

# Short Term Outcomes of Acute Coronary Syndromes by Diabetes

## Status: Bridging the Gap with Contemporary Therapies

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### INTRODUCTION

- Diabetes Mellitus (DM) has traditionally been associated with significantly adverse long-term and short-term cardiovascular outcomes.
- However, novel DM therapies have improved the prevention strategies for both primary and secondary cardiovascular diseases.
- The residual cardiovascular risk in post-myocardial infarction patients with DM (on contemporary therapies) compared to those without DM is unclear.

### OBJECTIVES

- To explore differences in demographics, risk profiles, clinical characteristics, and outcomes amongst post-myocardial infarction patients with or without DM.

### METHODS

#### Study Design and population

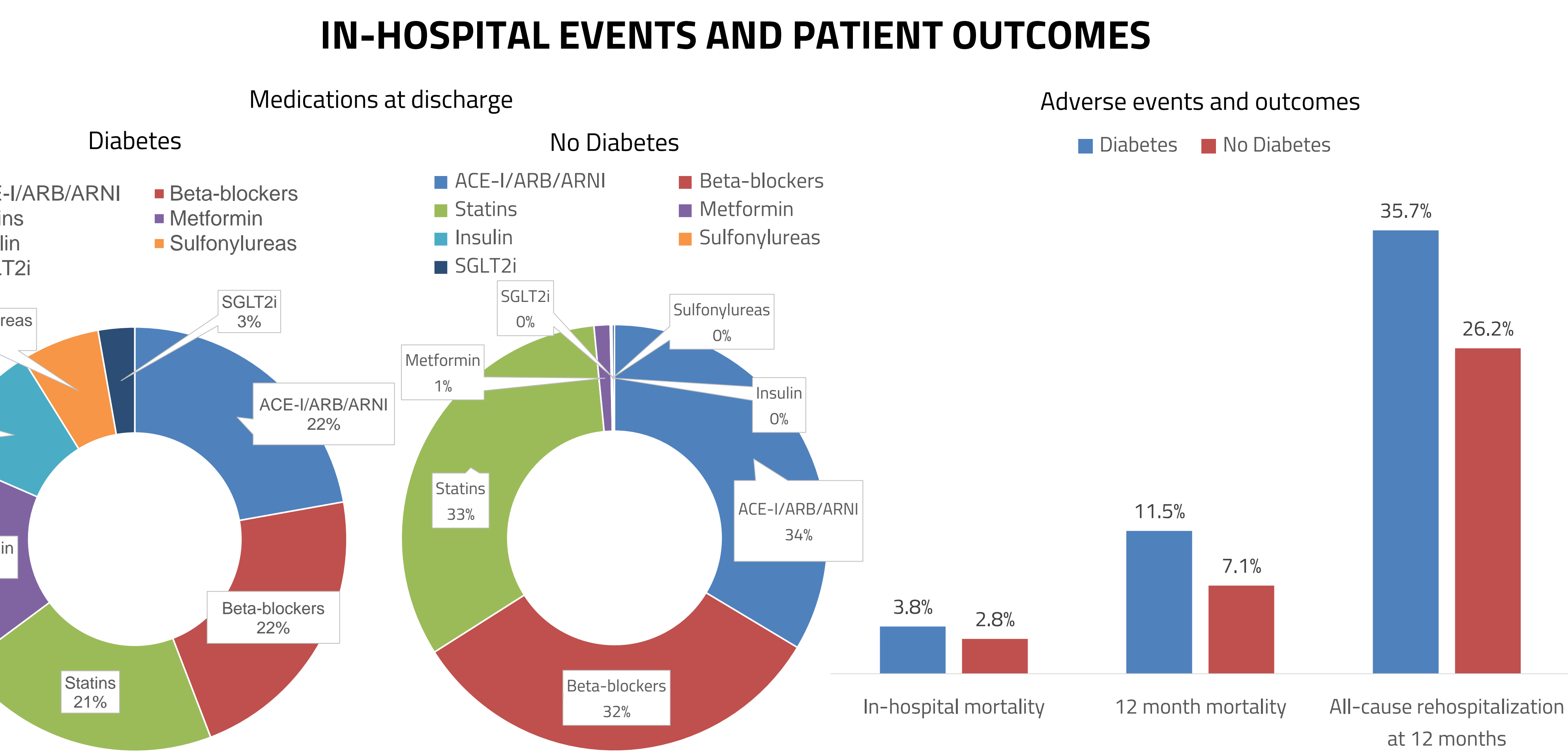
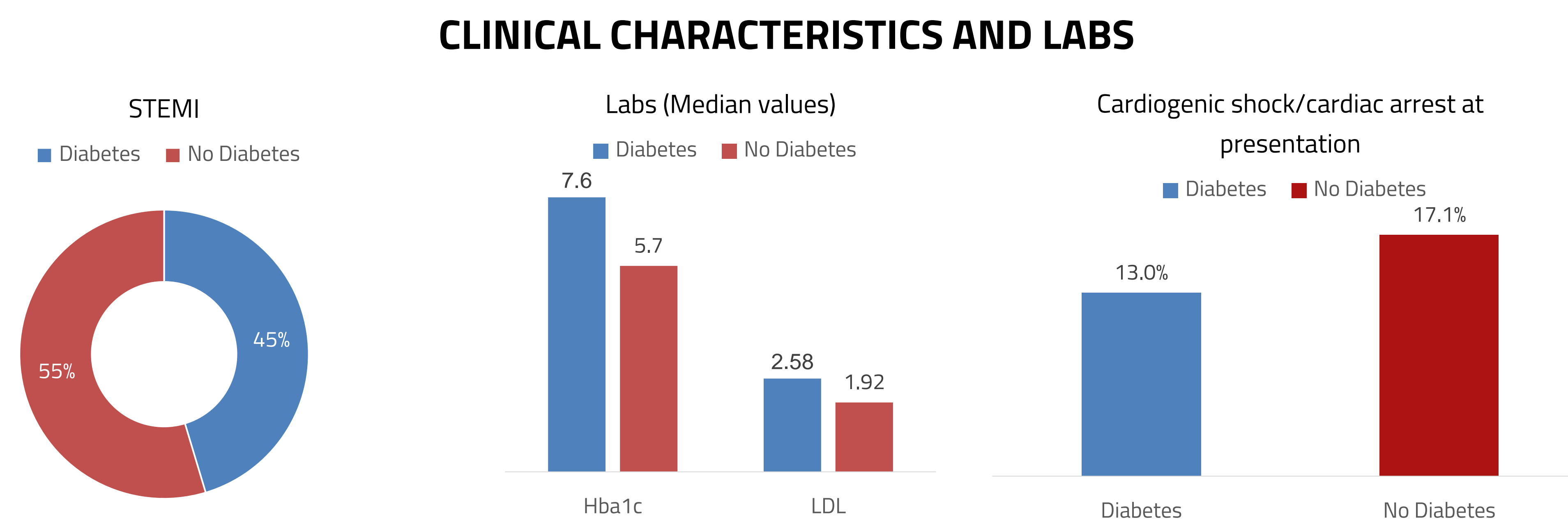
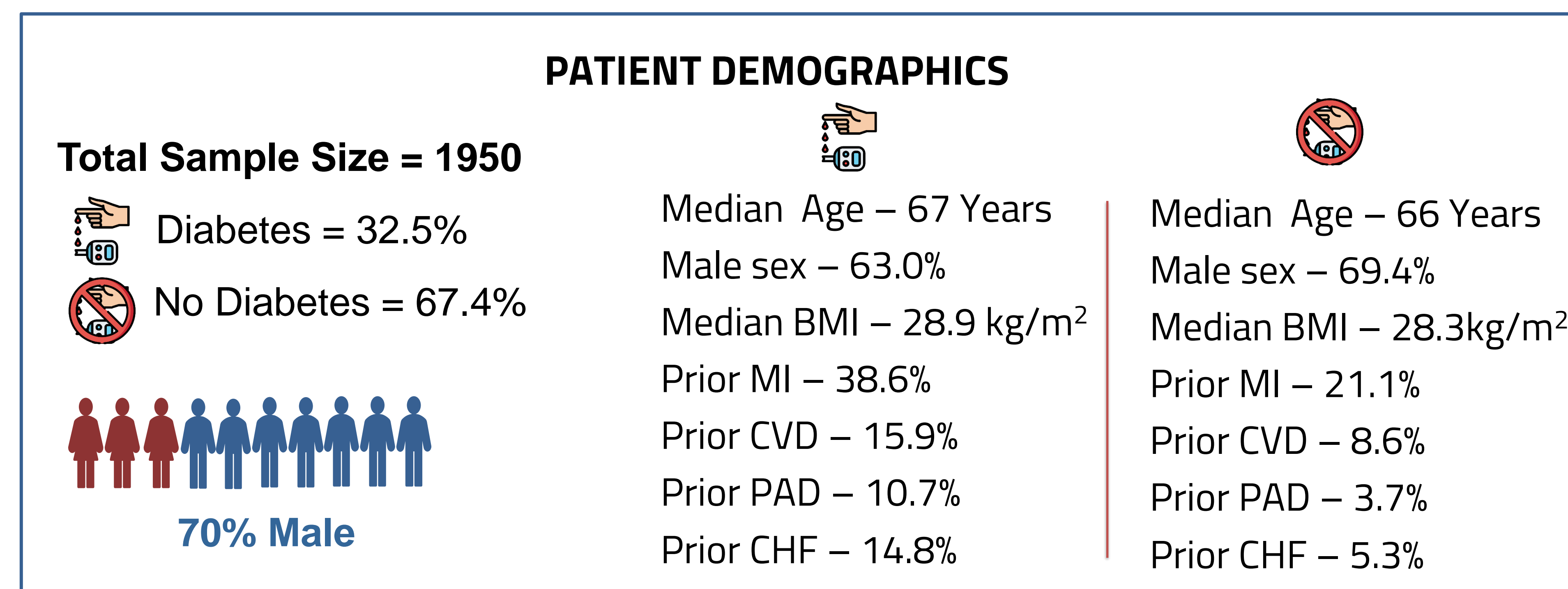
- Prospective, single-site cohort analysis
- Between March 15<sup>th</sup>, 2019, to March 31<sup>st</sup>, 2021, we prospectively evaluate consecutive acute coronary syndrome (ACS) admissions at the Royal University Hospital (RUH), Saskatoon.

