

# PROJECT PRESENTATION

## RECIDIVISM ANALYSIS

By Ayushi Gupta

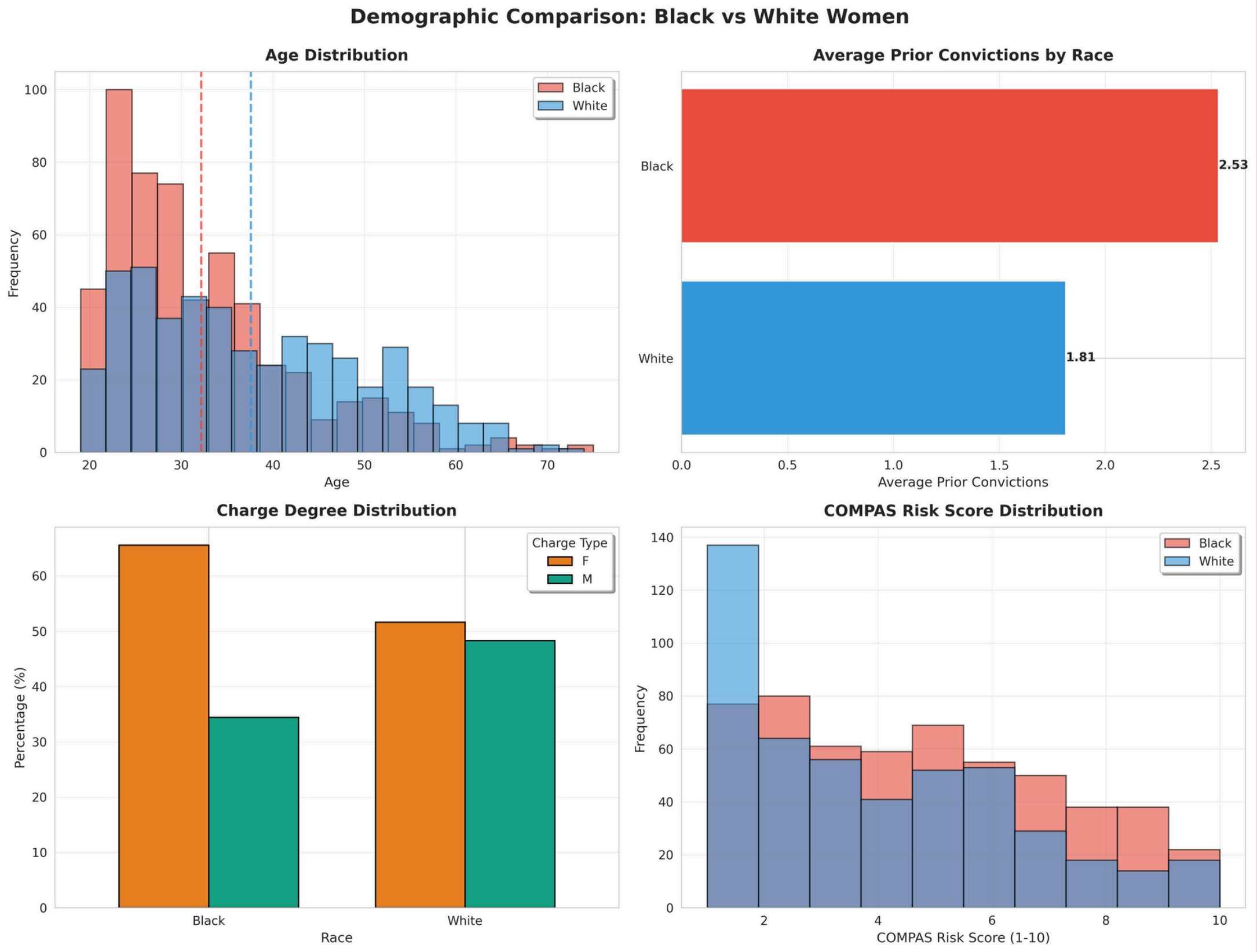
# INDEX

- Exploratory Data Analysis
- Principal Component Analysis
- Logistic Regression and Random Forest
- Kaplan-Meier Survival Analysis

