

A close-up portrait of Bonnie Anderson, a woman with long, wavy brown hair, smiling warmly at the camera. The word "ANSWERS" is overlaid in large white letters across the middle of her face.

ANSWERS



UBS Global Healthcare Conference

Bonnie Anderson
Chairman & Chief Executive Officer

May 20, 2019

Forward-Looking Statements

This presentation contains statements that are not historical and that are based on our beliefs and assumptions and on information currently available to us. These statements constitute forward-looking statements within the meaning of the Safe Harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are subject to known and unknown risks, uncertainties, assumptions, and other factors that could cause actual results to differ materially from our expectations.

Examples of forward-looking statements include, among others, statements we make regarding our expectations regarding our ability to expand commercialization of our Percepta and Envisia Genomic Classifiers, our expectations regarding our strategic collaboration with Johnson & Johnson; the future performance and acceptance of our Afirma, Percepta and Envisia classifiers and our Afirma Xpression Atlas platform; our dependence on a few payers for reimbursements and payments of our tests and a significant portion of our revenue; the complexity, time and expense associated with billing and collecting from payers for our classifiers; our ability to increase usage of and reimbursement for the Afirma, Percepta and Envisia classifiers, as well as any future products we may develop or sell; our dependence on physicians and patients who decide whether to order and use our tests; the fluctuation of our quarterly operating results; our ability to comply with federal and state licensing requirements and other laws and regulations applicable to our business, including potential regulation by the Food and Drug Administration or other regulatory bodies; our dependence on sole suppliers for equipment and other materials used for our tests; our ability to develop and commercialize new products and the timing and speed of commercialization; the amount by which use of our products may be able to reduce invasive procedures and reduce healthcare costs; our ability to attract and retain key personnel; our ability to achieve sales penetration in complex commercial accounts; the occurrence and outcome of clinical studies; the timing and publication of study results; the applicability of clinical results to actual outcomes; the continued application of clinical guidelines to our products and their inclusion in such clinical practice guidelines; our ability to compete; our ability to obtain capital when needed; and other risks set forth in our filings with the Securities and Exchange Commission, including the risks set forth in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2019. These forward-looking statements speak only as of the date hereof and Veracyte specifically disclaims any obligation to update these forward-looking statements.

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A Genomics Leader Creating Value Through Innovation

FOUNDED WITH A MISSION TO IMPROVE DIAGNOSTIC ACCURACY
Expanding to advance early detection and inform treatment decisions

Comprehensive scientific approach using whole-transcriptome sequencing coupled with machine learning to develop diagnostic tests that we believe can change clinical care

Clinical evidence published in top-tier journals to facilitate test adoption, coverage and reimbursement

Market leader with first-to-market tests in large, untapped clinical areas: thyroid cancer, lung cancer and idiopathic pulmonary fibrosis (IPF)

Robust pipeline including **non-invasive test for lung cancer** and **biopharma partnerships** to augment future growth

Experienced management team with **deep expertise** and **proven track record**



Execution Driving Momentum

Strong Commercial Growth

Grew revenue and genomic test volume by 47% and 33%, respectively, in 1Q19 compared with 1Q18

- Afirma revenue grew by 23% in 1Q19 compared with 1Q18
- Percepta classifier volume increased 195% in 1Q19 compared with 1Q18
- Envisia had revenue for the first time in 1Q19

Multi-product sales strategy a key driver of growth

Continued Reimbursement Success

Afirma, Percepta and Envisia classifiers all covered by Medicare

Achieved in-network status with nearly all major U.S. health plans as a service provider

