Adaptive biotechnologies™

Investor Relations Presentation

Safe Harbor

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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 the ability to map adaptive immune responses to target disease states, the ability to leverage any such findings to advance solutions to diagnose, treat and prevent infectious diseases; regarding our future financial or business performance, conditions, plans, prospects, trends or strategies and other financial and business matters; our current and prospective products and product candidates; FDA clearance or authorization of any products; 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 products and product candidates; the timing and success of our development and commercialization of current products and product candidates; the availability of alternative therapies for our target markets; and the other risks and uncertainties described in our filings with the Securities and Exchange Commission 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 our Annual Report on Form 10-K, including our most recent Annual Report on Form 10-K filed on February 14, 2023. 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.

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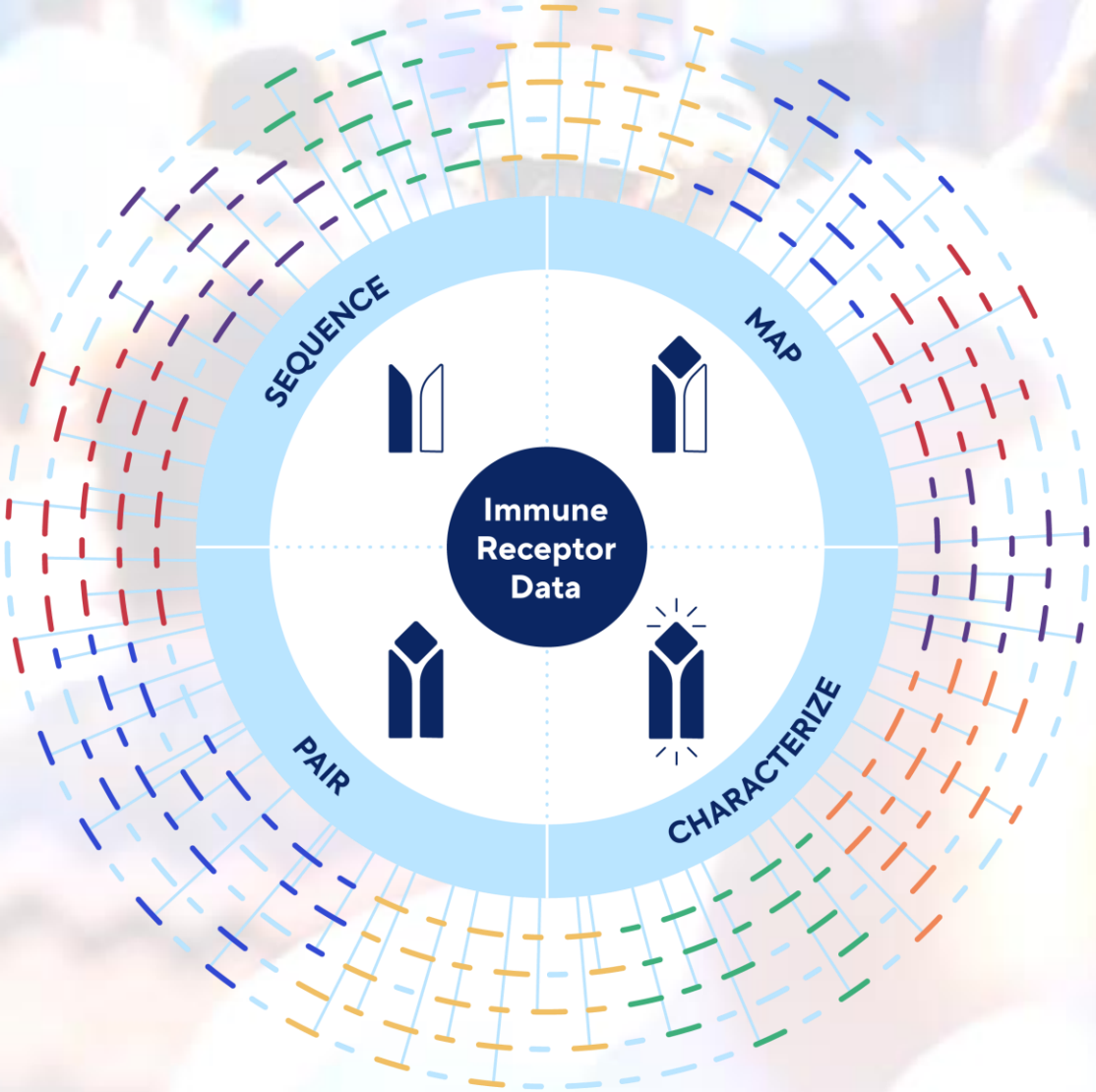
Our Mission

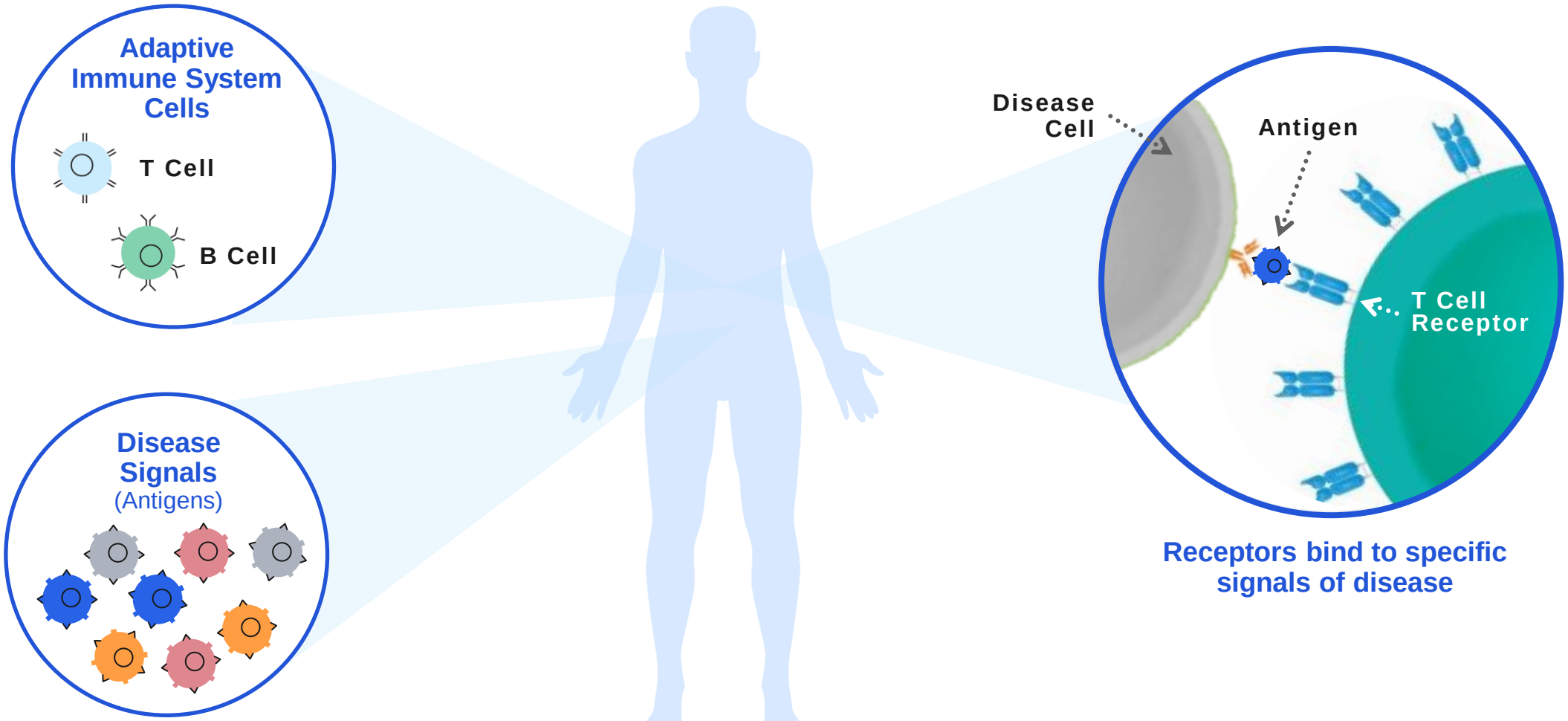
Translate the genetic language of the adaptive immune system into clinical products to diagnose and treat disease

