



Corporate Presentation

July 2021


 **ONCOCYTE™**

Where Tomorrow **LIVES**

Forward Looking Statement

Any statements that are not historical fact (including, but not limited to statements that contain words such as “will,” “believes,” “plans,” “anticipates,” “expects,” “estimates,” “may,” and similar expressions) are forward-looking statements. These statements include those pertaining to the commercial launch of DetermaRx, development and clinical use of DetermaIO and planned new diagnostic tests, clinical trials and studies, commercialization plans, future financial and/or operating results, and future opportunities for Oncocyte, along with other statements about the future expectations, beliefs, goals, plans, or prospects expressed by management. Forward-looking statements involve risks and uncertainties, including, without limitation, the potential impact of COVID-19 on our financial and operational results, risks inherent in the development and/or commercialization of diagnostic tests or products, uncertainty in the results of clinical trials or regulatory approvals, potential interruptions to our supply chain, the need and ability to obtain future capital, maintenance of intellectual property rights, and the need to obtain third party reimbursement for patients’ use of any diagnostic tests we commercialize, and risks inherent in acquisitions such as failure to realize anticipated benefits, unexpected expenditures or assumed liabilities, unanticipated difficulties in conforming business practices including accounting policies, procedures and internal controls, greater than estimated allocations of resources to develop and commercialize technologies, or failure to maintain any laboratory accreditation or certification. Actual results may differ materially from the results anticipated in these forward-looking statements and accordingly such statements should be evaluated together with the many uncertainties that affect the business of Oncocyte, particularly those mentioned in the “Risk Factors” and other cautionary statements found in Oncocyte’s Securities and Exchange Commission filings, which are available from the SEC’s website. You are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date on which they were made. Oncocyte undertakes no obligation to update such statements to reflect events that occur or circumstances that exist after the date on which they were made, except as required by law.

Mission Statement



Oncocyte is a precision diagnostics company with the mission to improve patient outcomes by providing clear insights that inform critical decisions in the diagnosis, treatment, and monitoring of cancer.

Oncocyte's *Determa* Platform Strategy

Products Deliver Critical Information Throughout the Patient Journey Improving Outcomes and Reducing Costs

Diagnosis of Cancer

Does patient have cancer?

Screening

Treatment Decision

Should I give adjuvant chemo?

Treatment Stratification

DETERMA Rx™

Available for Clinical Use

US TAM: ~\$140M

Global TAM: ~\$490M

Should I give targeted therapy?

Targeted Therapy Selection

DETERMA Tx™

Clinical Launch 2H21

US TAM: ~\$3B

Global TAM: ~\$5B

Should I give immunotherapy?

Treatment Selection

DETERMA IO™

Available for Research Use Only
Clinical Launch 2H21

Biopharma TAM ~ \$2B

Clinical TAM

US TAM: ~\$3B

Global TAM: ~\$5B

Patient Monitoring

Is the therapy working?

Therapy Monitoring

DETERMA CNI™

For Research Use Only in
2H21

US TAM: ~\$3B

Global TAM: ~\$5B

Is the cancer coming back?

Recurrence Detection

DETERMA Mx™

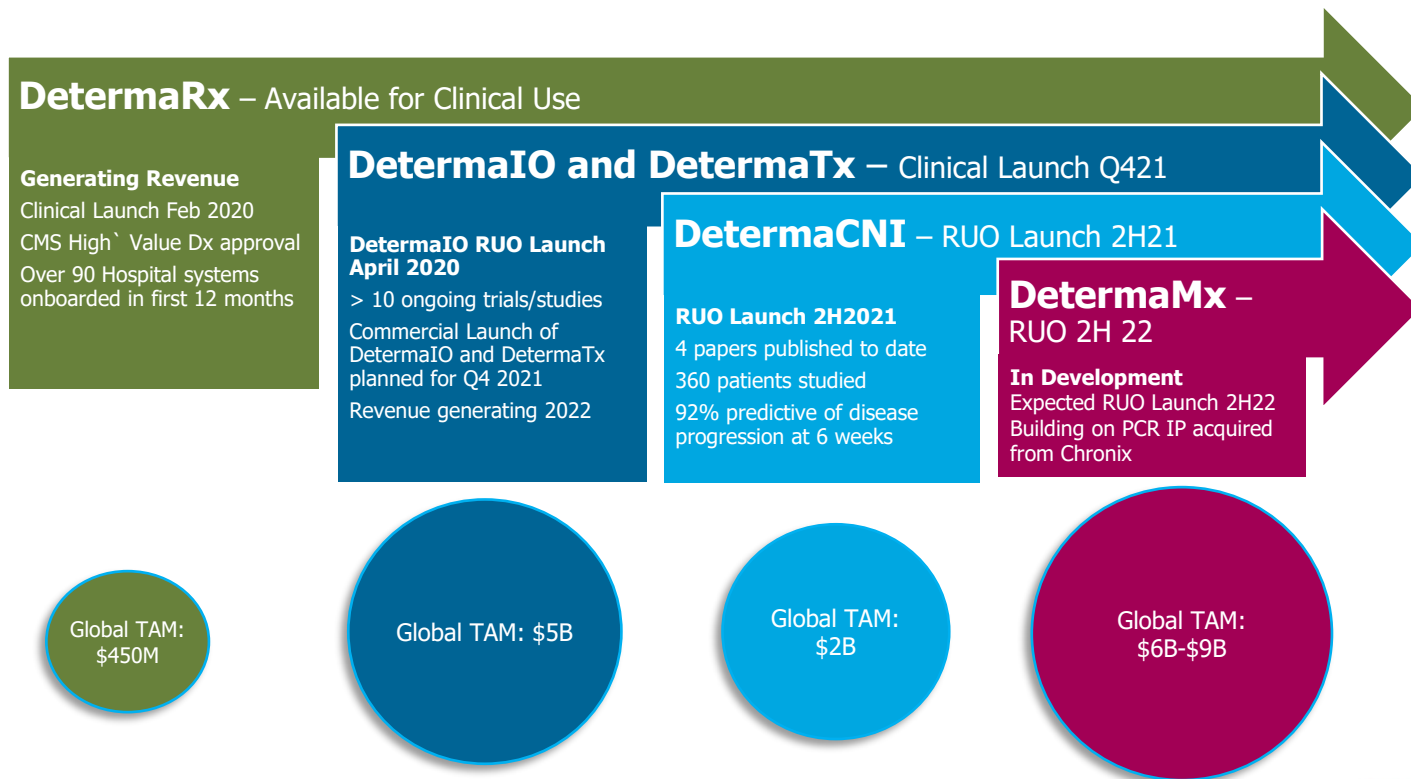
In Development

Global TAM: ~\$5B-\$10B

Differentiated Tests with **large TAMs (>\$10B)** to Address Unanswered Questions Across **ALL** Stages of Cancer

