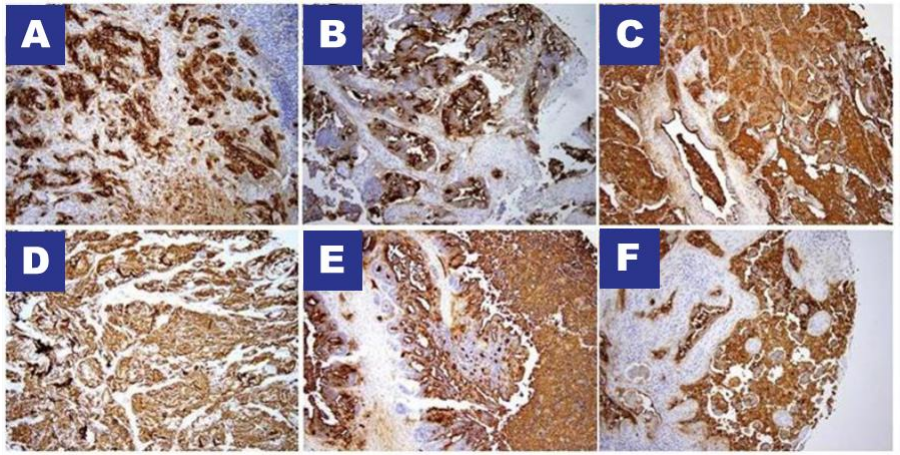
- **Regeneron to supply their PD-1 checkpoint inhibitor Libtayo® (cemiplimab) at no cost to BioNTech**
- Combination with **BNT112** (FixVac Prostate Cancer) in first-in-human phase 1/2 trial in advanced prostate cancer
- Targeted antigens of BNT112 are five prostate cancer specific antigens, including PAP and PSA as well as three internally identified antigens
- BioNTech and Regeneron to mutually agree on the clinical development plan for this combination study in prostate cancer
- BioNTech and Regeneron will each retain full commercial rights to BNT112 and Libtayo, respectively
- BioNTech to be sponsor of the trial: clinical trial application in Europe accepted on Nov 5, 2019
- Libtayo is being jointly developed by Regeneron and Sanofi
- **We expect this single-agent dose escalation part of the Phase 1/2 trial in Q4-2019, as planned**

BNT321: Cancer antibody targeting cancer associated carbohydrate sLe^a

Characteristics

- Clinical stage[1] product (MVT-5873, 5B1) acquired from MabVax Therapeutics Holdings Inc. in 2019
- Fully human IgG1 mAb with subnanomolar affinity, potent cell killing by ADCC &CDC activity
- Targets sialyl Lewis A epitope (sLe^a) epitope present in a range of glyco-proteins collectively known as CA19-9.
- CA19-9 is specifically expressed in pancreatic and various other cancers. Shedded CA19-9 is a prognostic marker in these cancers.
- CA19-9 is functionally associated with carcinogenesis[2].
- Six patients evaluated; four of them met the criteria for partial response and two patients met the criteria for stable disease. BNT321 was generally well tolerated by all six patients.
- This MVT-5873 phase 1 trial is currently paused; we intend to resume the trial as a phase 1/2 trial this year.

sLe^a expression in human cancers



A. Pancreatic ductal adenocarcinoma
B. Colon carcinoma
C. Lung adenocarcinoma
D. Urinary bladder, mucinous adenocarcinoma
E. Colon metastatic to ovary
F. Breast carcinoma, lymph node

[1]Trial currently paused,
[2]Engle et al,. Science 2019: The glycan CA19-9 promotes pancreatitis and pancreatic cancer in mice