- Founded in 2009
- NASDAQ listed 2019 (ADPT)
- 700+ employees
- 700+ publications to date



Adaptive biotechnologies®

The immune system detects and treats most diseases in the same way



Receptors bind to specific signals of disease

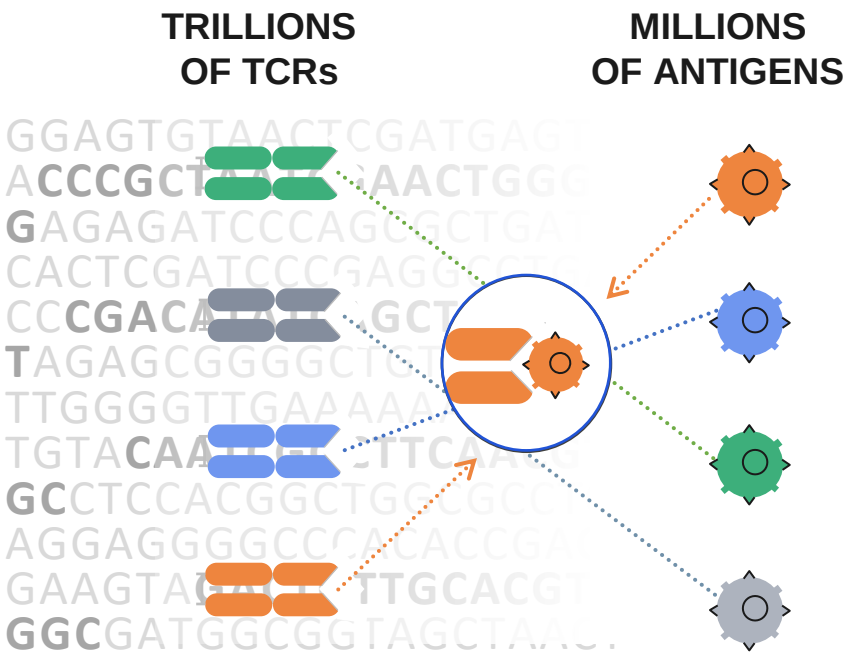
Revealing its massively diverse genetic code may transform medicine

INDIVIDUAL

30K
GENES
HUMAN GENOME

>100M
GENES
ADAPTIVE IMMUNE REPERTOIRE

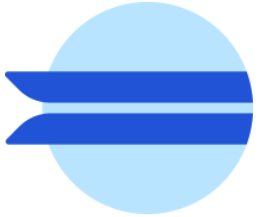
POPULATION



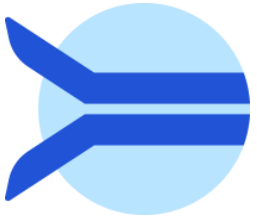
Sensitive | **Specific** | **Amplified** | **Systemic** | **Persistent**

Using the immune system as the source-code for immune medicine

Immune System



T Cells



B Cells

Genetics

Data

Immune Medicine

Autoimmune disorders

Cancer

Infectious diseases

Neurodegenerative disorders

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Adaptive Innovation Timeline

2009 — **Adaptive Biotechnologies**
Founded by Harlan and Chad Robins

2010 — **ImmunoSEQ**
1st research product launch
immunoSEQ

2012 — **HQ Opening**
In Seattle, WA

2015 — **Adaptive acquires Sequenta**
NDS technology for MRD in blood cancers
SEQUENTA

2017 — **Adaptive partners with Microsoft**
To map the human immune system

2018 — **clonoSEQ**
Cleared by FDA for MRD in ALL and MM
clonoSEQ

2019 — **Genentech**
Partnership
Cancer Targets · Therapeutic TCRs
Genentech
A Member of the Roche Group

2019 — **clonoSEQ**
Receives Medicare coverage ALL, MM, CLL

2019 — **IPO**
(Nasdaq: ADPT)

2020 — Expanded **SSF Labs**

2020 — **TCR Discovery**
Implemented
TCR Discovery: Antigen Specificity; TCR A/B PAIRING; BINDING + FUNCTIONALITY; SAFETY; TCR_1 TCR_2 ...TCR_N

2020 — **clonoSEQ**
Cleared by FDA for MRD in CLL
clonoSEQ

2021 — **Private Product**
Lab / Prototype

2021 — **HQ Relocation**
In Seattle, WA

2022 — **Ab Discovery**
Implemented
Antibody Discovery: H/L PAIRING; *in silico* SELECTION; BINDING; VALIDATE; Ab_1 Ab_2 ... Ab_N

2022 — **clonoSEQ**
DLBCL receives Medicare coverage and launch
clonoSEQ

2023 — **GNE T-Cell Therapy IND**
Accepted by FDA

2023 — **Capabilities build**
Target discovery, TCR and Antibody therapeutics

Business areas of focus: MRD and Immune Medicine

Minimal Residual Disease (MRD)

Highly sensitive NGS-based assessment of MRD in heme for use in clinical practice and drug trials.

TAM ~$5B*

Clinical Testing

clonoSEQ® Adaptive

MRD Pharma

NGS MRD

Immune Medicine (IM)

Rich immune receptor data informs clinical trials and development of transformative medicines.

TAM ~$44B*

Pharma Services

Adaptive Immunosequencing

Drug Discovery

Target Discovery
T-cell Therapeutics
Antibody Therapeutics

* Global TAMs.

