

# **Investor Presentation**

December 2019

#### Safe harbor



This presentation has been prepared by Adaptive Biotechnologies Corporation ("we," "us," "our," "Adaptive" or the "Company") and is made for informational purposes only. The information set forth herein does not purport to be complete or to contain all relevant information. Statements contained herein are made as of the date of this presentation unless stated otherwise. This presentation shall not constitute an offer to sell or the solicitation of an offer to buy securities, nor shall there be any sale of these securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction.

This presentation contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These statements are intended to be covered by the "safe harbor" created by those sections. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based on our current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies, our development plans, our preclinical and clinical results and other future conditions. In some cases, you can identify forward-looking statements by the following words: "may," "will," "could," "would," "should," "expect," "intend," "plan," "anticipate," "believe," "estimate," "predict," "project," "potential," "continue," "ongoing" or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words.

All statements, other than statements of historical facts, contained in this presentation are forward looking statements, including statements regarding our future financial or business performance, conditions, plans, prospects, trends or strategies and other financial and business matters; our current and prospective product candidates, planned non-IDE clinical studies, clinical trials and preclinical activities, research and development costs, current and prospective collaborations; the estimated size of the market for our product candidates, the timing and success of our development and commercialization of our anticipated product candidates; the availability of alternative therapies for our target market; and the other risks and uncertainties described in our fillings with the Securities and Exchange Commission (the "SEC"), including the Risk Factors and Management's Discussion and Analysis of Financial Condition and Results of Operations sections of our most recently filed Quarterly Reports on Form 10-Q and the prospectus filed with the SEC on June 26, 2019 in connection with our initial public offering. Although we believe the expectations reflected in such forward-looking statements are reasonable, we can give no assurance that such expectations will prove to be correct. Risks and uncertainties could cause actual results to differ materially from those expressed in our forward-looking statements. Accordingly, readers are cautioned not to place undue reliance on these forward-looking statements. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein.

Certain information contained in this presentation relates to or is based on studies, publications, surveys and other data obtained from third-party sources and the Company's own internal estimates and research. While the Company believes these third-party sources to be reliable as of the date of this presentation, it has not independently verified, and makes no representation as to the adequacy, fairness, accuracy or completeness of, any information obtained from third-party sources. In addition, all of the market data included in this presentation involves a number of assumptions and limitations, and there can be no guarantee as to the accuracy or reliability of such assumptions. Finally, while we believe our own internal research is reliable, such research has not been verified by any independent source.