Solid Pipeline Targeting a Large Served Available Market

Product Launch Timelines



DetermaIO

Predictive Test for Immune-therapy Response



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DETERMA^{IO}™ Addresses Important Unmet Need

There is a need for an effective clinical biomarker for IO therapy to improve response and decrease cost of care... DETERMA^{IO}™ delivers on both

UP TO
750,000

Patients are eligible for IO treatment/testing annually

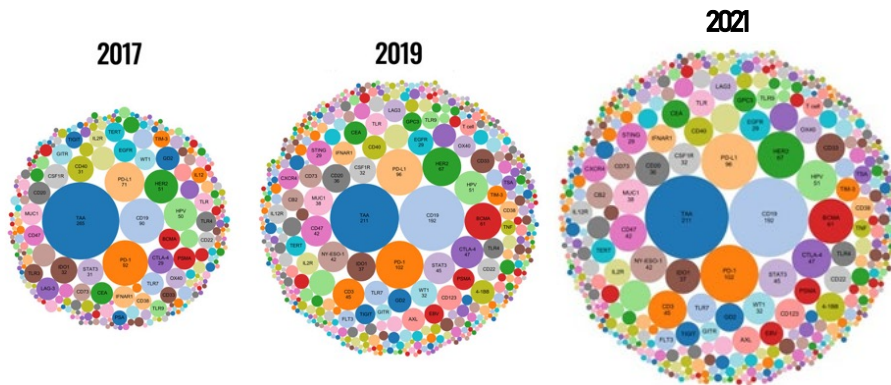
~\$3B (US Only)

Annual Addressable Testing Market

DETERMA^{IO}™

is the FIRST test to measure the ENTIRE Tumor Micro-Environment

IO Therapeutic Targets



Number of IO Indications Increasing Rapidly

~ \$120B

Potential annual therapeutic spend on IO drugs by 2025

~ 55%

Patients receive NO Benefit but exposed to side effects

~ \$60B

Healthcare investment with no patient benefit by 2025

DETERMA^{IO}™

A Precision Diagnostic to Determine Sensitivity to IO Therapies

Test



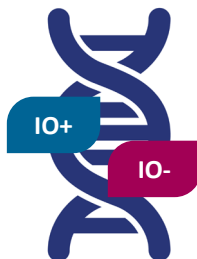
- Real-time PCR test on FFPE biopsy or resection specimen
- Measures 27 genes (RNA)
- Pan-cancer application

RNA Expression
via qPCR



Proprietary
Algorithm

Results



Stratification



Patients likely to
respond to current
Immune Checkpoint
Inhibitor therapies



Patients unlikely to
respond to ICIs and
should be considered
for other treatment
opportunities

DetermaIO measures **three distinct components** of the tumor micro-environment (TME)

Understanding the Entire TME Allows for Identification of:

- Patients that are primed to respond to ICI (mono)therapy
- Potential Mechanism(s) of Resistance to ICI therapy

1. Immunomodulatory Infiltrates
2. Epithelial-Mesenchymal Transition
3. ECM/CAF Fortification

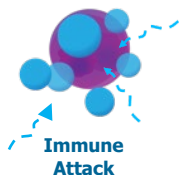
Response
"Hot" Resistance
"Cold"

✓	
	✓
	✓

Why Do Such a Small Percentage of Tumors Respond to Immune Mono-Therapy?

Understanding the importance of the Entire Tumor Micro-Environment

Immune system keeps tumors in check

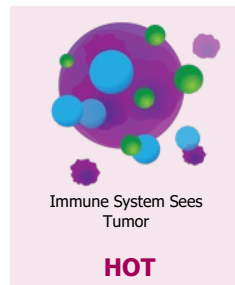


Tumor-Immune homeostasis

PD-L1 Expression



Oncogene mutation and neoantigen generation



DETERMA^{IO}

ICI Response

15-40% HOT

Anti-PD-(L)/PD1 Immunotherapy

60-85% COLD

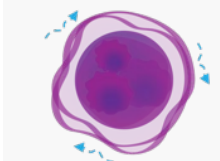
ICI Resistant No Response

Immune Surveillance re-established



Primary Response w/ ICI Mono-Therapy

Immune Resistant



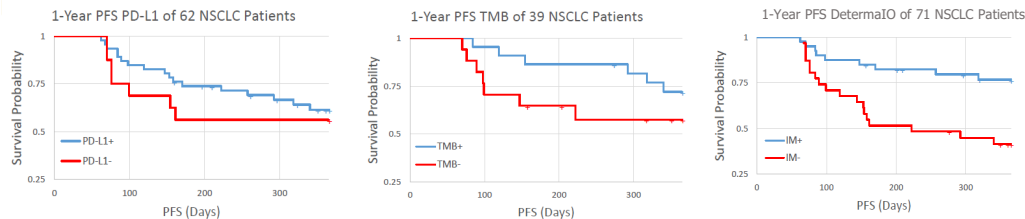
Cancer breaks through immune surveillance

Tumor selection / Secondary Escape

Patient Requires Combinatorial Therapy For Best Outcome

DETERMA^{IO}™ Qualifies More Patients for ICI treatment

NSCLC community setting: Assessment of TME clearly separates responders vs non-responders to Immune Checkpoint Inhibitors (ICI)



