

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



William Blair 39th Annual Growth Stock Conference

Bonnie Anderson
Chairman & Chief Executive Officer

June 5, 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.

Forward-looking statements can be identified by words such as: "anticipate," "intend," "plan," "expect," "believe," "should," "may," "will" and similar references to future periods. Examples of forward-looking statements include, among others, statements we make regarding our ability to achieve milestones under the collaboration agreement with Johnson & Johnson; our ability to achieve and maintain Medicare coverage for our tests; the benefits of our tests and the applicability of clinical results to actual outcomes; the size of our addressable market; the laws and regulations applicable to our business, including potential regulation by the Food and Drug Administration or other regulatory bodies; our ability to successfully achieve and maintain adoption of and reimbursement for our products; the amount by which use of our products are able to reduce invasive procedures and misdiagnosis, and reduce healthcare costs; the occurrence and outcomes 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

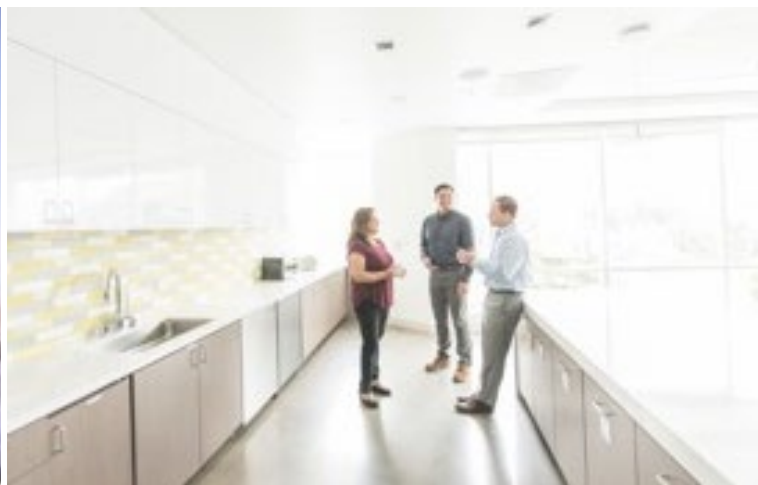
Afirma, Percepta and Envisia classifiers all covered by Medicare

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

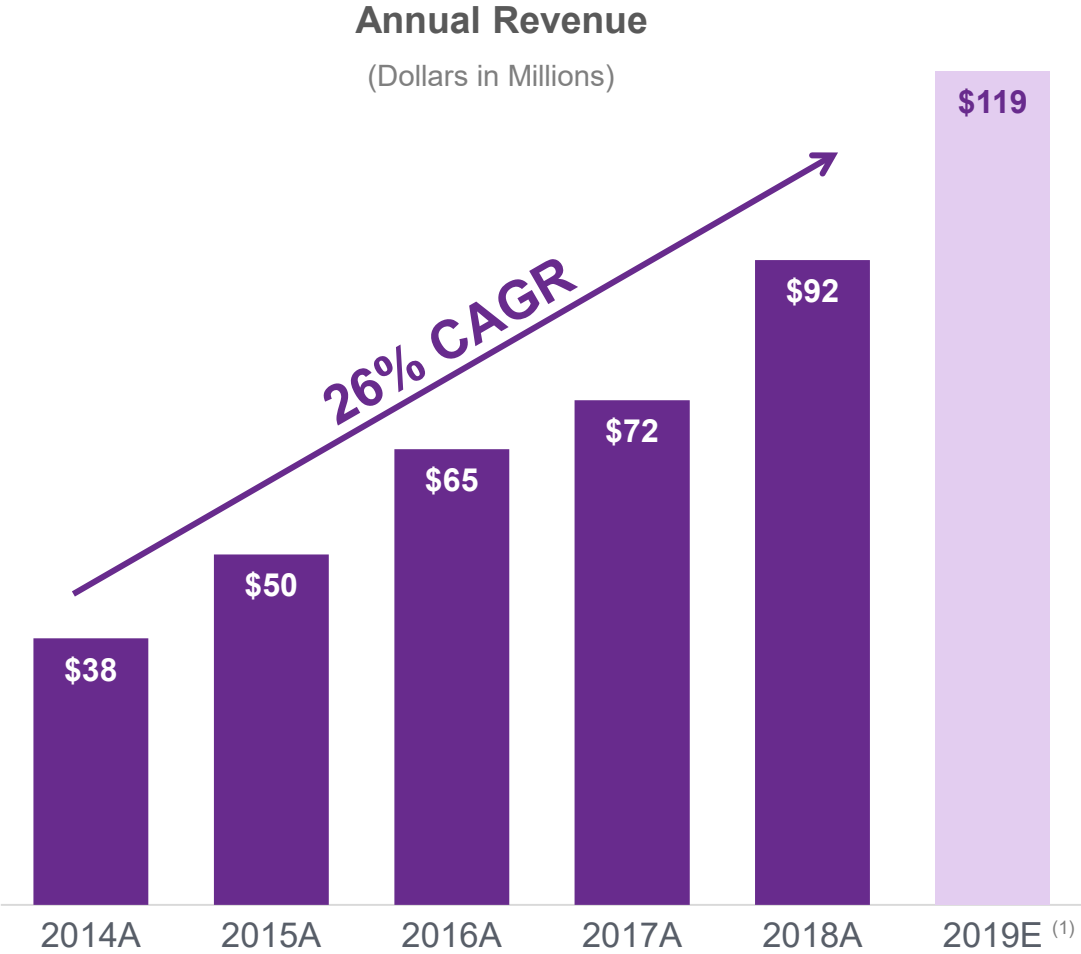
Strategic Collaborations Advancing Pipeline and Driving Value Creation

