When the question is genetics, the answer is Invitae.

WILLIAM BLAIR 2018 GROWTH STOCK CONFERENCE

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Bring comprehensive genetic information into mainstream medical practice to improve the quality of healthcare for billions of people.

Core principles

- Driving down the cost of genetic information will increase its personal and clinical utility
- Healthcare professionals are fundamental in ordering and interpreting genetic information
- People should own and control their own genetic information
- Genetic information is more valuable when shared
Exceptional growth across key indicators

INVESTMENT IN RUNAWAY LEADERSHIP PAYING OFF

Accessioned volume

Q1:17 | Q2:17 | Q3:17 | Q4:17 | Q1:18
---|---|---|---|---
26,000 | 30,500 | 40,000 | 53,000 | 64,000

Revenue

Q1:17 | Q2:17 | Q3:17 | Q4:17 | Q1:18
---|---|---|---|---
$10.3M | $14.3M | $18.1M | $25.4M | $27.7M

Gross profit

Q1:17 | Q2:17 | Q3:17 | Q4:17 | Q1:18
---|---|---|---|---
$1.0M | $3.8M | $5.0M | $8.3M | $9.6M
Increased guidance based on strong Q1

- Strong execution on all key indicators
- Received notification from Medicare in Q2 of approval for payment of del/dup analysis for certain tests under 81433 (approximately $500) alongside 81432
- Expectation to drive down cash burn by 40-50% exiting 2018
Strategy to reach billions of people

- Lower costs
- Attract Partners
- Expand content
- Drive Volume
- Lower prices
- Improve customer experience

Growth
How the market works today

Of the up to 10% of the population affected by genetic disease, less than 0.5% receive that information by way of an indication-based screen or test report.

- Testing remains largely “event based” with patients accessing the market through discreet entry points
- Report generally remains isolated from patient’s broader healthcare and long-term health decisions

A large, fragmented and inefficient market

- Carrier screening
- Fertility & perinatal health
- PGS/D
- Prenatal testing
- Neonatal testing
- Pediatric testing
- Preventive screening
- Adult inherited testing

10,000’s of tests

- Progeny
- Natera
- Counsyl
- Insight
- GoodStart Genetics
- Lineagen
- Celmatix
- CombiMatrix
- LabCorp
- Quest Diagnostics
- Myriad
- Color
- Roche
- Parabase Genomics
- Veritas
- Gene D
- Ambry Genetics
- AlleleX
- Sema4
- Miraca Life Sciences
- Courtagen
- Fulgent
- KONICA MINOLTA
- Foundation Medicine
- NeoGenomics Laboratories
- Guardant360
- Caris

PGx (~12)
Somatic cancer testing (~12)
 (>30)
 (>20)
How the market will work in the future

A large portion of the population in modernized healthcare systems will have their genetic information managed on their behalf to improve health outcomes for themselves and their families.

- Access to comprehensive genetic information services at all major market entry points
- Individuals can access comprehensive genetic information to inform healthcare decisions throughout their lives
THREE BASIC QUESTIONS DRAW PEOPLE TO GENETICS

Informing my health?
- Carrier screening
- Adult inherited testing
- Proactive

Starting a family?
- Fertility & perinatal health
- PGS/D
- Prenatal testing

Diagnosing a disease?
- Pediatric testing
- Neonatal testing

Comprehensive solution for clinicians and patients
Comprehensive solution for partners

A LIFETIME OF DATA ACROSS THE SPECTRUM OF HEALTHCARE

- Adult inherited testing
- Pediatric testing
- Neonatal testing
- Prenatal testing
- PGS/D
- Fertility & perinatal health
- Carrier screening
- Patient Communities
- Research
- Clinical Trials
- Therapeutics
- Devices
- Providers

Comprehensive phenotypic/Family health history data

INVITAE
A technology fueled business model

FROM SAMPLE TO ANSWER: CUSTOM AUTOMATION

- Scalable, custom, machine-learning software tools enable clinical analysis costs to decline even as assay and panel size increase.
- Capabilities are difficult to retrofit into large incumbent operations.
- Technology integration is tough to justify at smaller scale.

Moore’s Law
The cost of DNA sequencing is decreasing rapidly.

Metcalfe’s Law
The “Internet of genetics” is emerging.

Law of Finite Genomes
Understanding the genetic basis of disease is like a finite puzzle… it’s a reverse engineering problem!
Executed in the most exacting of industries

APPLYING WORLD-CLASS CLINICAL EXPERTISE TO RESULTS THAT INFORM CRITICAL HEALTHCARE DECISIONS

Many companies deploying technology to lower costs remain naïve about the complexity of biology
Building a best-in-class platform

BREADTH DEPTH AND SCALE IS ESSENTIAL TO LEAD

- Carrier screening
- Fertility & perinatal health
- PGS/D
- Prenatal testing
- Neonatal testing
- Pediatric testing
- Adult inherited testing

Depth and breadth have been a key component of our commercial success to date

Enhanced content feeds a virtuous cycle of scale, pulling forward value inflection point for our business
Leading with unparalleled depth at unmatched price

**NOT ALL CANCER TESTING CREATED EQUAL**

- Most comprehensive testing at the lowest price
- More genotypic and phenotypic data generated per individual
- Multiplies growth and value of network data relative to potential competitors

134
~70
67
30
28
Uniquely capable of serving growing demand

Inherited disease
Cancer market estimated to grow to ~2 million tests per year
• 1.2-1.3 million women in the US with breast and ovarian cancer who qualify for genetic testing didn’t receive it
• ~1.7 million newly diagnosed cancers per year
Cardio, Neuro, Peds estimated to grow over the coming years
• >90 million Americans living with cardiovascular disease or after-effects of stroke

Family health
Family health market is already larger than cancer with 4 million live births per year in the US
• Combined carrier testing, products of conception, cytogenetics, cancer screening into one NGS platform
• Aggregate market is enormous for family health

Proactive
Proactive Health market estimated to grow to over 10 million per year
• Up to 10% of the population is affected by a genetic disease
• ~330 million US population is the total addressable market
Emergence of new industry

- Make genetic testing more affordable and more accessible
- Build partnerships with industry peers to open new markets
- Make acquisitions that expand test menu content and services
- Share genetic information on a global scale to diagnose more patients correctly and bring therapies to market faster
- Build a genome management infrastructure

Comprehensive genetic health information service to lead new era of healthcare
Early value of a growing network effect

- People served
- Data per person
- Connections per person per data point

- Carrier screening
- Fertility & perinatal health
- PGS/D
- Prenatal testing
- Neonatal testing
- Pediatric testing
- Adult inherited testing

- Payers
- Partners
- Research
- Therapies
- Devices
- Advocacy
Q&A:

General discussion