- No exclusion criteria applied

#### Group Assignment and Variables Investigated

- Categorized by presence or absence of DM, we compare presenting demographics, pertinent laboratory trends, in-hospital treatment patterns, all-cause mortality, and all-cause re-hospitalization at one-year.

### RESULTS



### DISCUSSION

- Patients with diabetes were more likely male, have poly-vascular arterial disease and prior heart failure.
- Distribution of ACS subtypes and presentation with cardiac arrest and/or cardiogenic shock between those with/without DM were comparable.
- The use of secondary risk reduction therapies was also statistically comparable across the two groups, with SGLT2i use in patients with DM approximating 3%.
- Patients with and without diabetes had comparable in-hospital mortality but diabetes associated with significantly higher mortality and re-hospitalization at one-year

### CONCLUSIONS

- Diabetes continues to associate with significant baseline comorbidity; advances in contemporary therapies (medical and revascularization) appear to associate with similar in-hospital outcomes.
- In Northern Saskatchewan, the use of traditional and more novel risk reduction therapies (such as SGLT2i) appears encouraging
- However, the higher one-year mortality in patients with Diabetes and more than one in every three patients requiring re-hospitalization for all-causes at one-year highlights the need for an integrated multi-disciplinary approach in post ACS care for patients with Diabetes in Saskatchewan.

### ACKNOWLEDGEMENTS

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