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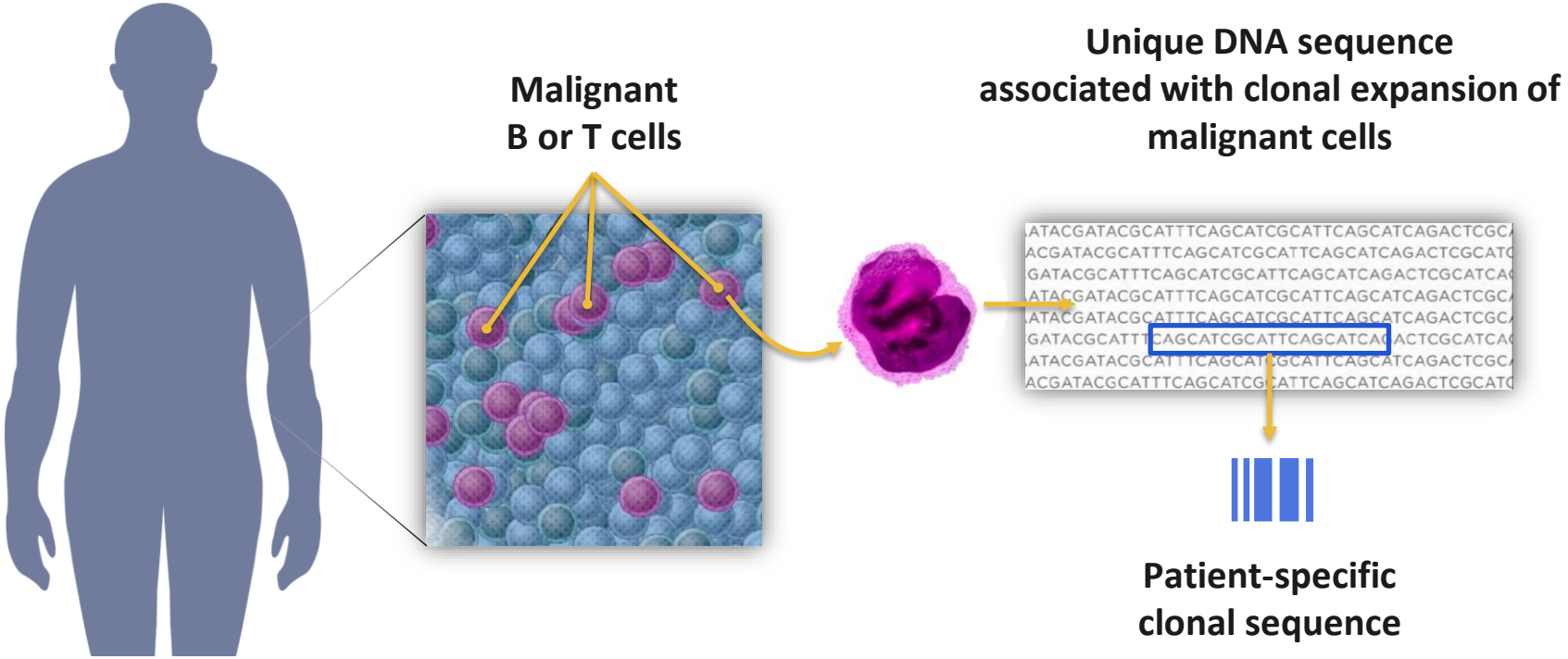
MRD

clonoSEQ is the gold standard for MRD in heme

- Highest sensitivity – detects one in 1M cancer cells
- Strong IP protection: 140+ MRD-specific patents
- Only FDA approved MRD assay for ALL, MM and CLL*
- 150+ publications, 100+ ongoing studies
- 300M covered lives (MM, ALL), ~200M in CLL
- NCCN guidelines ALL, MM, CLL
- 41 pharma partners, 160 active clinical trials

* All indications are CLIA validated including DLBCL

clonoSEQ assesses MRD by looking for specific DNA sequences associated with malignant B or T cells*

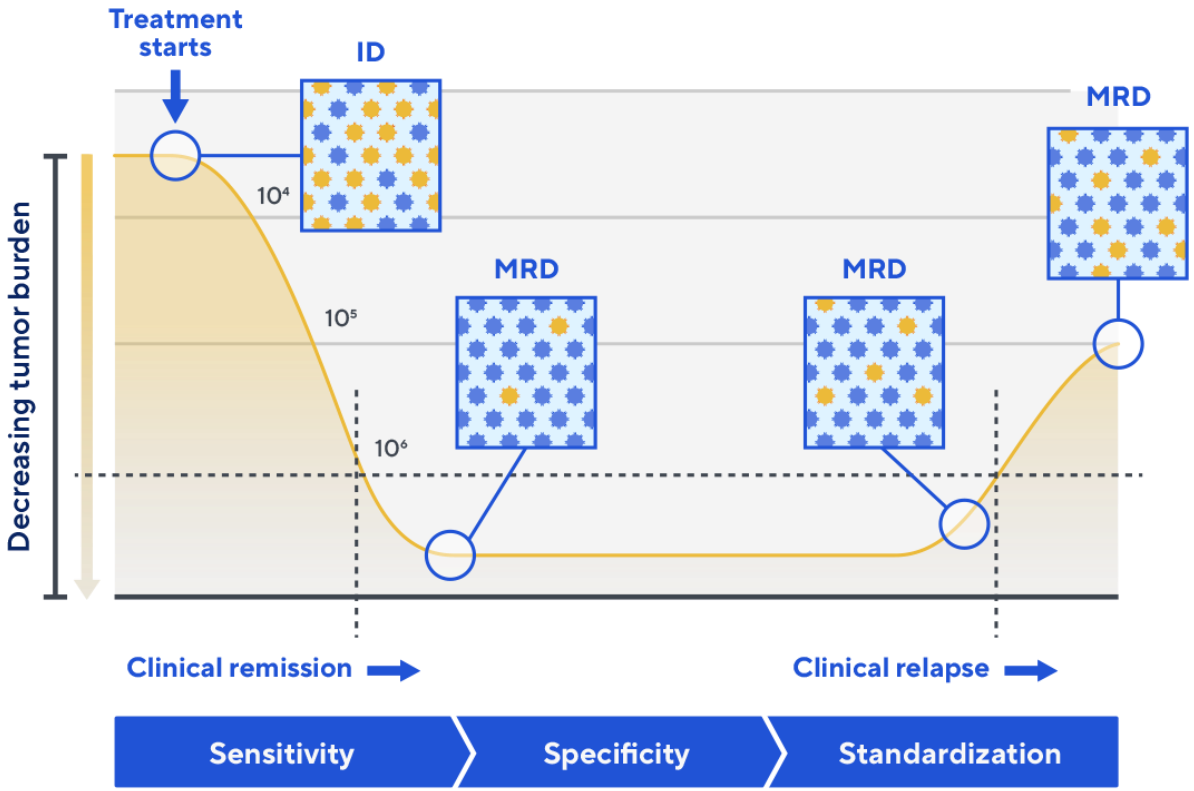


By sequencing the DNA associated with B- and T-cell receptors, clonoSEQ identifies and quantifies specific cancer-associated sequences, generating MRD results that are a direct measure of the tumor, not a surrogate of disease

