Advanced Genomics Platform for Next-Generation Cancer Therapies

Personalis®

Investor Presentation

November 2021

Forward-Looking Statements

This presentation and the accompanying oral presentation contain forward-looking statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact contained in this presentation, including statements as to future results of operations, financial condition, business strategy, plans, and objectives of management for future operations of Personalis, Inc. ("Personalis" or the "Company"), future market sizes, potential success of personalized cancer therapies and other drugs, the developing and potential competitive landscape for genomic sequencing platforms, performance and sensitivity of NeXT Personal and competitive MRD offerings, and others, are forward-looking statements. These statements involve known and unknown risks, uncertainties, assumptions and other factors that may cause the Company's actual results, performance or achievements to be materially different from any future results, performance or achievements, such as the impact of the COVID-19 pandemic on the business and operations of the Company and its customers, expressed or implied by the forward-looking statements. These forward-looking statements are subject to risks and uncertainties, including those discussed in Personalis' filings with the Securities and Exchange Commission ("SEC"), including in the "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" sections of the Company's most recently filed periodic reports on Forms 8-K, 10-K and 10-Q, and in the documents incorporated by reference therein.

In some cases, you can identify forward-looking statements because they contain words such as "anticipate," "believe," "contemplate," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "should," "target," "will," or "would," or the negative of these words or other similar terms or expressions. These statements are only predictions. Personalis has based these forward-looking statements largely on its current expectations and projections about future events and financial trends that it believes may affect its business, financial condition and results of operations. Also, these forward-looking statements represent the Company's estimates and assumptions only as of the date of this presentation. The Company assumes no obligation to update any forward-looking statements after the date of this presentation, except as required by law.

This presentation also contains estimates and information concerning the Company's industry and business, including estimated market size, projected growth rates of the markets in which Personalis participates, indicative pricing for the Company's products and the prevalence of certain medical conditions. These data involve a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. The Company has not independently verified the statistical and other industry data generated by independent parties and contained in this presentation and, accordingly, it cannot guarantee their accuracy or completeness. In addition, projections, assumptions and estimates of its future performance and the future performance of the industries in which it operates are necessarily subject to a high degree of uncertainty and risk due to a variety of factors. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by Personalis.

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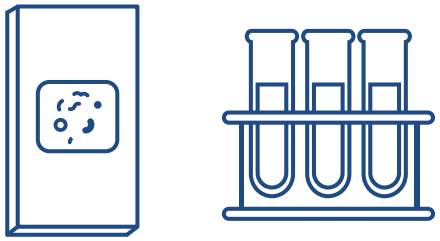
Providing Cancer Diagnostics Tests to Help Patients Live Better & Longer Lives