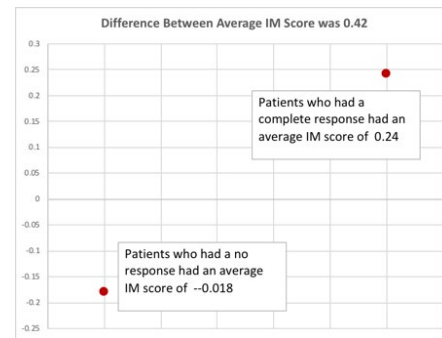
Lung Cancer Progression Free Survival Comparing DetermaIO (IM) to PD-L1 and TMB (SITC 2019)

DetermaIO is independent of: Therapy (even split of nivolumab and pembrolizumab), histology (18 squamous, 39 adenocarcinoma, 14 NOS) and biopsy site (resections and CNB of primary and metastatic sites)

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1. West Cancer Center and Research Institute, Germantown TN,
2. University of Tennessee Health Sciences Center, Memphis TN, 3. Insight Genetics, Nashville TN

TNBC MD Anderson Phase I: DetermaIO-positive patients are 4x more likely to respond than DetermaIO-negative patients



	Odds Ratio	95% CI	p-Value
DETERMA^{IO}™	4.13	1.36 – 13.47	< 0.015
PD-L1 Expression	2.63	0.82 – 9.21	0.11

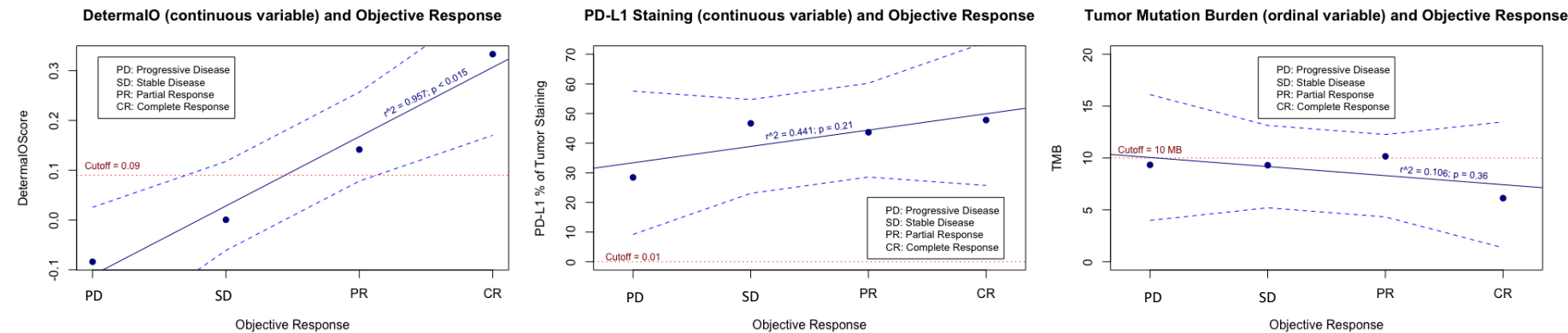
Study Design
(Phase I/II trial - NCT02489448):

Phase I/II trial - NCT02489448: 55 patients with stage I-III primary TNBC
PCR: n=25 (45%); No PCR: n=30 (55%)

Treated with neoadjuvant immunotherapy + chemotherapy
(durvalumab with weekly paclitaxel followed by dose-dense anthracycline/cyclophosphamide)

ONCOCYTE™

Correlation of Objective Response with DetermaIO vs other testing methods



Disease State	Avg IO Score	Avg PD-L1 Score	Avg TMB Score
Progressive Disease	-0.06	20.4%	8.5
Stable Disease	-0.04	41.5%	10.2
Partial Response	0.14	44.7%	14.6
Complete Response	0.33	47.8%	12.1

DETERMA^{IO}™ Predicts Response Across Solid Tumors

DetermaIO Data Summary To-Date:

- Proven predictor of response in all indications tested to date (NSCLC, TNBC, Bladder, Renal), without changes to algorithm
- Applicable to both PD-1 and PD-L1 inhibitors and shown to work with all ICIs tested to date (pembro, atezo, nivo, durva)
- Regularly outperforms existing biomarkers (PD-L1 IHC, TMB) and has been shown to be independent of other markers

NSCLC

West Clinic Cohort (71 Patients)

- Showed DetermaIO outperformed PD-L1 & TMB in predicting response to Pembrolizumab and Nivolumab
- Presented at SITC 2019

BCCA Study (200+ Patients)

- Will study DetermaIO's ability to predict response to IO monotherapy
- Results expected Q3

Korean Cohort (~60 Patients)

- DetermaIO successful at predicting durable clinical response
- Published Nielsen et al, 2021 (Heliyon)

TNBC

Yale/MD Anderson (55 Patients)

- Showed DetermaIO outperformed PD-L1 in predicting response to Durvalumab in neoadjuvant setting
- Presented at ASCO 2020

NeoTRIPaPDL1 (~250 Patients)

- Studying DetermaIO's ability to predict response to Atezolizumab therapy in neoadjuvant setting
- Results expected to be publicized at ESMO 2021

Other Indications

Potential Pan-Cancer Utility

- **Bladder/Urothelial**
 - IMvigor210 Trial – 272 patients treated with Atezolizumab
 - Presented at AACR 2021
- **Renal**
 - 55 Patients treated with IO therapy
 - ASCO 2021
 - Additional data studies planned
- **Colorectal**
 - (Planned) Study with ~170 Colon Cancer patients treated with Atezo combination therapy
- **Head & Neck**
 - (Planned) ~170 Head & Neck pts.