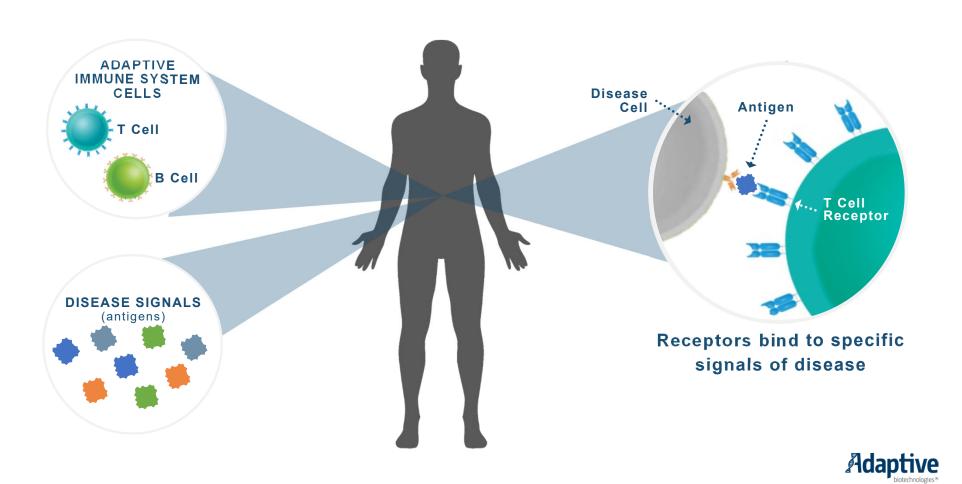
# The Adaptive Immune System



One of the largest clinical applications of genomics



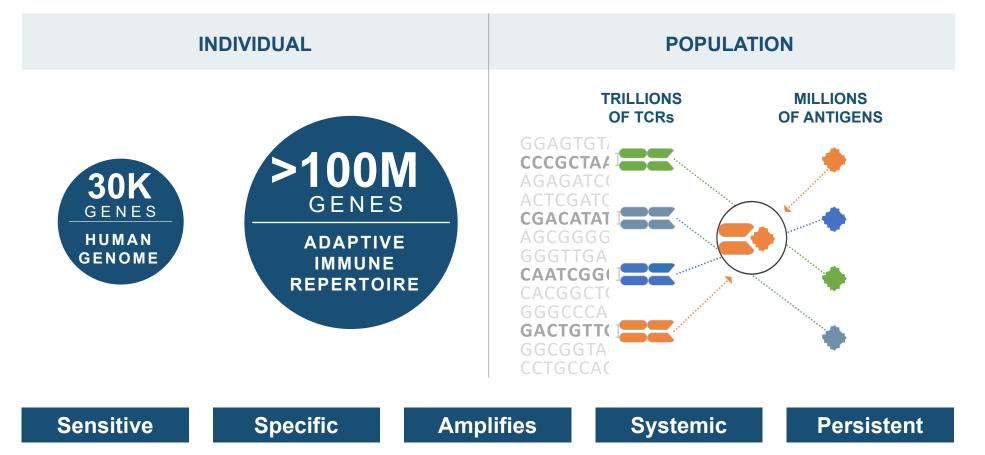
# The immune system detects & treats most diseases in the same way





# Revealing its massively diverse genetic code may transform medicine





# Harnessing the inherent biology of the adaptive immune system

TRANSFORMING THE DIAGNOSIS AND TREATMENT OF DISEASE

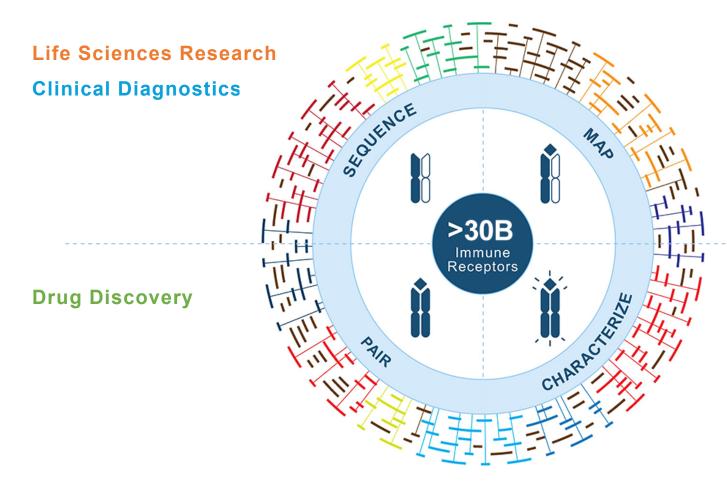
Immune Medicine Platform Clinical Immunomics Database Two
Commercial
Products

Robust Clinical Pipeline Strong Financial Position

~\$48B+ MARKET OPPORTUNITY



# **Proprietary immune medicine platform**





# Validated with patents, partners, and publications

265+
PATENTS

377
PATENTS
FILED

69
PENDING
PATENTS

165+
PARTNERS



PHARMA & BIOTECH



NATIONAL RESEARCH INSTITUTIONS 440+

PUBLICATIONS

>80
PUBLICATIONS
IN 2019 TO DATE



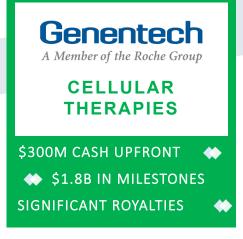


# Initial products set stage to monetize expansive pipeline









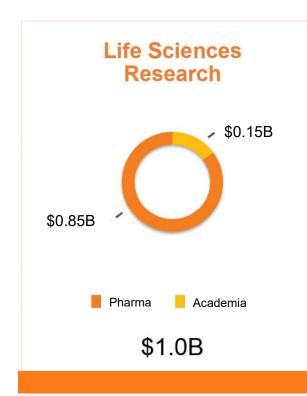
Note: immunoSEQ is for Research Use Only (RUO) and not for use in diagnostic procedures;