Providing biopharma & oncologists with molecular data about patient tumors

Patients

Tumor Samples



Comprehensive Molecular Data

~20,000

TUMOR GENES + IMMUNE SYSTEM

Customer Base

50+

BIOPHARMA CUSTOMERS using NeXT;
FUTURE EXPANSION WITH ONCOLOGISTS

Oncology Revenue Growth

2020 ONCOLOGY REVENUE: **$22.5M**
3Q'21 ONCOLOGY REVENUE: **$8.6M** (+50% YoY)

Large Market

~$40 billion

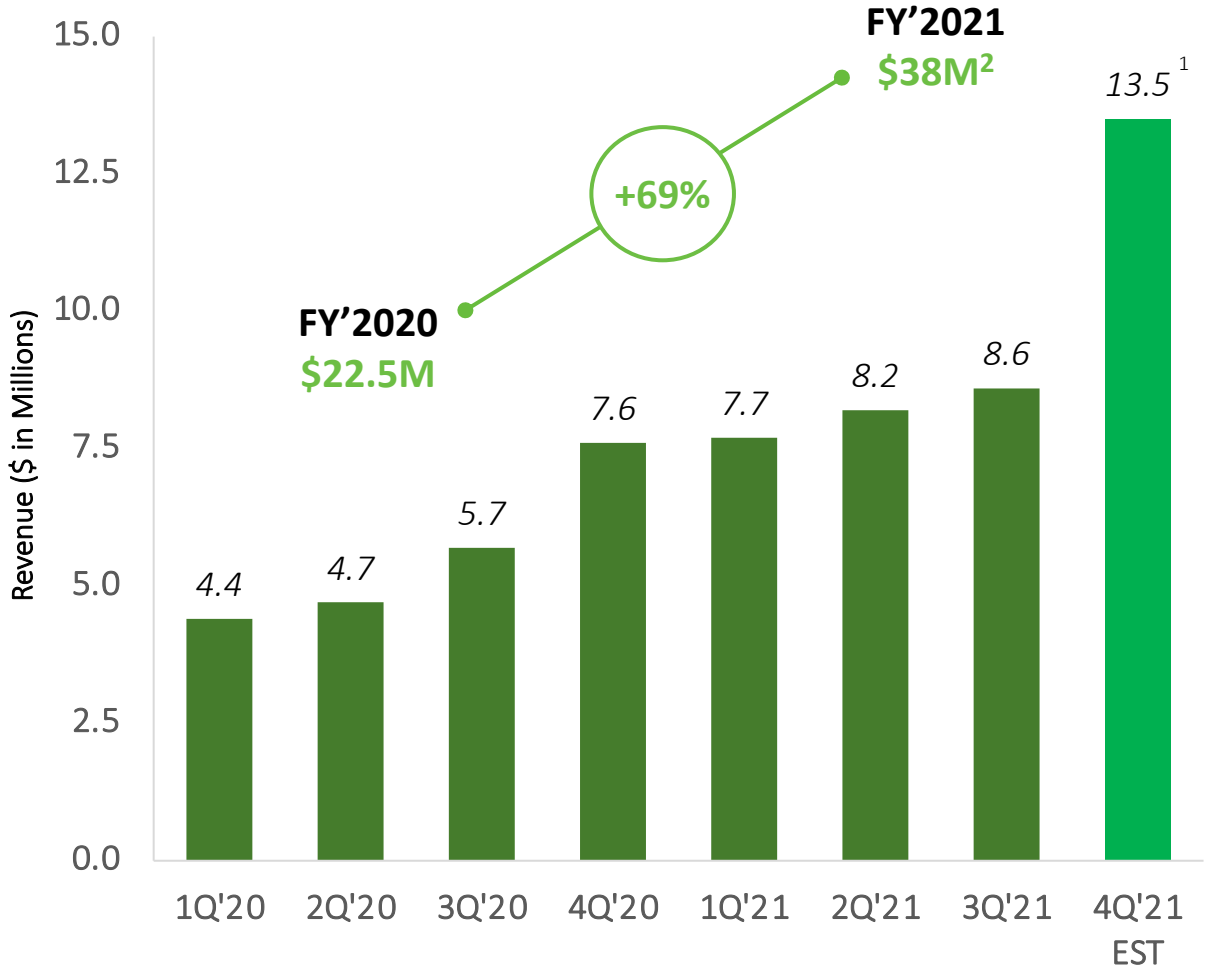
ESTIMATED TAM WITH BIOPHARMA, Dx, CDx, AND POPSEQ CUSTOMERS

Oncology

Personalis®

3Q 2021 Oncology Revenue Performance

- Record revenue of **$8.6M** in Q3 2021
- **50%** YoY growth for 3Q'21; strong adoption of NeXT by new & existing customers; 4Q'21 estimate[1] of **77%** YoY growth
- 3Q orders received for prospective[3] and retrospective[4] projects; prospective orders exceeded **50%** of total
- Initial pilot orders have increased on average from $50K range in 2018 to hundreds of thousands of dollars, and up to **millions**



Notes:

1 4Q'21 EST represents mid-point of guidance range of $12.5M to $14.5M included within the 11/4/2021 earnings press release

2 Mid-point of the full year 2021 guidance of $37M to $39M for oncology revenue included within the 11/4/2021 earnings press release

3 Prospective projects are clinical trials that will be conducted in the future; patient samples to be collected then sent to Personalis for testing

4 Retrospective projects are for clinical trial projects that have finished; patient samples are stored by the customer's service provider and will be sent to Personalis upon project commencement

2020-2021 Accomplishments

Key Highlights

50+ Customers have placed orders for NeXT as of 3Q 2021

9 of top 10 pharma companies have done business with Personalis

4 New Product Offerings since 2020

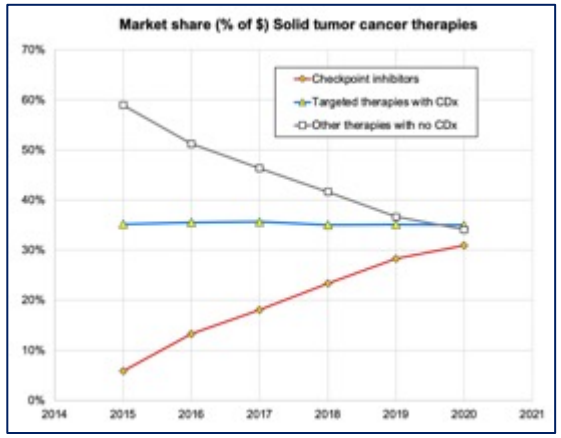
Commercial team has grown 100%+ since the IPO

Multiple New Partnership and Collaborations including Mayo Clinic

~220,000 samples tested to date and provides scale for NeXT Personal (MRD)

Two major pharma trends create new challenges & opportunities for cancer genetics

Large scale adoption of immunotherapies



Challenge :

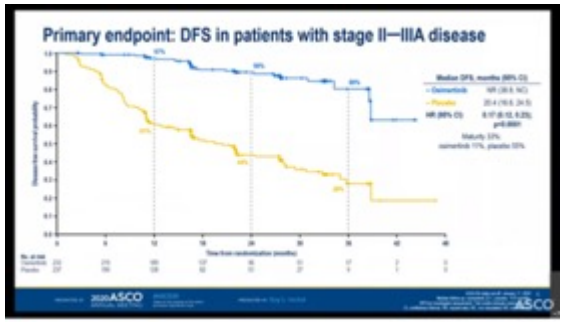
Complex biology of tumor & immune system interaction

