

GRAIL

A Revolution in Early
Cancer Detection



SAFE HARBOR STATEMENT

This communication contains, and our officers and representatives may make, "forward-looking statements" within the meaning of the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. 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. Our actual results and financial condition may differ materially from those indicated in the forward-looking statements. Therefore, you should not rely on any forward-looking statements. Among the important factors that could cause actual results to differ materially from those in any forward-looking statements are (i) our ability to develop and commercialize our instruments and consumables, 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 identify and integrate acquired technologies, products, or businesses successfully; (iv) our expectations and beliefs regarding prospects and growth for the business and its markets, and (v) other factors detailed in our filings with the U.S. Securities and Exchange Commission ("SEC"), 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. Any forward-looking statement made by us is based only on information currently available to us and speaks only as of the date on which it is made. We undertake no obligation to publicly update any forward-looking statement, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise.

CANCER IS A LEADING CAUSE OF DEATH WORLDWIDE



14M NEW CASES PER YEAR
8M DEATHS ANNUALLY



INCIDENCE INCREASING BY 70%
OVER NEXT 20 YEARS



AT LEAST HALF OF US CANCERS
DIAGNOSED AT STAGE III AND IV



SCREENING EXISTS FOR BREAST,
PROSTATE, COLON, LUNG, CERVICAL



SCREENING HAS BEEN SHOWN TO
STAGE-SHIFT CANCER DIAGNOSIS

GRAIL

A new company tackling the early detection of cancer on a global scale

MISSION: Enable the early detection of cancer in asymptomatic individuals through a blood screen

VISION: Massively decrease global cancer mortality by detection at a curable stage

GRAIL IS UNIQUELY POSITIONED TO PIONEER THIS FIELD TODAY
SEQUENCING AT DEPTHS THAT ARE COST-PROHIBITIVE TO OTHERS

THE EARLY DETECTION ctDNA HYPOTHESIS

Very deep sequencing will unlock the ability to screen asymptomatic individuals

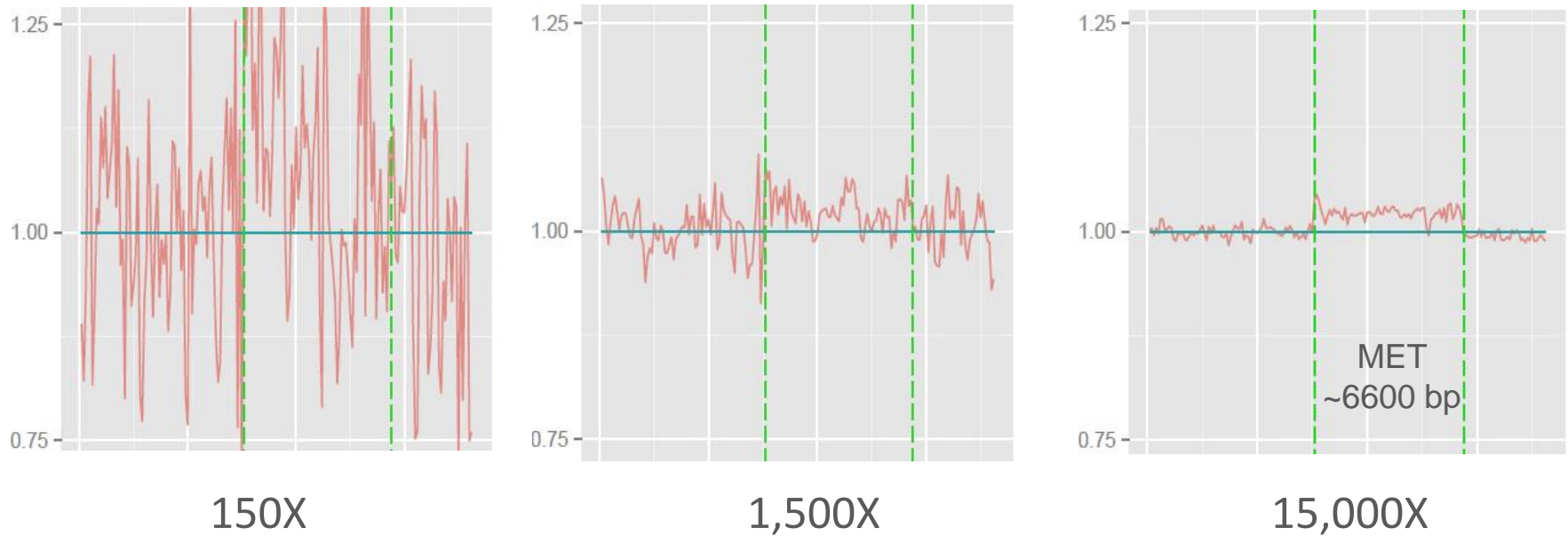
- ctDNA is a **direct measurement of cancer DNA**, rather than an indirect measure of the effects of cancer; as a result, it most likely will be superior to other biomarkers
- Tumors shed nucleic acids into the blood
- **Very deep sequencing will improve sensitivity and specificity** in two ways:
 1. Improved signal-to-noise ratio
 2. More mutations detected per sample