*T-cell testing is available as a CLIA-validated LDT and has not been cleared or approved by the FDA.
Carlson C, et al. *Nat Commun*. 2013;4:2680.; Faham M, et al. *Blood*. 2012;120(26):5173-80 (study author was an employee of Adaptive at time of publishing)

Our MRD business provides value to all stakeholders

MRD is highly prognostic of outcomes…



Transforming care for lymphoid cancer

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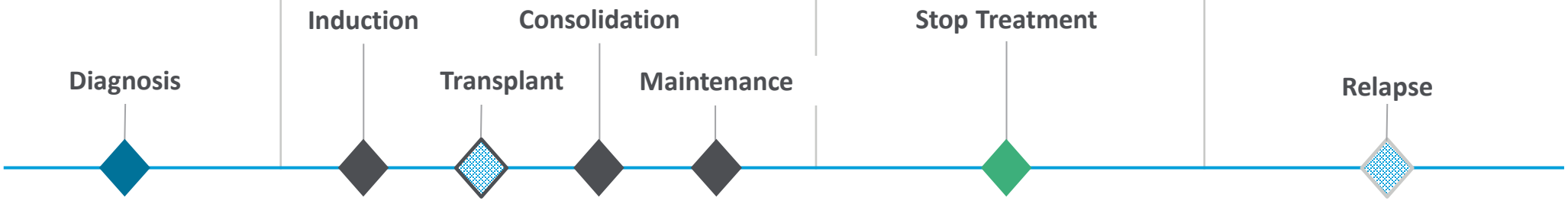
Disease burden assessment is integral to clinical decision-making throughout the treatment continuum

Phase			
Diagnosis	**Active Treatment**	**Remission**	**Disease Recurrence**
Purpose			
• Stage disease • Evaluate patient prognosis	• Inform treatment selection • Assess treatment response • Intensify / de-intensify treatment • Determine need for additional treatment (e.g., consolidation or maintenance)	• Monitor disease burden during remission • Inform frequency of monitoring • Decide to discontinue treatment	• Predict potential relapse • Decide to re-initiate treatment
Milestone			



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Other methods for clinical MRD evaluation in lymphoid cancers are limited

Other approaches to monitoring lymphoid cancers

ALL & CLL	MM	DLBCL[1]
Flow cytometry	Flow cytometry M-protein tests Serum FLC	PET / CT scans

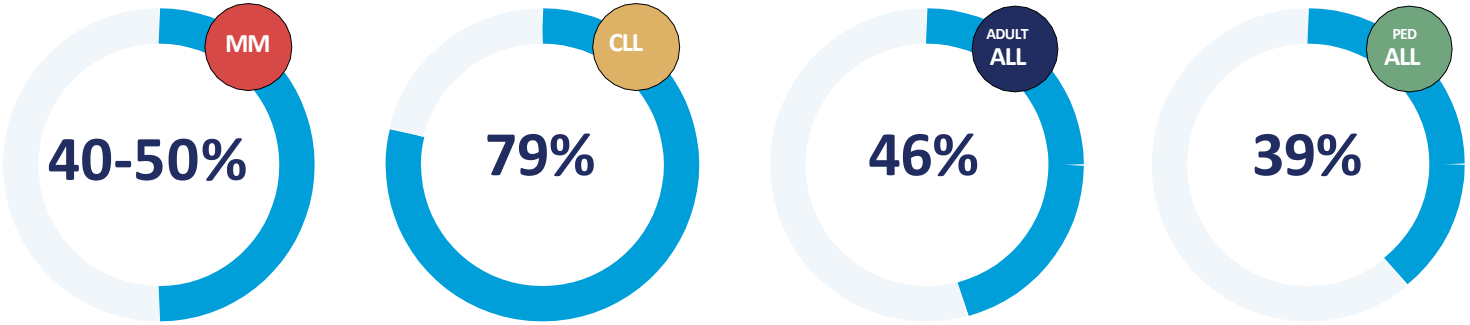
LIMITATIONS

Variable Sensitivity • Low Specificity • Lack of Standardization
Imprecise quantitation • Radiation exposure • Cost

[1] clonoSEQ is available for MRD assessment in DLBCL as a CLIA-validated laboratory developed test. clonoSEQ is FDA-cleared for MRD assessment in ALL, CLL and MM.

How does clonoSEQ compare to MFC?

Percentage of patients who were MRD-negative by MFC but had residual disease by clonoSEQ



clonoSEQ detects disease that MFC cannot

What it means

Many [patients] with apparent ‘MRD-negativity’ by MFC still relapse. These relapses are likely due to residual leukemia that is present below the level of detection of MFC.

-Short et al.

Short NJ, et al. Abstract presented at: the 62nd ASH Annual Meeting and Exposition; December 5-8, 2020.
Avet-Loiseau H, et al. *Blood*. 2015;126(23):191.
Short NJ, et al. *Blood Adv*. 2022;6(13):4006-4014.
Wood B, et al. *Blood*. 2018;131(12):1350-1359.

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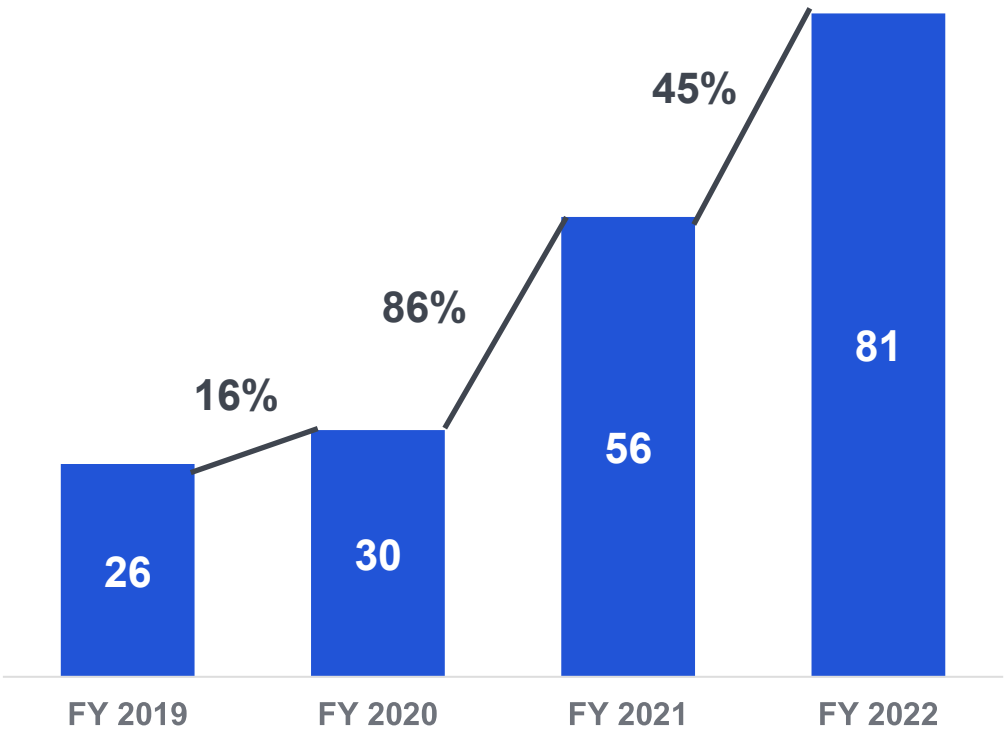
We are in early innings of penetration with significant opportunity to grow…

