

Business Updates

First Quarter 2021 Financial Results

May 6, 2021

Forward-looking statements and Disclaimer

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, including statements regarding: the Company's development of the Moderna COVID-19 Vaccine (mRNA-1273); the number of doses of the Moderna COVID-19 Vaccine that the Company anticipates being able to manufacture in 2021 and 2022 and on a quarterly basis, and investments to facilitate that manufacturing; anticipated doses to be delivered under advance purchase agreement in 2021 and 2022 and the associated dollar amounts to be received, which should not be construed as expected 2021 or 2022 revenue; the need for boosters against SARS-CoV-2 and the benefits of multi-valent vaccines; the Company's efforts to continue developing vaccines against COVID-19, including efforts to develop vaccines against variant strains of SARS-CoV-2 and for booster doses, and the anticipated efficacy of those vaccines; the Company's plans to submit for a Biologics License Application for mRNA-1273; the Company's plans to share additional data regarding its COVE Study of the Moderna COVID-19 Vaccine and the conduct of ongoing and future clinical trials; the development of additional COVID-19 vaccine candidates that may be refrigerator stable; the conditions under which mRNA-1273 or future vaccine candidates can be shipped and stored; the efficacy of mRNA vaccines and their potential for regulatory approval or authorization; the ability of the Moderna COVID-19 Vaccine to provide protection against COVID-19 over time; the Company's investments in increased research and development for infectious diseases and other therapeutic areas; the potential efficacy of vaccines against RSV and CMV and future clinical trials for those vaccines; the status of developments for programs in the Company's pipeline, including with respect to the timing, enrollment and potential results of clinical trials; the Company's corporate social responsibility efforts; future growth prospects for the Company; the Company's commercial rights to its development candidates; future research and development expenses; future investments in automation, artificial intelligence and digital; future sales, general and administrative expenses, and capital expenditures, as well as other expenses; orders and demand for the Company's Moderna COVID-19 Vaccine, both inside and outside the U.S.; the anticipated cost of sales associated with the Moderna COVID-19 Vaccine; and the Company's future tax rate. In some cases, forward-looking statements can be identified by terminology such as "will," "may," "should," "could," "expects," "intends," "plans," "aims," "anticipates," "believes," "estimates," "predicts," "potential," "continue," or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words. The forward-looking statements in this presentation are neither promises nor guarantees, and you should not place undue reliance on these forward-looking statements because they involve known and unknown risks, uncertainties, and other factors, many of which are beyond Moderna's control and which could cause actual results to differ materially from those expressed or implied by these forward-looking statements. These risks, uncertainties, and other factors include, among others: the fact that there has never been a commercial product utilizing mRNA technology approved for use; the fact that the rapid response technology in use by Moderna is still being developed and implemented; the safety, tolerability and efficacy profile of the Moderna COVID-19 Vaccine observed to date may change adversely in ongoing analyses of trial data or subsequent to commercialization; the Moderna COVID-19 Vaccine may prove less effective against variants of the SARS-CoV-2 virus, or the Company may be unsuccessful in developing future versions of its vaccine against these variants; despite having ongoing interactions with the FDA or other regulatory agencies, the FDA or such other regulatory agencies may not agree with the Company's regulatory approval strategies, components of our filings, such as clinical trial designs, conduct and methodologies, or the sufficiency of data submitted; Moderna may encounter delays in meeting manufacturing or supply timelines or disruptions in its distribution plans for the Moderna COVID-19 Vaccine; whether and when any biologics license applications and/or additional emergency use authorization applications may be filed in various jurisdictions and ultimately approved by regulatory authorities; potential adverse impacts due to the global COVID-19 pandemic such as delays in regulatory review, manufacturing and clinical trials, supply chain interruptions, adverse effects on healthcare systems and disruption of the global economy; and those other risks and uncertainties described under the heading "Risk Factors" in Moderna's most recent Annual Report on Form 10-K filed with the U.S. Securities and Exchange Commission (SEC) and in subsequent filings made by Moderna with the SEC, which are available on the SEC's website at www.sec.gov. Except as required by law, Moderna disclaims any intention or responsibility for updating or revising any forward-looking statements contained in this presentation in the event of new information, future developments or otherwise. These forward-looking statements are based on Moderna's current expectations and speak only as of the date hereof.

Moderna COVID-19 Vaccine: Authorized Use & Important Safety Information

Authorized Use in the United States:

The Moderna COVID-19 Vaccine has not been approved or licensed by the US Food and Drug Administration (FDA), but has been authorized for emergency use by FDA, under an Emergency Use Authorization (EUA), to prevent Coronavirus Disease 2019 (COVID-19) for use in individuals 18 years of age and older. There is no FDA-approved vaccine to prevent COVID-19.

The EUA for the Moderna COVID-19 Vaccine is in effect for the duration of the COVID-19 EUA declaration justifying emergency use of the product, unless the declaration is terminated or the authorization is revoked sooner.

Important Safety Information:

- Do not administer the Moderna COVID-19 Vaccine to individuals with a known history of severe allergic reaction (e.g., anaphylaxis) to any component of the Moderna COVID-19 Vaccine.
- Appropriate medical treatment to manage immediate allergic reactions must be immediately available in the event an acute anaphylactic reaction occurs following administration of the Moderna COVID-19 Vaccine. Monitor Moderna COVID-19 Vaccine recipients for the occurrence of immediate adverse reactions according to the Centers for Disease Control and Prevention guidelines (<https://www.cdc.gov/vaccines/covid-19/>).
- Immunocompromised persons, including individuals receiving immunosuppressive therapy, may have a diminished response to the Moderna COVID-19 Vaccine.
- The Moderna COVID-19 Vaccine may not protect all vaccine recipients.
- Adverse reactions reported in a clinical trial following administration of the Moderna COVID-19 Vaccine include pain at the injection site, fatigue, headache, myalgia, arthralgia, chills, nausea/vomiting, axillary swelling/tenderness, fever, swelling at the injection site, and erythema at the injection site. Additional adverse reactions, some of which may be serious, may become apparent with more widespread use of the Moderna COVID-19 Vaccine. Severe allergic reactions, including anaphylaxis, have been reported following administration of the Moderna COVID-19 Vaccine during mass vaccination outside of clinical trials.
- Available data on Moderna COVID-19 Vaccine administered to pregnant women are insufficient to inform vaccine-associated risks in pregnancy. Data are not available to assess the effects of Moderna COVID-19 Vaccine on the breastfed infant or on milk production/excretion.
- There are no data available on the interchangeability of the Moderna COVID-19 Vaccine with other COVID-19 vaccines to complete the vaccination series. Individuals who have received one dose of Moderna COVID-19 Vaccine should receive a second dose of Moderna COVID-19 Vaccine to complete the vaccination series.
- Additional adverse reactions, some of which may be serious, may become apparent with more widespread use of the Moderna COVID-19 Vaccine.
- Vaccination providers must complete and submit reports to VAERS online at <https://vaers.hhs.gov/reportevent.html>. For further assistance with reporting to VAERS, call 1-800-822-7967. The reports should include the words " Moderna COVID- 19 Vaccine EUA " in the description section of the report.

1Q21 earnings call agenda

Business Review

Stéphane Bancel
Chief Executive Officer

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Chief Commercial Officer

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Chief Financial Officer

Clinical Program Review

Stephen Hoge, M.D.
President

Conclusion/Q&A

Stéphane Bancel
Chief Executive Officer

Moderna's COVID-19 vaccine is protecting people in 37 countries already



102 million

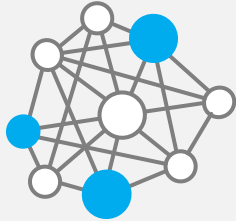
doses of Moderna
COVID-19 vaccine
shipped in 1Q 2021



First quarter 2021 highlights

- **Q1 financials summary**
 - Revenue: \$1.9B (\$1.7B of COVID-19 vaccine sales)
 - Net income: \$1.2B - First GAAP profitable quarter in company's history
 - Cash and investments: \$8.2B
- **2021 vaccine supply:** Increased 2021 supply forecast to between 800 million and 1 billion doses; 2021 Advance Purchase Agreements (APAs) increased to \$19.2B
- **Update on TeenCOVE Study:** Initial analysis of the Phase 2/3 TeenCOVE study of mRNA-1273 showed vaccine efficacy against COVID-19 of 96%; mRNA-1273 was generally well tolerated with no serious safety concerns identified to date
- **Plan to file rolling BLA this month to the FDA**
- **First patient dosed** in rare genetic diseases (Propionic Acidemia; mRNA-3927)
- **Increased investments across the company** – including infectious diseases vaccines, therapeutic medicines and in digital infrastructure:
 - R&D operating expenses in 1Q21 are **almost 4x** R&D operating expenses in 1Q20
 - Digital operating expenses 2021 **forecast almost 3x** compared to 2020

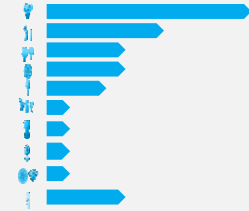
Additional manufacturing investments to respond to global need for mRNA COVID-19 vaccines in 2022 and beyond