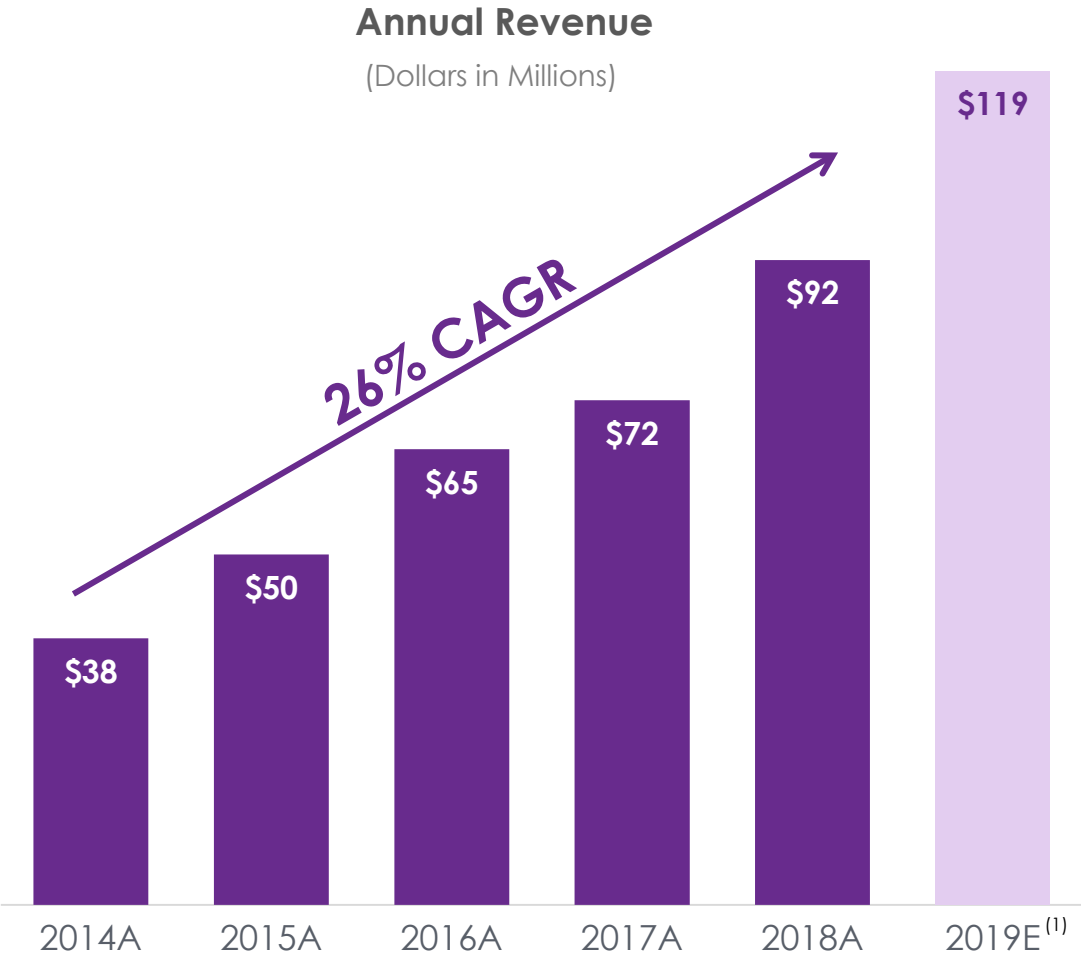
Strategic Collaborations Advancing Pipeline and Driving Value Creation

Strategic collaboration with Johnson & Johnson

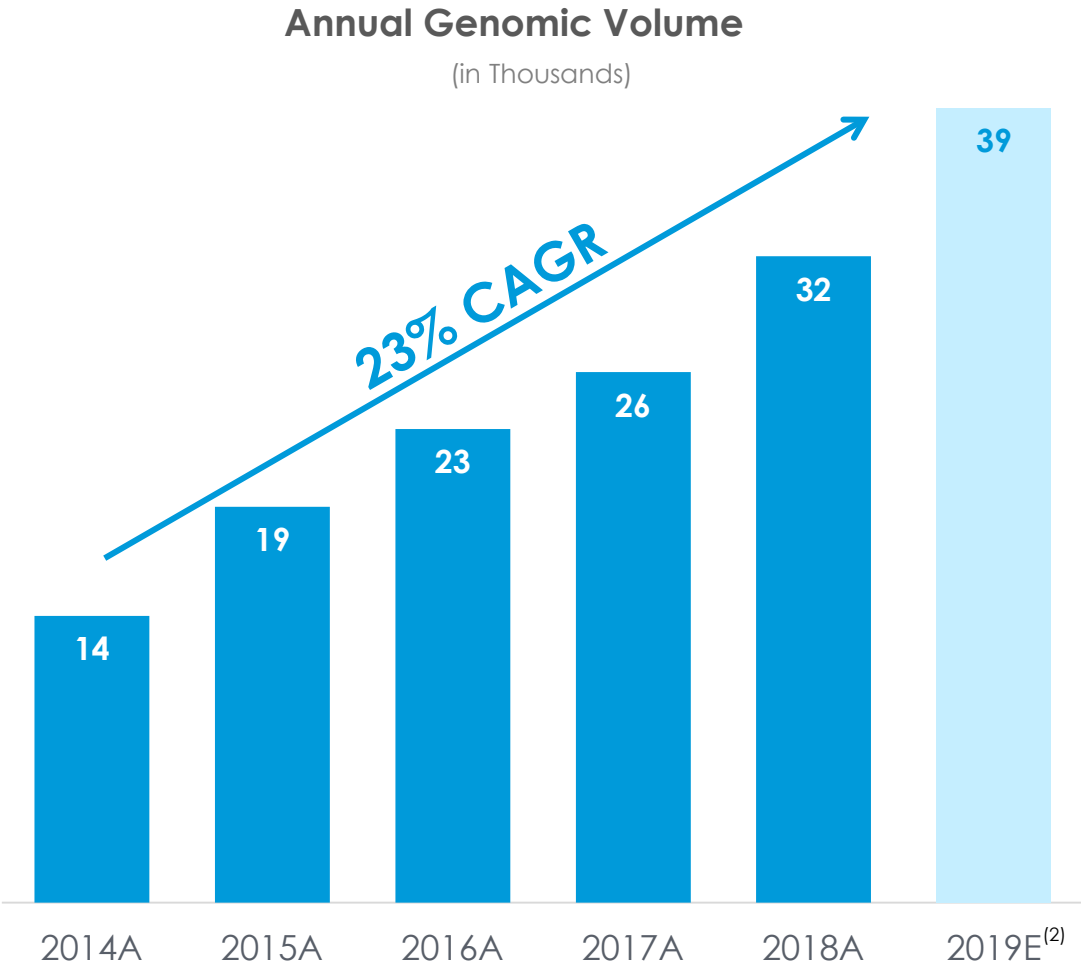
- Expect launch of Percepta whole-transcriptome-based, second-generation classifier in mid-2019
- Accelerating development of first nasal swab test for early lung cancer detection
- Global addressable market for lung cancer estimated at more than \$30 billion