Strategic collaboration with Johnson & Johnson

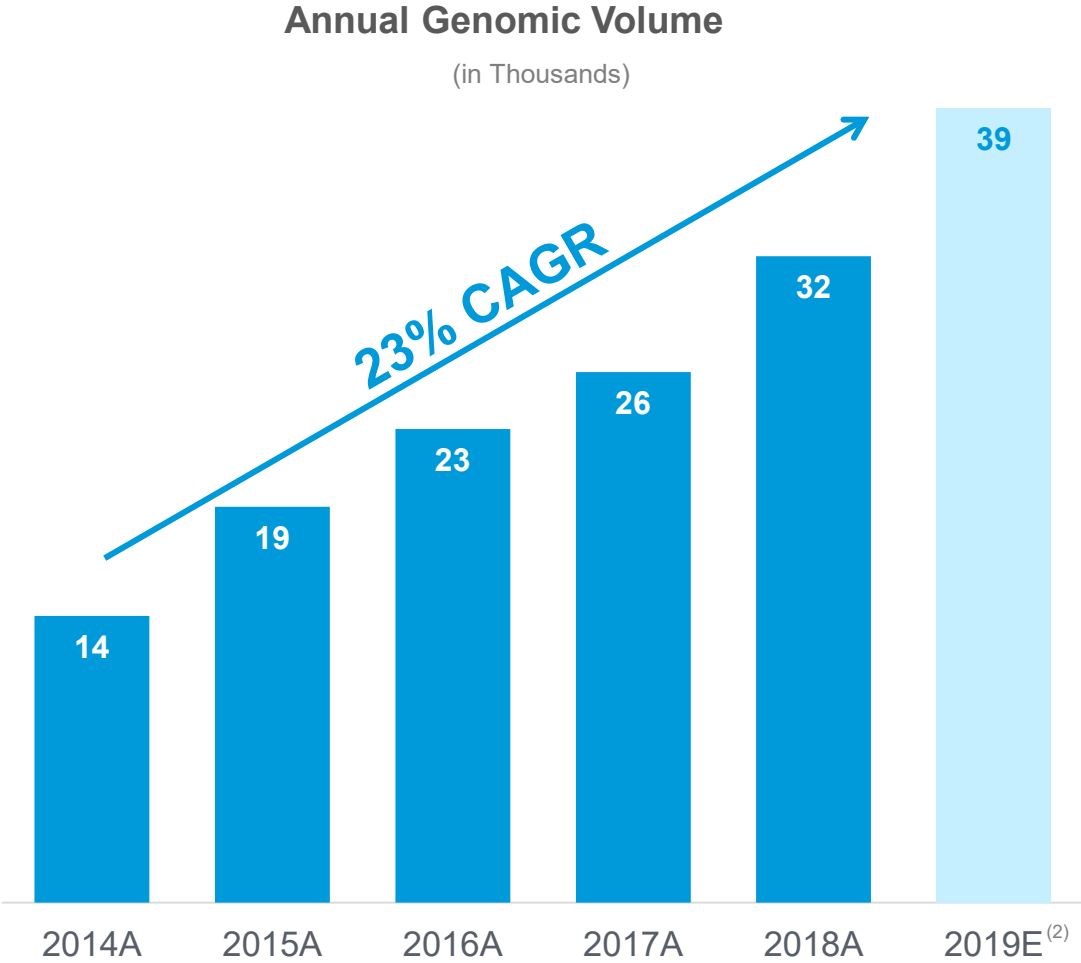
- Expect launch of Percepta® Genomic Sequencing Classifier (GSC) in mid-2019
- Accelerating development of first nasal swab test for early lung cancer detection
- Global addressable market for lung cancer estimated at more than \$30 billion



