

GRAIL

Munich RE 

# Joint Offering Deck

June 2022

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## GRAIL Background

**Munich Re & GRAIL Partnership**



## The Galleri<sup>®</sup> Test

**Multi-Cancer Early Detection**



## The Life Insurance Proposition

**GRAIL**

Detect cancer early,  
when it can be cured.

**Our Joint Vision:**

Help people live longer,  
healthier lives by  
detecting cancer  
in early stages.

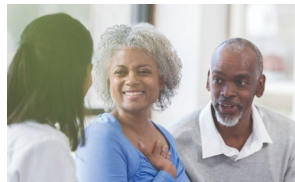
**Munich RE** 

Reinvent the consumer's  
experience of insurance  
through innovative technology

**MAY 2022:** Munich Re and GRAIL form an exclusive partnership with these goals:



**Educating the industry on multi-cancer early detection and bringing Galleri® into widespread use**



**Saving Lives**



**Bending cancer mortality in the Life Insurance industry**

# Cancer's profound impact

Staggering human and economic toll from cancer



18M

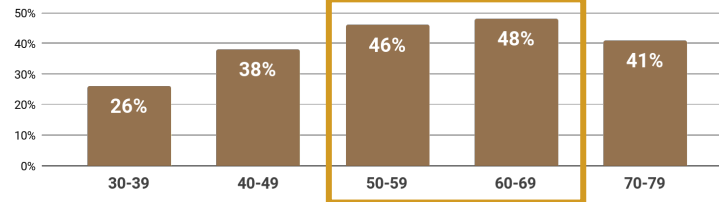
New Cases  
Annually

9.6M

Deaths  
Annually

Cancer's impact on the life insurance industry

Cancer as a % of Munich Re's Individual Life Claims

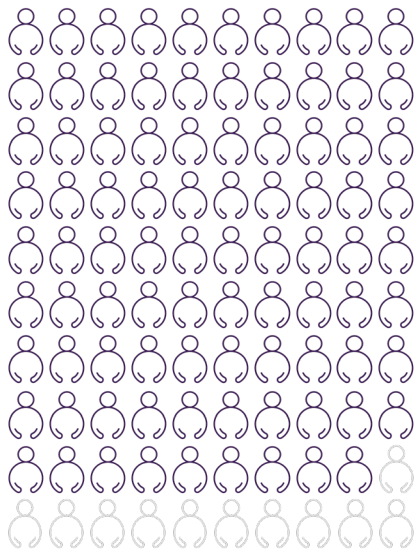


 ~1 in 2 deaths are from cancer

Cancer is the **#1 cause of death** in individual life insurance portfolio, especially among larger face amount policies<sup>3</sup>

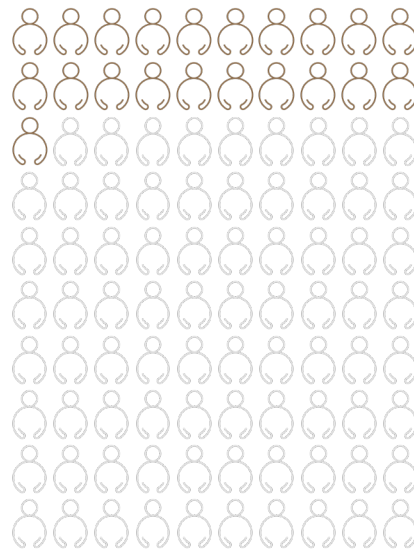
**41%** of individual life paid claims are due to cancer<sup>3</sup>

# Detecting cancer late dramatically decreases survival



**89%**

Survival  
rate when  
diagnosed  
**EARLY**



**21%**

Survival  
rate when  
diagnosed  
**LATE**

Based on 5-year cancer-specific survival rates. Source: Surveillance, Epidemiology, and End Results (SEER) Program ([www.seer.cancer.gov](http://www.seer.cancer.gov)) SEER\*Stat Database: Incidence - SEER 18 Regs Research Data, Nov 2018 Sub. Includes persons aged 50-79 diagnosed 2006-2015 "Early/Localized" includes invasive localized tumors that have not spread beyond organ of origin, including stage I-III; "Late/Metastasized" includes invasive cancers that have metastasized beyond the organ of origin to other parts of the body, including stage IV.