Science



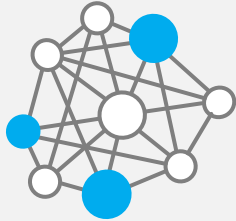
Market



Pipeline

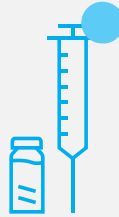
- Variants of concern continue to emerge
- Epidemiologists expect a surge in cases in the southern hemisphere during April 2021-October 2021
- Expect booster shots will be needed
- We believe that multi-valent vaccines will provide the best booster strategy

Additional manufacturing investments to respond to global need for mRNA COVID-19 vaccines in 2022 and beyond



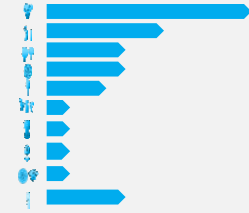
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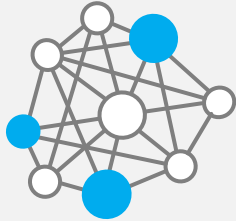
Market

- We believe mRNA vaccines are best-in-class
- Through numerous discussions we are having, we are seeing increased focus from governments around the world on mRNA vaccines for 2022 and 2023



Pipeline

Additional manufacturing investments to respond to global need for mRNA COVID-19 vaccines in 2022 and beyond



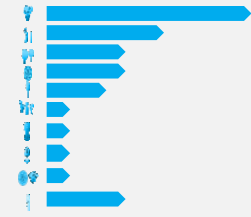
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Market

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Pipeline

- COVID-19 annual booster vaccines late 2021, 2022, 2023...
- Flu vaccine annual booster 2023+
- RSV vaccine
- CMV vaccine
- Therapeutics pipeline

Additional manufacturing investments to respond to global need for mRNA COVID-19 vaccines in 2022 and beyond

2021 Supply

- Raised 2021 manufacturing supply forecast to between **800 million to 1 billion doses**
- Aiming to produce 1 billion doses

2022 Supply

- Investments allow for a **doubling of drug substance production capacity** and an increase in formulation, fill and finish capacity in Europe
- **An increase of 50% in drug substance production supply** at Moderna's facilities in the U.S.
- **Global 2022 capacity increased to up to 3 billion doses for our COVID-19 vaccine** (depending upon the dosage mix)

Increased
Investments



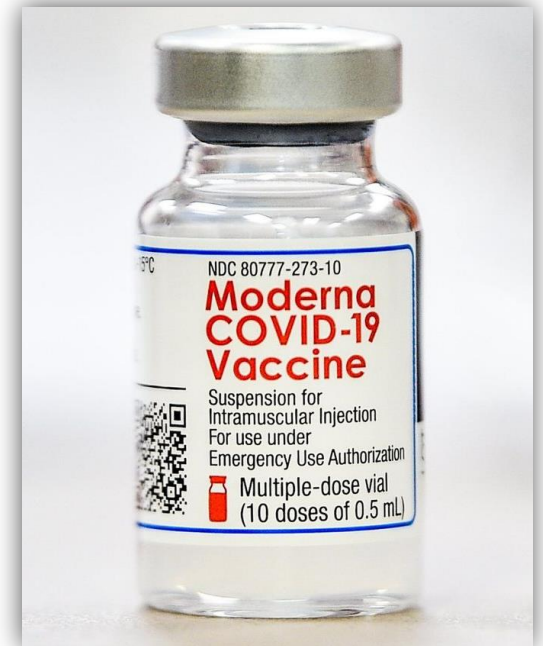
Manufacturing
facilities



Additional lines and
partnerships in Europe
and Switzerland

Best-in-class vaccine storage and distribution requirements among authorized mRNA vaccines

- Shipping is in standard freezers (-20°C) and 100 doses in carton to pallet(s) (237,600 doses/pallet)
- Storage is up to 6 months in a standard freezer and 4 weeks at refrigerated temperatures (2-8°C)
- Only authorized mRNA vaccine that does not require on-site dilution



Ongoing development data related to the current formulation could support a 3-month refrigerated (2-8°C) shelf life for the vaccine

We are proud of our progress in developing therapies for rare diseases and other therapeutic indications



Systemic Intracellular
Therapeutics

First patient dosed in Propionic
Acidemia (mRNA-3927) Phase
1/2 Paramount Study




A diagnosis of **propionic acidemia** isn't all that's shaping life these days.

**We have now
entered the clinic
in four indications**

- Infectious diseases
- Oncology
- Cardiovascular
- Rare diseases

Moderna as of May 2021

Pipeline	Commercial COVID-19 vaccine	Phase 3 preparation CMV vaccine	Phase 2 PCV, OX40L, VEGF	13 positive Phase 1 readouts 9 ID vaccine programs PCV, OX40L, VEGF, anti-Chikungunya antibody (repeat dose)	
Programs in development	Infectious Disease Vaccines 9 Vaccines for major unmet needs <ul style="list-style-type: none">• COVID-19 launched• CMV Positive Phase 2, Phase 3 preparation• hMPV/PIV3 Phase 1b age de-escalation study ongoing• RSV, Zika in Phase 1• Flu, EBV, HIV and Nipah in preclinical			mRNA Therapeutics 13 Medicines across 4 therapeutic areas <ul style="list-style-type: none">• 5 Immuno-Oncology: PCV, OX40L in Ph 2; Triplet, IL-12, KRAS in Ph 1• 4 Rare Diseases: PA in Ph 1; MMA, PKU, GSD1a in preclinical• 2 Cardiovascular Diseases: VEGF in Phase 2; Relaxin in preclinical• 2 Autoimmune Diseases: IL-2 and PD-L1 in preclinical	
Foundations	>1,500 Employees ¹	6th Consecutive year top employer by Science 	800 million to 1 billion doses to be produced in 2021	8 commercial subsidiaries across North America & Europe Creation of Moderna Japan KK	\$8.2B of cash and investments (unaudited) ¹

1. As of March 31, 2021; Cash and investments denotes cash, cash equivalents and investments

1Q21 earnings call agenda

Business Review

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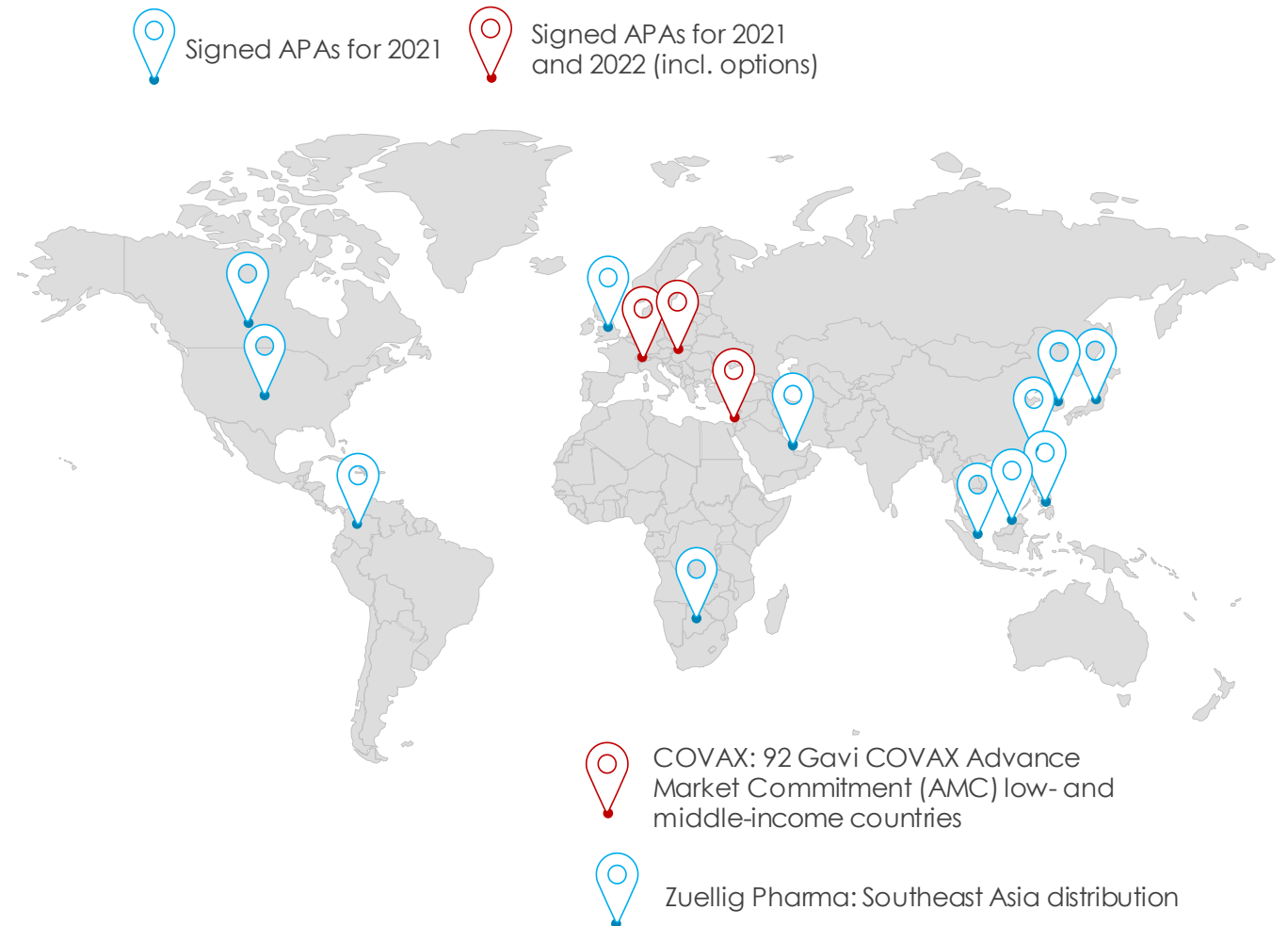
Our commitment to provide access to our COVID-19 vaccine continues with our recently signed agreements for 2022 and beyond