AACR 2016, Abstract CT026, Ragupathi_Maffuid

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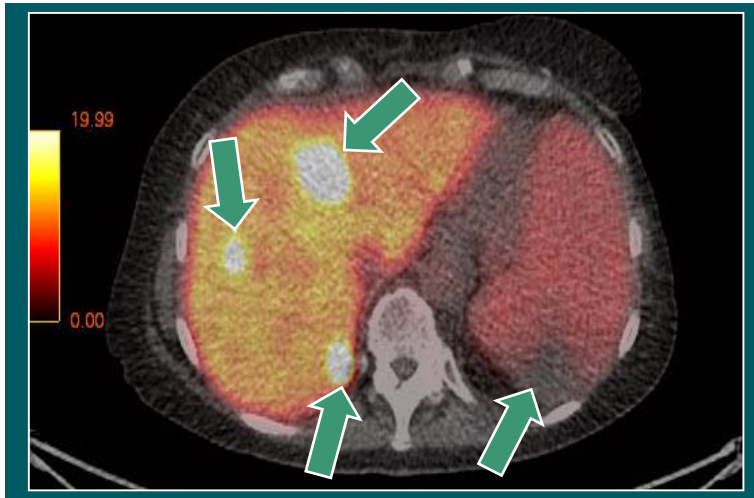
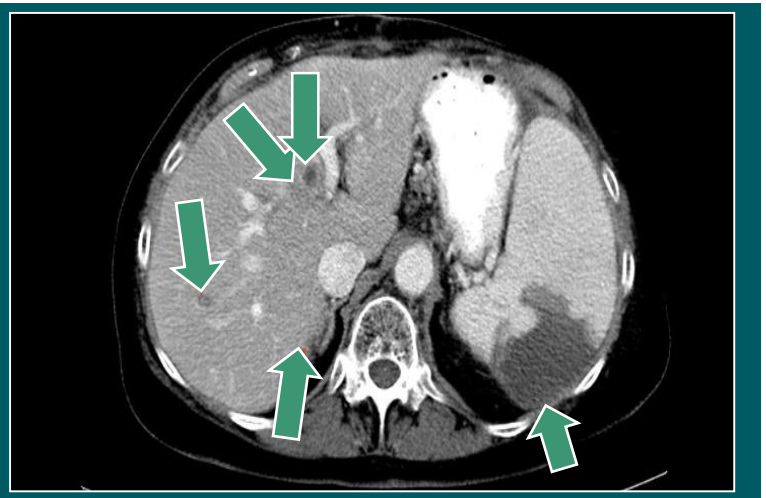
Specificity and high affinity make BNT321 a promising product candidate



PET/CT image after injection of 47 mg BNT321 and 3 mg MVT-2163 (PET conjugated Ab 5B1)



Diagnostic CT

67-year-old female with metastatic pancreatic adenocarcinoma and rising CA 19-9 antigen levels of 2119 U/mL

- The specificity and high affinity of BNT321 to CA19-9-positive cancer cells make it a promising high-precision drug candidate against pancreatic cancer and other CA19-9 positive tumors.
- We will shortly restart BNT321 trials against pancreatic cancer, as planned.

Lohrmann et al, **Clin Cancer Res 2019**: Retooling a Blood-Based Biomarker: Phase I Assessment of the High-Affinity CA19-9 Antibody HuMab-5B1 for Immuno-PET Imaging of Pancreatic Cancer.

