2020 JP Morgan Healthcare Conference

Francis deSouza | President & CEO | January 13, 2020
Safe Harbor Disclosures

This communication may contain statements that are forward-looking. Forward-looking statements are subject to known and unknown risks and uncertainties and are based on potentially inaccurate assumptions that could cause actual results to differ materially from those expected or implied by the forward-looking statements. Among the important factors that could cause actual results to differ materially from those projected by any forward-looking statements are (i) our ability to further develop and commercialize our instruments and consumables and to deploy new products, services, and applications, and expand the markets, for our technology platforms; (ii) our ability to manufacture robust instrumentation and consumables; (iii) our ability to successfully identify and integrate acquired technologies, products, or businesses; (iv) our expectations and beliefs regarding future conduct and growth of the business and the markets in which we operate; (v) challenges inherent in developing, manufacturing, and launching new products and services; (vi) our expectations regarding obtaining regulatory approval for our products; (vii) our expectations regarding our future financial results; and (viii) the application of generally accepted accounting principles, which are highly complex and involve many subjective assumptions, estimates, and judgments, together with other factors detailed in our filings with the Securities and Exchange Commission, including our most recent filings on Forms 10-K and 10-Q, or in information disclosed in public conference calls, the date and time of which are released beforehand. We undertake no obligation, and do not intend, to update these forward-looking statements, to review or confirm analysts’ expectations, or to provide interim reports or updates on the progress of the current quarter.
### Preliminary Revenue

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue (Millions)</th>
<th>YoY Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>$1,861</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>$2,220</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>$2,398</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>$2,752</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>$3,333</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>$3,541</td>
<td>6%</td>
</tr>
</tbody>
</table>

- **2019**: ~$3,541M Revenue
- **Q4 2019**: ~$950M Revenue
- **YoY Growth**: 10%
2020 Guidance

$3.86–$3.93B
FY20 Revenue Guidance

9–11%
Revenue Growth

~30%
Operating Margin

$6.45–$6.65
GAAP FY20 EPS

$6.80–$7.00
Non-GAAP FY20 EPS
2020 Revenue Growth Expected to be 9% to 11%

At the Midpoint of the Guidance Range, Assumptions Include:

- Total Sequencing Growth:
  - ~14%
  - ~200K whole genomes for UK Biobank
  - ~60K whole genomes for NIH's All of Us - Mid-2020 start
  - ~20K whole genomes for GeL/UK - Mid-2020 start

- Sequencing Consumables Growth:
  - ~17%

- PopGen
  - Arrays down ~15%

- Arrays
2019 Sequencing Systems: Most Shipments in Illumina History

- **NovaSeq™**: ~320
- **NextSeq™**: ~620
- **MiSeq™**: ~730
- **MiniSeq™**: ~240
- **iSeq™**: ~510

Record NovaSeq and NextSeq Shipments

Total Shipments: >2,400
Global Installed Base Grows >10% to >15,000

~150 Pb Sequence Data in 2019

- High Throughput: ~920 NovaSeq™, ~1,300 HiSeq™
- Mid Throughput: ~3,600 NextSeq™
- Low Throughput: ~7,400 MiSeq™, ~1,100 MiniSeq™, ~860 iSeq™

*Excluding HiSeq, this includes all systems that have been shipped to customers and may include some decommissioned or inactive systems.
Lower Sequencing Cost Broadens Customer and Application Reach

Cost Per Genome

- 2010: Exome
- 2014: Whole genomes
- 2017: Liquid Biopsy
- 2020: Tumor/Normal WGS

- 2010: Shotgun Metagenomics
- 2017: Single-cell multi-omics
- 2020: Spatial transcriptomics

Cost Per Genome:
- ~$15,000
- ~$1,000
- ~$800

10x Increase in Customers
>50x Increase in Data
~20x Cost Reduction
NovaSeq™ Consumables Almost Double in 2019

2x Data Generated in 2019
~40% New to High-Throughput
~30% HiSeq™ conversions

Every 30 sec 30x genome equivalent generated
Clinical Drives NextSeq™ Adoption

- **Record ~620 NextSeq Shipments**
- **~350 New NextSeq Customers**
- **>100 New NextSeqDx Customers**
- **>50% Clinical Shipments (inc. Consumables)**
New to Sequencing Users Drive Low-Throughput System Adoption