Recently signed deals for 2021, 2022 and beyond

- **COVAX** (34 million doses in 2021 with option for up to additional 466 million doses in 2022)
- **Switzerland** (13.5 million doses and 7 million doses in 2022 and options for additional 7 million in 22/23)
- **Israel** (5 million doses in 2021 and with an option for 17 million in 2022)
- Brunei
- Botswana
- Zuellig Pharma

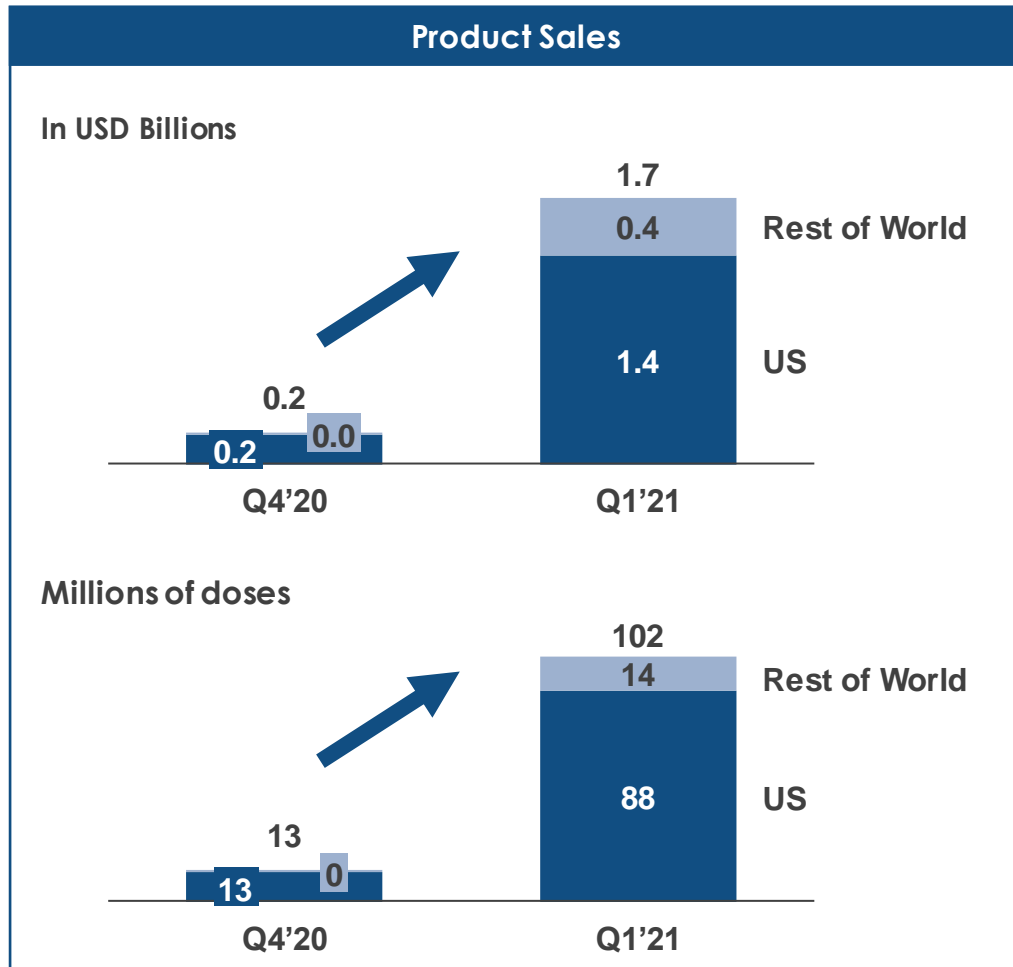
Previously announced deals

- United States (300 million doses with option for additional 200 million doses)
- European Union (310 million doses with option for additional 150 million doses in 2022)
- Japan (50 million doses)
- Canada (44 million doses)
- South Korea (40 million doses)
- Philippines, United Kingdom, Colombia, Taiwan, Qatar, Singapore



Q1'21 Commercial Update

\$1.7B in Product Sales, 102M doses delivered



- **Q1'21 Product Sales of \$1.73B**

- **\$1.4B US**
- **\$0.4B Rest of World**, including EU, Canada, Switzerland, Israel, Singapore and Qatar

- **102M doses delivered in Q1'21**

- **Completed delivery of 1st 100M doses to US** Government, within 100 days of EUA (incl. December delivery)
- 14M doses delivered to Rest of World

1Q21 earnings call agenda

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First quarter 2021 financial results

In \$ millions, except per share amounts (unaudited)

	Q1 2021	Q1 2020
Product sales¹	\$ 1,733	\$ -
Grant revenue ²	194	4
Collaboration revenue	10	4
Total revenue	1,937	8
Cost of sales	193	-
Research and development	401	115
Selling, general and administrative	77	24
Total operating expenses	671	139
Income (loss) from operations	1,266	(131)
Other (expense) income	(6)	7
Provision for income taxes	39	-
Net income (loss)	\$ 1,221	\$ (124)
Earnings (loss) per share – Diluted	\$ 2.84	\$ (0.35)
Weighted average shares – Diluted ³	430	353
Weighted average shares – Basic ³	400	353
Effective tax rate	3.1%	0.0%

1. In December 2020, we began to recognize revenue from sales of our COVID-19 vaccine to the U.S Government and international governments

2. Grant revenue increased in 2021, primarily related to the BARDA Agreement to accelerate development of our COVID-19 vaccine

3. We generated a net loss in Q1 2020, therefore the basic and diluted weighted average shares calculation was the same

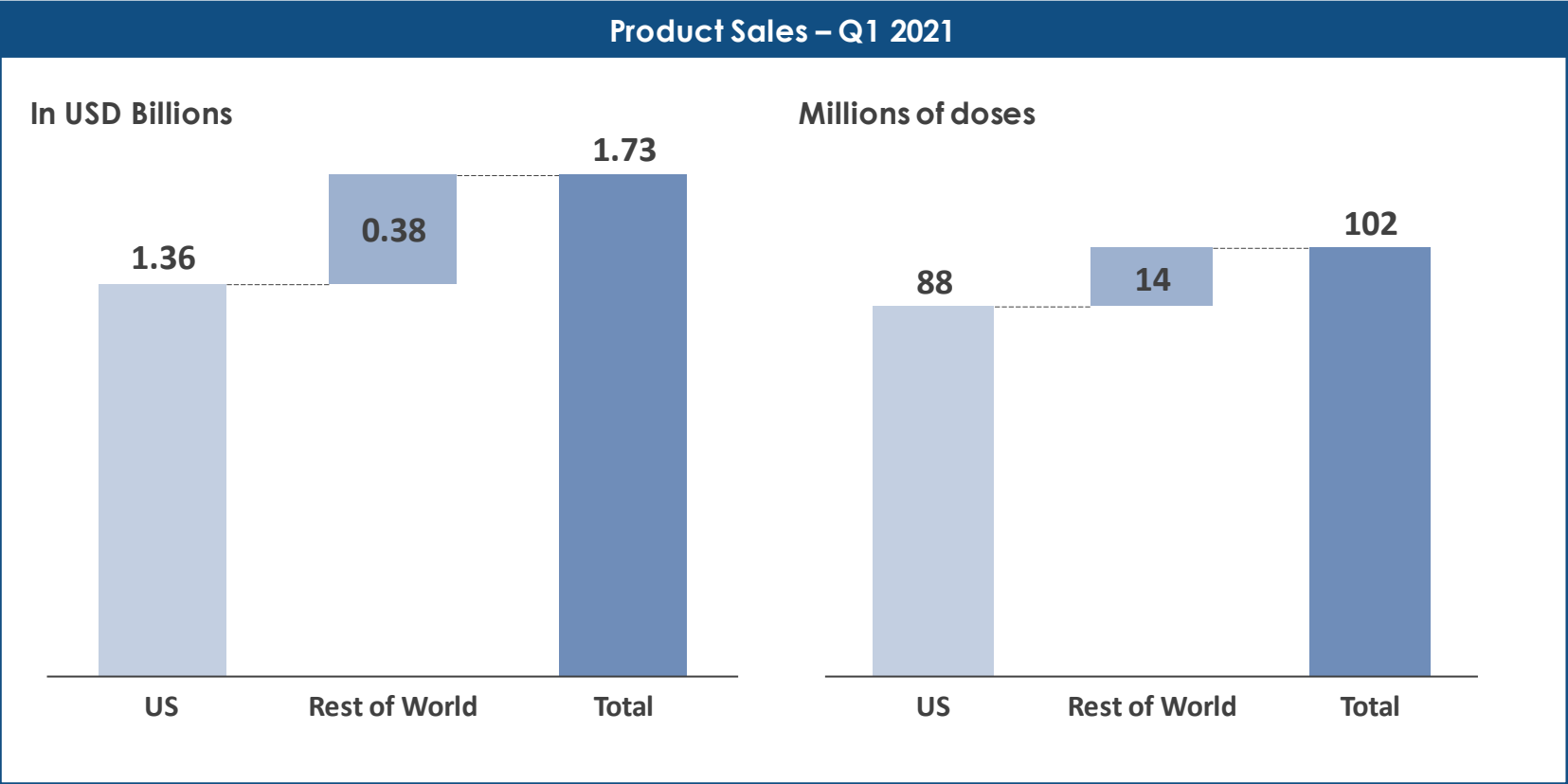
Cash and selected cash flow information

Balance Sheet Data	March 31, 2021 (unaudited)	December 31, 2020
Cash, cash equivalents and investments ¹	\$ 8.2 billion	\$ 5.2 billion