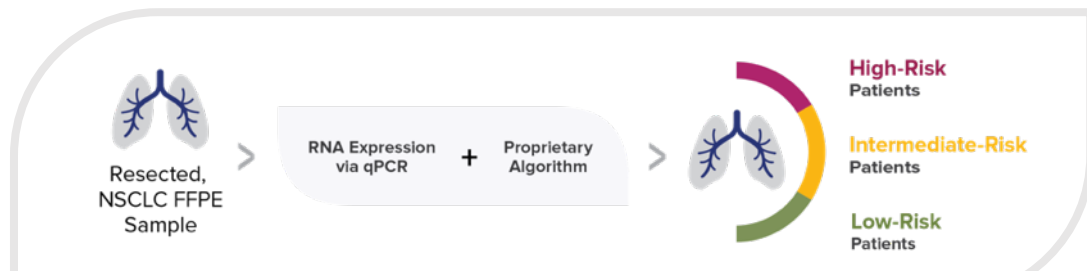
DetermaRx

Proprietary predictive test for early-stage lung cancer



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DETERMA^{Rx}™ Impacting Patient Care and Driving Revenue Today



Market Overview

- **Large global market (>\$450M)** in an underserved patient population
- **ONLY** test available for indication
- **Burning Rock** agreement provides access to largest world market in China
- **Chronix deal** provides EU beachhead

Commercial Traction

- **CMS coverage provides coverage for 70% of the U.S. NSCLC market.**¹
- **Signed Multiplan Deal – added 60M covered lives**
- **90+** onboarded sites in first 12 months
- **Quarter over Quarter volume growth**

Early-Stage Lung Cancer Can Be Deadly

Recurrence

due to presence of occult distant metastases despite 'early-stage' diagnosis

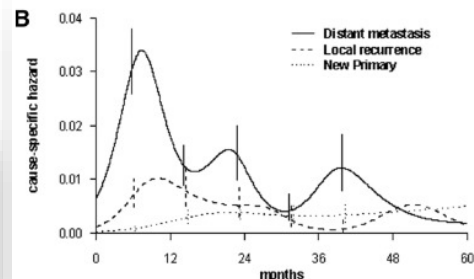
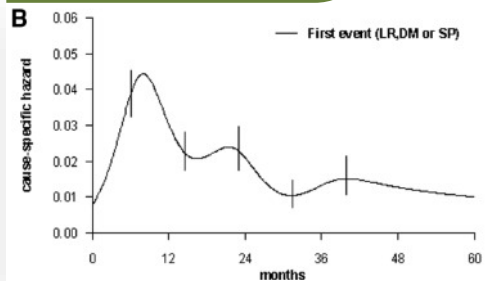
30-50% of early-stage patients with NSCLC recur after surgical resection¹

\$450M+ Global Market

Serving ~350k early-stage non-squamous NSCLC patient treatment decisions annually²

Recurrence After Surgery

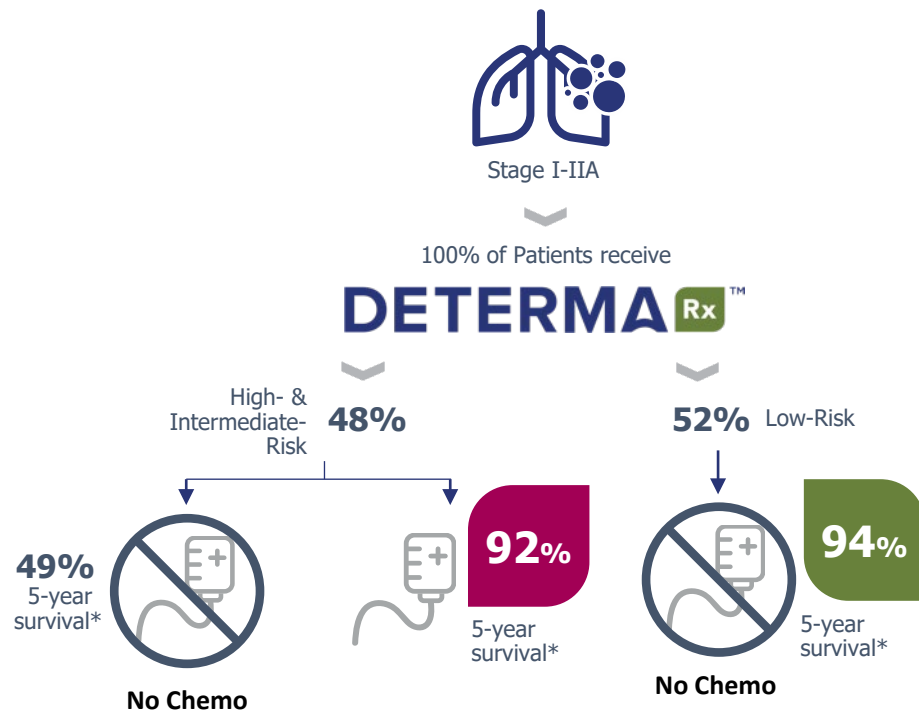
The majority of patients that recur do so within a year after surgical resection



Most of these recurrence events are due to distant metastasis

Demicheli, et al. (2012) J Thorac Oncol 7:723-30

DETERMA Rx™ Improves Survival



In a published prospective study, **DetermaRx identified patients who were at high- and intermediate-risk of recurrence.** When treated with chemotherapy, **these patients saw 92% disease-free survival at 5 years.**

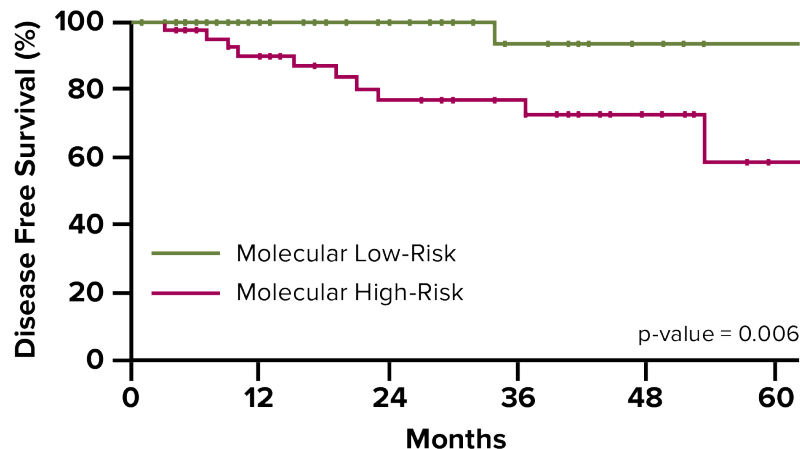
DetermaRx-directed chemotherapy was found to prevent the majority of recurrences among high-risk patients with the potential to **save thousands of lives in the U.S. annually**