No good biomarkers for patient response or tumor escape from therapy

Personalis' solution :

ImmunoID NeXT with proprietary biomarkers

FDA drug approvals for early stage cancer



Challenge :

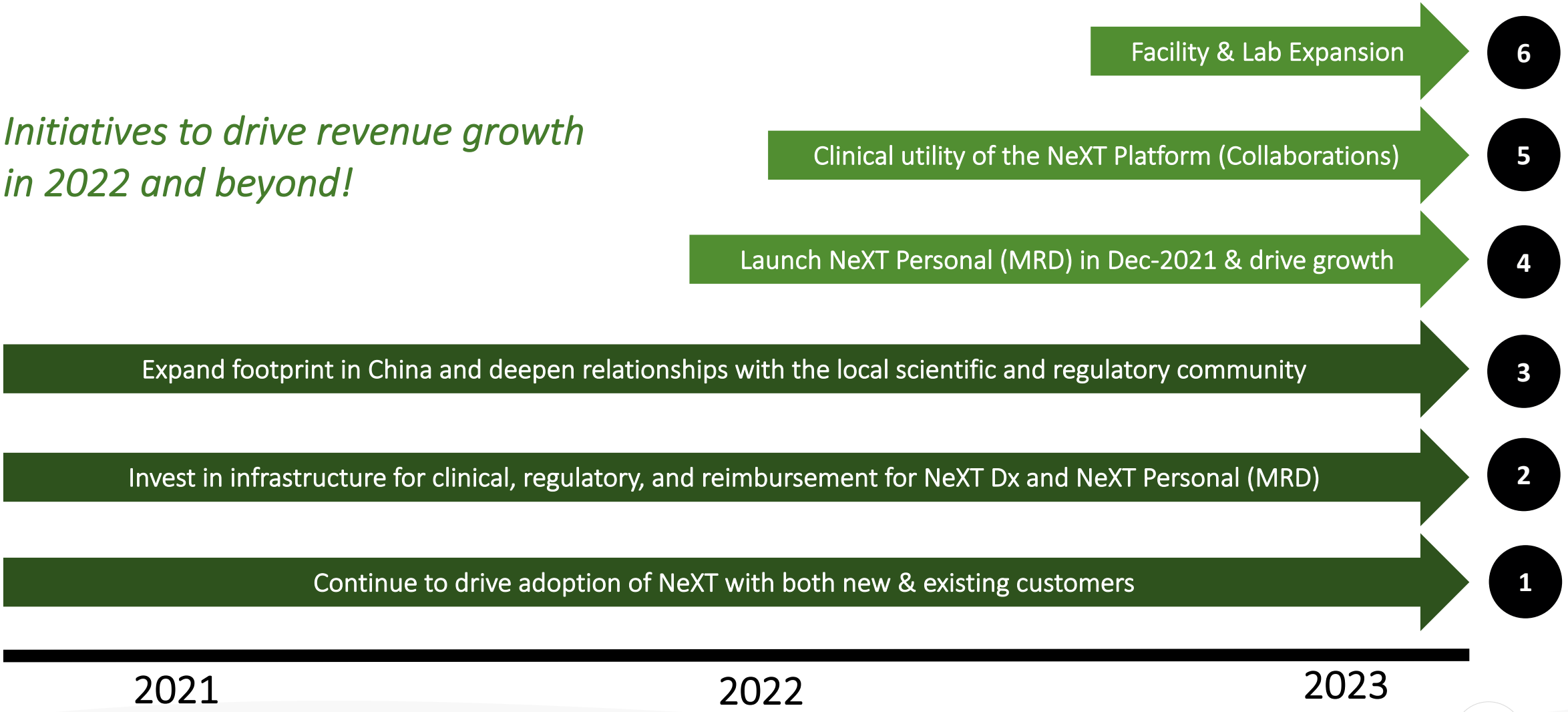
Dramatic reduction in recurrence after surgery, but no way to tell which patients need the drugs

Personalis' solution :