Statements of Cash Flows Data	Q1 2021 (unaudited)	Q1 2020 (unaudited)
Net cash provided by (used in) operating activities	\$ 2,971 M	\$ (106) M
Cash used for purchases of property and equipment	\$ (35) M	(6) M
Total	\$ 2,936 M	\$ (112) M

1. Excludes restricted cash of \$11 M at March 31, 2021 and \$12 M at December 31, 2020.

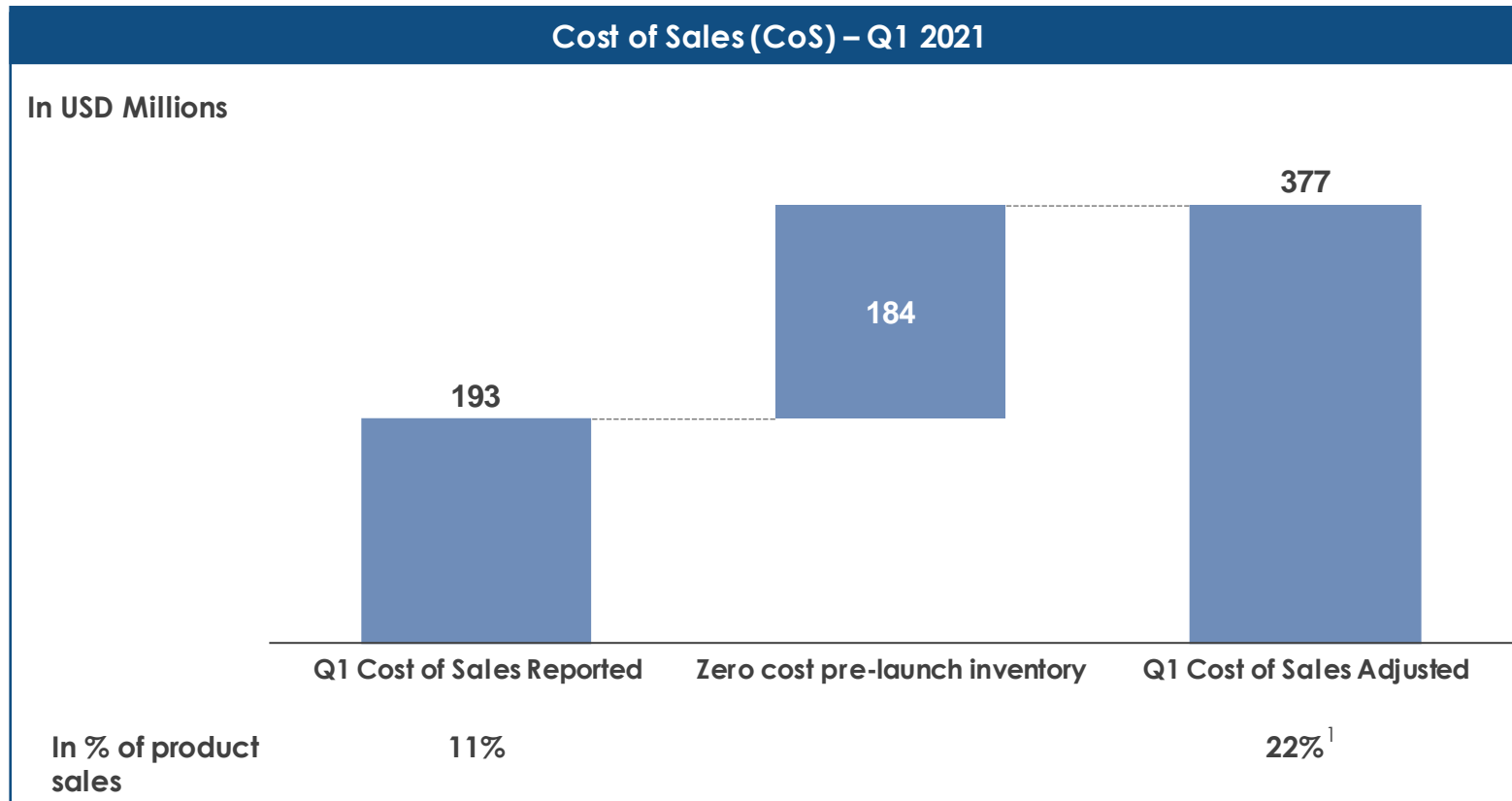
Q1 Financial considerations – Product Sales



- **Total Product Sales in Q1: \$1.73B**
 - US: \$1.36B
 - Rest of World: \$0.38B
- **Delivered doses in Q1: 102M**
 - US: 88M
 - Rest of World: 14M

Q1 2021 sales mix reflects the fact that US supply chain ramp up is approximately one quarter ahead of international supply chain

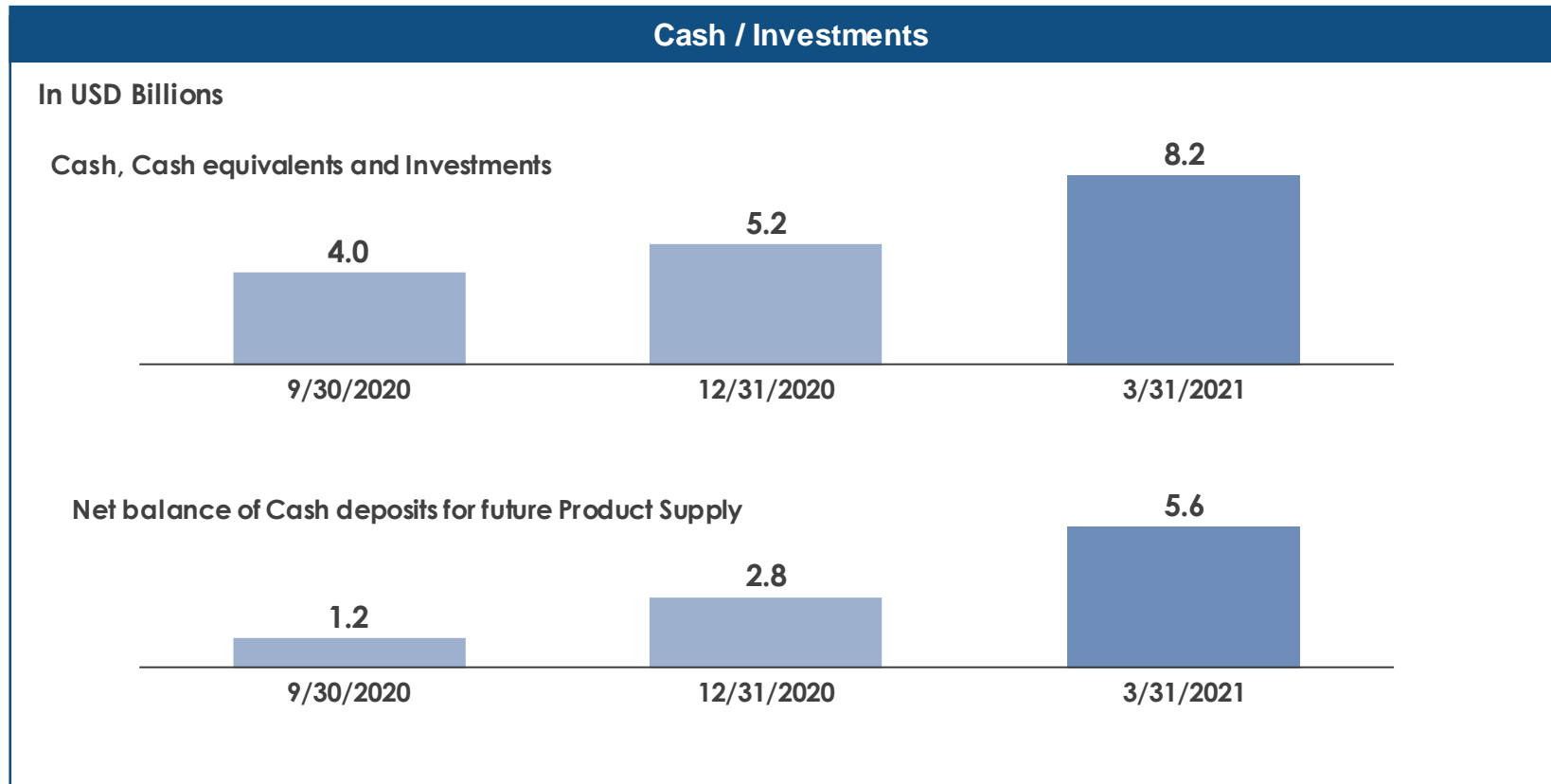
Q1 Financial considerations – Cost of Sales