# The majority of cancer deaths come from cancers without available screenings

WITHOUT SCREENING

71%

come from cancers  
**without available screenings today.**

Including, but not limited to:  
Pancreas, Liver, Bladder, Brain, Esophageal, Kidney,  
Ovarian, Melanoma, Stomach, Endometrial, Head  
and Neck, Thyroid, Vulvar.

WITH SCREENING

29%

come from cancers  
**with available screening\*.**



**Breast  
Cancer**



**Cervical  
Cancer**



**Colon  
Cancer**



**Lung  
Cancer**



**Prostate  
Cancer**

Among individuals 50-79 years old.

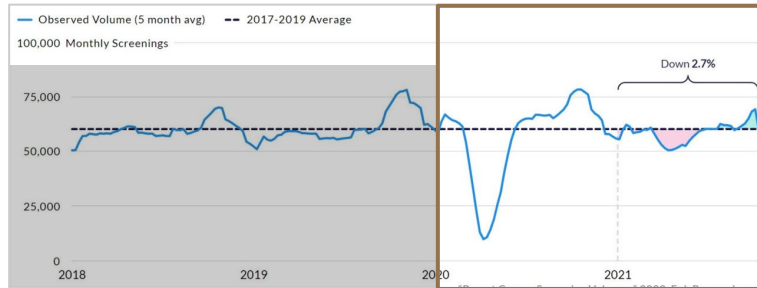
\*Assumes screening is available for all prostate, breast, cervical, and colorectal cancer cases and 43% of lung cancer cases (based on estimated proportion of lung cancers that occur in screen-eligible individuals older than 40 years) Source: Estimated deaths per year in 2021 from American Cancer Society Cancer Facts and Figures 2021. Available at: <http://www.cancer.org/content/dam/cancer-org/research/cancer-factsand-statistics/annual-cancer-factsand-figures/2021/cancer-facts-and-figures-2021.pdf>. Data on file GA-2021-0065

# The Covid pandemic has decreased adherence to single cancer screenings,<sup>1</sup> further complicating the challenge

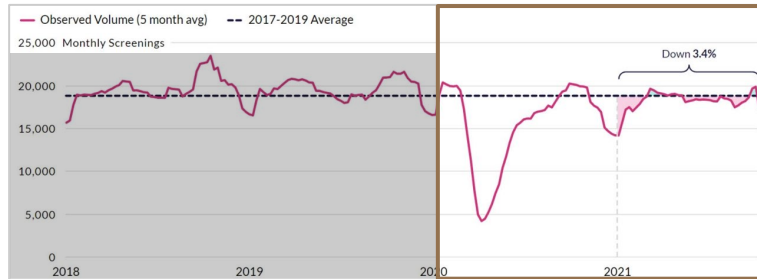
## 9.4M Estimated missed cancer screenings in the U.S. in 2020<sup>1</sup>



### Breast Cancer Screening Volumes



### Colon Cancer Screening Volumes



“...there will be

## 10,000 more

breast and colorectal cancer deaths over the next decade than would have been expected without the coronavirus.”<sup>2</sup>

- Norman 'Ned' Sharpless  
Director of the National Cancer Institute



At GRAIL,  
we see a better way.

Let's change from screening  
for individual cancers,  
to screening individuals  
for cancers.