*Prospective study of Stage I-IIA patients (*Clin Lung Cancer* 2018;19:58)

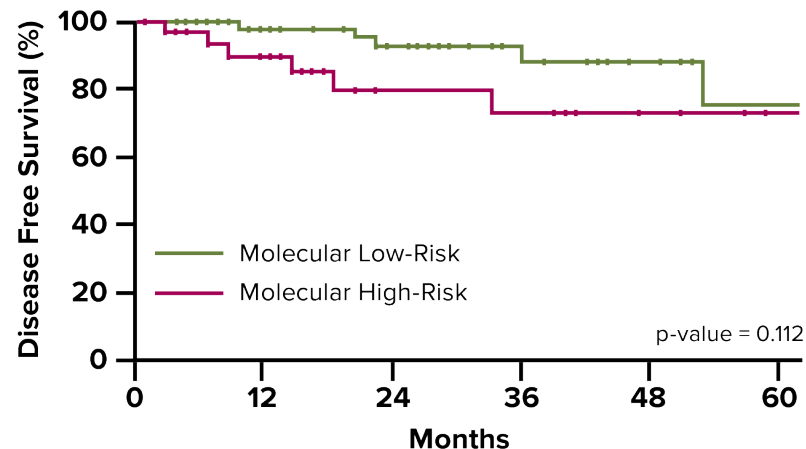
DETERMA^{Rx}™ Outperforms NCCN Criteria

- **DetermaRx reclassified 48% of NCCN “low Risk” patients to high-risk**
- Upon treatment, DetermaRx high-risk patients had a **Disease-Free Survival of 92.8%**

- Untreated DetermaRx low-risk patients exhibited better survival than untreated NCCN low-risk patients (93.8% 5-yr DFS vs. 75.2% 5-yr DFS)



DetermaRX Reclassification Improved Survival



Current NCCN Guidelines

DETERMA^{Rx}™ Launch Year was a Success

616 Patients Tested

380 Early Stage 1A

112 High Risk patients

Onboarded Accounts = 129

Onboarded Physicians = 201

Ordering physicians = 93

Ordering Accounts = 75

Marketing/Med Ed 2020

- ✓ 21 physician speaker events with 221 attendees, leading to 63 physicians onboarding to order DetermaRx
- ✓ 4 webinars with >400 participants representing physician, other health care provider and investors
- ✓ CME activity with >1700 physician reach
- ✓ 18 national KOL physician advisors and speakers engaged
- ✓ 2 educational videos released

Marketing/Med Ed Through Q1 2021

- ✓ 17 physician speaker events with 264 attendees, leading to 12 physicians onboarding to order DetermaRx
- ✓ 3 webinars and molecular tumor boards with >150 participants
- ✓ 15 national KOL physician advisors and speakers engaged
- ✓ 5 educational videos released



The Chronix Acquisition

Blood Based Monitoring

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Attractive market– TAM of \$15B*



Clear need to monitor:

Tumor response is variable and early decision to change therapy saves lives and healthcare costs

1,000,000
People

diagnosed with cancer in US annually
+ 15 million “living with cancer”



Repeat testing opportunity

Relatively easy path to entry

(modest correlation study with CT
Scans drives usage and CMS coverage)

Pharma opportunity

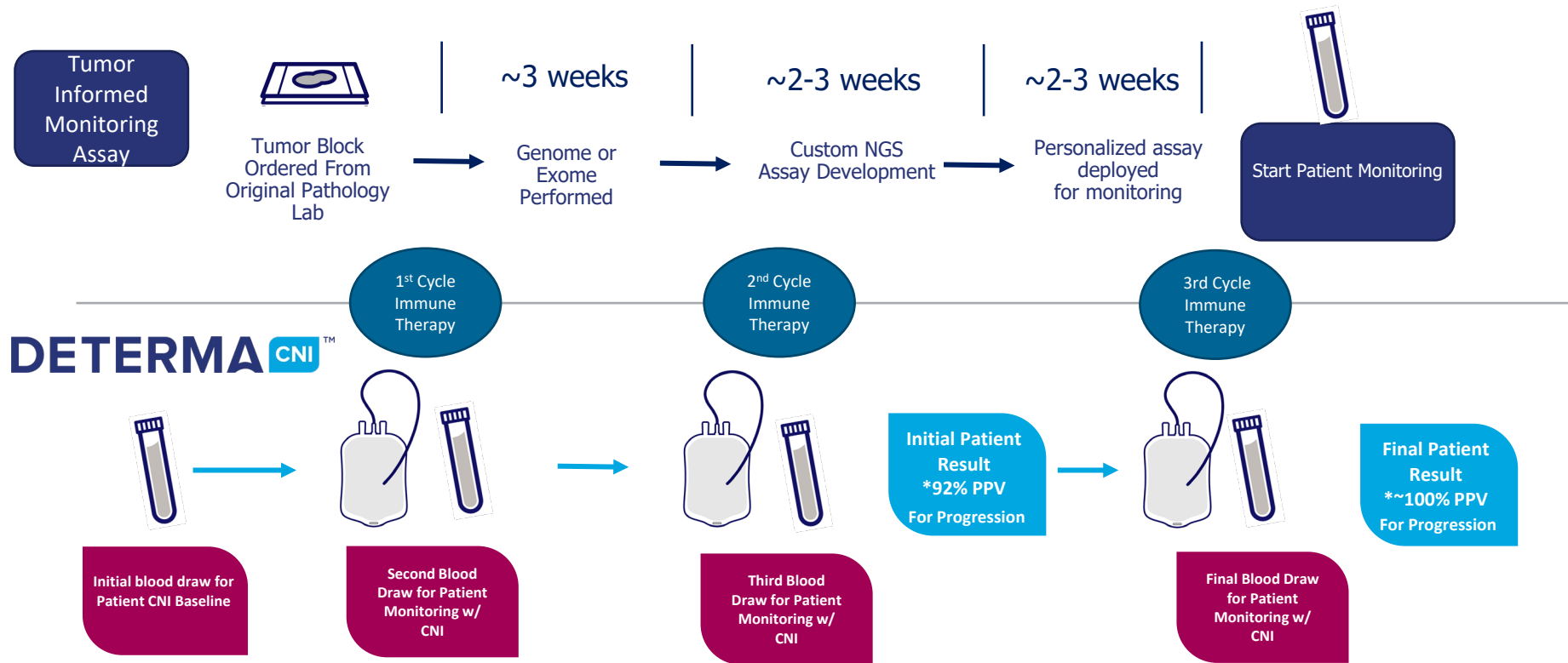
by identifying non-responders early in trials