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



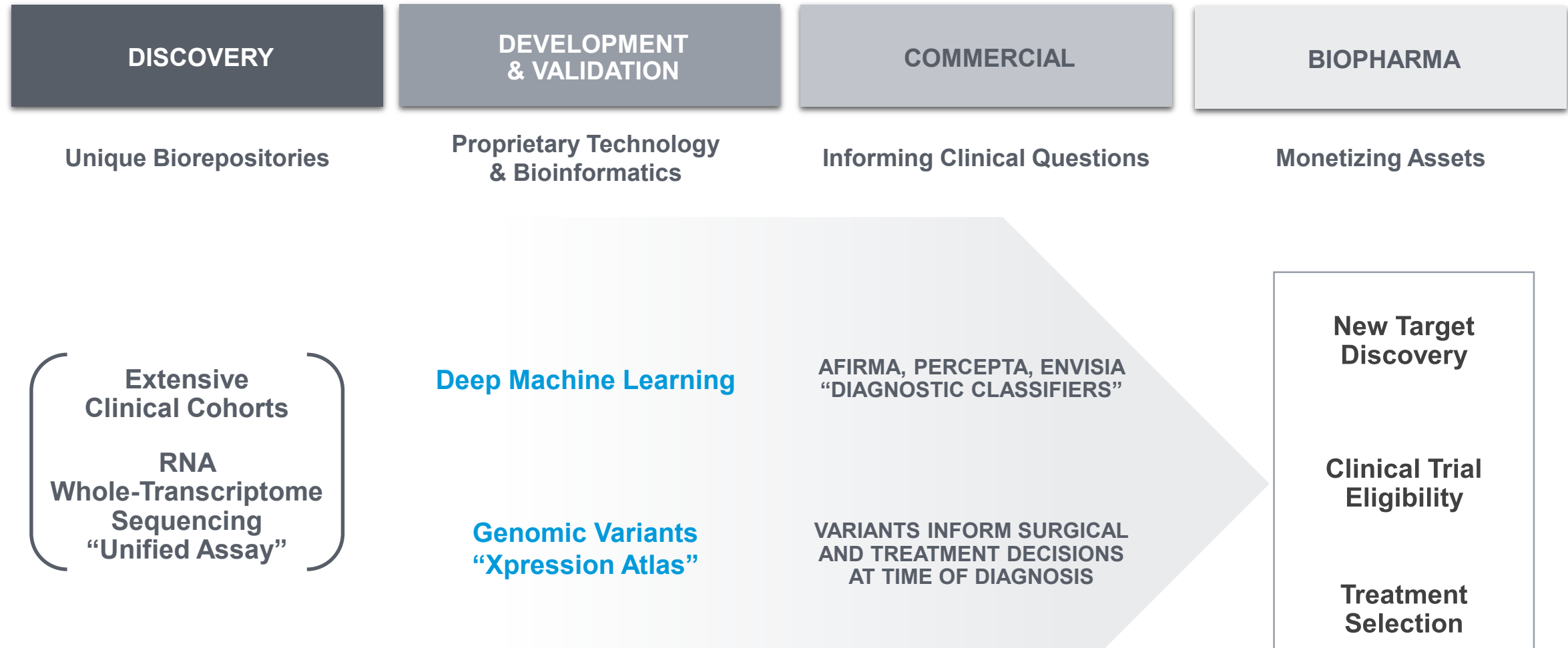
Rationale

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

A Powerful Scientific Platform: Multiple Vectors for Value Creation



Expanding Along the Value Chain



Thyroid

Afirma

GENOMIC SEQUENCING CLASSIFIER



Afirma

XPRESSION ATLAS



Lung Cancer

Percepta

GENOMIC SEQUENCING CLASSIFIER



ILD/IPF

Envisia

GENOMIC CLASSIFIER



Pipeline Test

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

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
- 23 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