INTRODUCING

Galleri®

Multi-Cancer Early Detection Test



# Key performance features of the Galleri<sup>®</sup>MCED test

Galleri Results Demonstrated in CCGA substudy 3<sup>1</sup>

**50+**

**Cancer types detected<sup>2</sup>**

**0.5%**

**False positive rate**

**89%**

**Accuracy in predicting location of the cancer signal**

**68%**

**Sensitivity stages I-III for 12 prespecified cancers representing 2/3 of cancer mortality in US**

## 50+ cancers, including unscreened cancers such as:

- Anus
- Corpus uteri (2 types)
- Esophagus
- Exocrine pancreas
- Gallbladder
- Hodgkin and non-Hodgkin lymphoma
- Bile duct (3 types)
- Kidney
- Larynx
- Leukemia
- Liver
- Melanoma of the skin
- Malignant pleural mesothelioma
- Merkel cell carcinoma
- Nasopharynx
- Neuroendocrine (3 types)
- Oral cavity
- Oropharyngeal
- Oro- and hypo-pharynx
- Ovary
- Plasma cell myeloma
- Renal pelvis and ureter
- Soft tissue sarcoma (5 types)
- Small intestine
- Stomach
- Testis
- Urinary bladder
- Vagina
- Vulva

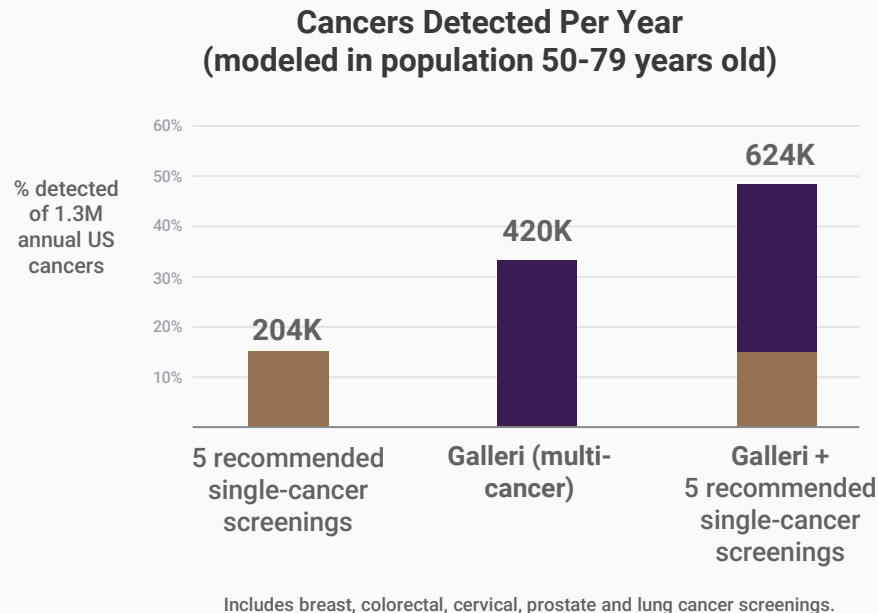
## Recommended screening programs<sup>3</sup>

Breast | Cervix uteri | Colon and rectum | Lung | Prostate

1. Klein EA, et al. Clinical validation of a targeted methylation-based multi-cancer early detection test using an independent validation set. *Ann Oncol*. 2021 Sep;32(9):1167-1177. doi: 10.1016/j.annonc.2021.05.806. 2. Amin MB, et al. (Eds.) *AJCC Cancer Staging Manual* (8th edition). Springer 2017. 3. United States Preventive Services Task Force. USPSTF A, B, and C rating.

# Galleri<sup>®</sup> improves the chances of detecting cancer early

Galleri could detect more cancers than standard screenings alone.