NeXT Personal MRD test with ~1ppM sensitivity

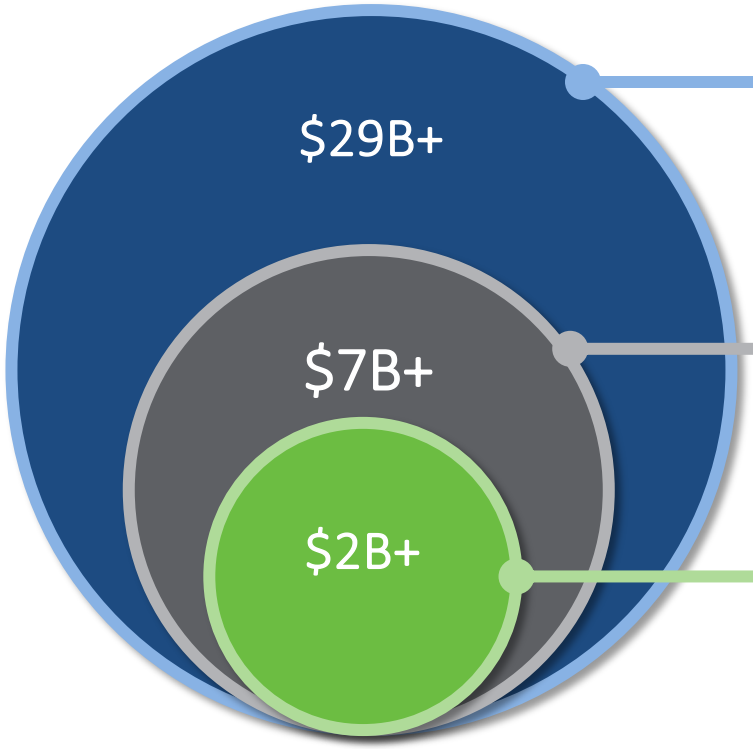
Strategic Priorities

Initiatives to drive revenue growth in 2022 and beyond!



Large Market: Therapy Selection, Monitoring, Clinical Trials, and Population Sequencing

Comprehensive Product Offering in ~$40B Current TAM Categories



Therapy Selection & Monitoring: 2M diagnosed patients treated actively per year needing initial tissue test for therapy selection and in-depth monitoring, represents $6B [1] and $22.7B [2] opportunity, respectively

Clinical Trial Patients: 200k clinical trial patients needing an initial tissue test and in-depth monitoring represents $7B opportunity with pharma [3]

Population Sequencing: Current TAM of $2B [4]

Notes:

1. Company estimate based on 2 million diagnosed cancer patients requiring an initial tissue test at a price of ~$3,000 per test.
2. Company estimate based on 2 million diagnosed patients requiring in-depth monitoring at a test price of $2,840 per test at a frequency of four times a year
3. Company estimate based on 200,000 clinical trial patients requiring an initial tissue test at a price of ~$3,000 per test and in-depth monitoring at a price of ~$4,000 per test at a frequency of eight times per year.
4. Company estimate based on its VA MVP genome sequencing pricing and 2 million individuals per year, based on publicly available reports of population sequencing projects covering over 14 million individuals and an assumed 7-year average project duration.

Overview of products and services portfolio

Product Offering	Description	Applications Use	Launch Date
ImmunoID NeXT	Single **tumor sample** test to identify multiple biomarkers; ~20,000 genes	Provide researchers with immunogenomic data for **drug development**	Nov-2018
NeXT Liquid Biopsy	**Exome liquid biopsy** test of ~20,000 genes; complement tissue analysis	Research use to **overcome complexities of spatial and temporal heterogeneity**; interrogate mechanisms of acquired resistance	Aug-2020
NeXT Dx	**Diagnostic test** of ~20,000 genes; biomarker results and clinical report	Enables **oncologists** to identify potential targeted **immunotherapy options** for patients with solid tumors	Jan-2020
NeXT Personal	Liquid biopsy **Minimal Residual Disease (MRD)** test; tumor informed; WGS to develop patient's personalized assay	**Oncologists** use to determine **therapy selection or to monitor cancer recurrence**; Research use for clinical trials, drug development, and CDx	Targeting Dec-2021

Competitive Landscape

Product / Service Offering	Description	Competitors
ImmunoID NeXT	Single **tumor sample** test to identify multiple biomarkers; ~20,000 genes	FMI (smaller panel – 50-500 genes), Caris, Ashion, Tempus, MedGenome, Neogenomics, Covance, Q^2 Solutions
NeXT Liquid Biopsy	**Exome liquid biopsy** test of ~20,000 genes; complement tissue analysis	Guardant Health (smaller panel– <500 genes)
NeXT Dx	**Diagnostic test** of ~20,000 genes; biomarker results and clinical report	Caris (Exome-scale), FMI (smaller panel – 50-500 genes)
NeXT Personal	Liquid biopsy **Minimal Residual Disease (MRD)** test; tumor informed; WGS to develop patient's personalized assay	Inivata, Invitae (ArcherDx), Grail, Natera, C2i, Burning Rock; competitive products can be 10-100x less sensitive

*NeXT Personal targeted to launch in Dec-2021 and can be **10-100X more sensitive** than competitive MRD products and targeting ~1 x 10^{-6} (1 ppm); requires 4ml of plasma which is lower than others too*

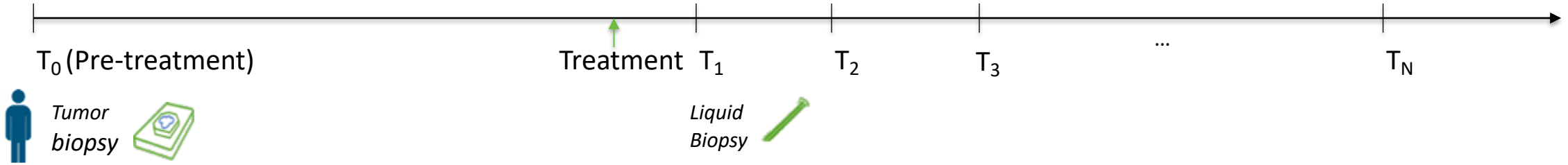
Therapy Selection, Monitoring, Clinical Trials TAM Build-Up