MRD Business Revenue ($M)[1]



Used in ~7% of lymphoid cancer patients in US[2]

Overall Pharma penetration of ~21%[3]

[1] Excludes regulatory milestones from pharma partners
[2] Incidence and prevalence from SEER database; 10 yr prevalence used for CLL and MM, 5 yr. prevalence used for ALL
[3] Penetration rate estimated based number of trials using clonoSEQ divided by the total number of all active trials in ALL, NHL, CLL and MM

clonoSEQ is supported by a robust evidence base with significant commitment to additional data generation

Journal of Clinical Oncology®

Peripheral blood ctDNA assessments can predict for progression events with added value to standard PET-CT scans

Frank et al. JCO. 2021

blood®

Durable MRD negativity lasting ≥6 or ≥12 months may represent yet a deeper level of response with a higher prognostic value

San-Miguel et al. Blood. 2022

blood®

MRD negativity is the most relevant predictor of clinical outcome compared with other prognostic factors for MM

Cavo et al. Blood. 2021

blood®

Minimal residual disease undetectable (uMRD) by next-generation sequencing predicts improved outcome in CLL after chemoimmunotherapy

Thompson et al. Blood. 2019

blood®

NGS MRD may provide more valuable prognostic information than RT-PCR for BCR::ABL1 and therapeutic decisions in Ph+ ALL may be better informed by also considering NGS MRD status

Short et al. Am J Hematol. 2023

BLOOD CANCER DISCOVERY

The best biomarker described to date for determining risk of relapse at any given time throughout the first year after CAR-T cell therapy … is NGS-MRD assessment of the marrow."

Pulsipher et al. Blood Cancer Discovery. 2022

- >160 peer-reviewed publications supporting the expanding clinical utility of clonoSEQ and NGS MRD in Heme cancers
- >100 ongoing prospective studies in partnership with clinician investigators for data/evidence generation

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DETERMINATION and MASTER: Two recent trials that support personalizing treatment decisions based on MRD-negative status

DETERMINATION trial: Similar 5-year PFS for MRD-negative patients regardless of transplant decision

53.5%
for those who received ASCT

59.2%
for those patients who did not

MASTER trial: 2-year progression for patients who stopped treatment based on 2 MRD-negative tests

9%
in standard risk patients

9%
in high-risk patients

47%
in ultra-high risk patients

What it means

Emerging data show why you might consider personalizing treatment decisions based on MRD-negative status.

ASCT, autologous stem cell transplant;
Dara-KRd, daratumumab + carfilzomib + lenalidomide + dexamethasone;
NDMM, newly diagnosed multiple myeloma; RVD, lenalidomide + bortezomib + dexamethasone.

About the studies
DETERMINATION was a phase 3 trial evaluating RVD alone or RVD + ASCT in patients with NDMM (n = 357). MRD was assessed by clonoSEQ (10^{-5}) from the start of lenalidomide maintenance therapy in 108 patients in the RVD-alone group and 90 patients in the RVD + ASCT group.
Richardson PG, et al. *N Engl J Med*. 2022;387(2):132-147.

MASTER was a multicenter, single-arm, phase 2 trial of patients with NDMM, conducted by Costa et al. Patients received Dara-KRd induction, ASCT, and Dara-KRd consolidation, according to MRD status. MRD was evaluated by NGS at the end of induction, post-ASCT, and every 4 cycles (maximum of 8 cycles) of consolidation. Primary endpoint was achievement of MRD negativity (10^{-5}). Subjects with 2 consecutive MRD-negative assessments entered treatment-free MRD surveillance.
Costa LJ, et al. J Clin Oncol. 2021;JCO2101935.

clonoSEQ clinical testing is covered by Medicare and private payers for >300 million people in the U.S.

MEDICARE

Medicare coverage is available nationally for myeloma, ALL, CLL, and DLBCL and includes assessment of MRD at multiple timepoints

Positive coverage policies in place from the largest national private insurers*

Coverage for clinically relevant use in myeloma, ALL, and CLL, per commonly-used clinical practice guidelines

Based on policies published as of July 2022. Coverage may vary by specific provider or plan.
*Based on insurance coverage and prior to applying any Adaptive-provided financial assistance

Expanding clonoSEQ utilization in lymphoid cancer patients

Three-pronged strategy to increase penetration in heme MRD …

Increase testing in blood

Expand into NHL

Increase usage per patient

… enhancing customer experience (EPIC integration), expanding coverage and increasing ASP

clonoSEQ is the test of choice for drug developers in heme cancers

Only FDA approved MRD test in heme cancers

Portfolio overview

41
Companies

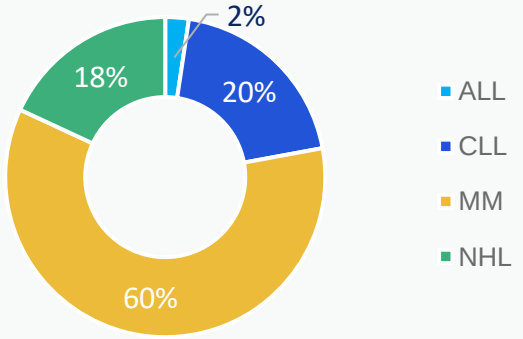
160
Ongoing Clinical Trials

>$400M
Future Milestones

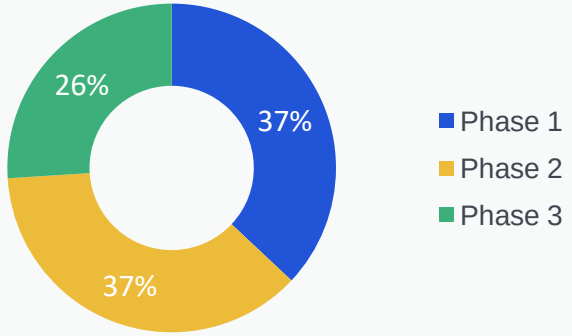
Top ten accounts

Portfolio mix

By indication ($ bookings)



By trial phase (number of studies)