Robust Annual Revenue and Genomic Volume Growth



(1) Midpoint of 2019 revenue guidance as of April 30, 2019



(2) As of April 30, 2019, the \$119 million midpoint of 2019 revenue guidance is supported by an estimated 20% to 25% growth in genomic test volume over 2018, or a midpoint of approximately 39,000 reported tests in 2019

Building on a Firm Foundation

Following a Proven Formula for Success



Relevance

ANSWER QUESTIONS THAT MATTER!
INTEGRATE INTO CURRENT CARE
PATHWAY TO CHANGE PRACTICE
AND REDUCE COSTS

Rigor

BUILD ROBUST
SCIENTIFIC AND
CLINICAL EVIDENCE;
INFORM GUIDELINES

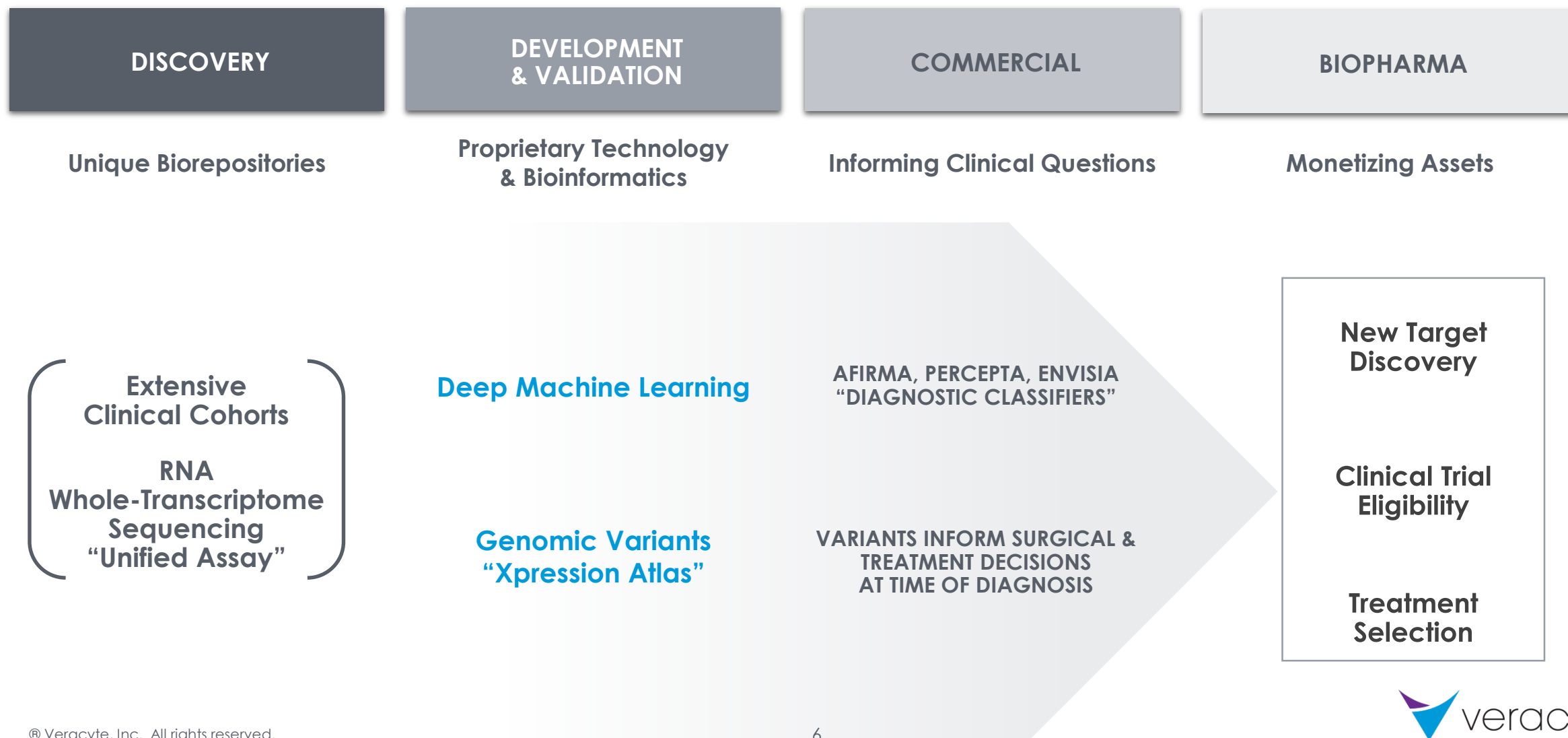
Rationale

PROVIDE ANSWERS THAT CHANGE
CARE WITH REAL CLINICAL UTILITY
AND ECONOMIC VALUE

Reimbursement

Extensive experience and coverage policies with payors pave way for reimbursement expansion

Our Powerful Scientific Platform: Multiple Vectors for Value Creation



Leading in the Age of Evidence

Deep library of clinical evidence published in top-tier journals

Afirma
THYROID FNA ANALYSIS

- 3 clinical validation studies
- 1 analytical verification study
- 22 clinical utility studies, including 3 long-term clinical outcome studies
- 2 cost-effectiveness and quality-of-life studies



The NEW ENGLAND
JOURNAL of MEDICINE

Percepta
BRONCHIAL GENOMIC CLASSIFIER

- 2 clinical validation studies
- 1 analytical verification study
- 2 clinical utility studies
- 1 cost-effectiveness study
- PERCEPTA Registry with
~ **770 enrolled patients**



The NEW ENGLAND
JOURNAL of MEDICINE

Envisia
GENOMIC CLASSIFIER

- 1 **combined** clinical validation and clinical utility study
- 2 clinical validation studies
- 1 analytical verification study
- 1 clinical utility patient study
- BRAVE ongoing clinical trial
~ **440 patients**