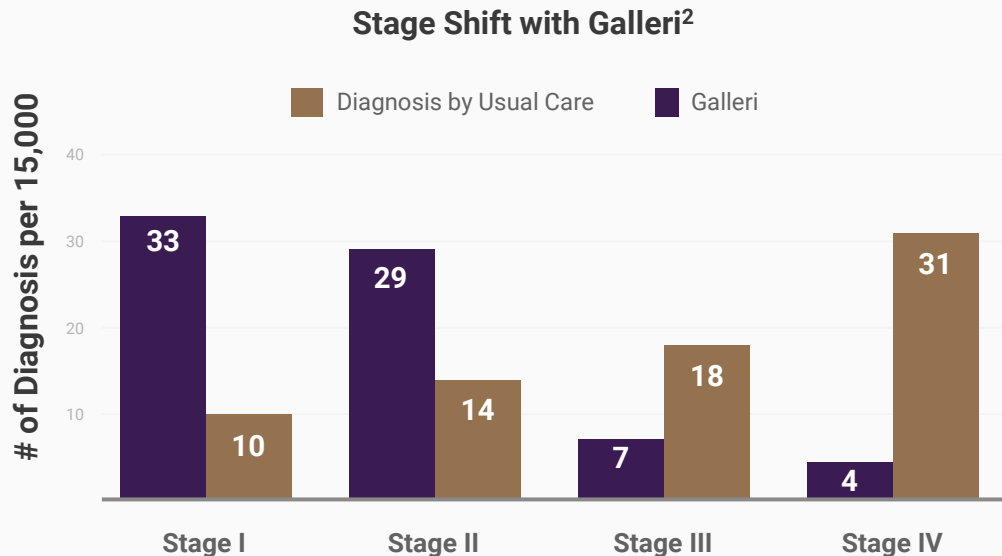
# 3X

more cancers could  
be detected early,  
if Galleri is added to guideline-  
recommended  
cancer screenings.

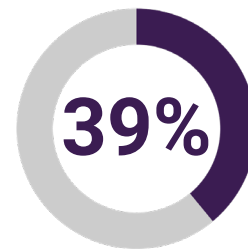
(Based on modeled data)

Based on Surveillance, Epidemiology, and End Results (SEER) incidence in individuals 50-79 years old who are screening eligible and have average risk of cancer. Data on file. Assumes nationally-representative adherence to USPSTF A, B, or C recommended screening (breast, colorectal, lung, cervical, and prostate cancer) and 100% screening with MGED test in the USPSTF-screened group. Baseline population of 107M (men and women aged 50-79; US Census Bureau. Annual Estimates of the Resident Population by Single Year of Age and Sex for the United States. <https://www.census.gov/data/tables/time-series/demo/popest/2010s-national-detail.html>. Accessed 5/29/20.)

# Model data suggests the shift to early cancer detection can impact mortality. Galleri<sup>®</sup> has the potential to shift cancer detection to earlier stages<sup>1</sup>



Modeled data based on expected performance of earlier version of Galleri in elevated risk population age 50-79



## Expected deaths averted in detected cancers

(5 year cancer mortality, based on modeled  
data from earlier Galleri version<sup>3</sup>)

1. Surveillance, Epidemiology, and End Results (SEER) Program ([www.seer.cancer.gov](http://www.seer.cancer.gov)) SEER\*Stat Database: Incidence - SEER 18 Regs Research Data, Nov 2018 Sub. Includes persons aged 50-79 diagnosed Noone AM, Howlander N, Krapcho M, et al. (eds). SEER Cancer Statistics Review, 1975-2015, National Cancer Institute, Bethesda, MD, [http://seer.cancer.gov/csr/1975\\_2015/](http://seer.cancer.gov/csr/1975_2015/), based on November 2017 SEER data submission, posted to the SEER website April 2018.  
2. Based on data from SEER18 (2006-2017) in the United States, all cancer incidence. Adding GRAIL's MCD test to usual care (based on modeled data). Assumes long-term screening results with optimized screening interval.  
3. Hubbell E, et al. Modeled Reductions in Late-stage Cancer with a Multi-Cancer Early Detection Test. *Cancer Epidemiol Biomarkers Prev.* 2021;30(3):460-468. doi: 10.1158/1055-9965.EPI-20-1134.

