When the question is genetics, the answer is Invitae.
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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
Recipe for billions

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

Growth
Focused execution is accelerating momentum

**Driving Triple Digit Volume and Revenue Growth in 2017**

**Disciplined acquisitions**
- 4 successful acquisitions adding complementary capabilities and reach

**Expanded product and commercial breadth**
- Launched exome sequencing and interpretation services
- Now test >20,000 genes
- Content across all stages of life

**Commercial collaborations**
- >16 biopharma and health system partners
- >100 advocacy organizations reaching >100,000 people

**Enhanced User Experience**
- Introduced Family Variant Testing at no additional charge
- Launched updated CancerGene Connect Platform
Dominant growth in diagnostics

ON TRACK TO BECOME LARGEST PROVIDER OF GENETIC CANCER TESTING BY VOLUME IN 2018

- Building a better product wins: more extensive menu, faster turnaround time and lower pricing
- Multiplying value proposition across breadth of platform
Reinvesting in growth continues to drive success

**Patient communities & network infrastructure**

- **Acquired:** January 2017
- **Launched:** April 2017 Invitae Patient Network, enabling participants to contribute data, learn how others manage similar health plans, and receive information about the latest research and clinical trial opportunities.

**Enhanced user experience**

- **Acquired:** June 2017
- **Launched:** September 2017 New version of CancerGene Connect, at no charge, to provide a software solution that simplifies data gathering, tracking and analysis for all genetic counselors and their patients.

**Expanded content and capabilities**

- **Acquired:** August and November 2017 (respectively)
- **Launched:** January 2018: Integrated sales force
Foundation for the future

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

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Emergence of new industry

Genome Management

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

Genome Network

Comprehensive genetic health information service to lead new era of healthcare

Genetic Testing

- Make genetic testing more affordable and more accessible
Network economics build patient value

**EARLY VALUE OF NETWORK APPROACH**

- **Offsetting cost to patients**
  - Comprehensive epilepsy panel testing for pediatric patients sponsored by BioMarin

- **Bringing more patients into the network**
  - Makes testing available to a broad cross-section of pediatric epilepsy patients

- **Expanding reach**
  - Complimentary sales and marketing effort taps new audiences to engage more patients and clinicians

- **Doing more with data**
  - Patients diagnosed sooner and treated faster
Over 150% increase in year-over-year volume

Full Year:
- Consolidated: ~150,000 accessioned samples
  - 154% increase year-over-year
- Base Business: ~134,000
  - ~130% increase year-over-year

Fourth Quarter:
- Consolidated: ~53,000 accessioned
- Base Business: ~44,000 samples
  - 113% increase year-over-year
  - 27% increase quarter-over-quarter
- Good Start: 7,678 samples in Q4
- CombiMatrix: 1,579 samples in 6 weeks post acquisition (3,191 full quarter)
Over 170% increase in year-over-year revenue

Full Year:
- $68.2M in consolidated revenue
  - 172% increase year-over-year
- Base business: $60.0M
  - 140% increase year-over-year

Fourth Quarter:
- $25.4M in consolidated Q4 revenue
  - Base business: $19.4M
    - Up over 110% year-over-year; 21% sequentially
    - Includes $0.8M in non-test revenue
  - Good Start: $4.0M
    - Excludes approximately $0.3M related to tests accessioned prior to August 4th acquisition close
  - CombiMatrix: $2.0M
    - Estimated full quarter revenue of $3.6M
Continuing to drive down cost of goods

- Average cost per sample on a consolidated basis of $321, a 19% reduction year-over-year
  - Base business: $297
    - Approximately 25% improvement year-over-year
    - 9% sequential improvement
- Anticipate near-term variability due to:
  - Exome volume increase
  - Good Start and CombiMatrix COGS prior to full integration
- Targeting 50% gross margin across the Invitae platform
Achieved full-year gross profit of $18.1 million