	Estimated # of Cancer Patients	x Assumed Testing Needed	x Indicative Price	= Market Opportunity	Personalis' Solution
Clinical Trial Patients	200k/Year [1]	1 Initial Tissue Test	~$3,000 [5]	~$600M	(NeXT Tissue)
		8x/yr in-depth monitoring [3]	~$4,000 [3]	~$6.4B	(NeXT LB & NeXT Personal)
Therapy Selection	2M/Year [2]	1 Initial Tissue Test	~$3,000 [5]	~$6B	(NeXT Dx & NeXT Personal)
Monitoring	2M/Year [2]	4x/yr in-depth monitoring [4]	~$2,840 [6]	~$22.72B	

Notes:
1. Estimated 200,000 enrolled in clinical trials based on Company review of ClincialTrials.gov data.
2. U.S. National Cancer Institute estimate that 2.2 million patients are actively receiving care. 2 million per year, net clinical trial patients.
3. Company estimate for pricing is based on the Company's historical standard pricing for tissue samples and anticipated pricing for liquid biopsy samples. Company estimate for frequency is based on frequency of monitoring in a clinical trial protocol used by Merck in a recent immune-oncology drug trial and assumes that monitoring would occur every six weeks.
4. Company estimate based on expected usage for Signatera, a personalized circulating tumor DNA monitoring assay to support optimal cancer treatment planning, reported by Natera on its Q2 2020 earnings call.
5. CMS payment rate for tissue-based cancer diagnostic test – based on CPT code 81455.
6. Currently no approved pricing for monitoring in cancer, but given the technical similarity to Natera's kidney transplant rejection monitoring test, Prospera, which also monitors cell free DNA from blood plasma and which receives coverage at $2,840, based on assumption that similar coverage could be sought for cancer monitoring genetic tests not currently subject to coverage.

NeXT Personal:
Tumor-informed liquid biopsy for Minimal Residual Disease and Recurrence Detection

- We believe **tumor-informed** MRD tests can be **more sensitive** than tumor agnostic (fixed panel) approaches
- Current Tumor-informed MRD solutions target less than a few hundred mutations identified through exome sequencing
- Our approach can **increase sensitivity by 10X-100X** by tracking over 1000 variants from Whole Genome Sequencing:



Whole Genome Tumor Profiling

- **1000's of variants identified across the whole genome**

Design Personalized Panel for each Patient

Tumor-Informed Personalized Panel

- Patient specific personalized panel synthesized for each patient tracking **>1000 mutations** from the tumor
- Detection of MRD utilizing 1000's of variants
- **High MRD sensitivity, targeting ~1 x 10^{-6} (1 ppm)**
- 4 ml plasma input

NeXT Personal: One Assay Combining Strengths of Tumor-Informed and Panel Approaches

Sequencing of Tumor

	MRD Detection	Variant Tracking	Clinical Panel Content
Personalized Panel	>1000 variants	~400 variants	100's to 1000's of variants
	• Provides MRD status (+/-) • Provides tumor fraction measurement • Target sensitivity: 1 PPM (~1 x 10^{-6}) • **Can be 10X-100X more sensitive than current offerings**	• Tracking of biologically or clinically important variants identified in whole genome CDS [or NeXT tumor profiling] • Target sensitivity: ~1 x 10^{-3} VAF	• Clinical hotspots • Resistance hotspots • IO or targeted therapy relevant regions • Target sensitivity: ~1 x 10^{-3} VAF