- **Cost of sales reported in Q1:** \$193M or 11% of product sales
- In Q1 \$184M of zero cost pre-launch inventory was sold. This inventory was expensed as research and development prior to authorization of our COVID-19 vaccine
- **Cost of sales adjusted (for zero cost pre-launch inventory) in Q1:** \$377M or 22% of product sales

- Q1 2021 reported cost of sales beneficially impacted by zero-cost pre-launch inventory
- Almost the entire balance of inventory at zero cost was sold in Q1, hence will not impact future quarters on a material basis

Q1 Financial considerations – Cash/ investments



- Cash, Cash equivalents and Investments as of March 31, 2021 at \$8.2B, up from \$5.2B end of December 2021
- Net balance of Cash deposits for future Product Supply as of March 31, 2021 at \$5.6B

Cash and investments increased further driven by commercial activities

Q1 Financial considerations – Tax rate

Tax Rate Considerations

In USD Billions

\$2.3

12/31/2020
Net operating loss
carry-forwards

- **Significant investments into our research, development and startup activities to develop the mRNA platform over the last decade** resulted in Net-Operating loss carryforwards with a balance of \$2.3B at year end 2020
- As of December 31st, 2020 we **maintained a full valuation allowance** against our deferred tax assets related to these loss carryforwards
- We determined that it was more likely than not that **we will be able to realize majority of our deferred tax assets**
- **As a result, we released the valuation allowance in Q1** on majority of federal and state operating losses, which will be recognized **through FY 2021 effective tax rate**
- **Recorded two discrete benefits in Q1 related to valuation allowance release** and to excess tax benefits related to stock-based compensation

Tax rate favorably impacted primarily driven by the release of the valuation allowance related to our deferred tax assets

2021 updated financial framework

APAs and Dose Volume

- For expected delivery in FY 2021: Advance Purchase Agreements (APAs) already signed for product sales of **~\$19.2 billion**
- FY dose capacity for 2021: minimum of **800M up to 1 billion doses (at 100µg / dose)**
- 2021 Q1 delivered doses: **102M**
- 2021 Q2 forecast for delivered doses: **200M - 250M**

Cost of sales

- Q1 2021 reported cost of sales at 11% of product sales; adjusted for previously expensed inventory at **22% of product sales¹**
- Full year 2021 reported cost of sales expected at **approximately 20% of product sales**

R&D and SG&A Expenses

- **Q1 2021 R&D and SG&A expenses** at ~\$0.5B, stable to comparable expenses in Q4 2020²
- Expect quarter over quarter cost increases in 2021 as commercial and research and development activities and expenses ramp up

Tax rate

- **For 2021 we now expect the effective tax rate in the low-teens** as a result of the expected global sales mix, the utilization of the accumulated net operating loss carry-forwards and discrete benefits recorded in Q1 (based on current corporate tax rates)

Capital Expenditures

- **Range of \$450-550 million of capital investments currently planned for 2021**, including planned capacity expansion as announced on April 29, 2021

1Q21 earnings call agenda

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Our strategy for combating COVID-19

Phase 2 trial underway to evaluate **three boosting strategies** against variants of concern

I

mRNA-1273: Moderna COVID-19 Vaccine

50 µg of mRNA-1273 (data being shared today)

II

mRNA-1273.351: Variant-specific booster candidate based on the B.1.351 (variant first identified in the Republic of South Africa)

- 20 µg of mRNA-1273.351 (N=20)

- **50 µg of mRNA-1273.351 (N=20) (data being shared today)**

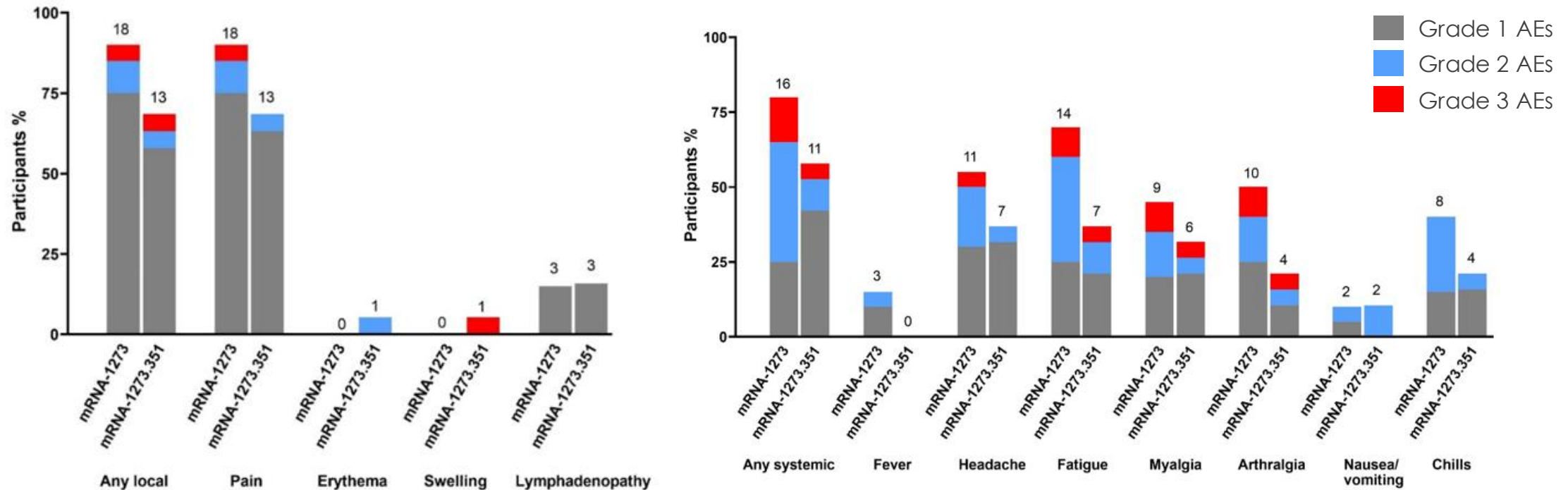
III

mRNA-1273.211: Multivalent booster candidate which combines mRNA-1273 and mRNA-1273.351 in a single vaccine

- 50 µg of mRNA-1273.211 (N=20)

Solicited local and systemic adverse events within 7 days after vaccination with a booster dose of mRNA-1273 or mRNA-1273.351

Safety and tolerability profiles following third dose booster injections of 50 µg of mRNA-1273 or mRNA-1273.351 were generally comparable to those observed after the second dose of mRNA-1273 in the previously reported Phase 2 and Phase 3 studies

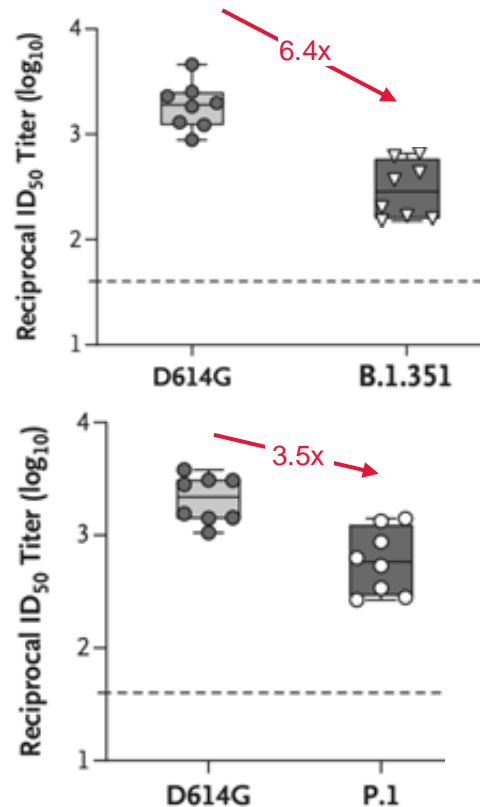


The percentage of participants who reported Grade 1 (gray), Grade 2 (blue), or Grade 3 (red) adverse events is shown in the figure for the 20 participants who received a booster dose of mRNA-1273 and the 19 participants who received a booster dose of mRNA-1273.351. The number above each bar shows the number of participants who reported the particular adverse event