Market multiple expansion being seen by players claiming their potential in monitoring (Natera, Guardant, Grail)

Fits with Oncocyte’s strategy of “owning the patient journey” throughout the **oncology continuum** – select treatment, monitor for response/progression

CNI Delivers Critical Answers Before Tumor Informed Takes First Baseline Blood Draw



DetermaCNI Clinical Validation To Date

4 Papers published
with CNI results

Patients in total
~365

Cancer types

Renal, pancreatic,
melanoma, lung,
colon, breast, head,
neck, prostate

Methods used

NGS to analyze CNV

Published detection

at < 0.1% of tumor derived
cfDNA in plasma

The Chronix CNI
test publication in
**Clinical Cancer
Research**

*"Tumor Cell-Free DNA Copy Number Instability Predicts Therapeutic Response to Immunotherapy", showed **92% predictive value** for disease progression prior to cycle two of therapy (at 6 weeks) and **close to 100% prediction prior to cycle three (9 weeks)**, including timely identification of hyper-progression which affects as much as 20% of lung cancer patients on immunotherapy*

Therapy Monitoring – DetermaCNI's Advantages

A monitoring test that only requires blood samples avoids tissue QNS and can identify progression before tumor-informed assays can be customized

- **Early data showed 92% sensitivity at second infusion**
- **Requires NO Tissue or upfront Exome/Comprehensive panel saving time and significant costs**
- CNV in blood could be independent or complimentary to SNV/mRNA/Methylation analytes to check all boxes.
- **FIRST MOVER** opportunity before tests/clinical workflows get established

	Chronix (CNI in ctDNA)	Natera (SNV in tissue, blood ctDNA)	GRAIL (methylation in cfDNA)	Guardant (mutations in ctDNA)
Blood-only	✓	X	✓	✓
High sensitivity for progression	✓	✓	TBD	X
Early prediction	✓	✓	TBD	X
Fits current patient mgmt. practices	✓	X	TBD	TBD

MRD/Recurrence Monitoring –

DETERMA has IP and Market Execution Differentiation

A commercially viable MRD/RecMonitoring test should be blood-only, with very high (>90%) sensitivity for identifying progression, predict early changes, and be very practical – easy sample access, seamless logistics, kitable, cost-effective

ddPCR/UltraSensitive PCR in blood could be independent or complimentary to SNV/mRNA/Methylation analytes to check all boxes

Market still early with room to establish solid position with low COGS, small input volume, better Turn Around Time, NO Tumor Tissue Sample required

	Chronix (CNI in ctDNA)	Natera (SNV in tissue, blood ctDNA)	GRAIL (methylation in cfDNA)	Guardant (mutations in ctDNA)
Blood-only	✓	X	✓	✓
High sensitivity for recurrence	✓	✓	TBD	X
Rapid TAT/POC	✓	X	X	X
Practical/Low COGS	✓	X	TBD	X

Biopharma Services

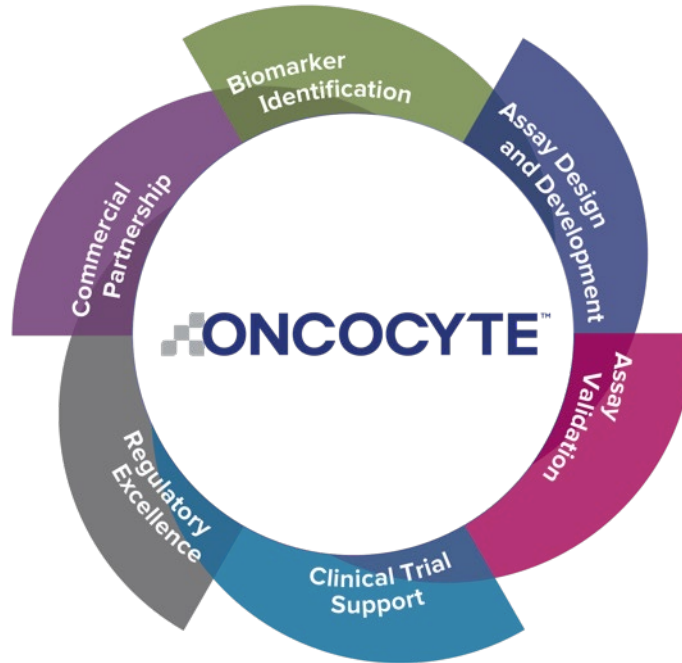
Comprehensive Capabilities Delivering Revenues Today



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Comprehensive Biopharma Services Offering

- CLIA/CAP Laboratory focused on revenue-generating biopharma services
- Solid track record of developing and validating novel assays across the spectrum of molecular platforms and technologies (singleplex, multiplex, NGS)