# Galleri<sup>®</sup> was developed with a strong network of partners:

## Commercial Partners & Investors



M Financial Group<sup>®</sup>



Alignment Healthcare



illumina<sup>®</sup>

one medical

## Clinical Study Institutions



Cleveland Clinic



Sutter Health



Memorial Sloan Kettering  
Cancer Alliance



The US Oncology  
Network

## Public Institutions



Galleri Trial

*"This collaboration between the NHS and GRAIL offers the chance for a wide range of cancers to be diagnosed much earlier and could fundamentally change the outlook for people with cancer."*

- Lord David Prior, Chair NHS England





CANCER  
RESEARCH  
UK

KING'S HEALTH  
PARTNERS  
CENTRE



CANCER MOONSHOT



# Benefits of offering Galleri<sup>®</sup> to Policyholders





Reduce mortality



Increase persistency & profitability

94% of policyholders are more likely to retain their policy if Galleri was offered<sup>1</sup>



Redefine customer engagement with life insurance

3 out of 4 policyholders say they would take the Galleri test<sup>1</sup>



Save lives

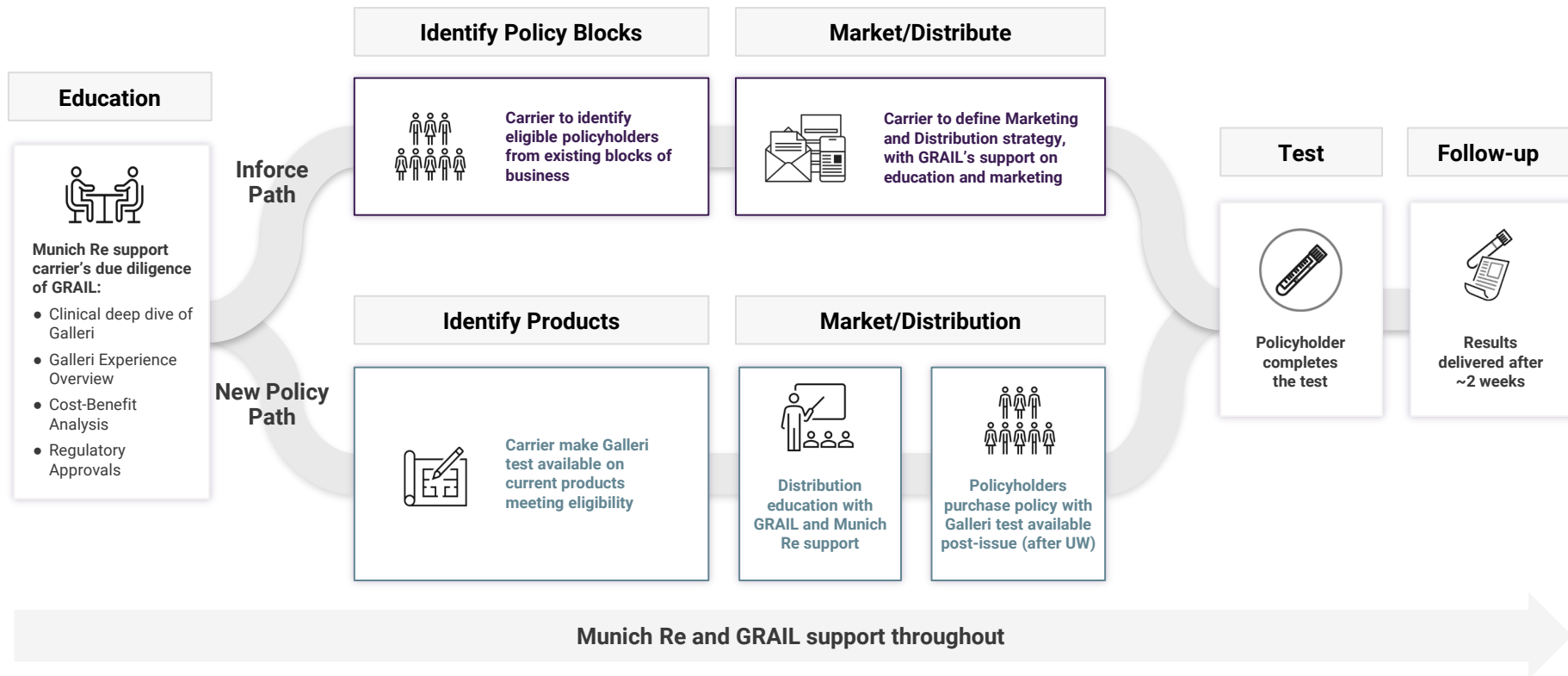
# Roll-out Process

## Inforce:

Making Galleri® test available to existing eligible policyholders

## New Policy:

Making Galleri test available to new policies sold post-issue (after underwriting)





# Bob's customer experience with the Galleri® Test

1

## Awareness & Education

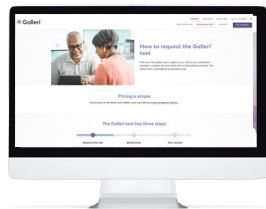


Bob's insurance company representative informs him via email that he may be eligible for the Galleri test at no cost to him.

Bob follows a link to a landing page with information and Q&A about Galleri.

2

## Eligibility Verification & Test Ordering



Bob meets the eligibility criteria and elects to request the test directly from the landing page.

He orders the test online via GRAIL's telemedicine partnerships.

3

## Collection Kit Delivery & Blood Draw



Bob receives this collection kit in the mail. He is given clear instructions via email throughout the process.

After receiving the kit, he schedules his blood draw online at a clinic one mile from his home.