Memorial Sloan Kettering Cancer Center

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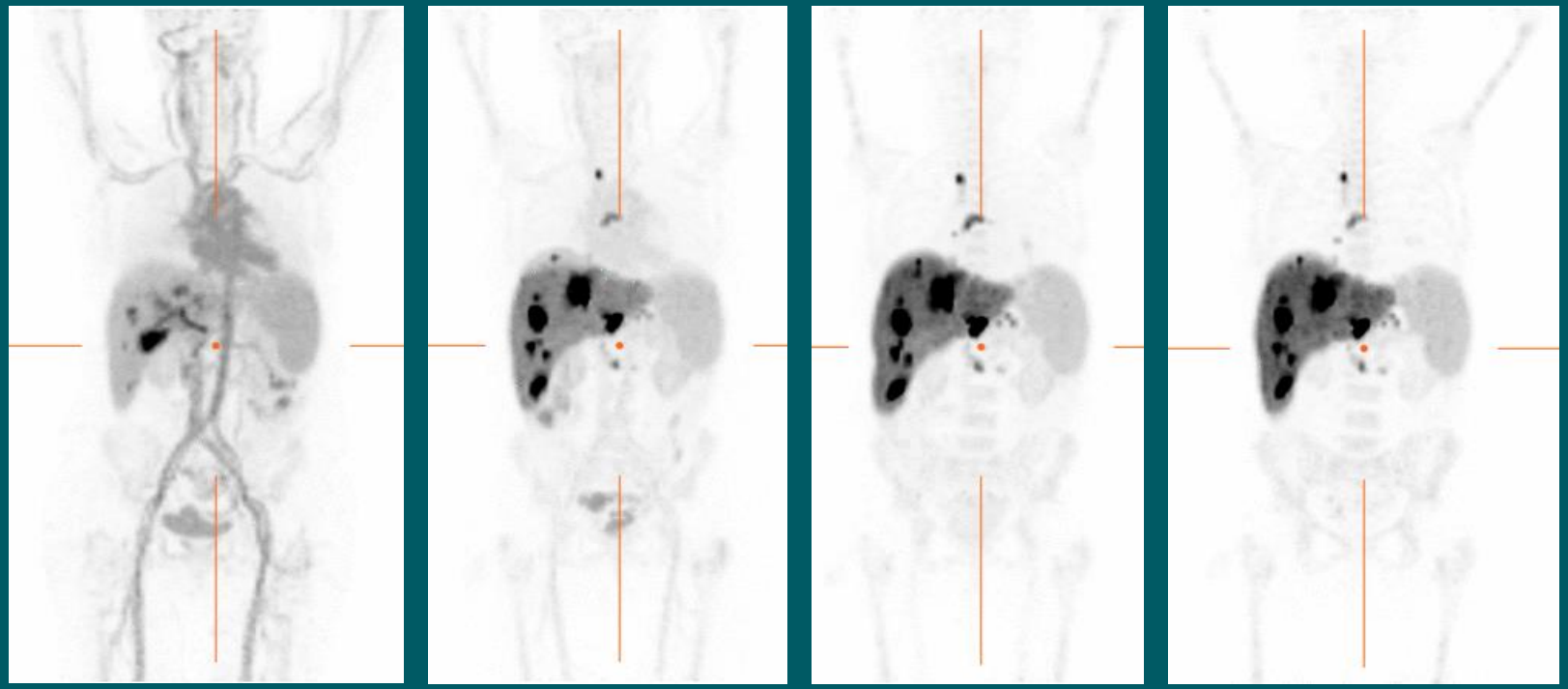
First-in-human Ph1 study also supports theranostic potential

PET/CT imaging study with MVT-2163 (PET conjugated Ab version; ^{89}Zr-DFO-HuMab-5B1)



- Robust accumulation in tumors lesions; tumor uptake increasing over time.
- Validates the target and the antibody and indicates utility of BNT321 also for detection by radio-imaging and for radiotherapy.

Lohrmann et al., Clin Cancer Res, 2019 in press

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BNT411: TLR7 agonist has entered the clinical stage

- Intravenously administered small molecule TLR7 (toll-like receptor 7) agonist
- Engineered for high potency and high selectivity for TLR7 receptor at the therapeutically active dose range
- Activates both adaptive and innate immune system
- Type 1 interferon-dominated release of cytokines and chemokines and potent stimulation of antigen-specific CD8+ T cells, B cells and innate immune cells such as NK cells and macrophages
- To be used in combination with chemotherapy and checkpoint inhibitors. Qualifies for various solid tumor indications and small cell lung cancer
- **IND was filed** on November 5, 2019
- We expect to initiate a Phase 1/2a clinical trial as a mono and combination therapy in solid tumors in H1/2020