# PART 1

## Exploratory Data Analysis

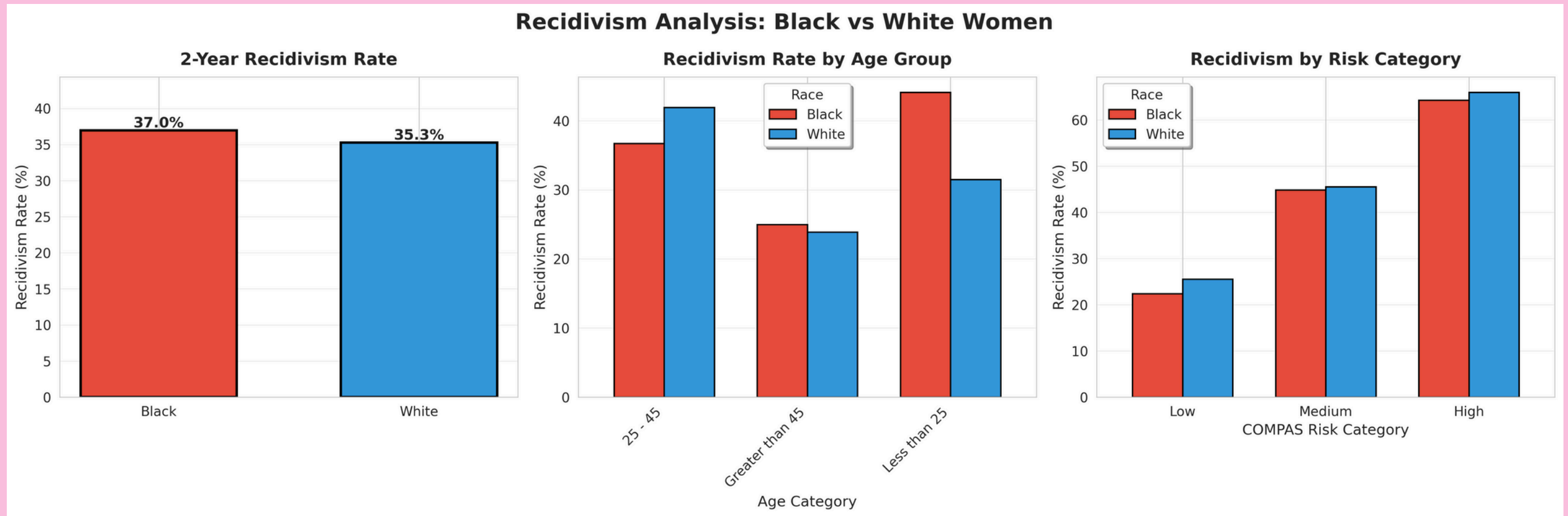
# DEMOGRAPHIC COMPARISON



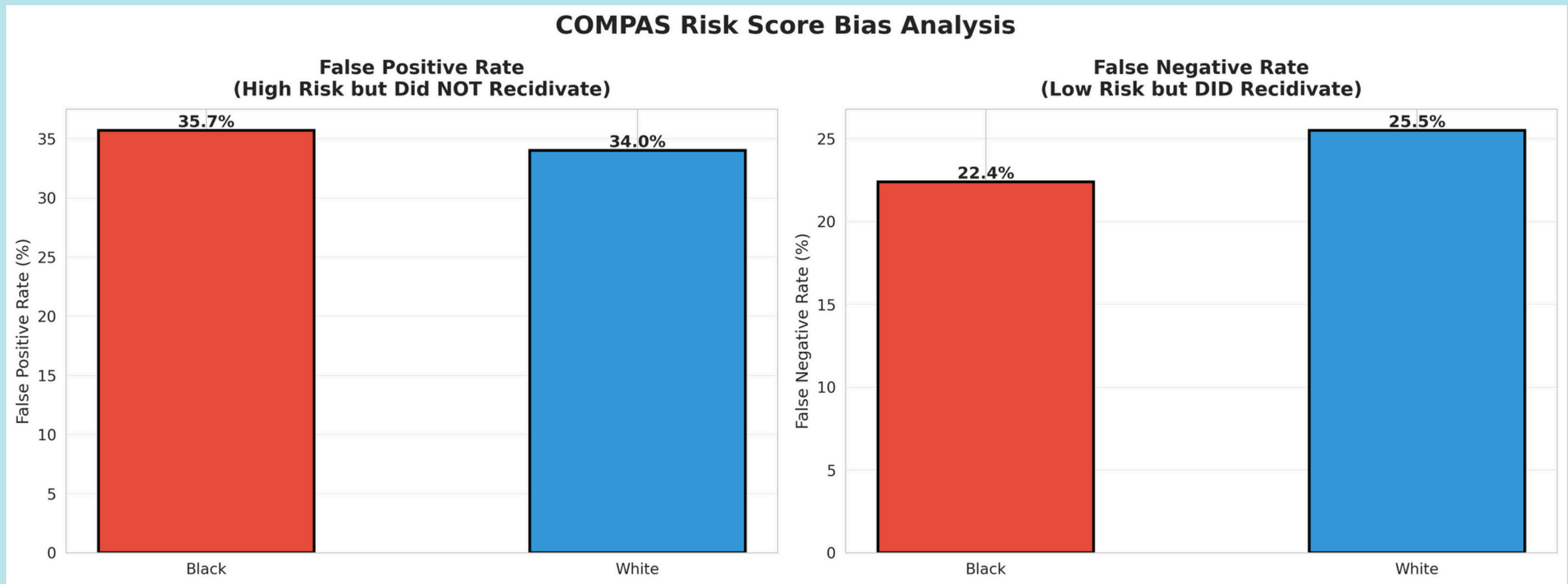
