Enhanced with a Clinically Validated Precision Medicine Tool
Forward Looking Statements

Some of the information presented here today may contain projections or other forward-looking statements regarding future events or the future financial performance of the Company. These statements are based on management’s current expectations and the actual events or results may differ materially and adversely from these expectations. We refer you to the documents the Company files from time to time with the Securities and Exchange Commission, specifically, the Company’s annual reports on Form 10-K, its quarterly reports on Form 10-Q, and its current reports on Form 8-K. These documents identify important risk factors that could cause the actual results to differ materially from those contained in the Company’s projections or forward-looking statements.
The Fourth Epoch in Hereditary Cancer Testing

- 1996: BRACAnalysis®
- 2000: COLARIS®
- 2013: myRisk® Hereditary Cancer
- 2017: riskScore™ BREAST CANCER
The Problem
Myriad Hereditary Cancer Testing Personalized Medicine for WHEN DECISIONS MATTER

Answering the most pressing question about cancer

Will I Get Cancer?
Patients Left Without Answers

Despite being at **high familial risk** for development of breast cancer, **fewer than 10% carry a clinically actionable mutation**
CLINICAL UNCERTAINTY
Provider and Patient Left Without a Definitive Answer

Risk of Breast Cancer
12%
Population Risk
87% BRCA Mutation
Doctors Focus on “Neon Light” Patients Due to Challenge of Negative Test Report

USPSTF Eligible Population

- 2 or More Relatives (1st or 2nd degree): 8.9M (60%)
- 1 Relative (1st or 2nd degree) <50 BC: 5.7M (40%)

myRisk Family History

- 2 or More Relatives (1st or 2nd degree): 10%
- 1 Relative (1st or 2nd degree) <50 BC: 90%

Only 10% of Patients Tested Are From the Largest Pool of Patients That Meet Criteria
The Product
riskScore™ is a clinically validated personalized medicine tool that predicts a woman’s lifetime risk of developing breast cancer using clinical risk factors and genetic-markers throughout the genome.

riskScore guides medical management in the prevention of breast cancer morbidity and mortality.
What Does riskScore Measure?
Combines Cutting Edge Science with Best-in-Class Family History Tool

- Proprietary score that combines data from >80 single nucleotide polymorphisms (SNPs) with well documented role in predicting cancer risk along with best-in-class family/personal history model (Tyrer-Cuzick model)

- Results for unaffected patients with European descent (initially)

- Provides residual risk for patients that are negative for myRisk test and is complimentary
**SNP**

A single nucleotide polymorphism (SNP) is a variation in a single nucleotide that occurs at a defined point within the genome.

**Tyrer-Cuzick**

Tyrer-Cuzick is a best-in-class family history prediction tool that looks at family history and personal factors such as age, age at first live birth, age at menarche, age at menopause, hormone use, birth control use, and lifestyle choices to assess breast cancer risk.
Advancing Genetic Risk Assessment

SNPs

- Common variants (low penetrance)
- ATM, CHEK2, PALB2, NBN
  - Rare variants (moderate penetrance)
- BRCA1, BRCA2, TP53, STK11
  - Rare variants (high penetrance)
The Science
Researched 20 years of genome wide association data on SNPs in breast cancer risk

Screened > 100,000 patients to select 24,259 patient training study which identified over 80 highly predictive SNPs

10,575 patient validation study showed the SNP panel in riskScore highly predictive of breast cancer risk

Combined genetic markers with family history tool in combined validation in 1,617 patients to be presented at San Antonio Breast Cancer Symposium
Risk Distribution From Combined Risk Score

SNP panel was highly statistically significant for lifetime and breast cancer risk with a p-value of $10^{-31}$

Combined risk score with SNP panel and Tyrer-Cuzick was highly statistically significant for both lifetime and five-year breast cancer risk with a p-value of $10^{-34}$ and $10^{-38}$ respectively

Patients have a broad distribution of relative risk with many significantly above and below the population risk
The Report
Patient #1

Breast Cancer riskScore™

RESULT: 15.2% Remaining Lifetime Risk for Breast Cancer
0.7% 5-Year Risk for Breast Cancer

Patient #2

Breast Cancer riskScore™

RESULT: 33.7% Remaining Lifetime Risk for Breast Cancer
1.1% 5-Year Risk for Breast Cancer
Provides individual risk score for breast cancer based upon genetic markers and Tyrer-Cuzick
Breast Cancer Screening Guidelines

The National Comprehensive Cancer Network and the American Cancer Society recommended annual breast MRI, in addition to mammogram, for women with >20% lifetime risk of breast cancer.
Advancing the Science with Actionable Results

**Uncertainty**

**GENETIC TEST RESULT:** NEGATIVE

**MEDICAL MANAGEMENT:**
- Clinical Breast Exam and Breast Awareness

**Myriad myRisk®**

**GENETIC TEST RESULT:** NEGATIVE

**RISK SCORE:** 33.7%

**MEDICAL MANAGEMENT:**
- Clinical Breast Exam and Breast Awareness
- Mammography
- MRI
- Risk Reducing Strategies
The Opportunity
Market Research Shows High Interest Level in riskScore

Would you change medical management based upon the combined score?

- 91% Yes
- 9% No

How would this enhancement impact the competitive advantage of myRisk relative to other panel tests?

- 87% Positively Impacts
- 13% No Change
- 0% Negatively Impacts
Physicians Believe riskScore Provides Incremental Value

“If it gets marketed to the vast public, then I think Myriad will have a test that nobody else has.”

“riskScore adds another piece of the puzzle. The sum of all information adds to an increased risk.”

“This is the most valuable thing a sales rep has shown me in years.”

“Myriad should be commended for the development of riskScore and advancing the science as it relates to refinement of breast cancer risk.”
Provides Reason for Preventive Care Doctors To Go “Deeper”

- From the “trusted advisor” in hereditary cancer
- Given low positive rate, average preventive care physician only looks for “neon light” patients
- **EVERY** patient will now have an individualized assessment of breast cancer risk
- Improved test value can drive deeper penetration
- Expands an already significant competitive moat
Myriad Will Continue to Be a Scientific Pioneer

- Commercially available as of today
- SNP Panel validation to be presented at National Society of Genetic Counselors annual meeting
- Combined validation (SNP Panel + Tyrer-Cuzick) presented at San Antonio Breast Cancer Symposium in December
- Work ongoing to identify breast cancer SNPs for additional ethnicities
- Future work will expand into other cancers