Planned study design for FIH trial:

Phase 1/2a, first-in-human, open-label, dose-escalation trial with expansion cohorts to evaluate safety, pharmacokinetics, pharmacodynamics, and preliminary efficacy of BNT411 as a monotherapy in patients with solid tumors and in combination with atezolizumab, carboplatin and etoposide in patients with chemotherapy-naïve extensive-stage small cell lung cancer (ES-SCLC)

H1 2020

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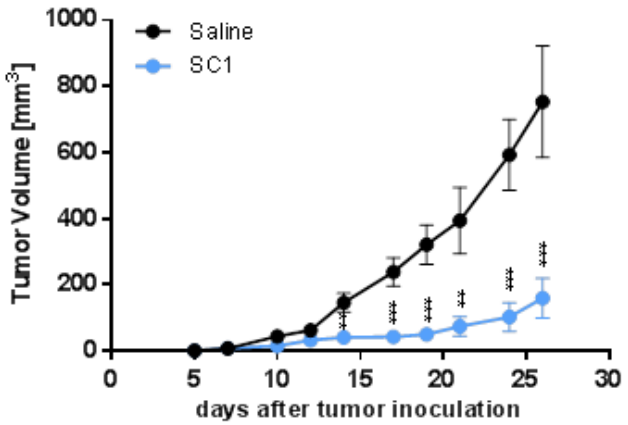
BNT411: TLR7 agonist pre-clinical data supporting the IND

1



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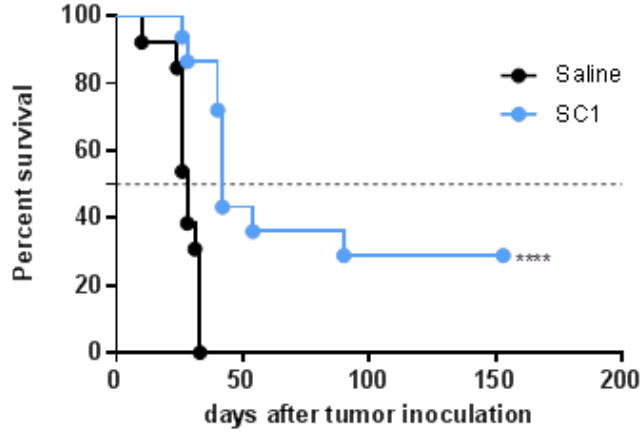

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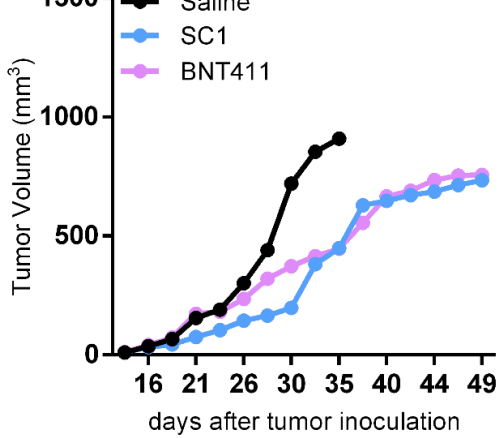

Syngeneic subcutaneous colorectal cancer mouse model

Characteristics

- Activity of BioNTech's TLR7 agonists shown in various mouse tumor models
- Activity on primary tumor growth and metastasis
- Activates tumor antigen specific T-cells as well as NK cells

1 TLR7 agonist (SC1), structurally very similar prototype of BNT411, causes strong tumor growth retardation in s.c. CT-26 model*

2 Treatment with TLR7 agonist (SC1) results in complete tumor clearance in 4 of 12 animals

3 Pharmacodynamic results from mouse tumor models performed with SC1 support BNT411 IND registration

*Vascotto, Oncoimmunology 2019: Intravenous delivery of the toll-like receptor 7 agonist SC1 confers tumor control by inducing a CD8+ T cell response