Personalis Partnership with Mayo

Offer advanced **cancer testing** to Mayo cancer patients

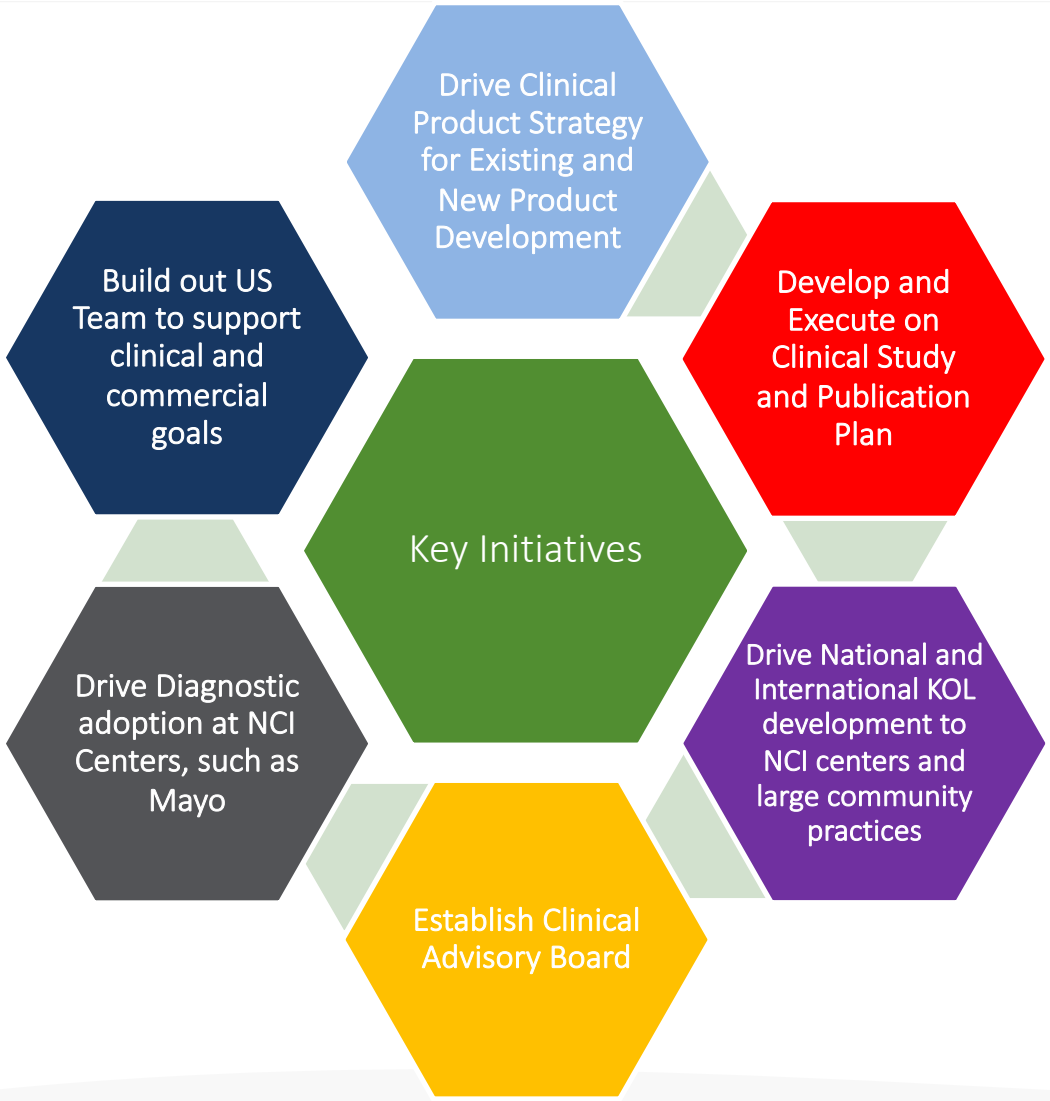
Announces Personalis as a **cancer diagnostics** company

Mayo serves **1.3M+** patients a year from 50 states, 140 countries; major campuses in Minnesota, Arizona, and Florida

Rochester, MN Hospital is ranked **#1** in the nation by US News and World Report, Phoenix, AZ is #15

Mayo serves ~ **15,000** cancer patients a year

Medical Affairs Initiatives to Demonstrate Clinical Utility



Commercial Diagnostic Expansion

Facilitates Medicare and private payer coverage and guidelines adoption

Broad KOL adoption for clinical Dx/CDx objectives

Drives awareness of company and clinical objectives

Impact

Diagnostic Business: Planned Clinical Studies

Study[1]	Design	Size	Goal
Clinical utilization study	Retrospective samples	~1500+	Survey across tumor types in "real world" clinical samples
Observational study	Prospectively designed	5000	Should be aligned with initial FDA submission
Clinical utility studies	Retrospective samples	200+ per utility determination for top cancer types	Alignment with top cancers and NCCN level 1 and 2A markers
Exploratory Biomarker study	Retrospective samples	~600	Identify more predictive biomarkers for immunotherapy and potential resistance mechanism
Clinical validation study (follow on to exploratory biomarker study)	Prospectively enrolled	Size depends on outcome of exploratory biomarker study (e.g. ~1200)	Clinically validate immunotherapy biomarker from exploratory study
NeXT Personal collection study Mayo when LDT is available	Prospective Collection Study	~1200	Establish clinical utility of MRD test

Notes:

1 Clinical Studies, designs, and size may change depending upon future needs and requirements

Operational Excellence at Scale

~220,000 human samples
sequenced to date

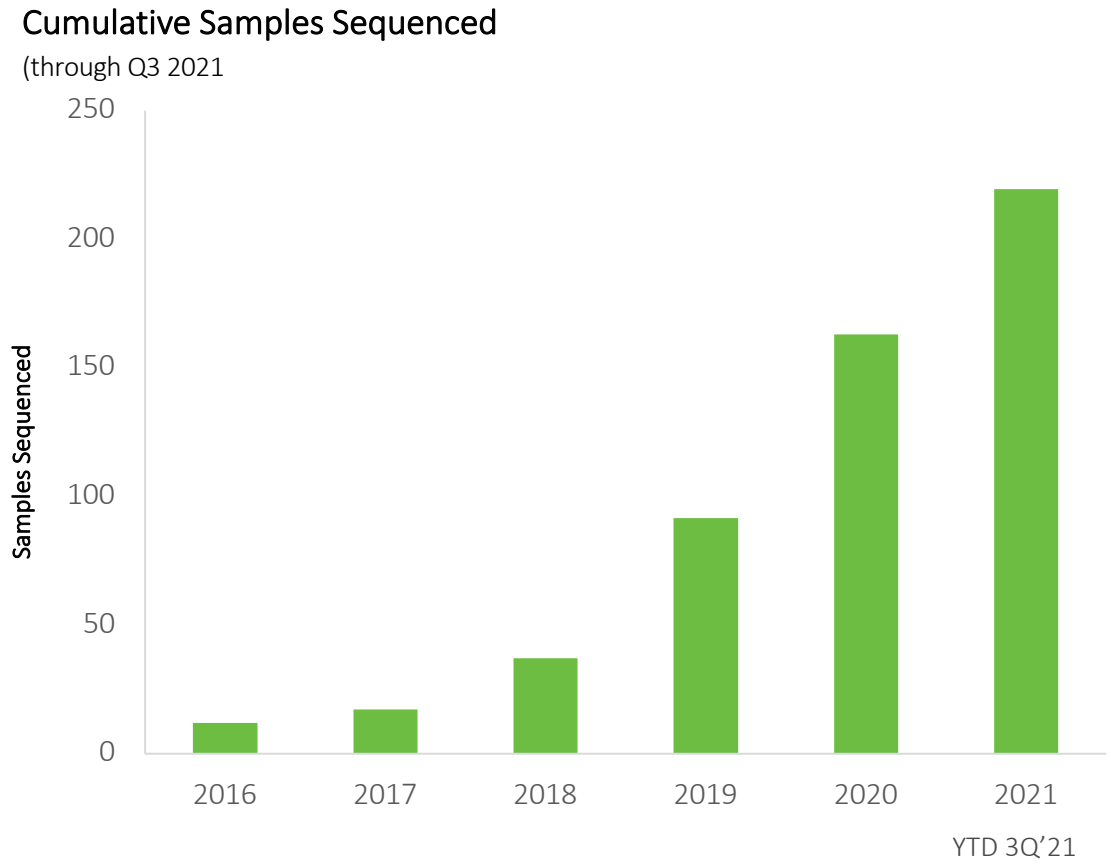
Significant focus on process development
including with laboratory automation, to drive margin expansion

Differentiated QMS and Regulatory Credentials
CLIA / CAP, NY State[1] & FDA[2] - all at exome scale

Intellectual Property Protection
including 13 issued U.S. and 4 issued foreign patents

Headquartered
in Menlo Park, CA

285+ employees



Notes:
1. We maintain a current license with the New York State Department of Health for our laboratory
2. We have filed a Device Master File with the FDA.

Major advances in DNA sequencing & synthesis, but 1st generation cancer diagnostic tests are rooted in the past by clinical studies, regulatory & reimbursement inertia

DNA Sequencing Technology

2010 : Illumina HiSeq

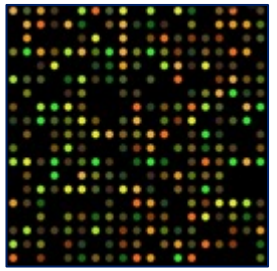
2017 : Illumina NovaSeq

$100 Genome Platforms

Near-term : New platforms expected

DNA Synthesis Technology

Individual oligo synthesis



Array-based synthesis

Early NGS cancer tests

- 100's of genes
- Mainly just DNA
- Dozens of tumor informed loci

Personalis tests

- All ~20,000 human genes
- DNA, RNA & Immune repertoire
- 1,000+ tumor informed loci

Laboratory Operations

High-volume with fast turnaround time[1] less than 10 days for exome-scale testing using automated systems and NovaSeq[2] sequencers

Notes:
1. Average turnaround time (TAT) for clinical samples less than 10 days from sample receipt date until delivery of molecular data
2. NovaSeq is a product of Illumina

Experienced Leadership Team

John West
President, Chief Executive Officer & Director

Richard Chen, M.D., M.S.
SVP & Chief Medical Officer

Stephen Moore
General Counsel

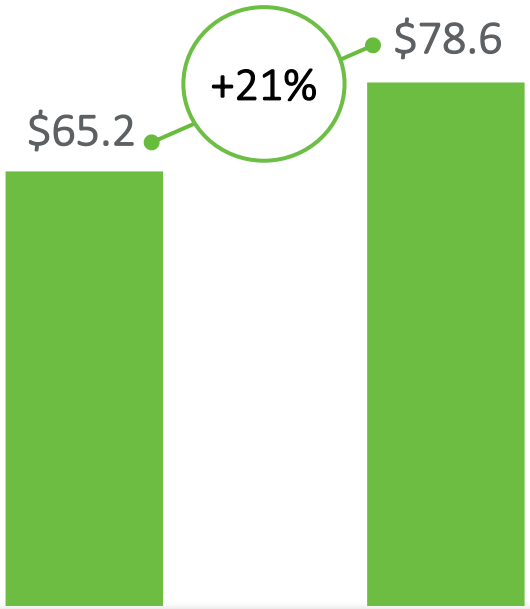
Aaron Tachibana
Chief Financial Officer

MANAGEMENT TEAM		
Christian Haudenschild, Ph.D.	SVP Operations	
Stephane Mouradian	SVP Business Development	
Susan Moriconi	VP People & CHRO	
Carol Tillis	VP Finance and Administration	
Rena McClory, Ph.D.	VP Marketing	
Lloyd Hsu	VP Software Engineering	
Robert Bruce	VP Reimbursement	
NON-EMPLOYEE DIRECTORS		
Jonathan MacQuitty, Ph.D.	Chairman of the Board	
A. Blaine Bowman	Director	
Alan Colowick, M.D.	Director	
Karin Eastham	Director	
Kenneth Ludlum	Director	
Woodrow Myers, M.D.	Director	