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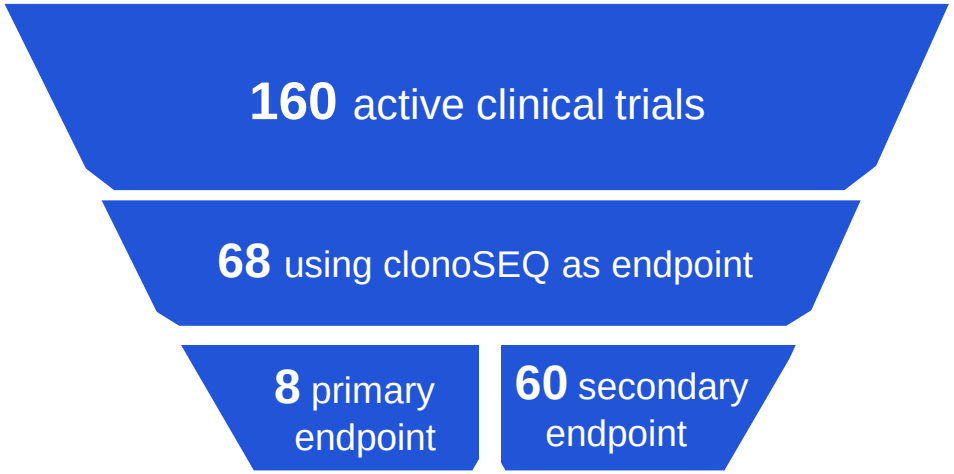
clonoSEQ MRD, gold standard in drug trials, sees growing use as an endpoint

- Several recent FDA drug approvals contain data supporting clinical utility of MRD

BLINCYTO® (blinatumomab) for injection 35 mcg single-dose vial
Abecma (idecabtagene vicleucel) suspension for IV infusion
DARZALEX® (daratumumab) injection for intravenous infusion 100 mg/5 mL, 400 mg/20 mL
VENCLEXTA® venetoclax tablets 10mg, 50mg, 100mg

- ~$400M in eligible regulatory milestones from active & future trials

clonoSEQ MRD used as primary endpoint in 8 trials



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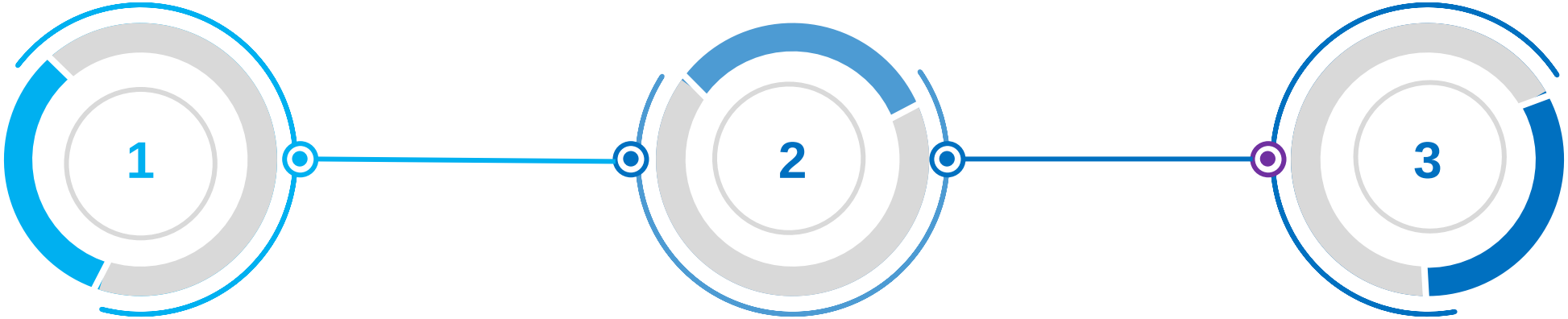
MRD business is well positioned to deliver strong revenue growth over time



Competitive Advantages

- Sensitivity (10^{-6})
- Breadth of published evidence
- FDA approved
- Broad payer coverage (US)
- Product of choice for pharma R&D
- Sample type flexibility

External Catalysts

- Rich pipeline of new agents (bi-specifics, CAR-T, etc.) driving deeper responses
- Patients living longer as treatment choices advance
- NGS-MRD evolving as SOC in treatment algorithms across cancers
- FDA support for using NGS-MRD as an endpoint in trials

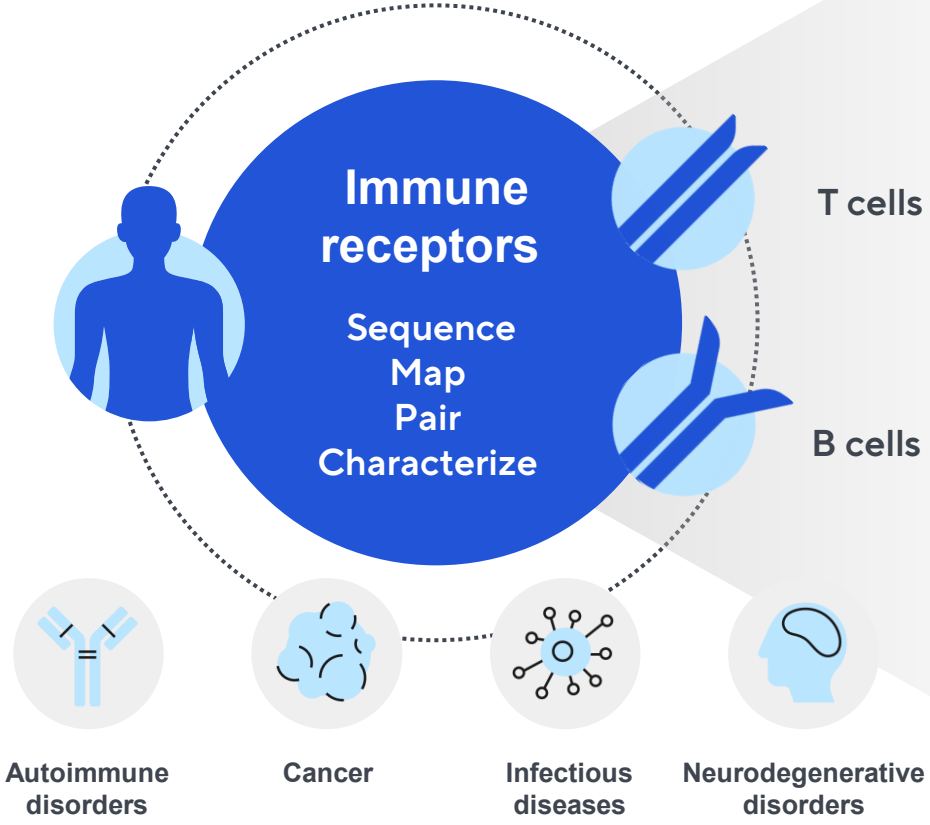
Internal Catalysts

- Sales force expansion
- Continued investments in evidence generation studies
- Expansion of reimbursement coverage & RWE studies
- EMR (EPIC) integration
- Product enhancements