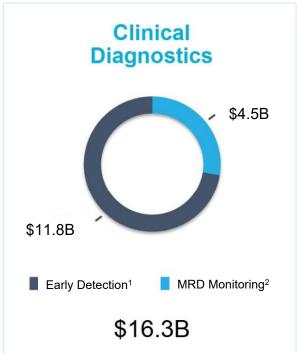
The clonoSEQ Assay is FDA-cleared for use in B-cell acute lymphoblastic leukemia and multiple myeloma patients to detect and monitor minimal residual disease (MRD) in bone marrow samples. clonoSEQ is also available for use in other lymphoid cancers as an LDT. For important information about the FDA-cleared uses of clonoSEQ, including test limitations, visit clonoseq.com/technical-summary



# ~\$48B+ addressable market breaks down across 3 product areas









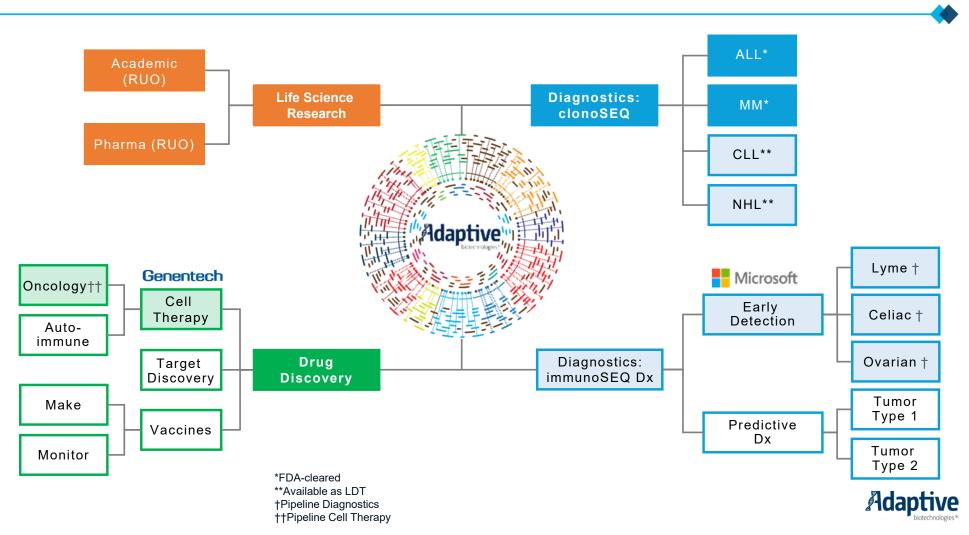






# Multiple opportunities for growth

11



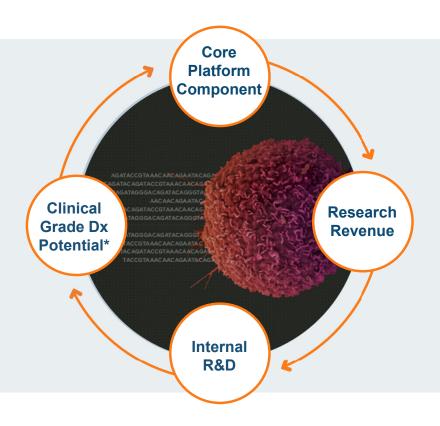
# Quantifying immunology with immunoSEQ

### ~\$1B market opportunity

**SCALE** 

**PRECISION** 

**SPEED** 



~2,000 **RESEARCHERS** 

165+

**BIOPHARMA PARTNERS** 

540+

**CLINICAL TRIALS** 

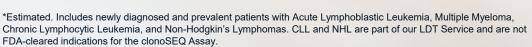


# Monitoring Minimal Residual Disease (MRD) in blood cancer...

- → ~4.6 million patients living with most blood cancers\*
- Patients are living longer due to new therapies
- Clinicians need to monitor disease burden regularly
- Pharma companies need new ways to measure response
- Guidelines are continually evolving to include MRD across disease states