THE LANCET
Respiratory Medicine

Highly Efficient Commercial Model

Afirma

GENOMIC SEQUENCING CLASSIFIER

Percepta

BRONCHIAL GENOMIC CLASSIFIER

Envisia

GENOMIC CLASSIFIER

Sales Structure

SALES SPECIALIST ACROSS ALL PRODUCTS,
PULMONARY CLINICAL EXPERTS,
ACCOUNT SPECIALISTS FOR TOP ACCOUNTS

Evidence

SCIENTIFIC RIGOR FOCUSED ON
GENERATING DATA, PUBLICATIONS,
GUIDELINES & COMMERCIAL ADOPTION

Reimbursement

IN NETWORK STATUS WITH NEARLY
ALL MAJOR U.S. HEALTH PLANS

EXPECT TO ACHIEVE OPERATING CASH FLOW BREAKEVEN BEFORE END OF 2019

Our Founding Strategy: Improve Diagnostic Accuracy

Hundreds of thousands of patients evaluated for suspected disease



IMAGING AND/OR BIOPSIES

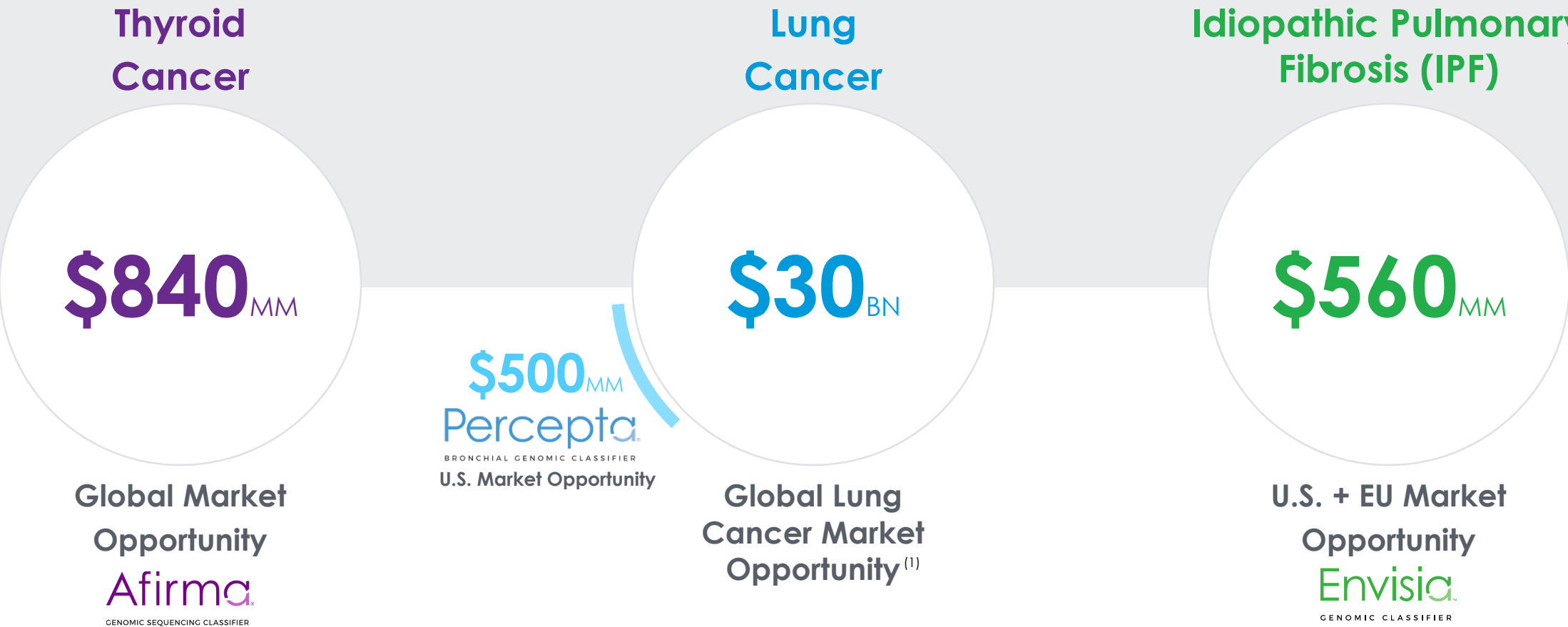
Diagnosis Uncertain*

15% to 70%

* In thyroid and lung indications

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Robust Market Opportunity Across Multiple Diseases



Estimated market sizes based on Company estimates
(1) Market size based on Company estimates and includes nasal swab test for early detection

In Thyroid Cancer

An Incredibly Inefficient and Avoidable Diagnostic Paradigm

525_K

FINE NEEDLE ASPIRATIONS
PER YEAR TO EVALUATE
THYROID NODULES

~15% to 30%

YIELD INCONCLUSIVE RESULTS

Majority

OF PATIENTS WITH INDETERMINATE
RESULTS UNDERGO SURGERY

~75%

DEEMED BENIGN POST-OPERATIVELY

Challenging
Diagnosis with

100_K +

UNNECESSARY SURGERIES PERFORMED
IN U.S. ANNUALLY ⁽¹⁾

Source: Company estimates
(1) ~180k surgeries performed to diagnose ~60K cancers

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Improving Patient Outcomes in Thyroid Cancer