Immune Medicine

Immune Medicine business

Immune Medicine Platform



Growth Areas

Pharma Services

Immune receptor sequencing

Drug Discovery

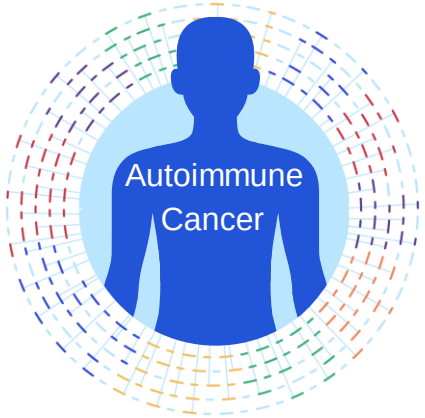
Target Discovery
T-cell Therapeutics
Antibody Therapeutics

Adaptive biotechnologies™

Drug Discovery combines novel target discovery and therapeutic assets

Unique ability to discover and validate novel disease specific drug targets

Target Discovery



TCR Therapeutics

Antibody Therapeutics

Develop differentiated TCR and antibody therapeutic products against validated, novel targets

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Pharma Services growing portfolio across multiple indications

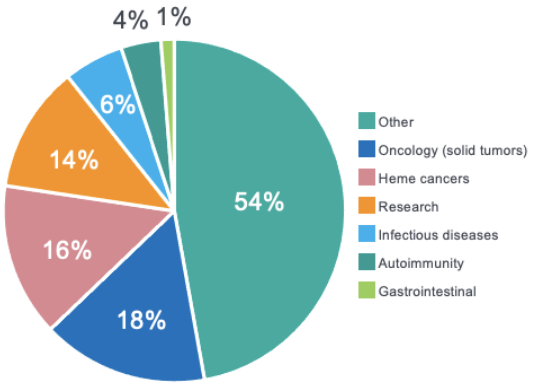
4+
Major therapeutic areas

500+
Total studies to date

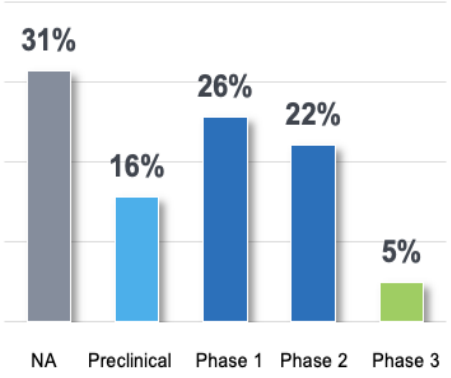
140
Total active studies

85+
Companies

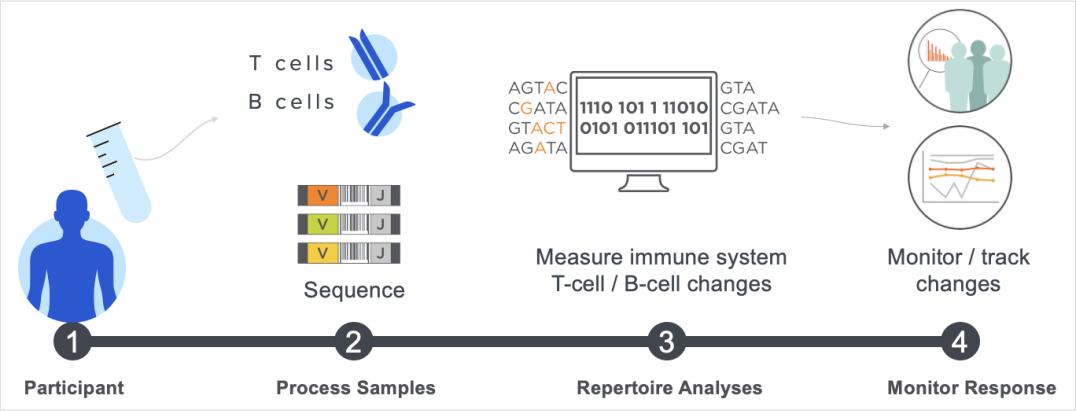
Portfolio mix by indication



Portfolio mix by study phase



Rich immune receptor biomarker data accelerates clinical trials



Growth drivers

- Scale companies / # of studies using sequencing
- Increase penetration in later stage trials and across indications

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Immune receptor data fuels our pipeline in cancer and autoimmune disease

High unmet clinical need… → **Drug Discovery efforts to meet the need**

Cancer

- Cell therapy in heme with early success
- Cell therapy in solid tumors is the next frontier

TCR Cell Therapy — Shared / Private — Genentech, A Member of the Roche Group

Autoimmune disorders

- Efforts underway to discover disease-specific targets
- Opportunity to bring precision medicine to patients with autoimmune diseases

Novel Targets — IBD, MS

TCR Tx — Partner/(co)Develop

Antibody Tx — Partner/(co)Develop

Against novel targets

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Cell Therapy in Oncology; Partnership with Genentech

- Cell therapies showing great efficacy
  - Limited to surface markers only
- T-cell receptors are cancer specific
- Our platform generates highly potent TCRs against cancer antigens

- Characterize TCRs against cancer antigens for cellular therapy
  - Shared Products
  - Private Products
- Ability to pursue partnerships outside of oncology

$300M
Upfront payment

$1.8B
In milestone payments

Royalties in mid-single digit to upper-teen range

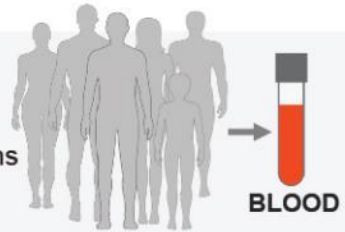
Developing novel neoantigen directed T-cell therapies

Shared Product

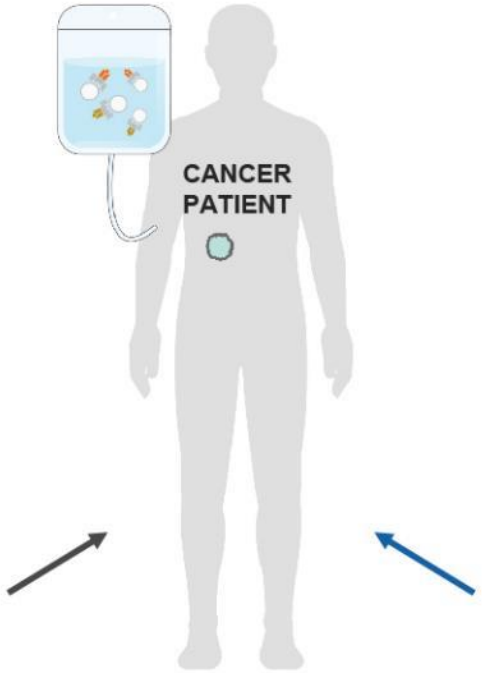
1. Profile DNA in patient tumor to determine immunogenic antigens and neoantigens

