

















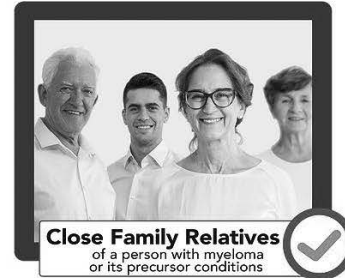








# Eligibility Criteria



2 groups of U.S. adults, age 40-75, qualify for a free screening:

**1. African Americans**

AND / OR

**2. People of Any Race Who Have a Parent, Sibling, or Child with:  
Multiple myeloma, another blood cancer, OR one these related  
conditions:**

- Monoclonal Gammopathy of Undetermined Significance (MGUS) ⓘ
- Smoldering Multiple Myeloma ⓘ
- Waldenström Macroglobulinemia ⓘ

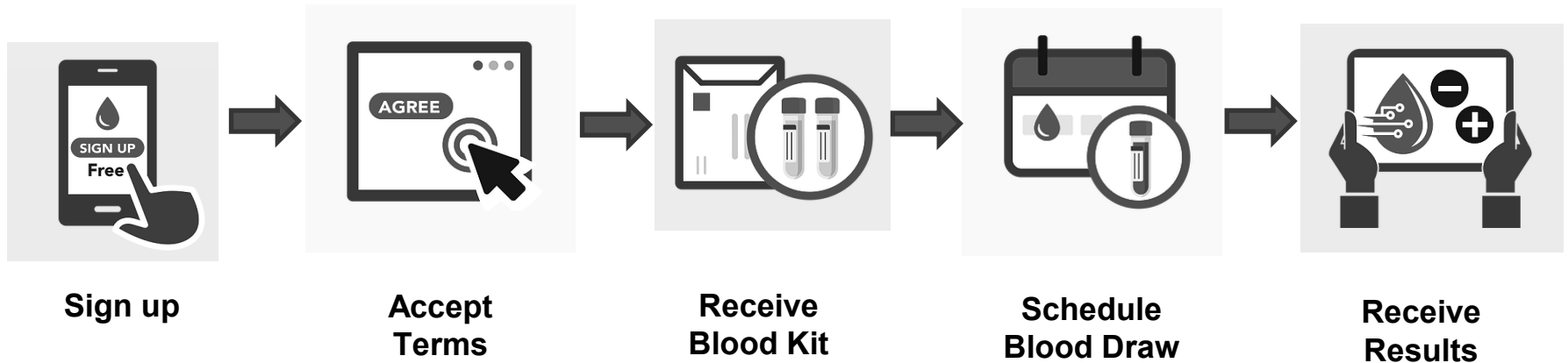
**Please sign up for the study if you qualify.**

**Note:** The PROMISE study is for people who may have higher risks,  
**but have not been diagnosed** with any of these conditions.

**If you have been diagnosed** with one of these conditions, please visit our  
[PCROWD study, a sister project for people with precursor conditions.](#)