525,000 patients in U.S. evaluated
for suspected thyroid cancer annually

↓
Ultrasound-guided FNA

↓
Diagnosis Uncertain

↓
~100,000

Afirma

GENOMIC SEQUENCING CLASSIFIER

Benign

Reduce
Unnecessary
surgeries by
~70%

Suspicious

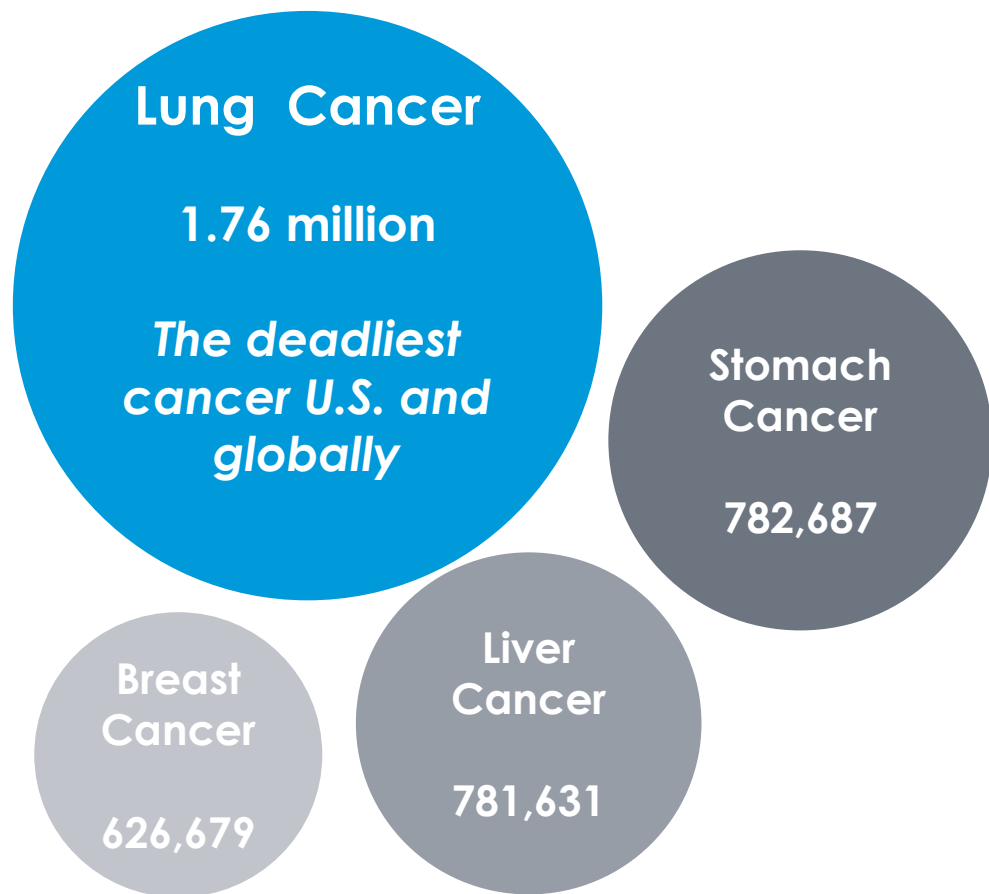
Xpression Atlas

Inform treatment
decisions to improve
patient outcomes

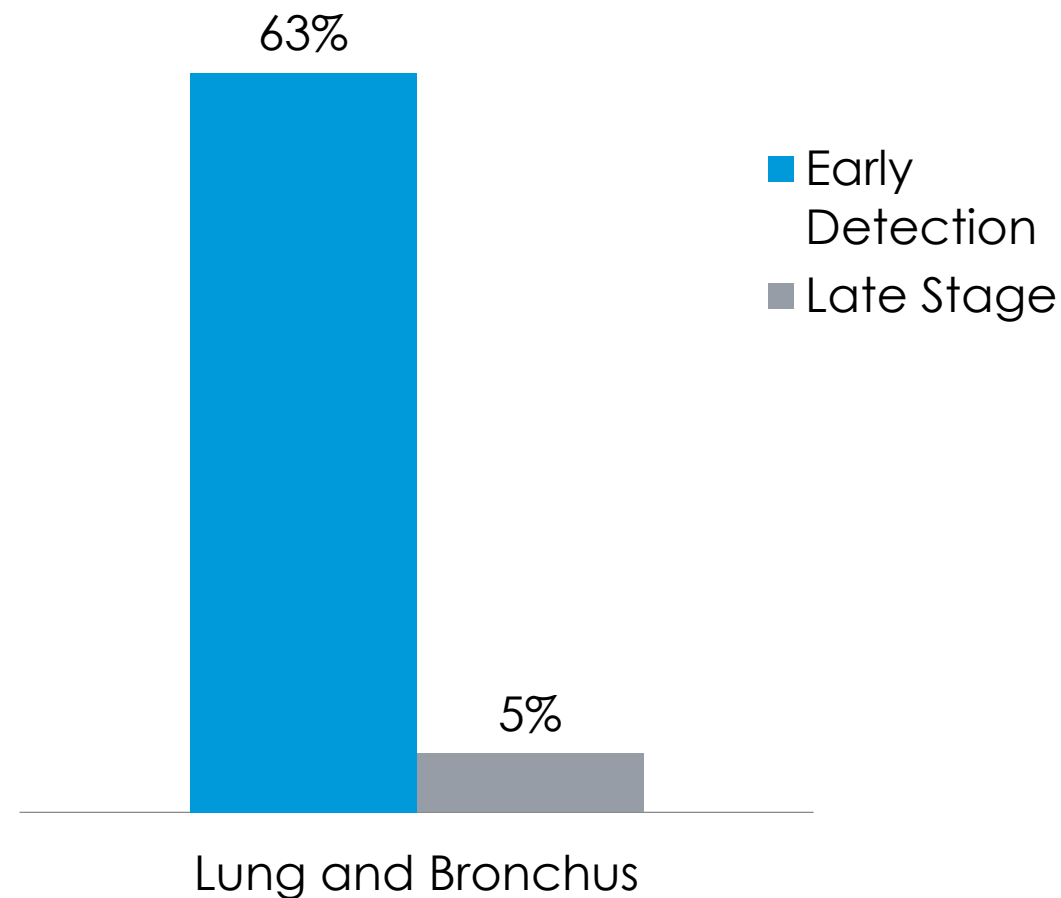
In Lung Cancer

Early Detection and Improved Diagnosis are Key to Saving Lives

Estimated Cancer Deaths Worldwide, 2018



Five-Year Survival Rate⁽¹⁾



Sources: GLOBOCAN 2018, National Cancer Institute Surveillance, Epidemiology and End Results (SEER)

(1) "Early stage" includes invasive localized tumors that have not spread beyond organ of origin.

"Late stage" includes invasive cancers that have metastasized beyond the organ of origin to other parts of the body.