GENOMIC SEQUENCING 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 AND COMMERCIAL ADOPTION

Reimbursement

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

EXPECT TO ACHIEVE OPERATING CASH FLOW BREAK-EVEN BEFORE END OF 2019

Our Founding Strategy: Improve Diagnostic Accuracy

Hundreds of thousands of patients evaluated for suspected disease



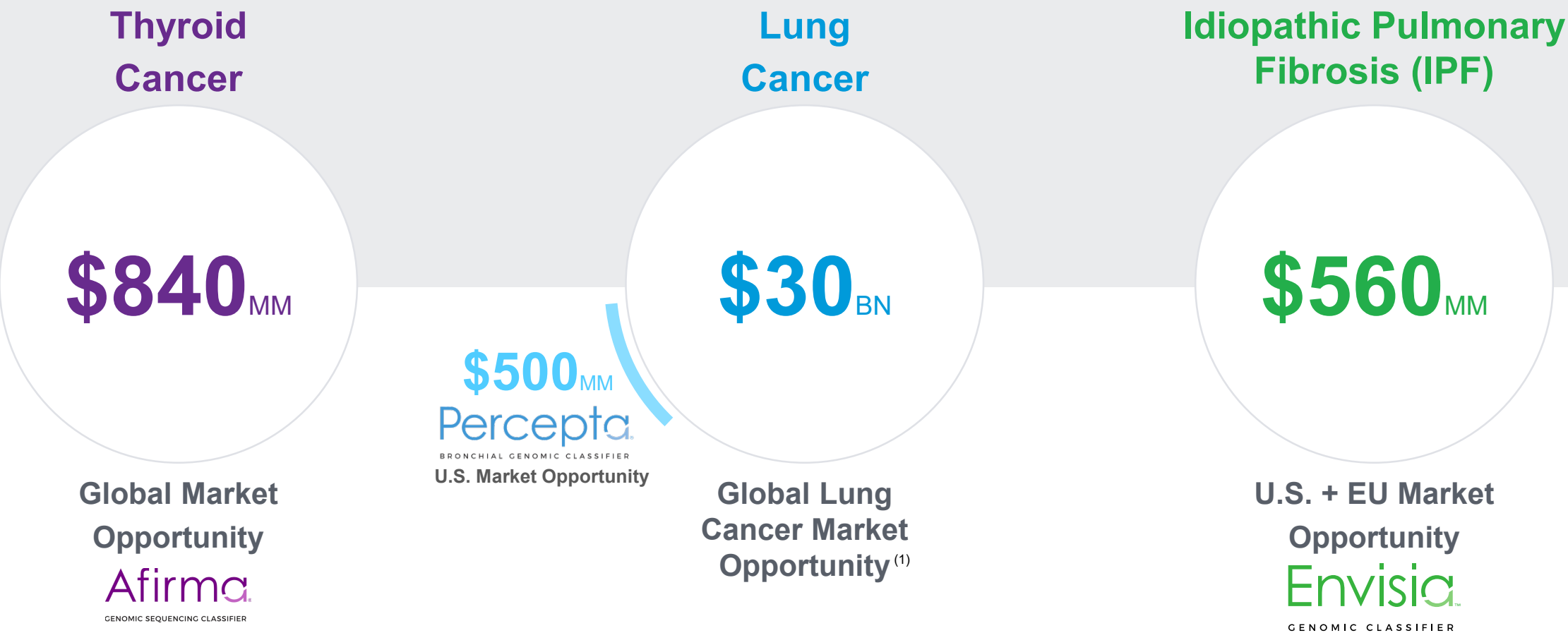
IMAGING AND/OR BIOPSIES

↓
Diagnosis Uncertain*

15% to 70%

*In thyroid and lung indications

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

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

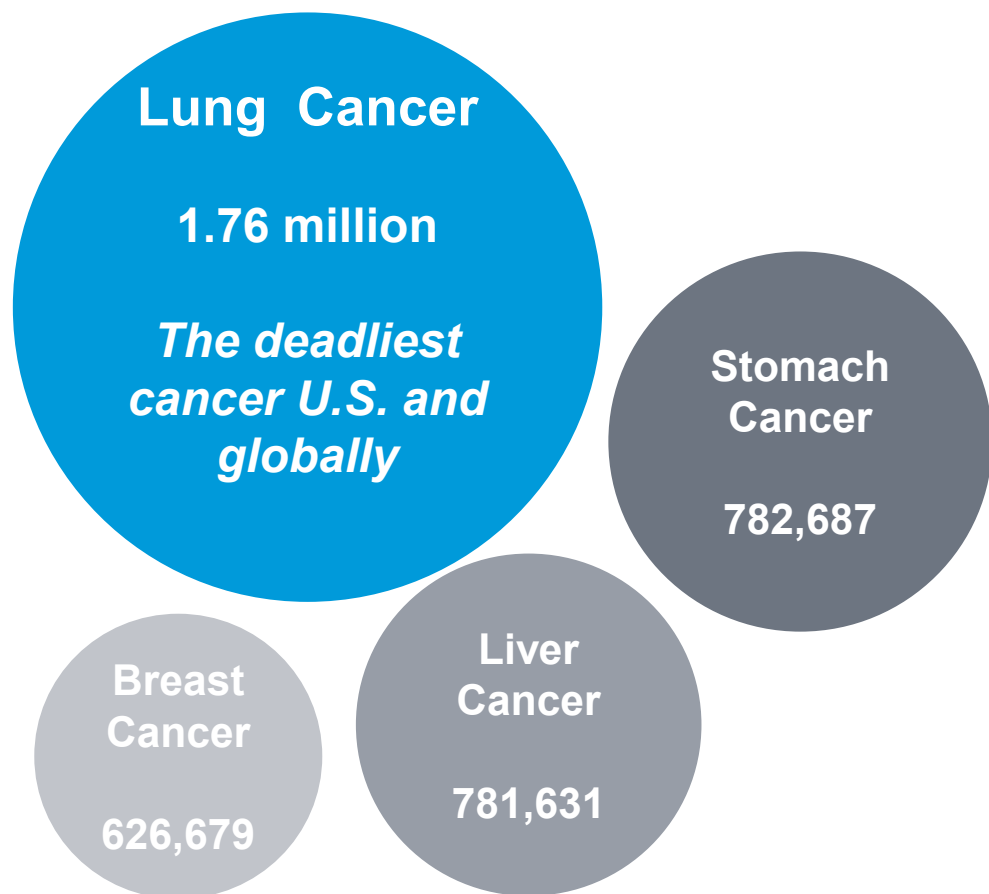
Xpression Atlas

Inform treatment
decisions to improve
patient outcomes