Full Year:
- Consolidated gross profit of $18.1M
  - Base business: $15.9M gross profit, up from negative $2.8M in 2016

Fourth Quarter:
- Consolidated gross profit of $8.3M
  - Base business: $6.3M gross profit, up from $1.1M in Q4 16
- Represents gross margin of 33% of consolidated test revenue
  - Base business: 33%
  - Calculation excludes other revenue
Leverage from operating expenses

Full Year:
- Consolidated operating expenses of $139.4M
- Base business operating expenses of $126.0

Fourth Quarter:
- Consolidated Q4 17 operating expenses of $43.2M
  - 66% increase year-over-year compared to 158% volume growth
  - 21% sequential increase compared to 33% volume growth
- Base business operating expenses of $34.7M
  - 33% increase year-over-year compared to 113% increase in volume
- Q4 17 Opex included $8.6M in non-cash expenses
  - Stock comp: $4.8M
  - Depreciation and amortization of equipment: $2.2M
  - Amortization of intangibles from acquisitions: ~$1.0M
    - Will be $1.3M when full quarter of CombiMatrix amortization
Balance sheet summary and non-cash items

- Ended Q4 17 with $76.0M in cash
  - Additional $20.0M debt draw down available in Q1 18
- $30.5M cash burn in Q4 17 on consolidated basis, compared to $22.6M in Q3 17
  - Adjusted cash burn was $26.7M, excluding ~$3.9M in one-time charges due to acquisitions
    - Base business burn was ~$22.7M excluding ~$4M in acquisition and integration costs
- Q4 17 included $13.4M in non-cash expenses
  - $8.6M in non-cash operating expenses
  - $4.8M reversal of tax benefit recorded in Q3
- Integration and operating costs expected to continue over next two quarters until acquisitions fully integrated
  - Expect modest decrease in burn through H1 18 with more significant decreases in H2 18
Anticipating continued strong growth in 2018 and beyond

- Accessioning at least 250,000 samples in 2018

- Anticipate at least doubling revenue in 2018
  - Clear line of sight to $120 million
  - Potential upside excluded from guidance
    - Reimbursement improvements via continued progress with payer contract implementation
    - Medicare Del Dup
      - Incremental ~$500 on 5-10% volume (BRCA & Lynch)
    - Non-test revenue: partners and patient networks
      - Principally reflected in test volume
      - Modest non-test revenue
Tracking our progress in 2018 and beyond

**REAL-TIME INDICATOR**

**Volume**
Anticipated continued double-digit sequential growth
At least 250,000 samples expected in 2018

**TRAILING INDICATOR**

**Revenue**
Expected to double in 2018: $120 million

**TREND**

- Reimbursement
  Short-term variability
- Gross Profit
  Short-term variability
- COGS
  Short-term variability
- Operating Leverage
  Short-term variability

**BUILDING TOWARD HIGHLY PROFITABLE NETWORK BUSINESS WITH 50% GROSS MARGIN ACROSS THE PLATFORM BASED ON INCREASING DEMAND AND SCALABLE COST STRUCTURE**
2018: Volume drives current and future value

3 SIMPLE QUESTIONS TO BUILD 1 BIG NETWORK

Informing my health?

Starting a family?

Diagnosing a disease?

Carrier screening

Fertility & perinatal health

PGS/D

Prenatal testing

Pediatric testing

Neonatal testing

Adult inherited testing

Proactive

Family health

Diagnosing a disease?
A mutual value model to drive explosive growth

People: Across all stages of life
- Most comprehensive, highest quality genetic information
- Lowest cost to access medically relevant information
- Connect with physicians, research, treatment, and patient communities

Partners: Across all healthcare sectors
- Better, more comprehensive information to accelerate research & innovation
- Access to larger target patient populations
- Single source solution
Performance Statement

VALUING GENETICS BEYOND DIAGNOSTIC SILO

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

Building a genetic information network to span healthcare continuum

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