REMAINING CANCEROUS CELLS

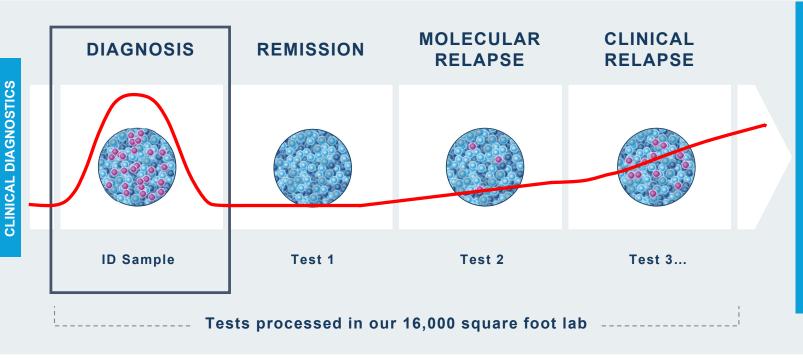






# clonoSEQ tracks patient-specific cancer cells

~\$4.5B market opportunity for 4.6 million patients



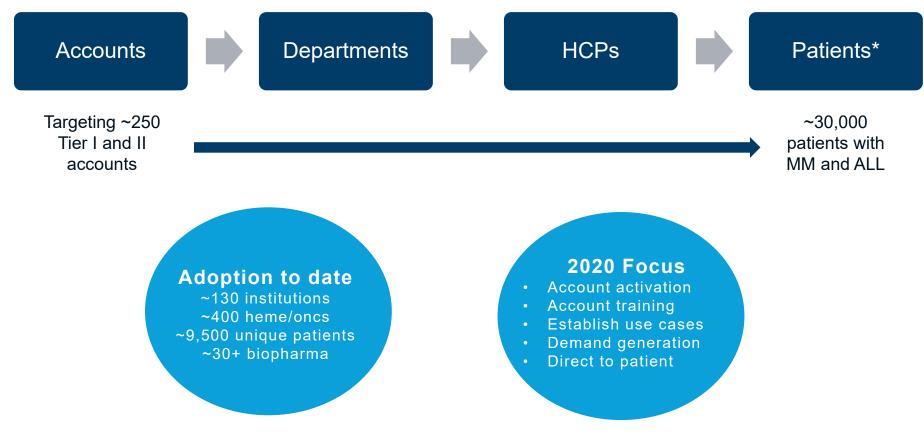
FDA-cleared
MM and ALL, bone marrow

CLEP approval & LDT MRD monitoring for B-cell and T-cell\* cancers

Reimbursement
CMS, ~165M+ covered lives,
positive BCBSA assessment



# Approach to penetration in the US today





# MRD offers broad clinical utility

# Potential role of clonoSEQ throughout treatment

- Use for prognosisMRD status is the strongest predictor of outcomes
- Assess response
   Post induction and consolidation, MRD guides treatment intensity
- Delay transplant
   MRD negative patients may delay or avoid need for SCT
- Discontinue maintenance
   Maintaining MRD negativity may guide duration of maintenance treatment





# clonoSEQ solves limitations of current methods



# Current approaches to monitoring blood cancers

#### Lymphoma

PET / CT scans Flow cytometry

#### Leukemia

Flow cytometry ASO PCR

#### **Multiple Myeloma**

M-protein tests Flow cytometry

- **\(\oddsymbol{\oddsymb**
- **\(\oddsymbol{\oddsymb**
- **♦** Invasive
- Radiation exposure
- **Expensive**