2. Select TCRs against shared antigens from TruTCR Library

TruTCR LIBRARY
Screen donor blood against shared antigens using TruTCR criteria

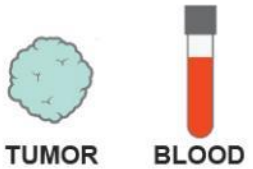


3. Deliver TCRs to patient whose tumor expresses shared antigen(s)



Personalized Product

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



2. **Screen in real-time** for TCRs against patient-specific neoantigens using Adaptive's TCR discovery platform

3. Engineer cell therapy with patient-specific TCRs, **manufacture in real-time** for each patient

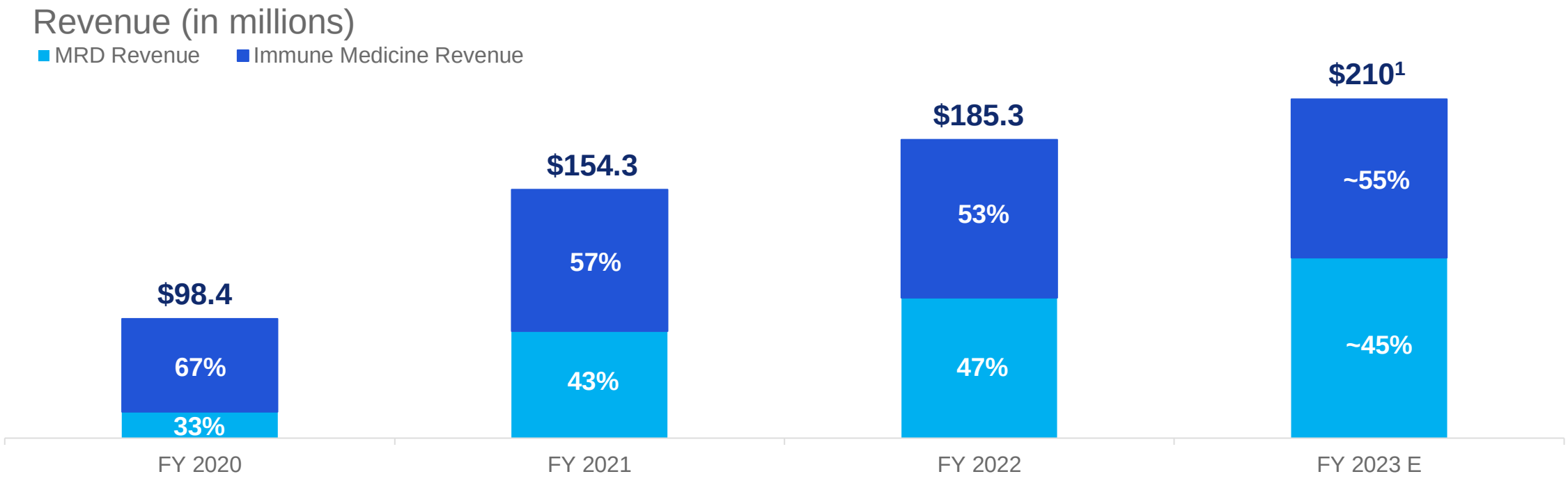
4. Deliver fully personalized therapeutic TCRs to patient

DUAL TCR CELLULAR THERAPY APPROACHES

Adaptive biotechnologies™

Financials

Financial Highlights



- ~$417 million in cash, cash equivalents and marketable securities as of 06/30/2023
- No debt

Note: bar charts not at scale
[1] Mid-point of guidance range $205M-$215M as of 06-30-23

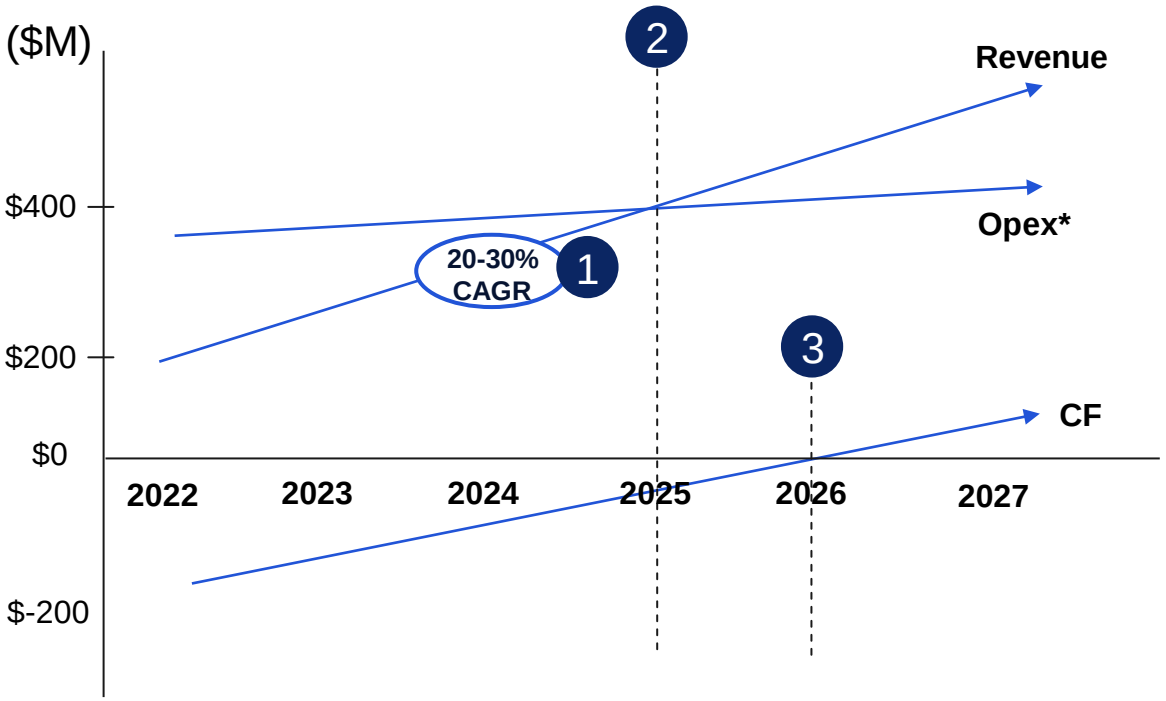
Long-term expectations

Path to Profitability / Cash Flow breakeven

1. Revenue CAGR from 2022-2027 to be 20-30%
   - 2019-2021 CAGR of 35%
2. Adj EBITDA[1] positive 2025
   - Prudent spend management: maintain operating expenses levels at low growth
3. Cash Flow Breakeven 2026
   - $417M cash, cash equivalents and marketable securities as of 6/30/23
   - Cash on hand >3 years

[1] Adjusted EBITDA excludes stock comp

Estimated 5 yrs P&L progression



* Opex in this chart excludes stock comp, depreciation and amortization
Chart not at scale