**PCROWD**

# How does the PROMISE screening process work?



# National and International PROMISE

>5600 accrued to date



**South Africa, Kenya, Israel**

# PROMISE partners with the MGB BioBank

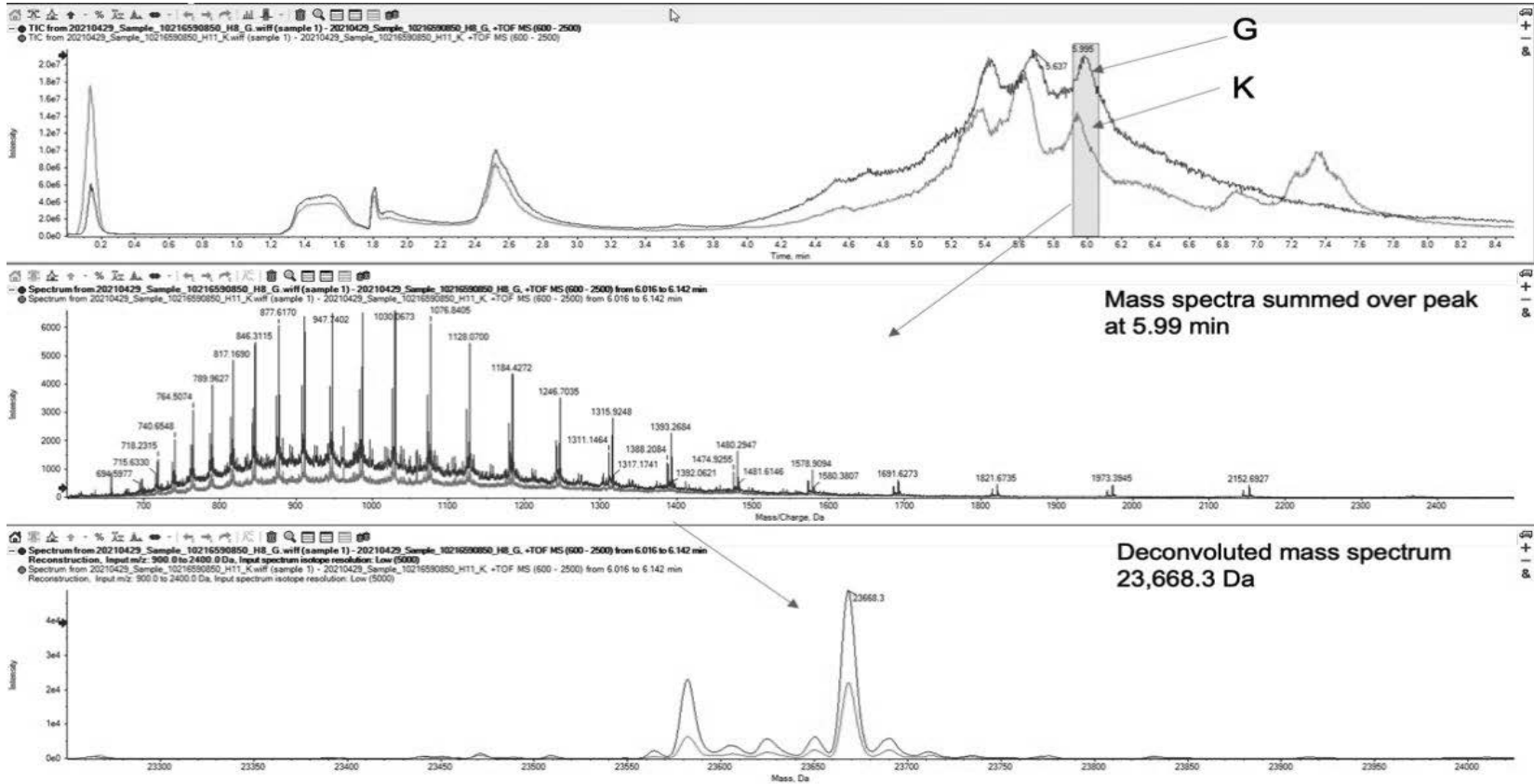


- 123,000 individuals
- 20% non-White
- 50,000 GWAS or exome sequencing data

## **PROMISE inclusion criteria applied to MGB: 4,446 samples into PROMISE**

- **2,373 individuals** self-identify as Black/African American > 30 years
- **1,868 participants** who reported to have a first-degree family relative diagnosed with a hematologic malignancy >30 years to be screened

# MALDI-TOF Mass spec is sensitive and specific



Stacked mass spectra from MALDI-TOF MS and confirmatory LC-MS of monoclonal light chains observed in the heavy chain (blue trace) and the monoclonal light chains observed in the light chain (pink trace) in a sample from a PROMISE study participant.

# No Increase in Cancer Worry after Screening Positive

**Cancer worry** assessed pre- and post-screening using 4-item scale adapted from the Lerman Breast Cancer Worry Scale

We are interested in understanding how often most people think about cancer in their daily lives. Please know that we are **NOT** asking because we think you have or will have cancer. Please answer the following questions to the best of your ability.

46. During the past month, how often have you worried about your chances of developing cancer?

Not at all or rarely       Sometimes       Often       Almost all of the time

47. During the past month, how often have you thought about your own chances of developing cancer?

Not at all or rarely       Sometimes       Often       Almost all of the time

48. During the past month, how often have your thoughts about your chances of getting cancer affected your mood?

Not at all or rarely       Sometimes       Often       Almost all of the time

49. During the past month, how often have your thoughts about your chances of getting cancer affected your ability to perform daily activities?

Not at all or rarely       Sometimes       Often       Almost all of the time

- Cancer worry assessed after receiving a diagnosis of MGUS was not significantly different than cancer worry pre-screening (paired ttest p-value=0.52)

# No Difference in Quality of Life Between Positive and Negative Participants

**Quality of Life** assessed post screening using the RAND 36-item Short Form Health Survey (SF-36)

- No significant differences observed between screen-positive vs screen-negative participants for any of the following sub-scales (all  $p > 0.2$ )
  - Physical functioning
  - Role limitations due to physical health
  - Role limitations due to emotional problems
  - Energy/Fatigue
  - Emotional well-being
  - Social functioning
  - Pain
  - General health

# Argument for screening for myeloma

- ❖ Early therapeutic intervention can improve PFS/prevents CRAB morbidity
- ❖ Early detection of MGUS can help identify those at risk of developing MM
- ❖ Screening of high-risk individuals can show a high prevalence rate >10%
- ❖ Screening is sensitive and specific
- ❖ The cost of yearly follow up is significantly lower than the cost of active therapy of MM with comorbidities (renal failure, fractures, etc)
- ❖ No evidence of increased worry or change in QOL

# A Message from our Promise Participants



[www.promisestudy.org](http://www.promisestudy.org)



# Acknowledgments