# clonoSEQ

Universal applicability to patients with lymphoid malignancies

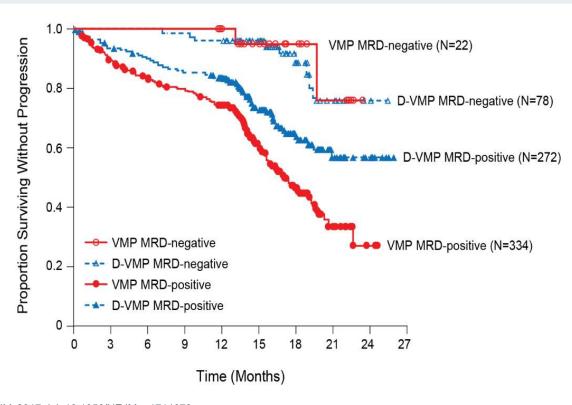
- Sensitivity of 1 in a million cells
- **Standardized**
- \* Patient's unique cancer
- Minimally invasive
- No radiation exposure



# clonoSEQ example of clinical validation in patients with MM

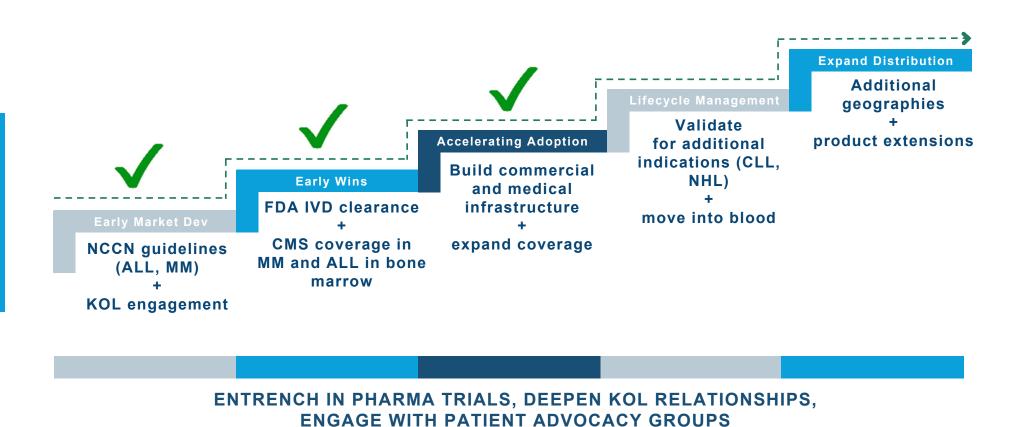


# Patients who were MRD negative by the clonoSEQ Assay had longer PFS compared to MRD positive patients regardless of treatment





## Strategic path to market leadership





# immunoSEQ Dx: TCR-Antigen Map for diagnosis of multiple diseases

CELIAC







**ANTIGEN MAPPING** 



MACHINE LEARNING

Mapping trillions of TCRs to millions of antigens in the population

2

EARLY CLINICAL SIGNALS

2019

CONFIRMED SIGNAL IN LYME

**GOAL** 

BECOME PART OF PRIMARY CARE



### immunoSEQ Dx Mission/Vision



immunoSEQ Dx will revolutionize the way in which people are diagnosed with most diseases



#### **Patients**

- Earlier, certain Dx
- Confidence in provider network
- Convenience of blood-based testing

#### **HCPs**

- Clinical confidence
- Practice efficiency
- Instantly solve differential Dx

#### **Payers**

- Reduced unnecessary Dx spend
- Reduced burden from late Dx
- Targeted use of therapies