# FEATURE CORRELATION



# RECIDIVISM ANALYSIS



# COMPASS SCORE BIAS

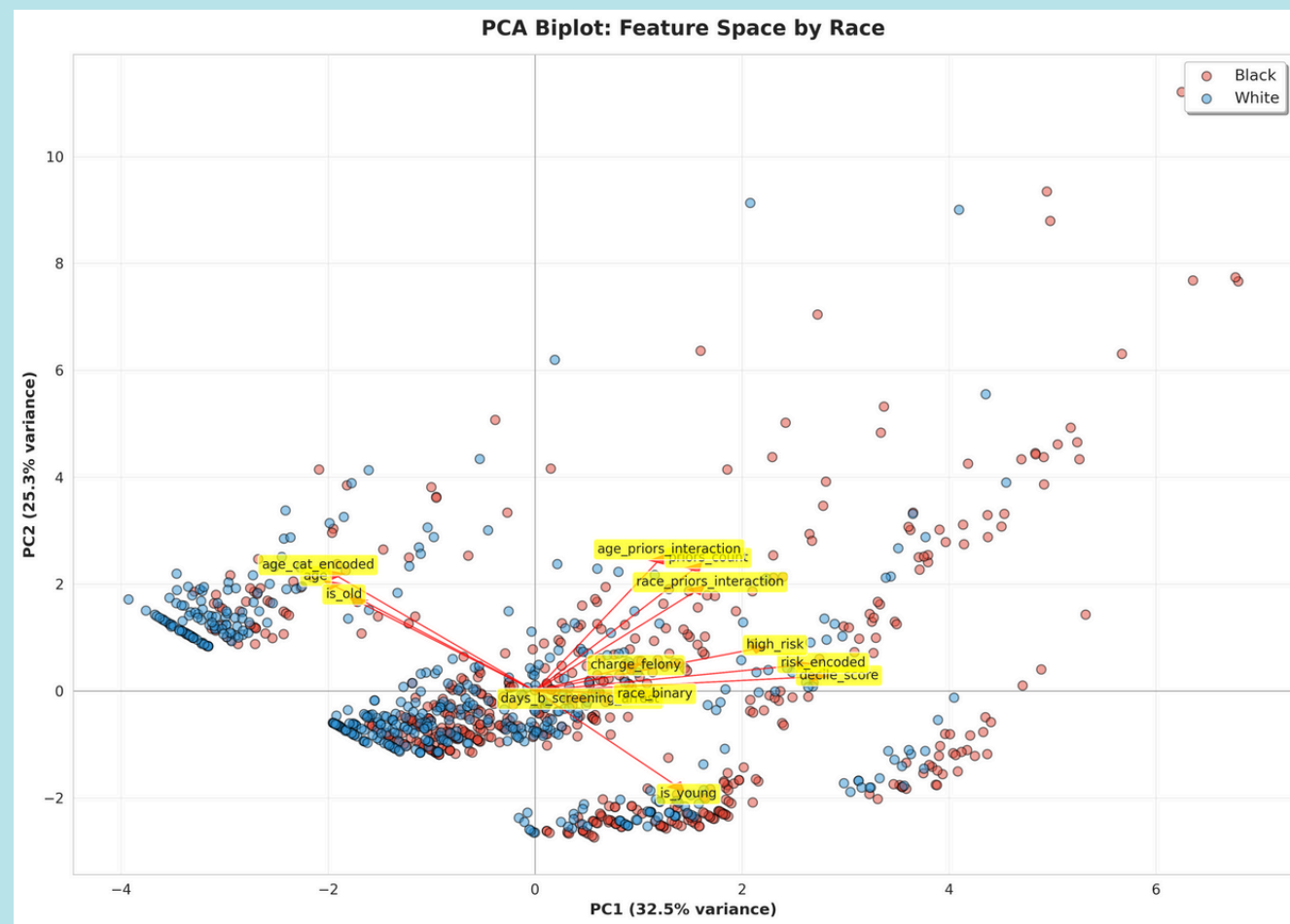
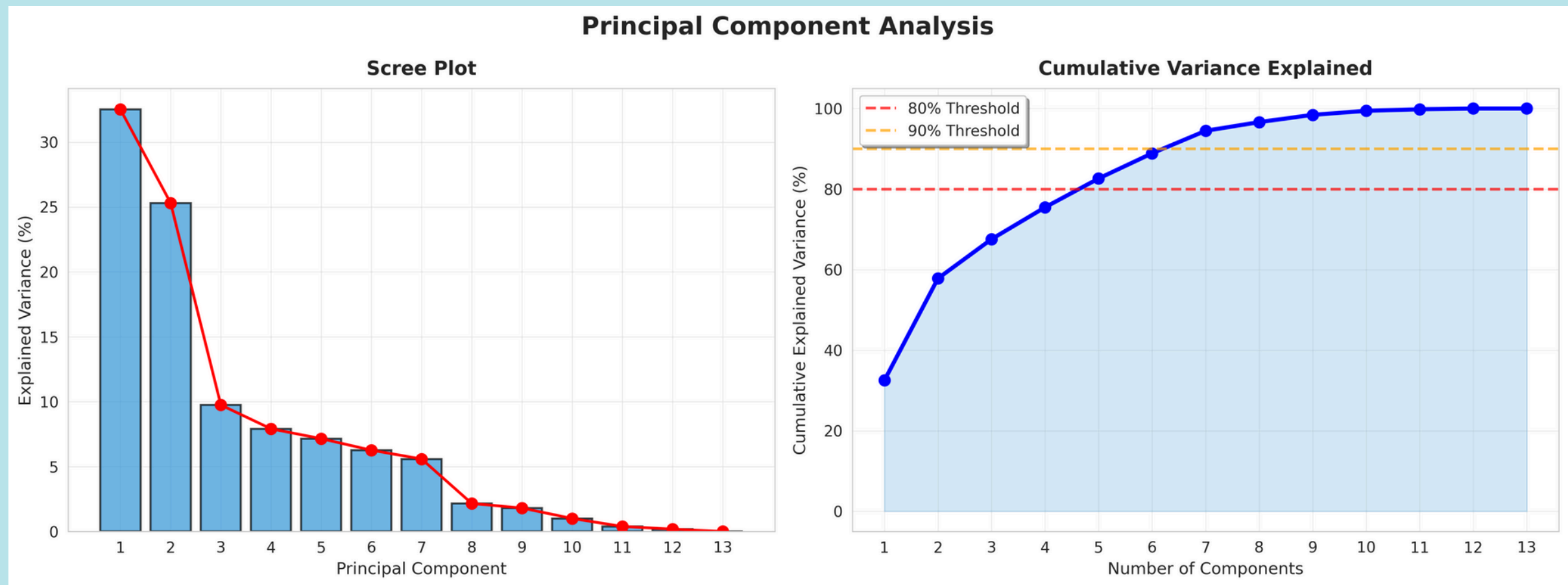