Ultra-deep sequencing to detect ctDNA has the potential to be the holy grail for early cancer detection. We have the technology and cost structure to do it years before anyone else.

Deep Sequencing Drives Performance

Improves signal-to-noise, making small amounts of ctDNA detectable

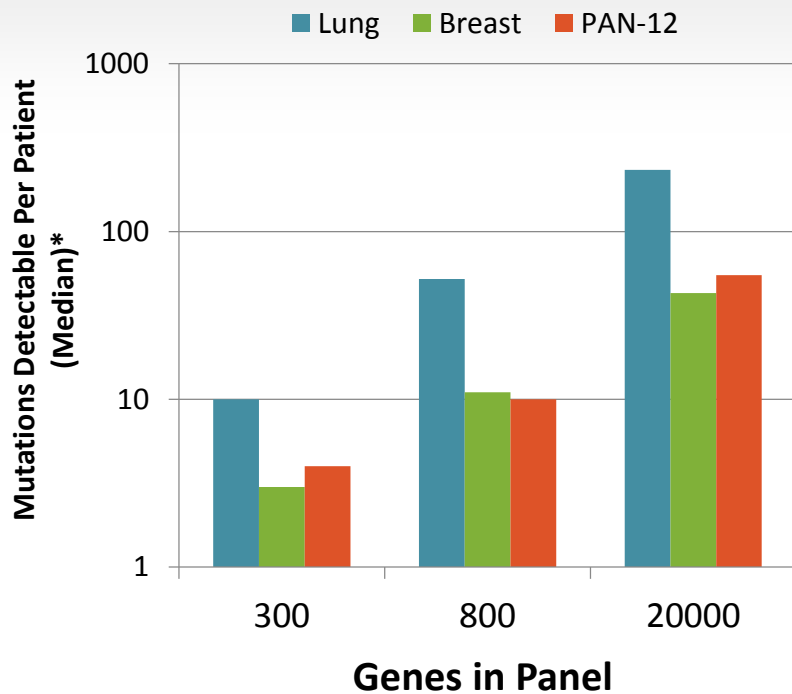
EXAMPLE: SEQUENCING OF MET AMPLIFICATION $\sim 1\%$