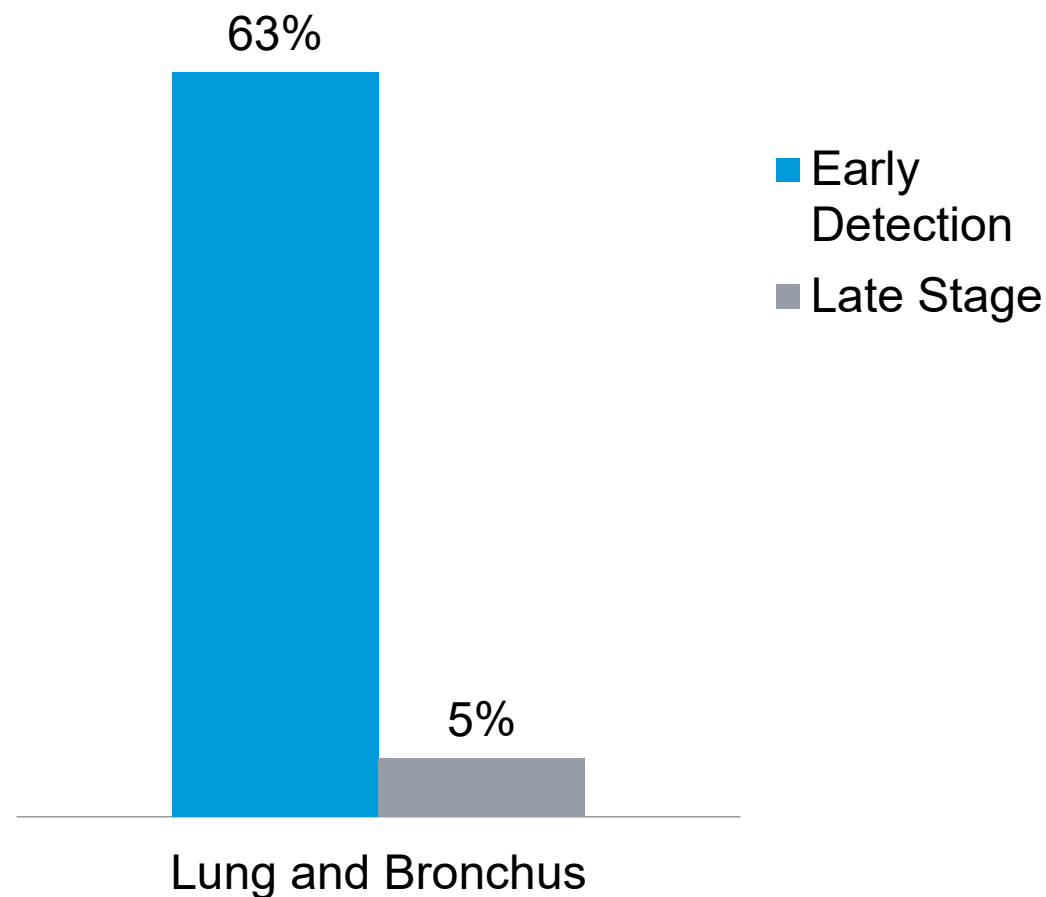
In Lung Cancer

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

↓
360,000 Bronchoscopy
~80% intermediate risk

↓
Diagnosis Uncertain Up to 60%
~150,000

↓
Percepta
GENOMIC SEQUENCING CLASSIFIER

↙
**Low-Dose
CT Scan**

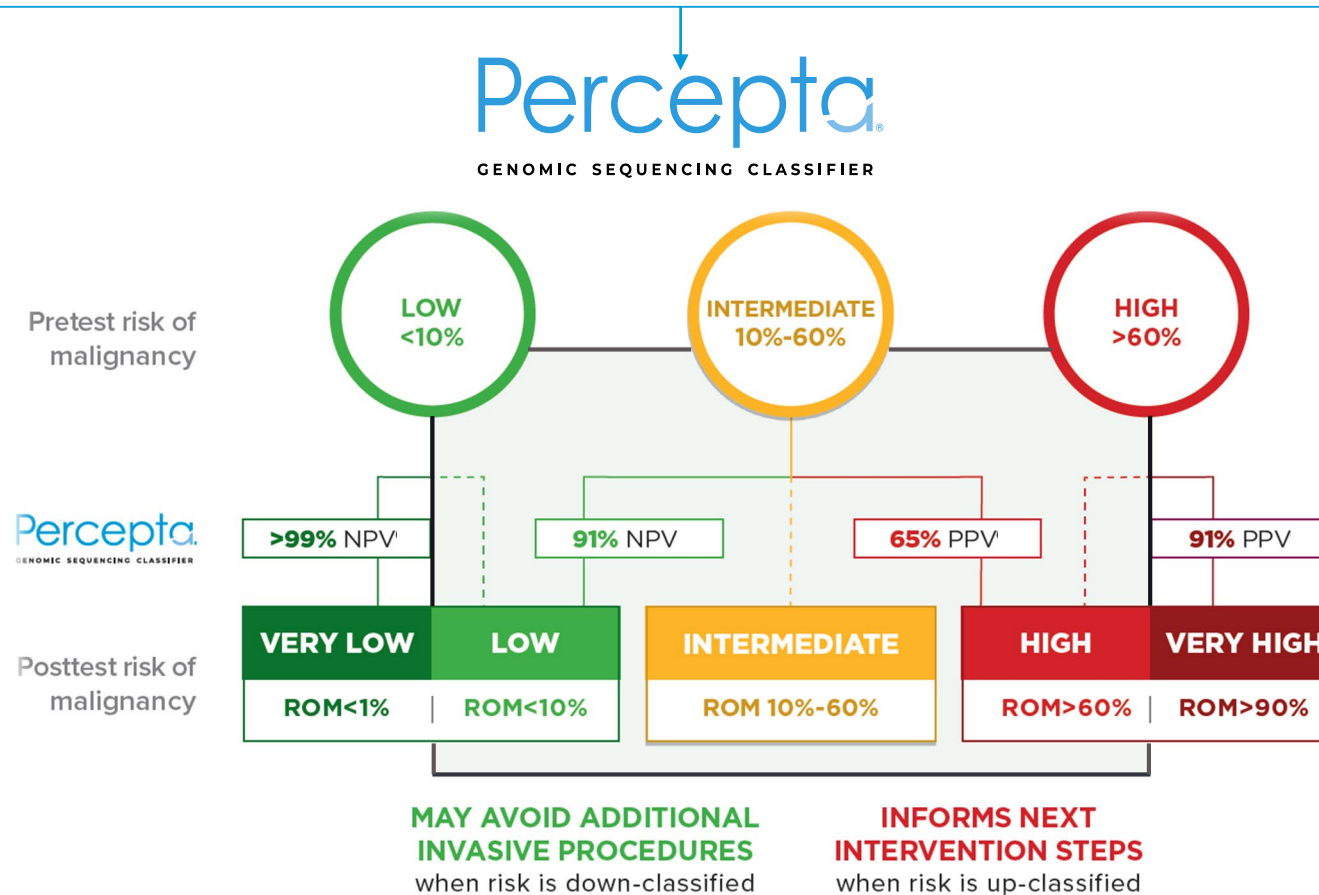
Follow with LDCT in lieu
of invasive procedure