# PART 2

## PRINCIPAL COMPONENT ANALYSIS



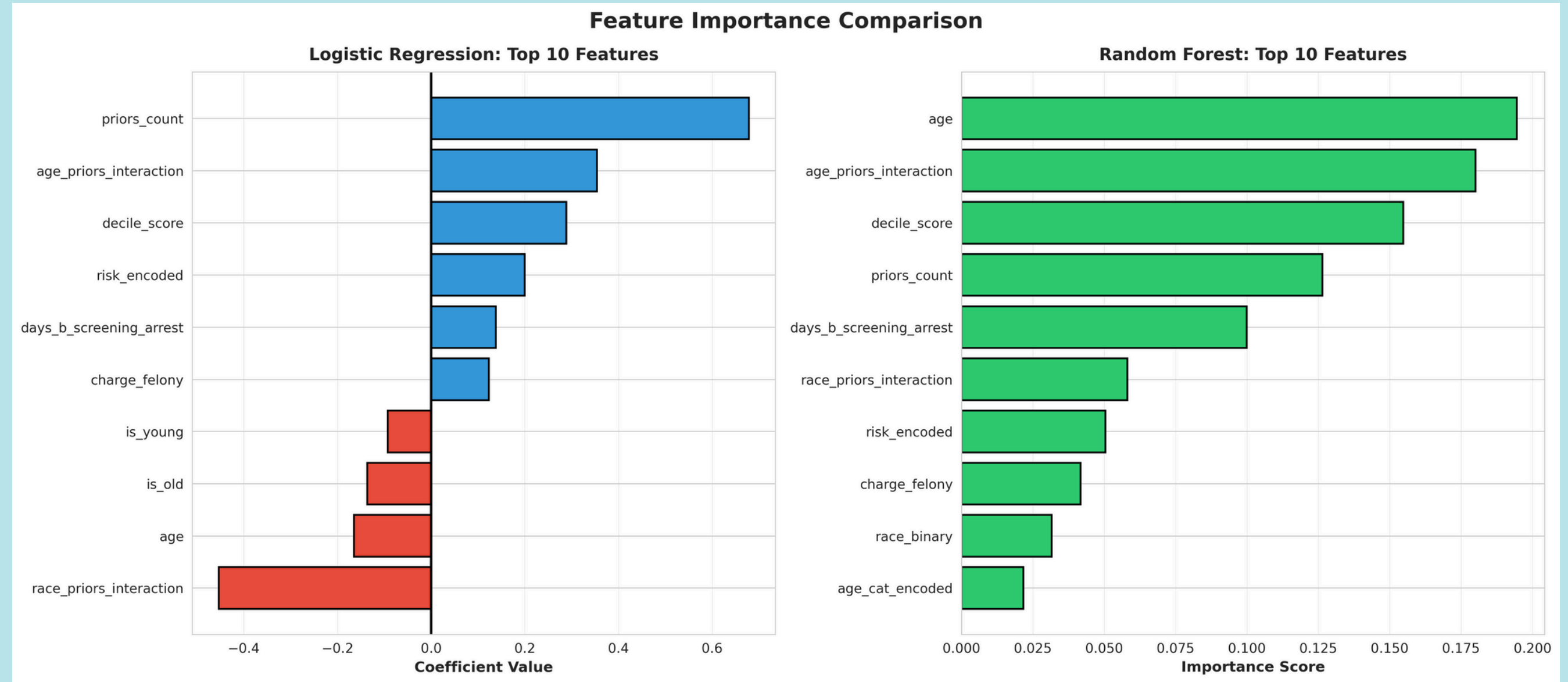
# FEATURE SELECTION



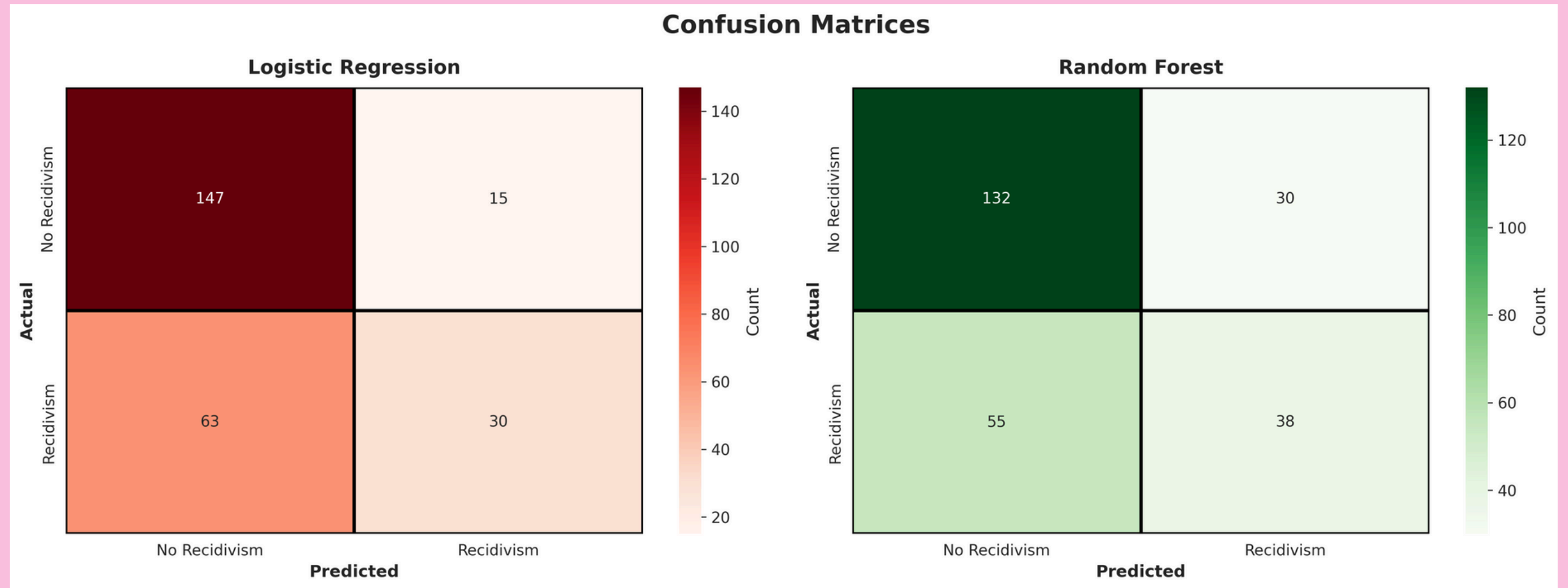
# PART 3

## LOGISTIC REGRESSION AND RANDOM