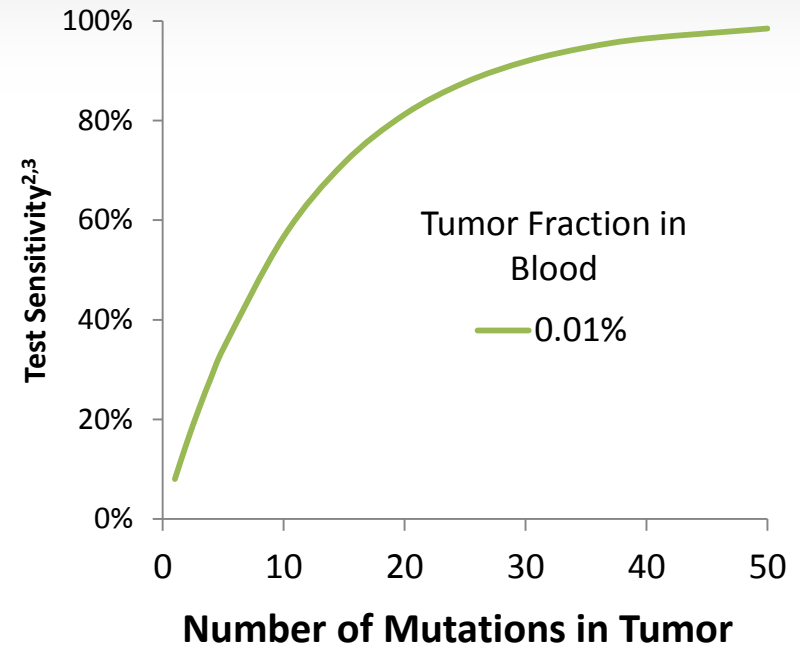
Relative Sequencing Depth

DEEP SEQUENCING ENABLES DETECTION OF CANCER MUTATIONS AT LOW LEVELS IN BLOOD

Deep Sequencing Increases the Number of Detectable Mutations



Improved Test Sensitivity When Multiple Mutations Are Detectable



1. TCGA data used for analysis
2. Single tube of blood (~10,000 genomic equivalents of cfDNA)
3. Likelihood of detecting at least 1 mutation with ≥ 3 supporting error corrected reads

CTDNA LUNG CANCER RESEARCH

Compelling breadth of findings from a single ctDNA assay

Oncogenic Driver	<i>EGFR</i>	<i>KRAS</i>	<i>ERBB2</i>	<i>BRAF</i>	<i>MET</i>	<i>ALK</i>	<i>ROS1</i>	Total
Alteration detected (n/n)	23/23	12/16	3/3	1/1	2/2	3/4	1/2	45/51 (88%)

- 37 gene panel was developed to detect oncogenic driver alterations
- No false positives detected
- Most ctDNA testing has shown 65%–75% sensitivity compared to tissue

VAST MARKET OPPORTUNITY FOR ASYMPTOMATIC SCREENING

	Base Case	Bull Case
Assumptions	<ul style="list-style-type: none">• ctDNA screening appropriate for high risk individuals• Most cancers detectable at stage 2 and later	<ul style="list-style-type: none">• ctNA becomes the definitive analyte of a biologically significant cancer AND defines origin of the tumor• Cancer routinely detected at stage 1
Outcome	<ul style="list-style-type: none">• GRAIL has multi-year lead and distinct economic advantage	<ul style="list-style-type: none">• GRAIL is the leading cancer company
Addressable Market	<ul style="list-style-type: none">• ~\$20B–\$40B market	<ul style="list-style-type: none">• ~\$100B–\$200B market

VAST MARKET OPPORTUNITY FOR ASYMPTOMATIC SCREENING

	Base Case	Bull Case (All risk levels)
Population	<ul style="list-style-type: none">• High-risk patients	<ul style="list-style-type: none">• All-risk patients
# Individuals	<ul style="list-style-type: none">• > 70M	<ul style="list-style-type: none">• 387M
Test Price	<ul style="list-style-type: none">• \$500–\$1000	<ul style="list-style-type: none">• \$500–\$1000
Test Frequency	<ul style="list-style-type: none">• Once every 2 years	<ul style="list-style-type: none">• Once every 2 years

SECURED FUNDING TO DRIVE GRAIL FORWARD

- >\$100M Series A

- \$40M initial investment by Illumina

- >50% Illumina ownership

- Long-term supply agreement

- Significant royalty to Illumina

- Illumina owns intellectual property outside of asymptomatic screening



BEZOS EXPEDITIONS

BILL GATES

SUTTER HILL VENTURES

illumina®

FEATURES OF GRAIL'S PRODUCTS



Universal blood tests with *de minimis* false positives



Free from radiation exposure and invasive procedures



No limitation to frequency of screen



Potential for rapid global scale

Uniquely set up to solve the challenge of early detection,
but will not pursue other applications of ctDNA