Financials

Personalis®

Personalis Financial Profile and Historical Growth



Revenue ($M)	2019	2020	3Q'20	3Q'21
Gross Profit	22.1	20.1	5.3	8.1
Operating Expenses	(44.5)	(62.3)	(15.0)	(25.8)
Net Loss	(25.1)	(41.3)	(9.5)	(17.7)

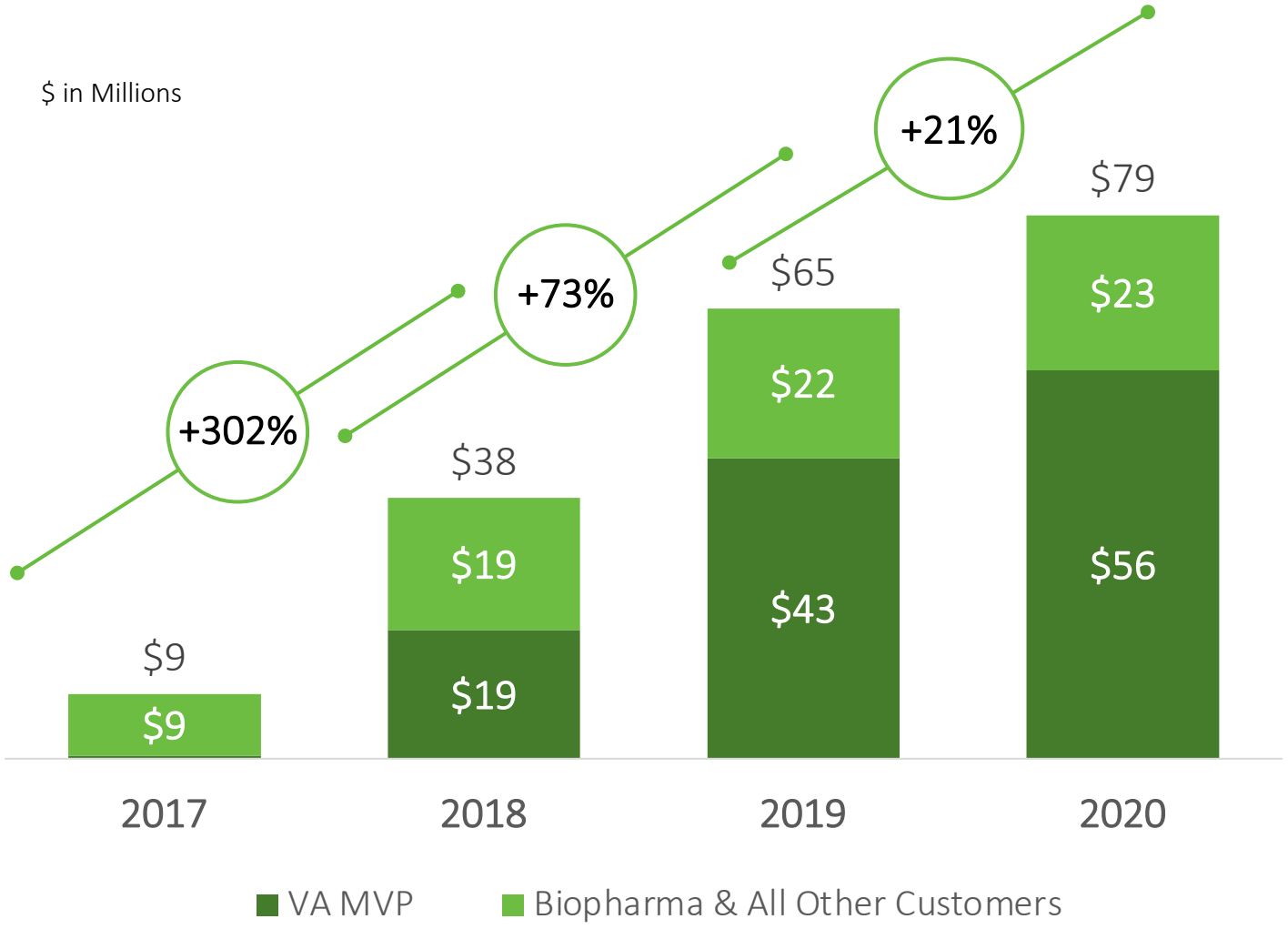
3Q'21 Balance Sheet

Total Cash[1]: $305M

No Debt

Notes:
1. Includes cash, cash equivalents and short-term investments

Personalis Revenue Growth



Q3 2021 Overview

Biopharma & All Other Customers

Q3 2021: $8.6M, +50% Y/Y

Strong customer orders Q3 ‘19 – Q3 ‘21 following introduction of our NeXT platform

Population Sequencing (includes VA MVP)

Q3 2021: $ 13.7M

Unfulfilled orders beginning of Q4 2021 in the amount of $12.9M; expect to complete by Q1 2022