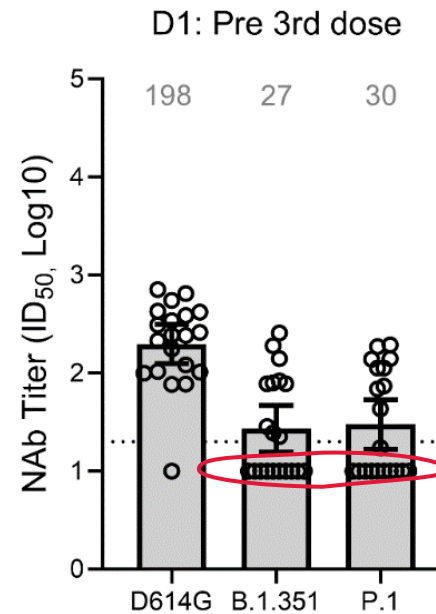
Neutralization of SARS-CoV-2 Pseudoviruses against wildtype and variants of concern

Neutralization of SARS-CoV-2 Pseudoviruses in Serum Samples¹

(1 week post second dose from the primary series of mRNA-1273)

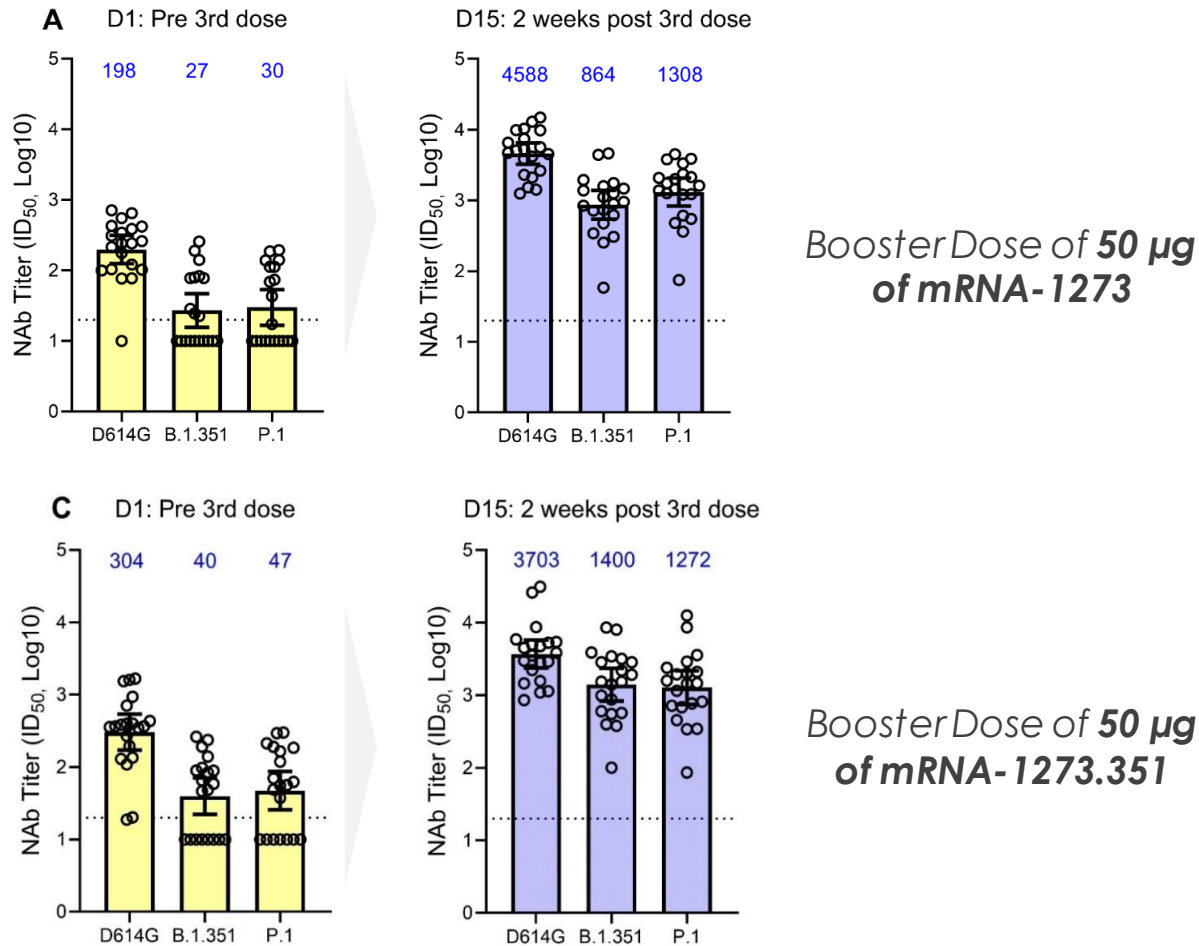


Neutralization of SARS-CoV-2 Pseudoviruses 6-8 months post primary vaccination series with mRNA-1273 and prior to booster vaccination²



- ✓ Neutralization titers decline with time against both wildtype and variants of concern
- ✓ Lower titers against variants of concern can accelerate waning
- ✓ Six to eight months after vaccination with primary series of mRNA-1273
 - Most participants have high titers against wild-type (D614G) strain
 - Approximately half of participants have undetectable titers against the tested variants of concern (B.1.351, P.1)

Two weeks after receiving either mRNA-1273 or mRNA-1273.351, PsVN titers were boosted in all participants and against all tested variants



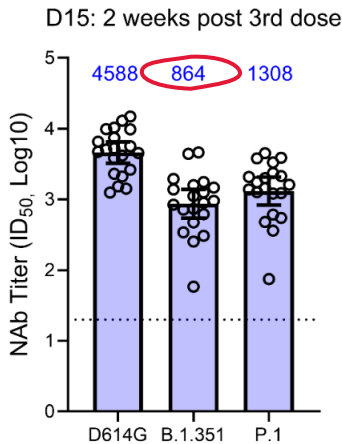
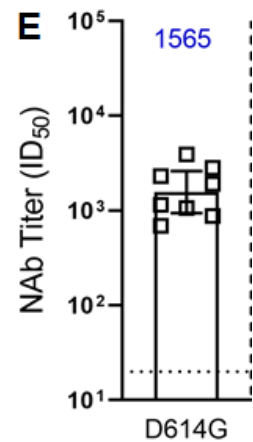
Neutralization of recombinant SARS-CoV-2 VSV-based pseudoviruses (D614G, B.1.351 and P.1) by serum from participants before (D1) and 15 days after boosting (D15) with 50 µg of mRNA-1273. The geometric mean neutralizing antibody titer is denoted by the top of the box and the 95% confidence intervals are shown by the brackets. The titers for individual participants are shown by the circles. The fold increases for day 15/day 1 are shown above the bars. The horizontal dotted lines indicate the lower limit of quantification (LLOQ). **** = $p < 0.0001$ by the Wilcoxon matched-pairs signed rank test.

Initial observations

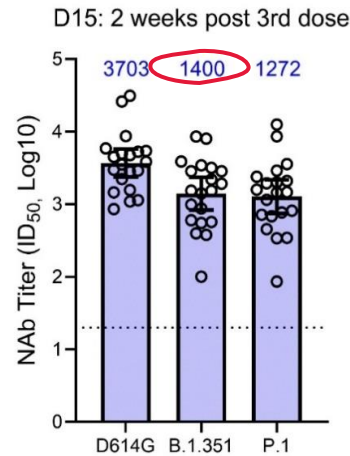
- ✓ Following boost, geometric mean titers (GMT) against the wild-type, B.1.351, and P.1 variants increased to levels similar to or higher than the previously reported peak titers immediately following primary vaccination (D614G)
- ✓ Even as early as 15 days, boosting with mRNA-1273.351 appeared to be more effective at increasing neutralization titers against the B.1.351 variant when compared to mRNA-1273 (GMT = 1400 for mRNA-1273.351; GMT = 864 for mRNA-1273)
- ✓ mRNA-1273.351 booster also appeared to narrow the relative difference in neutralizing titers between wild-type and B.1.351 variants compared to mRNA-1273 booster

Two weeks after receiving either mRNA-1273 or mRNA-1273.351, PsVN titers were boosted in all participants and against all tested variants

Primary series comparison, 1 week post dose 2 of mRNA-1273



Booster Dose of 50 µg
of mRNA-1273



Booster Dose of 50 µg
of mRNA-1273.351

Neutralization of recombinant SARS-CoV-2 VSV-based pseudoviruses (D614G, B.1.351 and P.1) by serum from participants before (D1) and 15 days after boosting (D15) with 50 µg of mRNA-1273. The geometric mean neutralizing antibody titer is denoted by the top of the box and the 95% confidence intervals are shown by the brackets. The titers for individual participants are shown by the circles. The fold increases for day 15/day 1 are shown above the bars. The horizontal dotted lines indicate the lower limit of quantification (LLOQ). **** = $p < 0.0001$ by the Wilcoxon matched-pairs signed rank test.