~700 New LT System Owners

~5,600 Customers

115 Countries

85% System Customers with LT System
2020 Key Focus Areas

Enable
Breakthrough Genomics Research

Accelerate
Clinical Adoption of Genomics

Advance
Technology Leadership and Innovation
Sequencing Opportunities Across Research Expanding

Emerging Applications
- Liquid Biopsy
- Synthetic Bio
- Immunoprofiling
- Microbiome
- CRISPR
- Infectious Diseases

Novel Methods
- Single-Cell
- Spatial Genomics
- Rare Variant Detection

More Samples
More Sequencing
More Discoveries

Key Initiatives
- UKBB
- All of Us
- Human Cell Atlas
Global Population Genomics Research Gaining Momentum

100K
NHS | Genomics England

NIH’s All of Us

UKBB

Population-specific genomic insights
Scales genomic infrastructure
Connects researchers

10M+
global samples
50+
global initiatives
Poised to Transition to Broader Health System Programs

Population Research Initiatives
- Research Cohorts
- Identify Novel Insights
- Validate Data

Population Health System
- 4B+ People Annually
  - Routine Clinical Care
  - Improve Healthcare Economics
  - Improve Patient Outcomes

More People
When sequencing becomes standard of care

More Applications
Going beyond RUGD and oncology

More Sequencing
Multiple sequencing over lifetime
UK Leading Adoption of Genomics at Population Health Level

Vision

- Diagnose rare diseases
- Match patients to most effective treatment
- Increase the number of cancer survivors

Initial ramp in 2020

- 2014: First participants recruited
- 2015: First participant diagnosis returned
- 2016: First diagnoses of children returned
- 2017: First research users access data
- 2018: 100,000 Genomes sequenced
- 2025: 300,000–500,000 Patients sequenced
Enable Innovators
Provide technology solutions that drive innovation

Broaden Use
Deliver IVDs to broaden use of clinical sequencing

Accelerate Reach
Partner to accelerate patient access and impact
NIPT Adoption Growing with Majority of Opportunity Ahead

~140M Annual Births

~70M Accessible Births

~8M 2019 Tests

+20%
Illumina IVD Solutions Accelerate NIPT Adoption

VeriSeq™ NIPT
CE-IVD

80%  
2019 Sample Growth  

>890K  
Samples Processed Since Launch  

25  
Countries

TruSight™ NIPT in Development for the US Market

Planned Sample-to-Report Solution
Targeting FDA PMA submission
Improving Patient Outcomes for Genetic Disease

Today’s Reality

- <1% Utilization
- >5 Years for diagnosis
- $57B Cost Burden

300M Affected Lives
6000 Genetic Diseases
200 New Diseases Reported Annually
200M Affected Lives
6000 Genetic Diseases
200 New Diseases Reported Annually
TruSight™ Software Suite Will Enable Sample-to-Report for Genetic Disease

From millions of variants to an answer

- Quickly
- Seamlessly
- Cost-effectively

Available Q2 2020

Development Collaborator

Select Beta Customers
Global Opportunity for NGS to Inform Cancer Care

**Early Screening**
- freenome
- GRAIL
- GUARDANT
- Thrive.

<1% Current Adoption

100M Patient Lives

**Therapy Selection**
- ARCHER
- FOUNDATION MEDICINE
- GUARDANT
- illumina
- QIAGEN
- SOPHiA

~8% Tumors Sequenced

5M Patient Lives

**Monitoring**
- Adaptive
- ARCHER
- GUARDANT
- QIAGEN
- SOPHiA
- LexentBio
- natera

<1% Current Adoption

12M Patient Lives
Illumina Cleared Platforms Support Clinical Customers

**MiSeq™Dx**
- Oncology
- Genetic Disease

**NextSeq™Dx**
- NIPT
- Oncology Panels
- Genetic Disease Exomes
Illumina Cleared Platforms Expanding with NovaSeqDx

- **MiSeq™Dx**
  - Oncology
  - Genetic Disease

- **NextSeq™Dx**
  - NIPT
  - Oncology Panels
  - Genetic Disease Exomes

- **NovaSeq™Dx**
  - Blood based ctDNA
  - Tumor/normal WGS
  - Genetic Disease WGS

Intended for IVD Use Targeting 2022
Partnerships Broadening IVD Menu

Impact more lives. Faster and better.