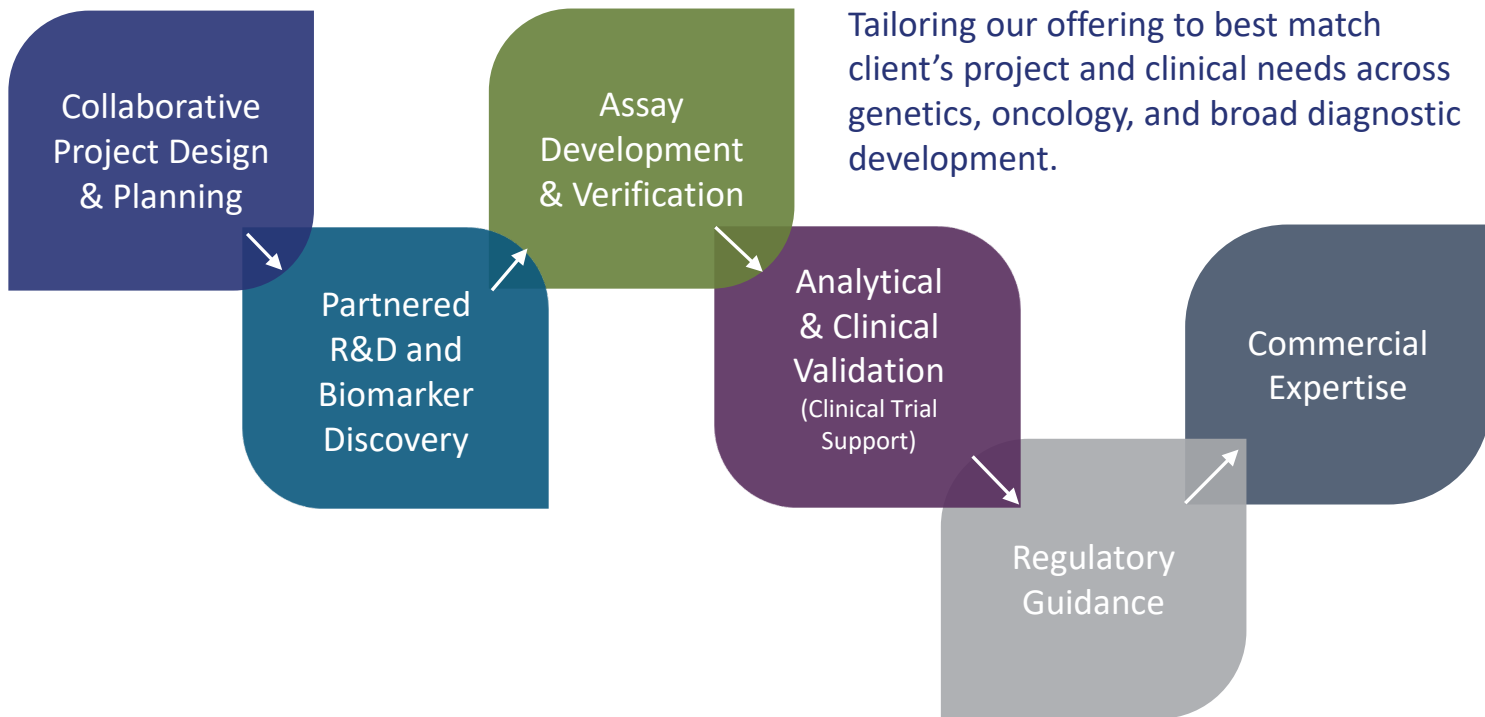


- Expertise with multiple non-invasive methodologies builds on DetermaDx foundation and enables therapeutic monitoring
- Adds strength to Oncocyte's future development of "multi-omics" assays



Partnership from Concept

Through Regulatory to Commercialization



Oncocyte Growth Drivers

Strategic Milestones Accelerate Enterprise Value

1H 2021

Expand sales team to drive DetermaRx growth

Close additional Private Payor coverage for DetermaRx

DetermaRx Global Expansion to China and LATAM

DetermaIO publications at AACR, ASCO

2H 2021

DetermaIO Milan Trial presentation at ESMO

DetermaIO and Tx Clinical Commercialization

DetermaRx in NCCN guidelines

DetermaCNI launches for pharma services

DetermaRx Global Expansion to EU

1H 2022

CMS coverage decision for DetermaIO

DetermaCNI CMS submission

DetermaMx "Tumor Informed" recurrence monitoring test launched as RUO for pharma trials

2022/2023

DetermaCNI is launched for clinical use for "Tumor Naïve" Immune Therapy Monitoring

DetermaIO in NCCN guidelines

Thank You

 **ONCOCYTE™**



Experienced Leadership Team

Pioneering Molecular Diagnostics



RON ANDREWS

President & Chief
Executive Officer



MITCH LEVINE

Chief Financial Officer



PADMA SUNDAR

Chief Commercial Officer



DOUG ROSS, MD PhD

Chief Science Officer

ThermoFisher
SCIENTIFIC

life
technologies™


CLARIENT
A GE Healthcare Company

 **enable** capital management llc

 **GUARDANT**

 **Roche**

 **CellMax Life**

 **GE Healthcare**

 **Bethesda**
group

 **PerkinElmer**
For the Better

DetermaIO Derived from a Well-Published Molecular Classifier

2011 - Lehmann *et al.* published a 2188 gene molecular subclassification system for TNBC tumors based on gene expression patterns

2016 - Ring *et al.* reduced the classifier to 101 genes

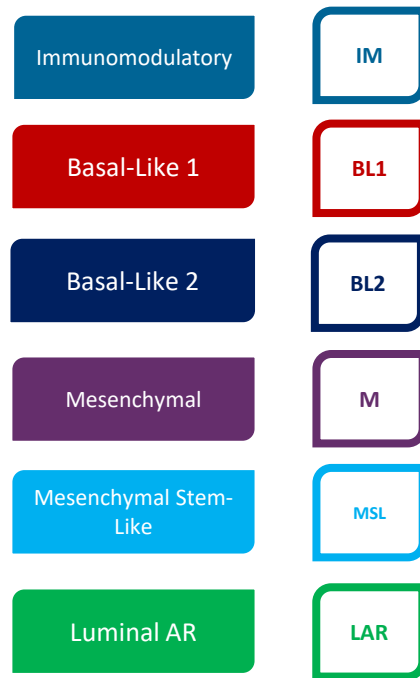
2016 - Ring *et al.* and Lehmann *et al.* noted that the IM (TILs) and MSL classifications (Stroma signature) were best interpreted as modifiers of the other "tumor phenotypes"