Other vaccine programs are in/preparing for clinical trials

CMV vaccine preparing for Phase 3 start in 2021

Prophylactic Vaccines

CMV vaccine

- CMV vaccine is on track to start the pivotal Phase 3 trial in 2021 (roughly ~8,000 participants)

Zika vaccine

- Preparing for Phase 2 trial; expected to begin in 2021

hMPV/PIV3 vaccine

- Phase 1b trial is currently enrolling in toddlers; first cohort has been fully enrolled

RSV vaccine

- Positive interim Phase 1 data announced at Vaccines Day on April 14th
- Phase 1 pediatric and adult vaccine trials are ongoing

Flu vaccine

- Nominated 3 development candidates (mRNA-1010/-1020/-1030), Phase 1 study of mRNA-1010 expected to begin in 2021

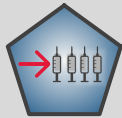
Clinical programs continue to enroll across modalities

Seven clinical proof of concept trials

Modalities



Localized
regenerative
therapeutics



Cancer vaccines



Intratumoral
immuno-oncology



Systemic intracellular
therapeutics

- **VEGF (AstraZeneca)**: Phase 2 ongoing
-
- **PCV**: Randomized Phase 2 in combination with KEYTRUDA® vs. KEYTRUDA® alone, partnered with Merck, is ongoing
 - Phase 1 in multiple cohorts is ongoing; upsized head & neck cohort is recruiting additional patients
 - **KRAS (Merck)**: Phase 1 ongoing
-
- **OX40L**: Phase 2 dose expansion in combination with durvalumab in ovarian cancer patients is ongoing
 - **Triplet (OX40L/IL-23/IL-36y)**: Phase 1 dose escalation as a monotherapy and in combination with durvalumab is ongoing
 - **IL-12 (AstraZeneca)**: Phase 1 ongoing
-
- **PA**: First pediatric patient dosed

Moderna's Development pipeline

May 2021

Core modalities

Prophylactic vaccines



Systemic secreted & cell surface therapeutics



Cancer vaccines



Intratumoral immuno-oncology



Localized regenerative therapeutics



Systemic intracellular therapeutics



Preclinical (incl. Open IND)		Phase 1			Phase 2		Phase 3	Commercial
EBV	Flu		RSV	Zika	Ph2 prep Zika	CMV	Ph3 prep CMV	COVID-19
Nipah	HIV	H7N9	COVID-19 (mRNA-1283)	hMPV/PIV3		COVID-19 (mRNA-1273-351/-211)		
Relaxin	PD-L1		Chikungunya antibody					
IL-2								
			KRAS		Personalized Cancer Vax			
			IL-12	OX40L/IL-23/IL-36γ	OX40L			
					VEGF			
MMA		PA						
PKU	GSD1a							

1Q21 earnings call agenda

Business Review

Stéphane Bancel
Chief Executive Officer

Commercial Review

Corinne Le Goff, Pharm.D., M.B.A.
Chief Commercial Officer

Financials

David Meline
Chief Financial Officer

Clinical Program Review

Stephen Hoge, M.D.
President

Conclusion/Q&A

Stéphane Bancel
Chief Executive Officer

2021 and looking into 2022

2021 APAs: – Increased to \$19.2B

2022 APAs:

- Some countries have already signed APAs for 2022: Israel, Switzerland
- COVAX facility for up to 466m doses in 2022
- Discussions ongoing for 2022 APAs with all the countries that signed APAs for 2021
- Discussions ongoing with governments that we could not supply in 2021, but who are highly interested in APAs for prime series and variant-specific boosters for 2022, including in Asia, Latin America, the Middle-East and Africa

We are investing to increase supply up to 3B doses in 2022 to meet the demand for mRNA vaccines next year

Looking at the next 5-10 years

- **We believe we have the most innovative vaccine pipeline in the industry:** COVID-19 variants, Flu, RSV, CMV, EBV, ...
- **We now have therapeutics development candidates in the clinic** in Oncology, Cardiology, and Rare Diseases
 - Aim to start studies in Auto-immune diseases soon
- We are working in the labs on **new modalities**, such as the lung with Vertex
- **As we build Moderna to have 10X more impact on the world**, we are investing to scale up the company efficiently

Accelerating our investment in digital, automation and AI

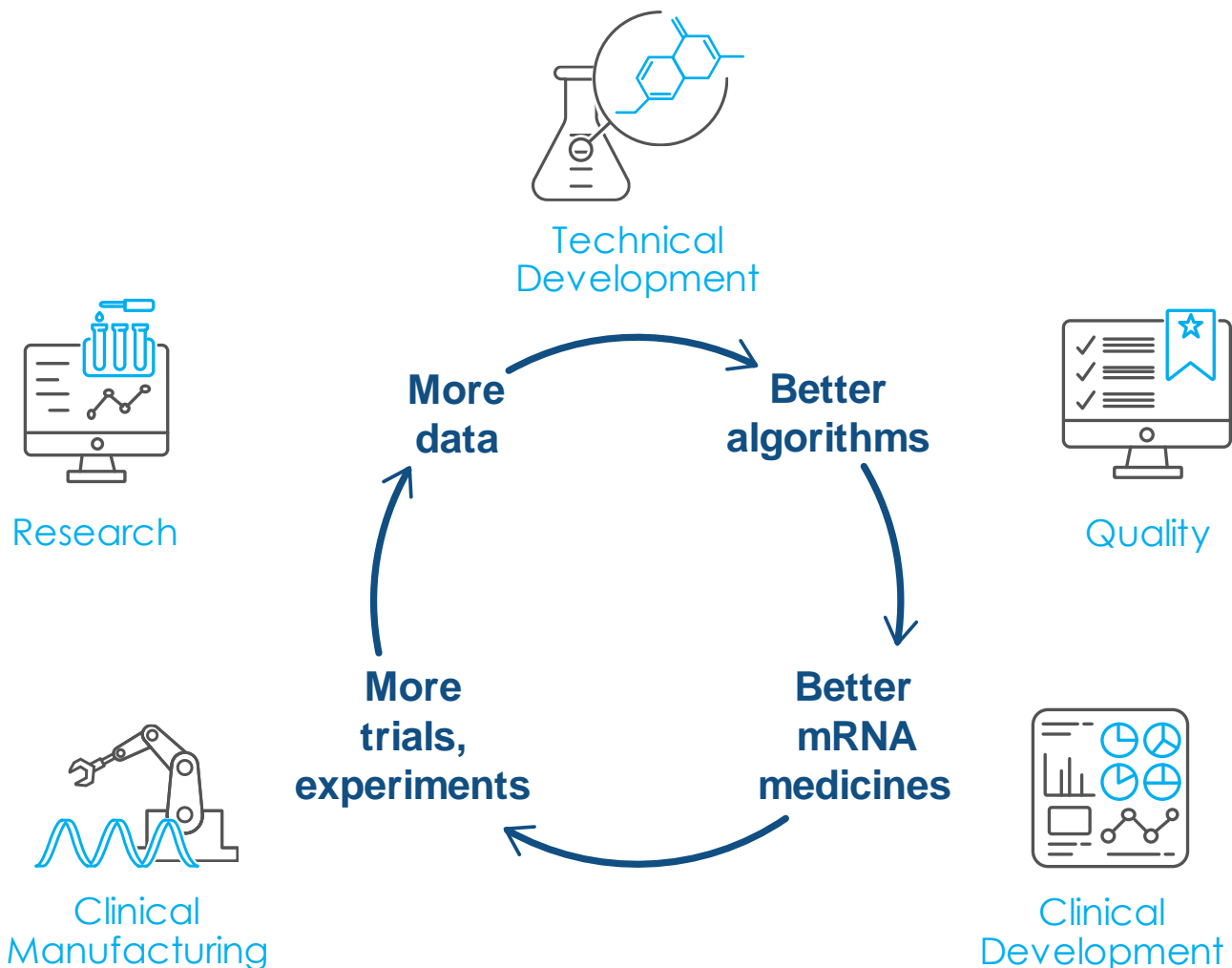
2019-2021 digital investments expected to be over \$250 million



2019: \$27M
2020: \$59M
2021E: \$170M

- **R&D:** Accelerate the pace of learning and innovation and change the paradigm of clinical execution
- **Manufacturing:** Enable rapid and efficient scale up of internal and external manufacturing, deliver on-time and provide data for real-time decision making
- **Commercial:** Accelerate universal and easy access to our medicines and provide key insight to our customers
- **Corporate Functions:** Lean and efficient processes that allow people to do their best work
- **Creation of AI Academy**

We integrate automation, AI and digital technology into everything we do



We are investing in **harmonized and integrated data**, **intelligent automation** of repetitive tasks and **integrated systems** with one entry point