FOREST

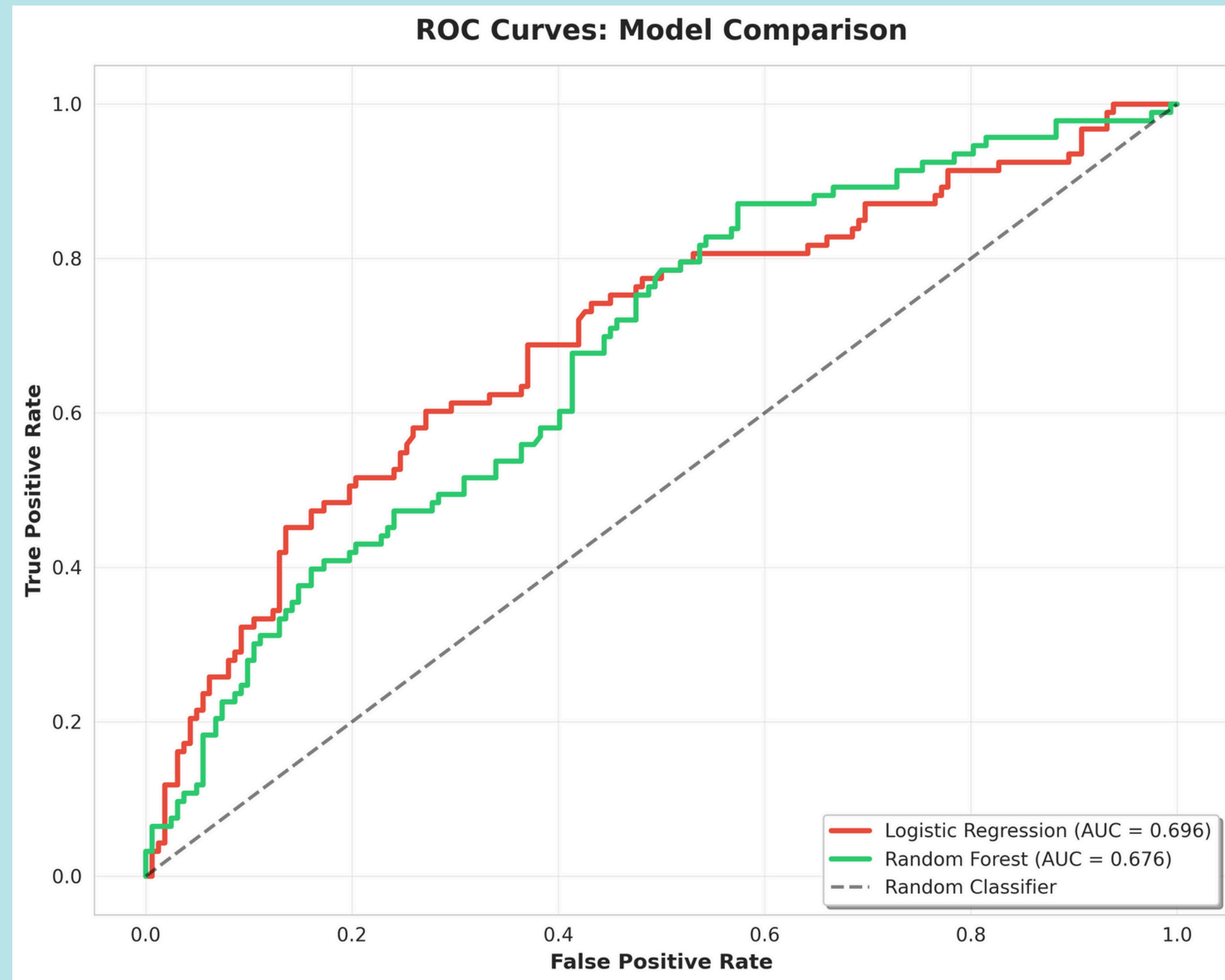
# FEATURE COMPARISON



# CONFUSION MATRICES



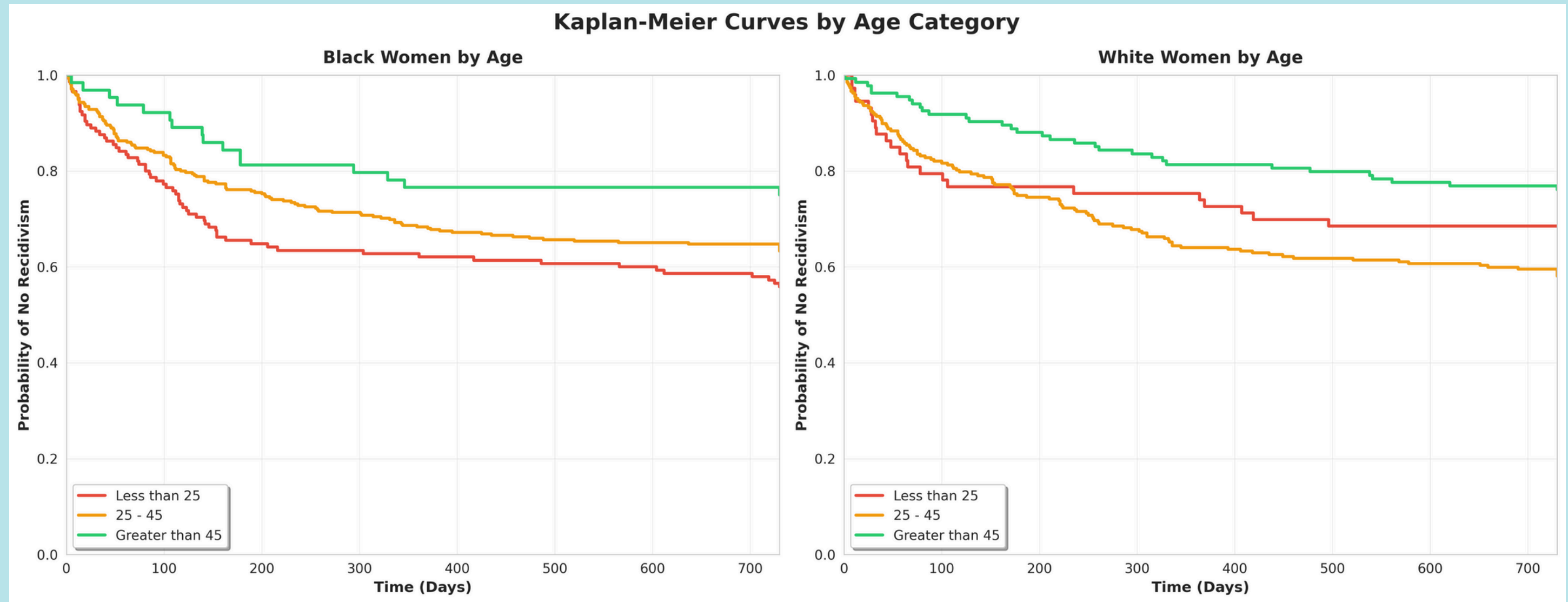
# ROC CURVES



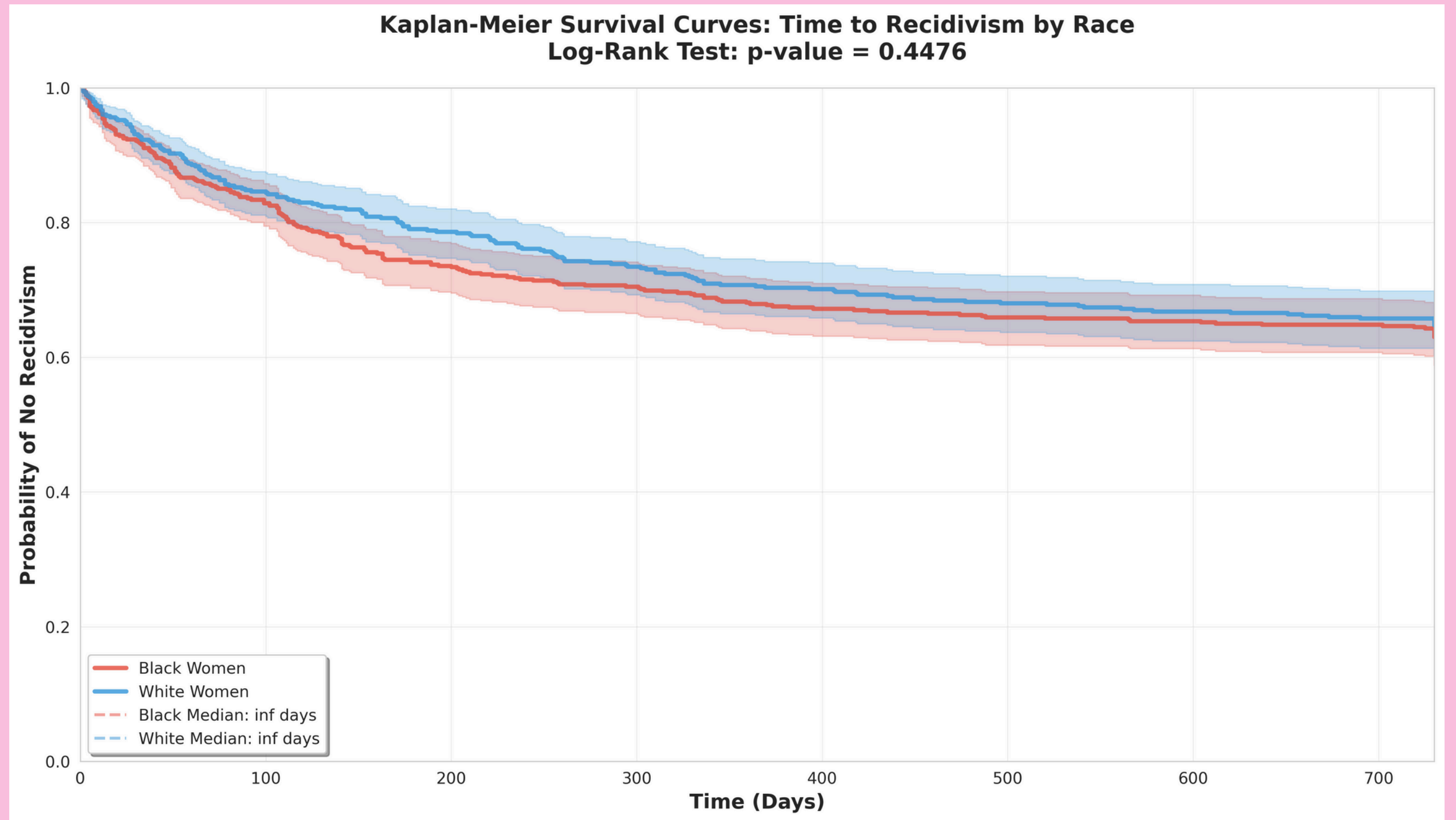