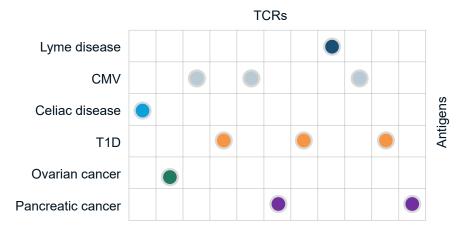


# **Building and using the Antigen Map**

#### -41

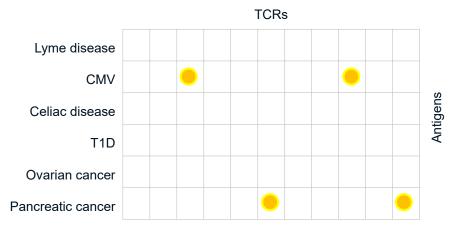
#### **MAP TCRs to Disease Antigens**

#### From healthy donors & patients



#### Reference Map with immunoSEQ DX

#### In an individual patient



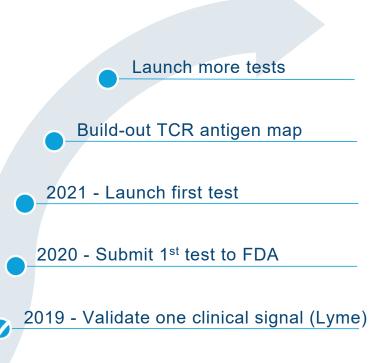


# Plan to decode the immune system to diagnose with Microsoft





- Antigens are known and understood
- Sample availability with clinical outcomes
- Unmet need for better diagnostic
- Earlier intervention would improve patient outcomes



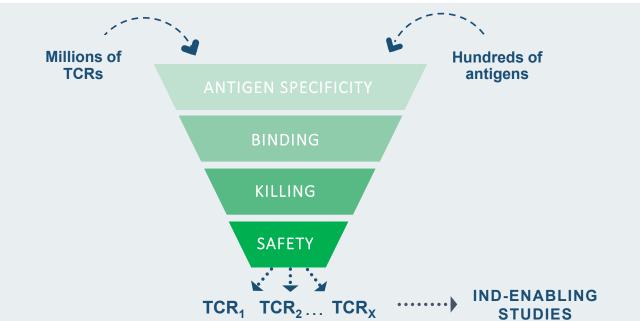
Build software and data pipeline



# **DRUG DISCOVERY**

# **Drug Discovery: Identifying optimal clinical TCR candidates**

~\$31.4B market opportunity for >100,000 metastatic patients\*

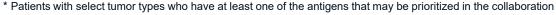


Using TruTCR<sup>^</sup>, we have characterized...

3,000
UNIQUE, NATURALLYOCCURRING TORS

~600
CLINICALLY RELEVANT TARGETS

Note: Statistics stated as of November 20, 2019



<sup>^</sup> Investigational Use Only



# Developing cell therapies for cancer patients with Genentech

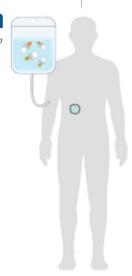








- \$300M upfront payment
- \$1.8B in milestone payments
- Royalties in mid-single digit to mid-teen range



Joint foray into TCR cellular therapy in oncology

Motivated to create **individualized therapy** for each cancer patient

TCR discovery capability expected to be used in real time to screen patient blood for TCRs directly targeting patient-specific neoantigens



# Developing novel neoantigen directed T cell therapies

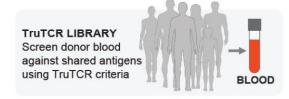


#### **SHARED PRODUCTS**

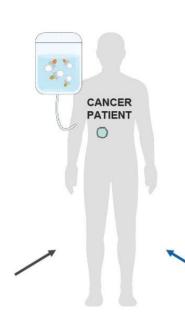
Profile DNA in patient tumor to determine immunogenic antigens and neoantigens



Select TCRs against shared antigens from TruTCR Library



Deliver TCRs to patient whose tumor expresses shared antigen(s)



#### PERSONALIZED PRODUCT

Profile DNA in patient tumor to determine immunogenic antigens and neoantigens, and sequence blood for TCRs





- Screen in real-time for TCRs against patientspecific neoantigens using Adaptive's TCR discovery platform
- Engineer cell therapy with patient-specific TCRs, manufacture in real-time for each patient
- Deliver fully personalized therapeutic TCRs to patient