Broaden Channel
Expand Menu
Drive Reimbursement
Accelerate Physician & Patient Education
Illumina + Roche
World-Leading NGS Technology and Clinical Diagnostics

CDx Partnership on TruSight™ Oncology 500

Access to Dx platforms for IVD kits
Focus area Oncology
Breaking the Diffraction Limit to Increase Flow Cell Density

**Blue / Green SBS**
Greater separation of signal
Allow closer proximity

**Super Resolution Optics**
Breaking the diffraction limit
Not yet achieved in any sequencer

>30x Increase in Data Density*
Introducing NextSeq™ 1000 & NextSeq™ 2000
NextSeq™ 1000 & NextSeq™ 2000 Will Drive Higher Intensity Sequencing

- **MiSeq™**
  - 15 Gb | $110/Gb
  - Panels
  - Small microbes

- **NextSeq 550**
  - 120 Gb | $40/Gb
  - NIPT
  - Oncology Panels
  - Enrichment
  - Panels
  - Small microbes

- **NextSeq 1000**
  - 120 Gb | $30/Gb
  - Single-cell Trios
  - ctDNA (blood)
  - Exomes
  - NIPT
  - Oncology Panels
  - Enrichment
  - Panels
  - Small microbes

- **NextSeq 2000**
  - 300 Gb | $20/Gb
  - Larger Studies
  - New Applications
  - Sequencing Per Sample

- Will Drive Higher Intensity Sequencing
Faster and More Flexible Sequencing at Lower Cost

- 2.5x Output*
- 50% Reduction in Operating Cost
- 4x Reduction in Storage Footprint
- 6x Faster Secondary Analysis

*NextSeq™ 2000 with P3 Flow Cell vs NextSeq 550

75 Breakthrough Innovations
Multiple Configurations Address Broad Customer Set

**NextSeq™ 2000**
- $335K
- Q1 20
- NextSeq 2000 with P2 Flow Cell 120G Q1 20
- NextSeq 2000 with P3 Flow Cell 300G Q4 20

**NextSeq™ 1000**
- $210K
- Q4 20
- NextSeq 1000 with P2 Flow Cell 120G
Illumina in 2020

Enable
Breakthrough Research
- NHS Commissioning

Accelerate
Clinical Adoption
- Roche Partnership
- NovaSeq™ Dx
- TruSight™ Software Suite
- TruSight™ NIPT

Advance
Technology Leadership
- NextSeq™ 1000 and NextSeq™ 2000
Illumina, Inc.
Reconciliation of Non-GAAP Financial Guidance

The Company’s future performance and financial results are subject to risks and uncertainties, and actual results could differ materially from the guidance set forth below. Potential factors that could affect our financial results are included from time to time in the public reports filed with the Securities and Exchange Commission, including Form 10-K for the fiscal year ended December 30, 2018 filed with the SEC on February 11, 2019, Form 10-Q for the fiscal quarter ended March 31, 2019, Form 10-Q for the fiscal quarter ended June 30, 2019, and Form 10-Q for the fiscal quarter ended September 29, 2019. We assume no obligation to update any forward-looking statements or information.

<table>
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<tr>
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<tr>
<td>GAAP diluted earnings per share attributable to Illumina stockholders (a)</td>
<td>$6.45–$6.65</td>
</tr>
<tr>
<td>Amortization of acquired intangible assets</td>
<td>0.19</td>
</tr>
<tr>
<td>Non-cash interest expense (b)</td>
<td>0.28</td>
</tr>
<tr>
<td>Incremental non-GAAP tax expense (c)</td>
<td>(0.12)</td>
</tr>
<tr>
<td>Non-GAAP diluted earnings per share attributable to Illumina stockholders</td>
<td>$6.80–$7.00</td>
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(a) This guidance does not include any impact resulting from the termination of our merger agreement with Pacific Biosciences of California, Inc. on January 2, 2020.

(b) Non-cash interest expense is calculated in accordance with the authoritative accounting guidance for convertible debt instruments that may be settled in cash.

(c) Incremental non-GAAP tax expense reflects the tax impact related to the non-GAAP adjustments listed.