A Complement to Diagnostic Bronchoscopy to Reduce Invasive Procedures in Lung Cancer

1.8M to 2M incidental lung nodules detected
by CT scan in U.S. annually; most followed by CT

↓
350,000 Bronchoscopy
~60% low-to-intermediate risk

↓
Diagnosis Uncertain Up to 70%
~140,000

↓
Percepta
BRONCHIAL GENOMIC CLASSIFIER

↙
**Low-Dose
CT Scan**
Follow with LDCT in lieu
of invasive procedure

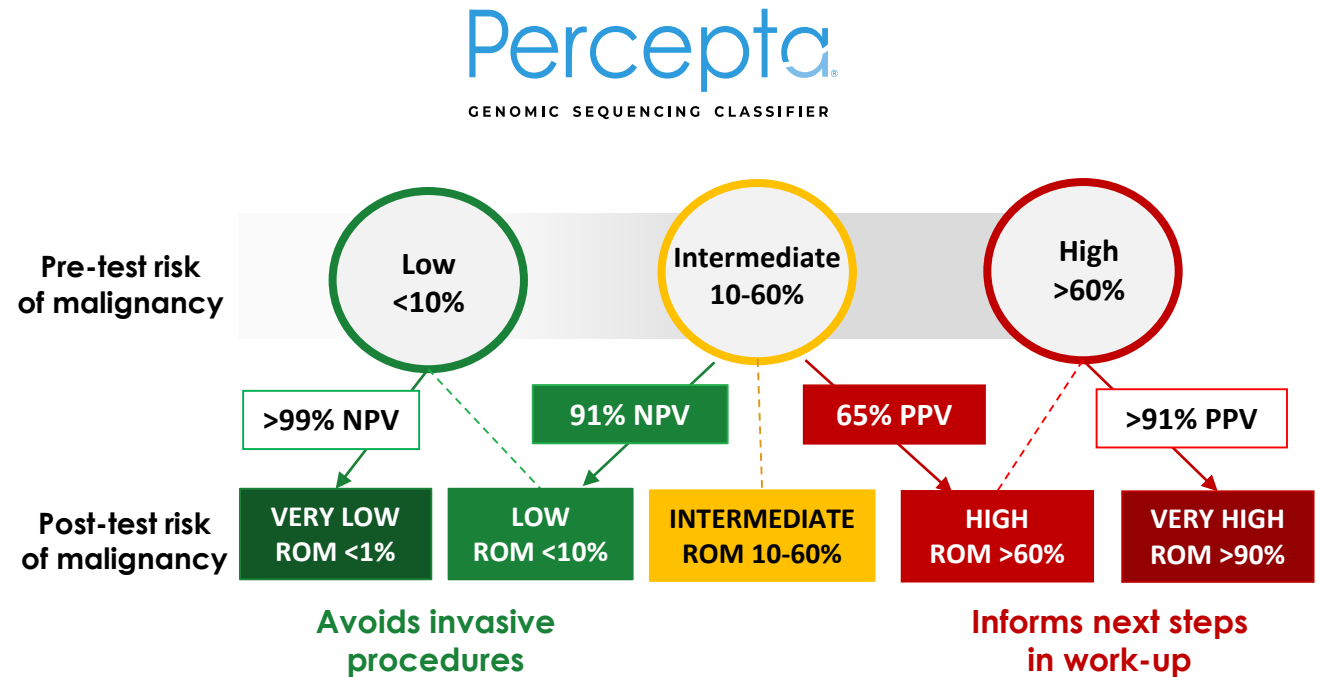
~46%
Low risk for cancer

↘
**Improved
Treatment Decisions**

Announced Today

“Next-Generation” Percepta® Genomic Sequencing Classifier

- Based on same “*field of injury*” science in the airway
- Developed using machine learning on RNA whole-transcriptome sequencing
 - **>1,600 patients** in classifier training set
 - Independently validated on a cohort of **412 patients**
- Combined classifier
 - **Down-classifies:**
 - Intermediate-risk patients to low-risk with **91% NPV**
 - Low-risk patients to very low-risk with **>99% NPV**
 - **Up-classifies:**
 - Intermediate-risk patients to high risk with **>65% PPV**
 - High-risk patients to very high with **>91% PPV**



PROVIDES CLINICALLY ACTIONABLE RESULTS ACROSS ALL PRE-TEST RISK GROUPS

In Idiopathic Pulmonary Fibrosis (IPF)

A Progressive, Life-Threatening, Interstitial Lung Disease



Notoriously difficult to diagnose

LEADING TO TREATMENT DELAYS, PROLONGED MISDIAGNOSIS,
PATIENT DISTRESS AND ADDED HEALTHCARE EXPENSE

Median survival time 2.5 years

LIFE EXPECTANCY WITH IPF IS WORSE THAN THAT OF MANY CANCERS

IMPROVING DIAGNOSIS TO INFORM TREATMENT THAT COULD SAVE LIVES

Sources: American Lung Association; Ley B, et al. Clinical Course and Prediction of Survival in Idiopathic Pulmonary Fibrosis. *AJRCCM* 2011;
Hutchison J, et al. Increasing Global Mortality from Idiopathic Pulmonary Fibrosis in the Twenty-First Century. *Annals ATS* 2014