**DUAL TCR CELLULAR THERAPY APPROACHES** 



#### **Near-term milestones**

- Life Sciences Research
  - Completion of upgraded RUO kit on track with launch planned in Q1 2020
- Clinical Diagnostics clonoSEQ
  - FDA submission for monitoring patients with CLL from blood samples
- Clinical Diagnostics immunoSEQ Dx
  - Confirmed one signal in Lyme Disease
  - Initiate clinical validation
  - FDA submission for first indication by end of 2020
- Drug Discovery
  - First IND submission for shared product in 2020\*



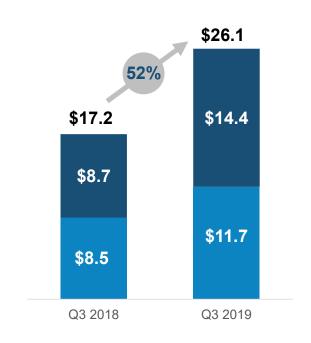
<sup>\*</sup>Product candidates in development as part of our worldwide collaboration and license agreement with Genentech. The "1st Shared" and "2nd Shared" product candidates refer to the two lead clinical product candidates selected from our library of TCRs that target cancer antigens present in many cancer patients. Genentech will determine the timing of discussions with, and submissions to the FDA.

# **Financial highlights**

# QUARTERLY REVENUE (Millions)







Sequencing revenue



# **Attractive financial model**

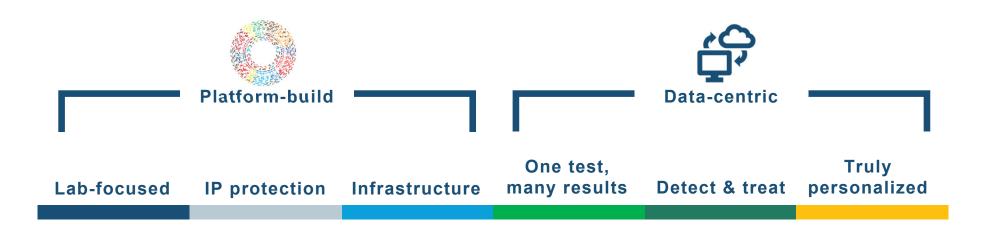
	2017	2018	Target Model
Revenue %	100%	100%	100%
Cost of Revenue %	41%	35%	<b>:</b>
R&D %	83%	70%	:
S&M %	44%	44%	•
G&A %	41%	37%	•

<sup>\*</sup>all figures in table represent % of revenue

★ Well capitalized with \$708.7M¹ and no debt



# Our vision: To translate immunomics into clinical products



High-margin, patient-specific, immune-driven clinical products



## Today's takeaways



#### SIGNIFICANT MARKET OPPORTUNITY

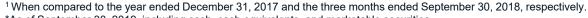
Targeting an estimated \$48+ billion initial opportunity with a beachhead in drug discovery via Genentech deal and potential for significant disruption in early detection through Microsoft partnership.

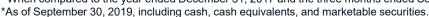
#### PROVEN COMMERCIAL **MODEL**

First diagnostic, clonoSEQ, has two FDA cleared indications and secured payor coverage with Medicare, 4 major national plans, plus several large regionals for >165MM covered lives to date.

#### **STRONG FINANCIAL PROFILE**

Strong revenue growth of 45%<sup>1</sup> in 2018 and 52%<sup>1</sup> in Q3 2019, high margin potential, and are well capitalized with \$708.7 million\* with no debt.







# Mission-driven executive leadership





Chad Robins
Chief Executive Officer
& Co-founder



Harlan Robins, PhD
Chief Scientific Officer &
Co-founder



Julie Rubinstein
President



**Chad Cohen**Chief Financial Officer



Lance Baldo, MD
Chief Medical Officer



Sean Nolan Chief Technical Officer



Francis Lo
Chief People Officer



Nancy Hill SVP, Operations



Charles Sang SVP, Adaptive Diagnostics



Sharon Benzeno, PhD SVP, Drug Discovery



Stacy Taylor SVP & General Counsel