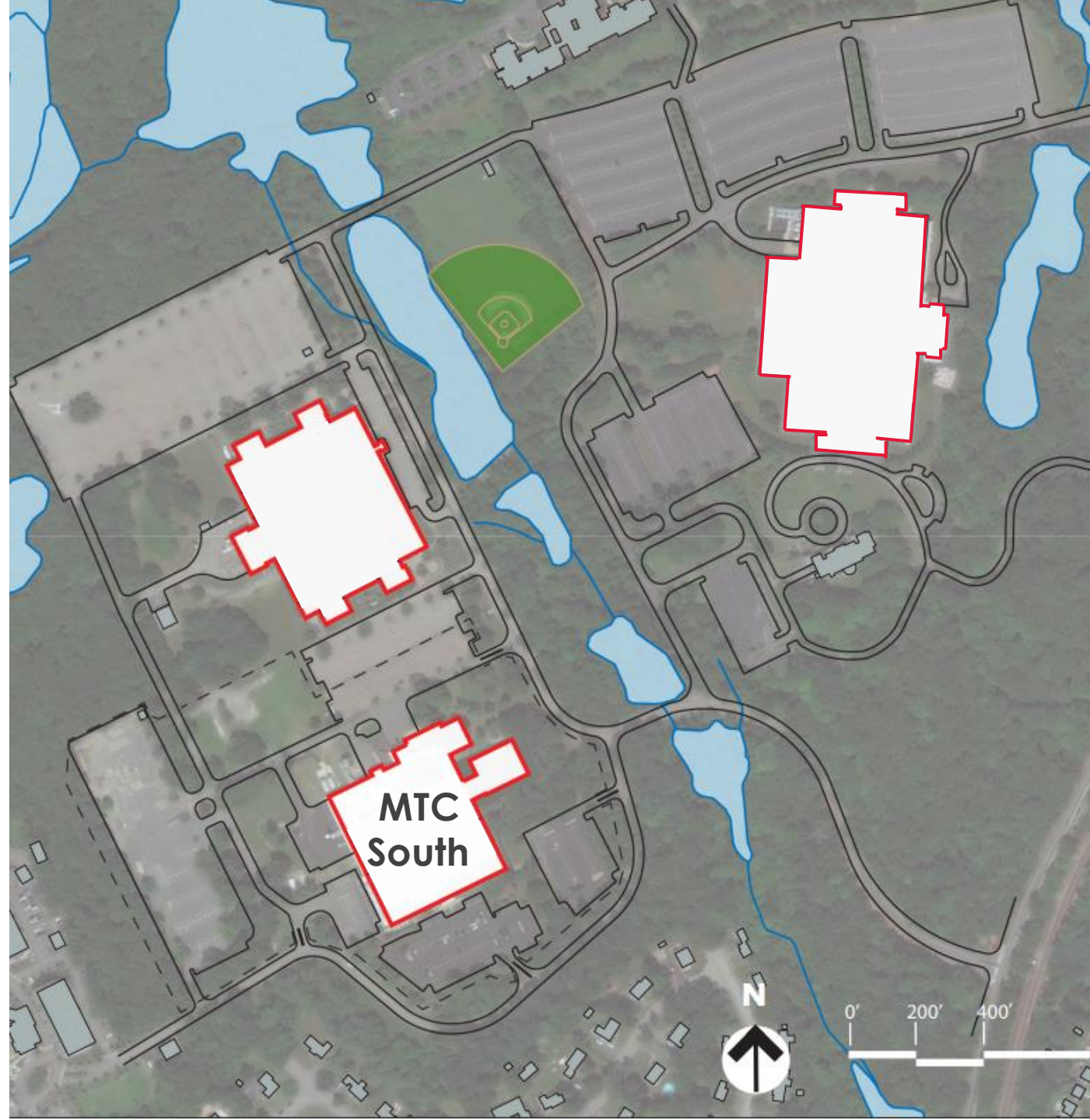
Select programs include

- Clinical trials for the future
- Regulatory intelligence
- Pharmacovigilance

Expansion of Manufacturing Technology Center (MTC)

MTC South (original manufacturing site)

- ~200,000 square feet
- Opened in July 2018



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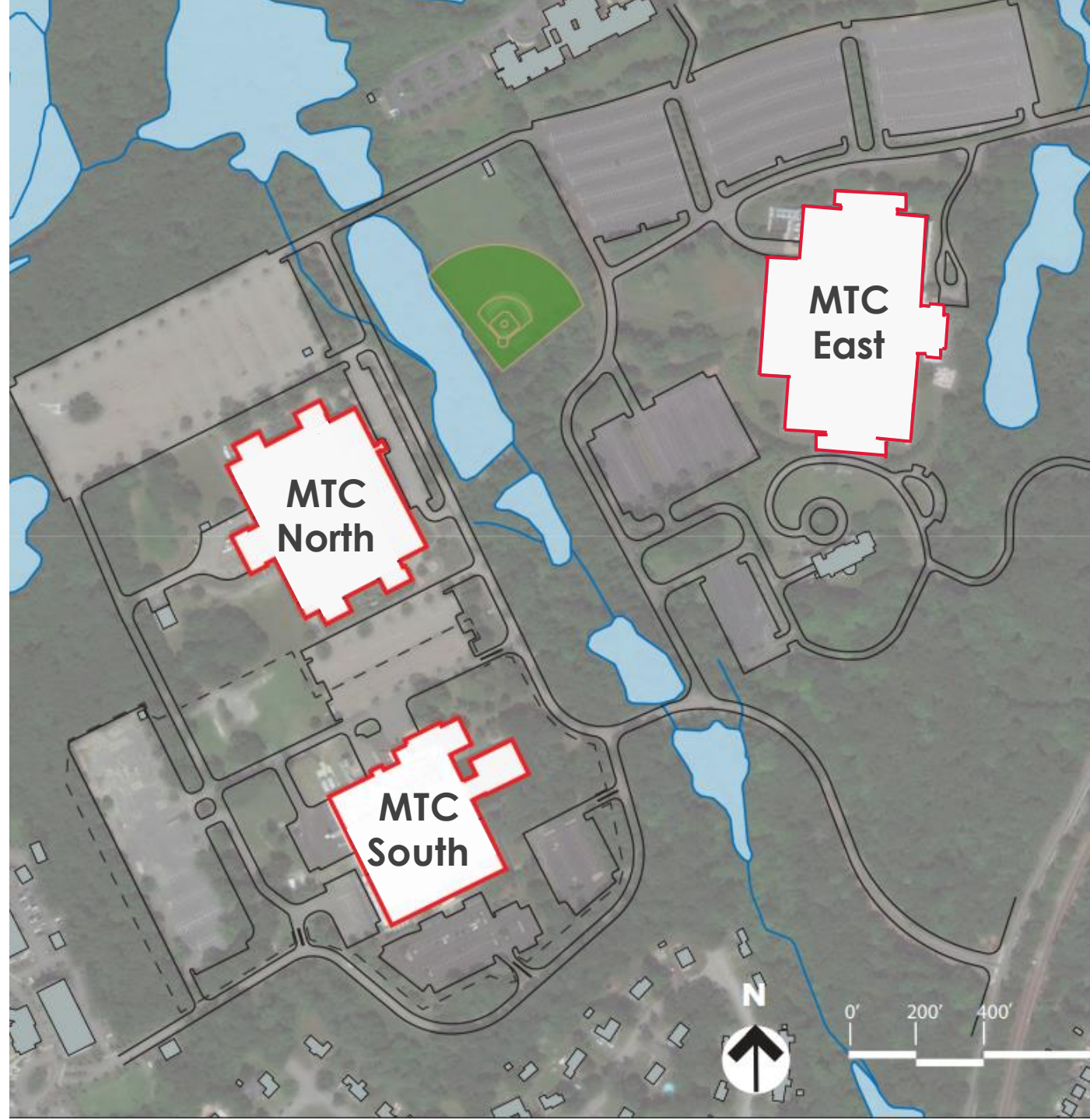
MTC North

- ~225,000 square feet
- Opened in May 2020

MTC East

- ~240,000 square feet
- Expected to open 4Q21

Approximately 650,000 square feet of facilities



Our Commitment to Corporate Responsibility



Commitment to Belonging, Inclusion & Diversity

- Published expanded workforce diversity figures for the first time
- Signed the CEO Action for Diversity & Inclusion pledge
- Ongoing commitment to increasing diversity in our clinical trials



Commitment to the Environment

- Aim to source U.S. facilities with renewable energy and offset carbon emissions through credits program in 2021



Community Outreach

- In our communities, we are giving back in-person and virtually—and thinking about how to scale our impact for the future



Select resources



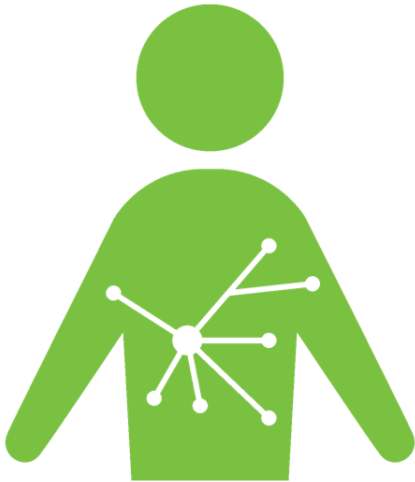
[Blog Post](#): Taking the next steps on our CSR journey



[Website](#): Newly updated Responsibility section of our website

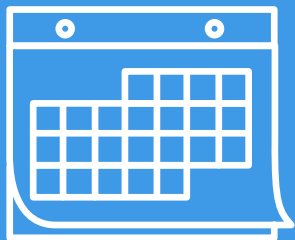


[Framework](#): Moderna's CSR framework



Our mission

To deliver on the promise of mRNA science to create a new generation of transformative medicines for patients.



Save the Date Events in 2021

> **Science Day**
May 27th

> **R&D Day**
September 9th