↘
**Improved
Treatment Decisions**

Announced at ATS 2019

“Next-Generation” Percepta® Genomic Sequencing Classifier

~150,000 PULMONARY NODULE BRONCHOSCOPIES ARE INCONCLUSIVE



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%*

↓
EnvisiaTM

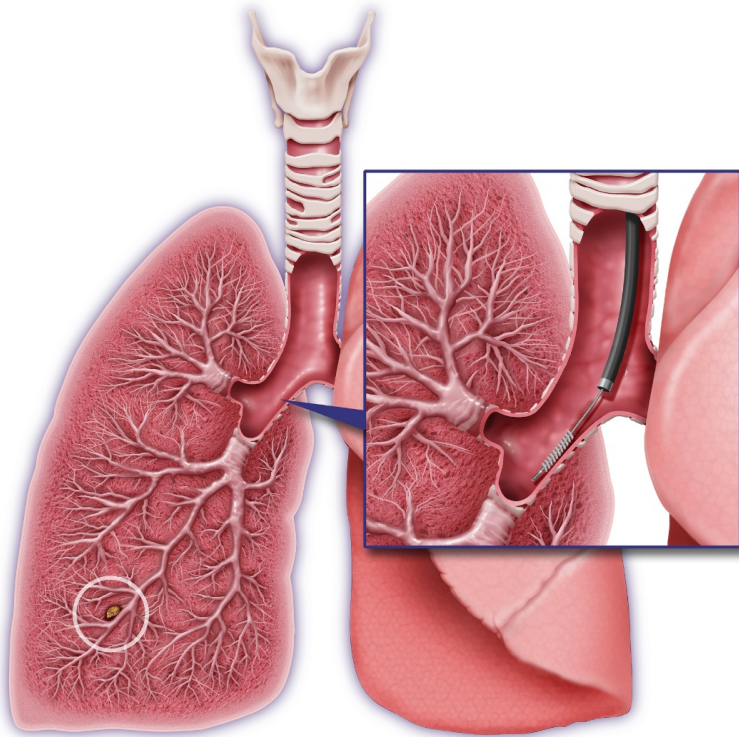
GENOMIC CLASSIFIER

↓
Classic UIP pattern
improves confidence in
IPF diagnosis without surgery

* Based on Company estimates

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 \$30M value on cohorts

FURTHER STRENGTHENS OUR LEADING POSITION IN LUNG CANCER DIAGNOSIS

Experienced Team with Track Record of Success

Bonnie Anderson <i>Chairman and Chief Executive Officer</i>	
Keith Kennedy <i>Chief Financial Officer</i>	   GE Capital
Chris Hall <i>President and Chief Operating Officer</i>	
Giulia Kennedy, Ph.D. <i>Chief Scientific and Medical Officer</i>	  
John Hanna <i>Chief Commercial Officer</i>	 
Freddie Bowie, Ph.D. <i>Vice President, Corporate and Business Development</i>	   THE BOSTON CONSULTING GROUP

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 market opportunity of more than \$30 billion

Experienced management team

with deep expertise and proven track record

Continued strong momentum

positions VCYT for near- and long-term success