IPF: Accelerate Diagnosis to Get Patients Life-Extending Treatment Faster

~200,000 patients in U.S. and Europe
evaluated for suspected ILD

↓
High Resolution CT

↓
Lack highly confident Dx
~150,000 up to 75%*

↓
Envisia™

GENOMIC CLASSIFIER

↓
Classic UIP pattern
improves confidence in
IPF diagnosis without surgery

* Based on Company estimates

Expanding Along the Value Chain



Thyroid

Afirma

GENOMIC SEQUENCING CLASSIFIER



Afirma

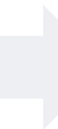
XPRESSION ATLAS



Lung Cancer

Percepta

BRONCHIAL GENOMIC CLASSIFIER



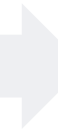
ILD/IPF

Envisia

GENOMIC CLASSIFIER



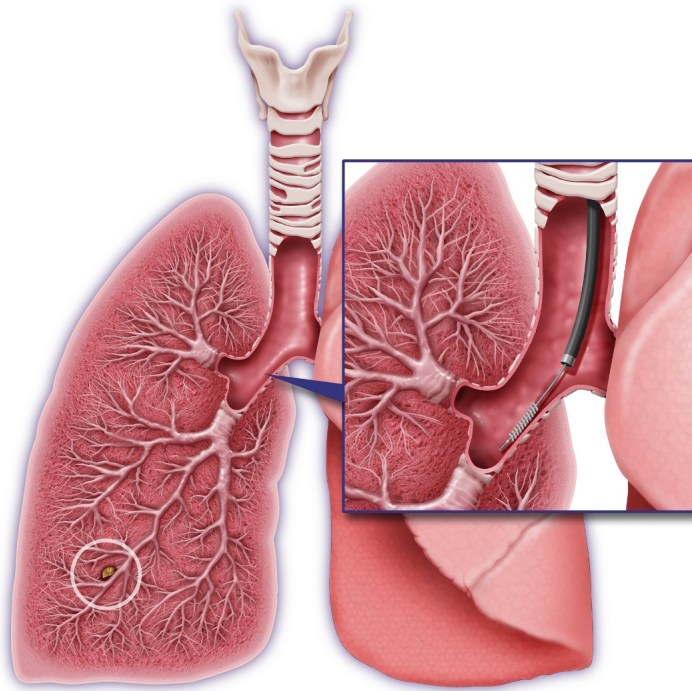
Pipeline Test



DELIVERING VALUE TO PATIENTS, CLINICIANS AND PAYORS ACROSS THE CLINICAL CARE CONTINUUM

Pipeline Highlight: Nasal swab test for early lung cancer detection

Using novel, proprietary field of injury science that powers **Percepta**
BRONCHIAL GENOMIC CLASSIFIER



Peripheral lung nodules **difficult to biopsy** leading to **late-stage diagnosis**

Exposures such as smoking leads to genomic alterations in airway **detected from a simple brushing or swab**

Percepta classifier is based on bronchial airway brushing

New nasal swab test is designed to **detect lung cancer** from **genomic alterations in the nose**



Shared Gene Expression Alterations in Nasal and Bronchial Epithelium for Lung Cancer Detection

- Perez-Rogers J, et al. *JNCI J Natl Inst.* 2017

NON-INVASIVE NASAL SWAB TEST DESIGNED FOR EARLY DETECTION TO SAVE LIVES

Strategic Collaboration Accelerates Pipeline and Expands Market Opportunity



Accelerates two key programs for Veracyte:

- Nasal swab test designed for early lung cancer detection (expect preliminary data by end of 2019)
- Commercialization of second-generation Percepta classifier, deploying RNA whole-transcriptome sequencing platform (expected in mid-2019)

+\$50M in monetary and non-monetary value*

*\$20MM cash and estimated \$30MM value on cohorts

FURTHER STRENGTHENS OUR LEADING POSITION IN LUNG CANCER DIAGNOSIS

Catalysts to Drive Continued Momentum in 2019



Revenue Growth

✓ Afirma GSC and Xpression Atlas

Launch of next-generation Percepta classifier in mid-2019

✓ Final Medicare coverage decision; commercial expansion

Evidence Development

✓ Ongoing real-world studies

Spotlight clinical utility data

✓ Publication of clinical validation and utility data
THE LANCET
Respiratory Medicine

Pipeline Advancement

Field of injury advances; early data on nasal swab test

✓ Achieved



VCYT: A Compelling Value Proposition

Proven Model of Success

Answering clinical questions that matter

Novel RNA whole-transcriptome sequencing and machine learning scientific platform

Clinical evidence published in top-tier journals

First-to-market, first-to-coverage

Clinically impactful tests

Address large, underserved thyroid cancer, lung cancer and idiopathic pulmonary fibrosis markets

Significant growth opportunity

Current and pipeline products address a market opportunity of more than \$30Bn

Experienced management team

with deep expertise and proven track record

Continued strong momentum

positions VCYT for near- and long-term success