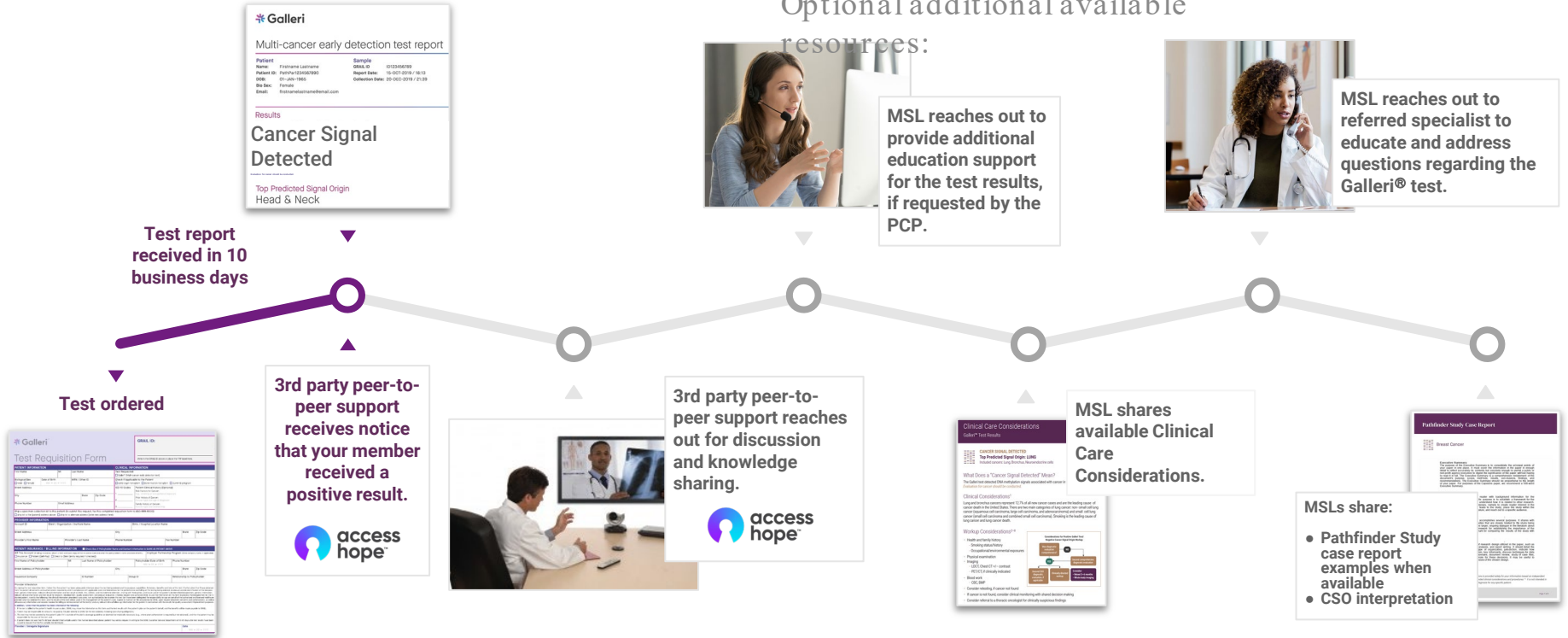
4

## Return of Results



After about two weeks, Bob is contacted by a provider who lets him know that his test is negative, and no cancer signal was detected.

# Post-Positive Galleri® Test Support for Ordering Providers







## Important Safety Information

The Galleri® test is recommended for use in adults with an elevated risk for cancer, such as those aged 50 or older. The Galleri test does not detect all cancers and should be used in addition to routine cancer screening tests recommended by a healthcare provider. Galleri is intended to detect cancer signals and predict where in the body the cancer signal is located. Results should be interpreted by a healthcare provider in the context of medical history, clinical signs and symptoms. A test result of “Cancer Signal Not Detected” does not rule out cancer. A test result of “Cancer Signal Detected” requires confirmatory diagnostic evaluation by medically established procedures (e.g. imaging) to confirm cancer. If cancer is not confirmed with further testing, it could mean that cancer is not present or testing was insufficient to detect cancer, including due to the cancer being located in a different part of the body. False-positive (a cancer signal detected when cancer is not present) and false-negative (a cancer signal not detected when cancer is present) test results do occur. Rx only.

GRAIL’s clinical laboratory is certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA) and accredited by the College of American Pathologists (CAP). The Galleri test was developed, and its performance characteristics were determined by GRAIL. The Galleri test has not been cleared or approved by the Food and Drug Administration. GRAIL’s clinical laboratory is regulated under CLIA to perform high-complexity testing. The Galleri test is intended for clinical purposes.



Thank you.