2018 - 27-gene real time PCR assay and RNAseq equivalent algorithm were developed to measure the interplay between TILs and stroma to classify patients as likely responders or non-responders to immuno-oncology therapies

2019 - The RTPCR Assay was validated as associated with response to Checkpoint Inhibitor therapy in NSCLC

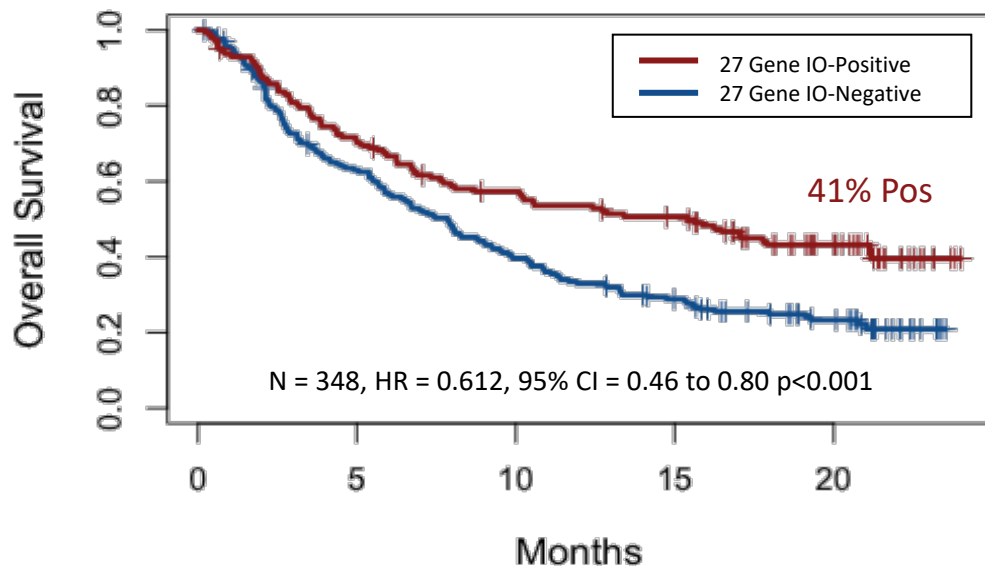
2020 - The whole transcriptome RNAseq assay was validated as associated with response to Checkpoint Inhibitor therapy in TNBC

Over 1800 references in the literature to this classification system



AACR 2021 IMvigor210 Results Revealed Significant Association with Atezo Response vs PD-L1 and TMB

27 Gene Predictor



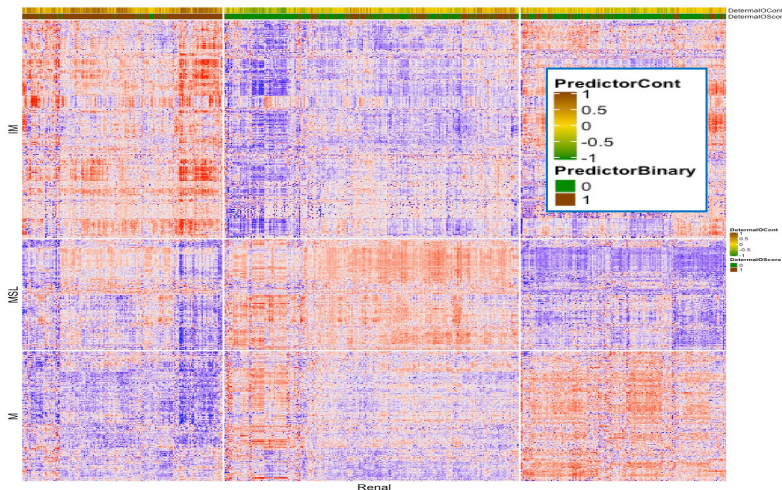
Initial Results:

- DetermaIO ("27 Gene IO") Positivity was significantly associated with response to Atezo
- DetermaIO was significant in multivariate analysis with PD-L1 and TMB.

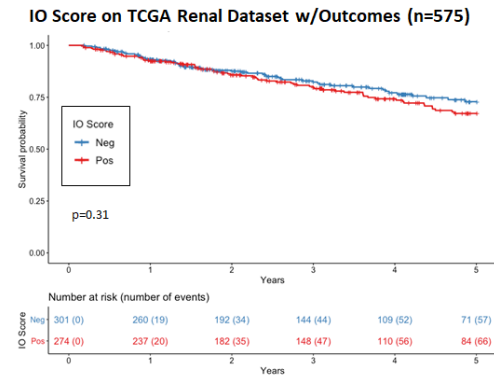
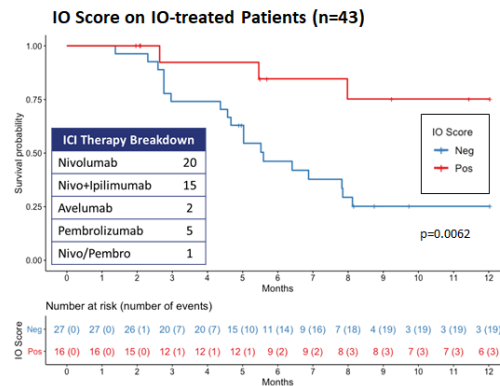
Run on RNAseq *in silico* data

ASCO 2021 Renal Carcinoma Results Revealed Significant Predictive Value for ICI Response

DetermaIO continues to deliver predictive response data without retraining our algorithm vs TMB which is varies across tumor types



TCGA data confirms same algorithm and threshold



M2Gen RNAseq dataset demonstrates strong association with ICI response