Third Quarter 2019 Financial Results (unaudited) – Cash Balance

Total Business

In EURm	September 30, 2019	December 31, 2018
Cash and cash equivalents	463	411
Net proceeds from IPO incl. overallotment	135[1]	-
***Pro forma* cash and cash equivalents**	**598**	**411**

[1] Net proceeds received in October / November 2019 (mentioned as subsequent event in Q3 Financial report)

Third Quarter 2019 Financial Results (unaudited) – Profit and Loss

Total Business[1] In EURm	Three months ended September 30,		Nine months ended September 30,	
	2019	**2018**	**2019**	**2018**
Collaboration revenue	22.2	16.2	64.3	45.5
Revenue from other sales transactions	6.4	4.2	16.3	18.3
Total Revenue	**28.7**	**20.4**	**80.6**	**63.8**
Cost of sales	(4.2)	(2.8)	(12.9)	(9.2)
Gross profit	**24.4**	**17.6**	**67.7**	**54.6**
Research and development expenses	(50.4)	(32.8)	(161.0)	(91.2)
Sales and marketing expenses	(0.7)	(0.8)	(1.9)	(2.0)
General and administrative expenses	(10.6)	(6.6)	(34.5)	(16.2)
Other operating / financial income less expenses	7.1	(0.4)	8.8	8.7
Income taxes	0	(0.6)	0	(0.6)
Loss for the period	**(30.1)**	**(23.5)**	**(120.9)**	**(46.8)**

[1] We have made rounding adjustments; accordingly, numerical figures shown as totals may not be exact aggregations of the figures that preceded them

Our expected trial news flow

	Platform	Candidate	Indication *(Target)*	2H-2019	1H-2020	2H-2020	2021-2022[3]
mRNA	FixVac	**BNT111**	Advanced Melanoma		Report Phase 1 Start Phase 2	Start Phase 3	Phase 2/3
		BNT112	Prostate Cancer	Start Phase 1/2			Phase 1/2
		BNT113	HPV+ H&N Cancer			Start Phase 2	
		BNT114	Triple Negative Breast Cancer		Data Update Phase 1		
	iNeST	RO7198457 (BNT122)	1L Melanoma with CPI			Top line Phase 2[1]	Phase 2
			Multiple ST (basket trial)		Data update Phase 1/2		
	Intratumoral Immunotherapy	SAR441000 (BNT131)	Solid tumors *(IL-12sc, IL-15sushi, GM-CSF, IFNα)*			Report Phase 1/2[2]	
	RiboMabs	BNT141	Multiple ST			Start Phase 1	
		BNT142	Multiple ST *(CD3+CLDN6)*			Start Phase 1	
	RiboCytokines	**BNT151**	Multiple ST *(Optimized IL-2)*		Start Phase 1		Phase 1
		BNT152	Multiple Solid Tumors *(IL-7)*			Start Phase 1	
Others	**CAR-T Cells**	**BNT211**	Multiple ST *(CLDN6)*		Start Phase 1/2		Phase 1/2
	Next-Gen CP Immunomodulators	GEN1046 (BNT311)	Multiple ST *(PD-L1x4-1BB)*				Report Phase 1/2
		GEN1042 (BNT312)	Multiple ST *(CD40x4-1BB)*				
	Antibodies	BNT321 (MVT-5873)	Pancreatic Cancer *(CA19-9)*	Resume Phase 1/2			
	TLR7 Ligand	**BNT411**	Multiple ST *(TLR7)*		Start Phase 1		Phase 1/2

Legend: Expected begin of trial; Expected data readout / update

[1]We expect this topline data update to include an update on the ongoing study, including patient enrollment numbers, with full efficacy and safety data for an interim update expected in the second half of 2021; [2]As the trial is sponsored and conducted by Sanofi, the timing of data updates is not under our control, and is subject to change by Sanofi. [3]Our expectations for timing of milestones beyond 2020 are premised on and subject to the achievement of earlier milestones on their expected timelines.

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