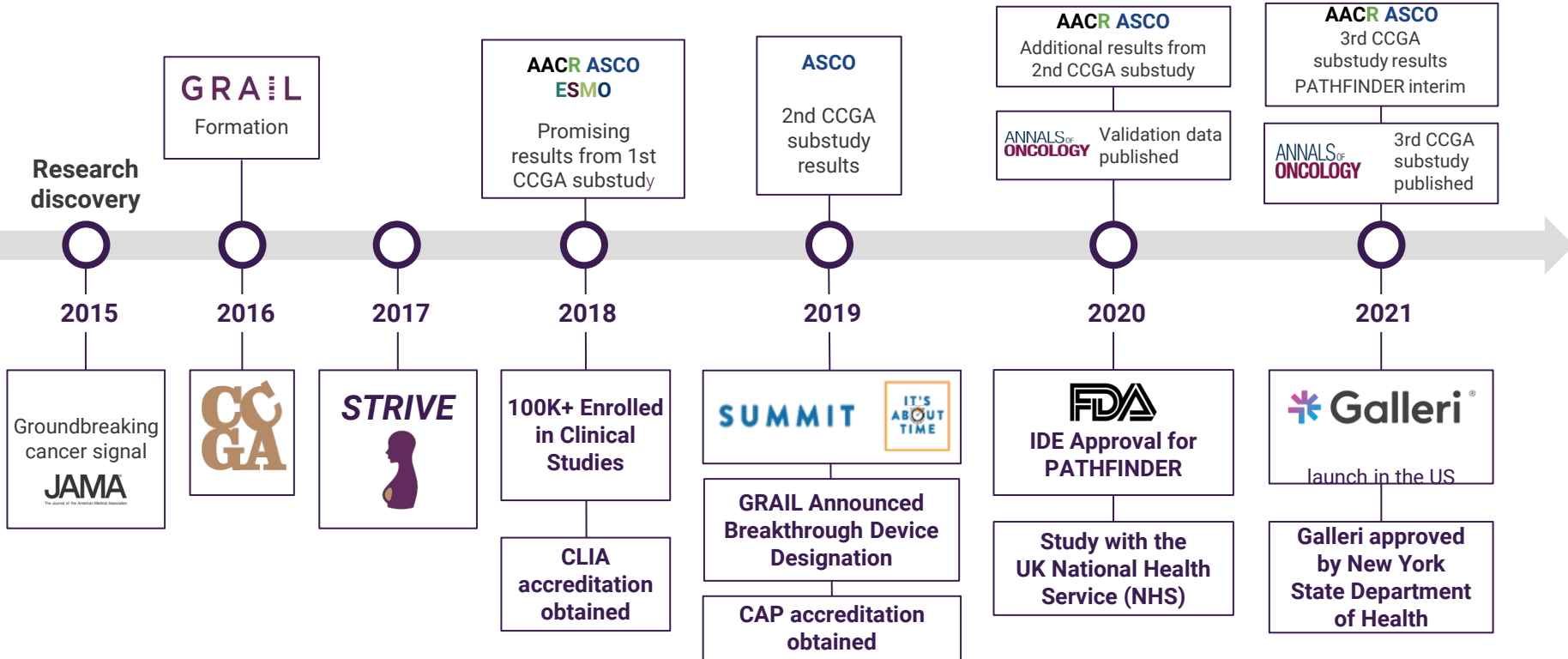
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**GRAIL**

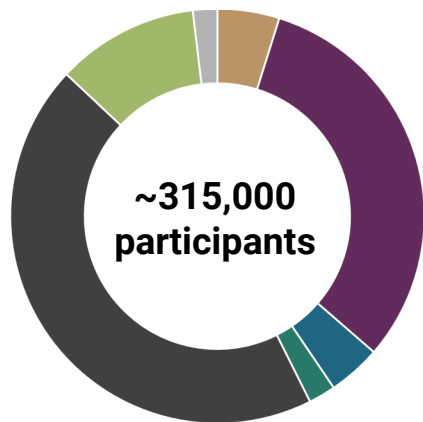
# Appendix

# Robust and unbiased clinical development program towards a multi-cancer product vision



# Clinical Development Program

Test development, validation, and implementation in population-scale studies



**1 CCGA** (n=15,254)  
NCT02889978

**Develop and validate a cell-free DNA-based MCEd test**  
*Expected completion: (Primary analysis complete) 5-year follow up: March 2024*

**2 STRIVE** (n=99,481)  
NCT03085888

**Clinical validation in women undergoing mammography screening**  
*Expected completion: May 2025*

**3 SUMMIT** (n=13,035)  
NCT03934866

**Clinical validation in individuals at high risk of lung cancer**  
*Expected completion: August 2030*

**4 PATHFINDER** (n=6,662)  
NCT04241796

**Assess clinical implementation and perceptions of MCEd test**  
*Expected completion: (Enrollment complete January 2022) Final analysis fall 2022*

**5 NHS-Galleri** (n~140,000)  
ISRCTN 91431511

**Assess clinical utility of MCEd for population screening in the UK**  
*Study duration: ~10 years (~4.5 years to primary analysis)*

**6 REFLECTION** (n~35,000)  
GRAIL-MA-001<sup>a</sup>

**Assess experience/clinical outcomes in real-world setting**  
*Study duration: ~7 years*

**7 SYMPLIFY** (n~6,000)  
ISRCTN 10226380

**Assess MCEd test in individuals with signs/symptoms of cancer**  
*Expected completion: March 2023*