# PART 4

## KAPLAN MEIER SURVIVAL ANALYSIS

# AGE COMPARISON

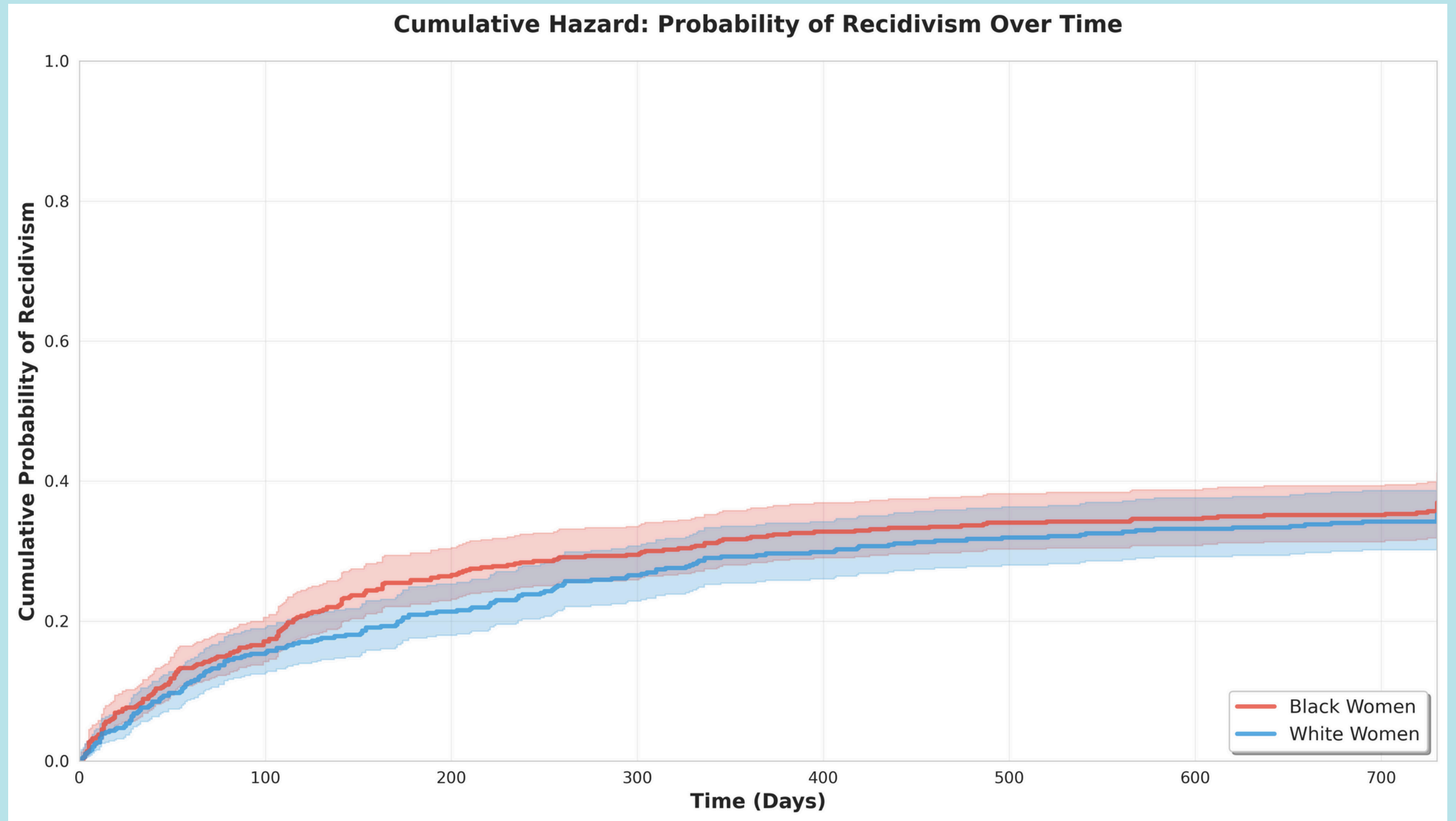


# RACE COMPARISON

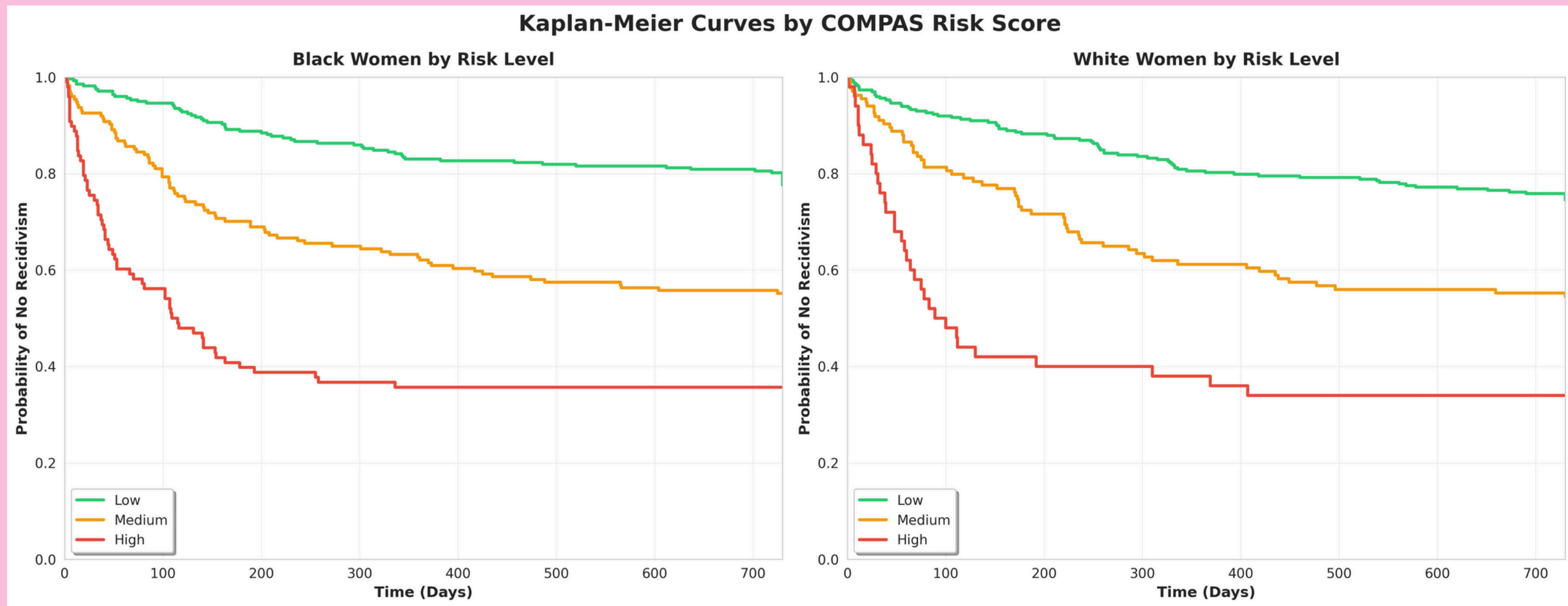




# RECIDIVISM PROBABILITY



# COMPAS RISK SCORE



A solid pink vertical bar is positioned on the left side of the image. A thin black horizontal line extends from the right edge of this bar across the top of the light blue background, ending with a small black dot.

THANK YOU

A thin black horizontal line is located near the bottom right of the image, starting with a small black dot and extending to the right edge.