GRAIL FINANCIAL IMPACT

- \$0.15 dilutive to 2016 non-GAAP EPS attributable to Illumina shareholders
- 4-year investment
- Consolidated into Illumina P&L

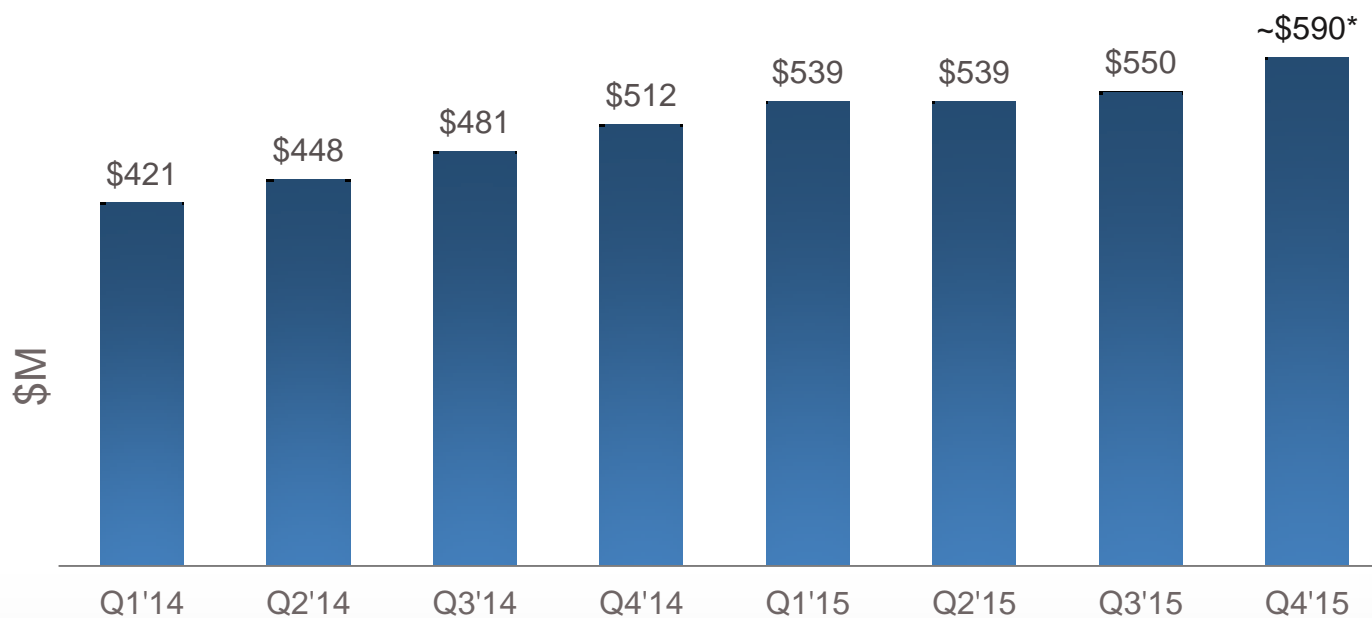


Q4'15 Preliminary Results

7%
sequential
growth

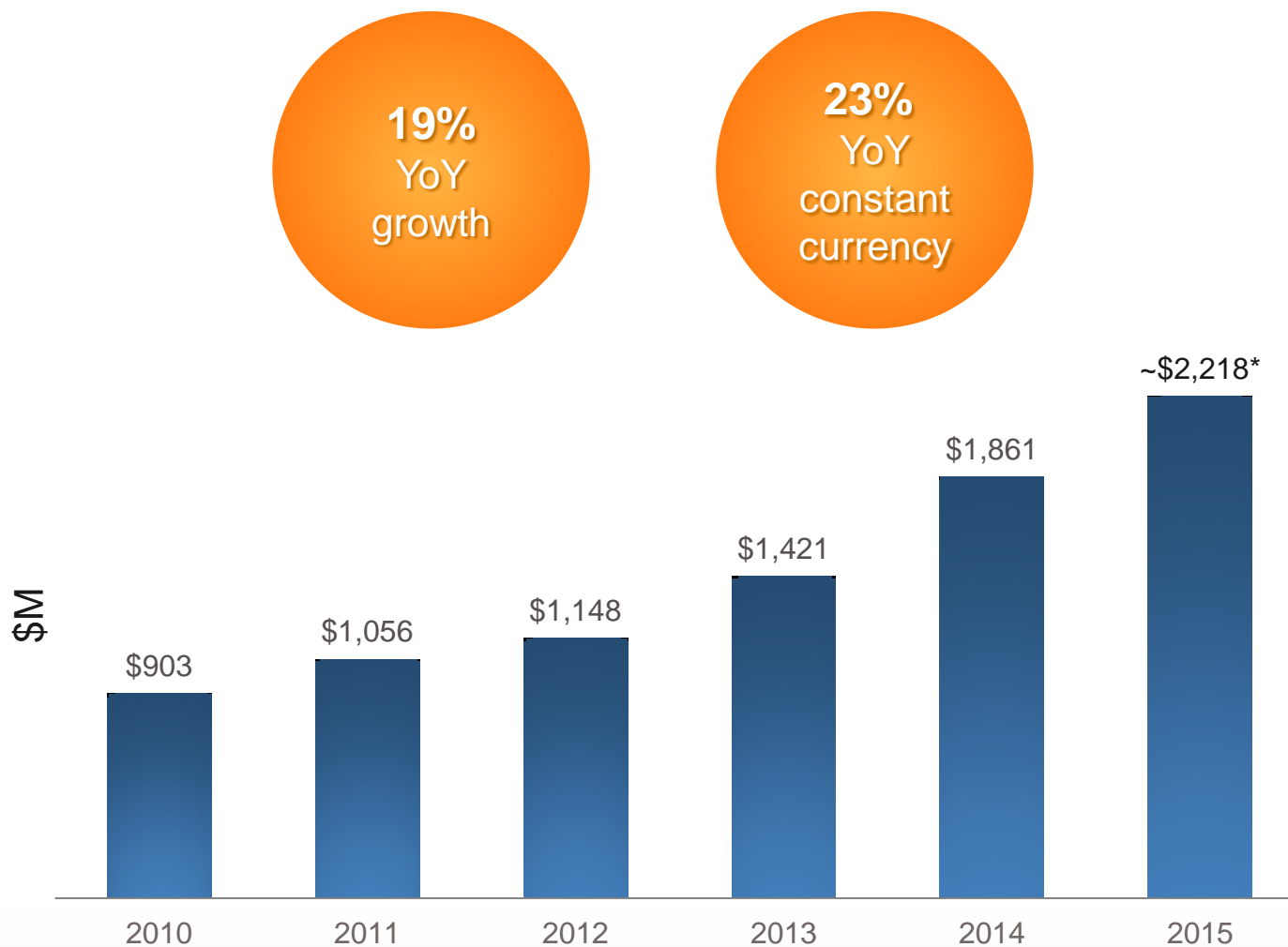
15%
YoY
growth

18%
YoY
constant
currency



* Q4-15 Revenue results are management's current estimate and are unaudited

Fiscal 2015 Preliminary Revenue



* 2015 Revenue results are management's current estimate and are unaudited

2016 Financial Guidance

2016	
Revenue¹	Assumptions
<hr/>	<hr/>
+16% YoY ¹	GM%²: ~73%
EPS³	NCI⁴: \$30M
<hr/>	Shares: 149M
\$3.55 – \$3.65	

1. Revenue guidance assumes constant currency rates from January 8, 2016; a 1% headwind from currency is included in total company revenue guidance
2. Adjusted non-GAAP excluding stock based compensation
3. Non-GAAP EPS attributable to Illumina stockholders, including stock based compensation, Includes \$0.10 and \$0.15 of dilution from Helix and GRAIL respectively
4. Non-controlling interest is the portion of net loss associated with Helix and GRAIL that is not attributable to the Illumina shareholders

Investing for Long-Term Growth



1. Non-GAAP EPS attributable to Illumina shareholders

2. Adjusted non-GAAP operating margin implied at the mid-point of guidance, excluding stock based compensation expense