Divergent Mortality Trends in Aortic Stenosis by CKD Severity: A Nationwide Analysis (2010 – 2023)

Comparing Early-Stage Versus Late-Stage Renal Disease

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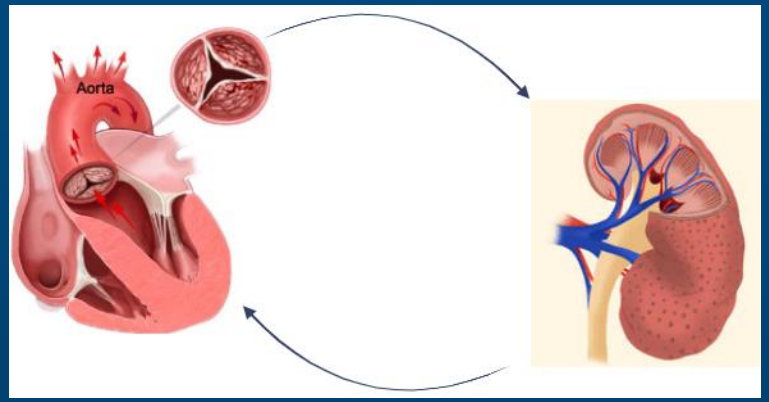
Disclosure of Relevant Financial Relationships

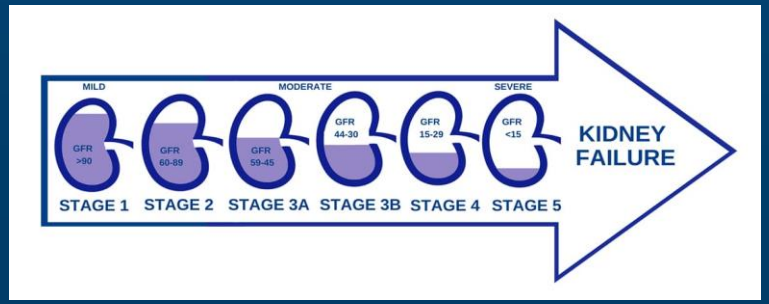
I, Aymen Ahmed, DO NOT have any financial relationships to disclose.

Within the prior 24 months, I have not had a financial relationship with a company producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients

Background



Chronic kidney disease (CKD) worsens outcomes in patients with aortic stenosis (AS) BUT mortality trends stratified by CKD severity remain *insufficiently characterized*



Does AS-related mortality differ by CKD severity ?

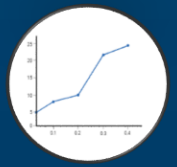
Aim: To examine *trends in AS-related mortality* in CKD patients stratified by *CKD severity status* in the US

Methods

Centers for Disease Control and Prevention Wide-ranging Online Data for Epidemiologic Research (CDC WONDER) database 2010 - 2023

Patients ≥ 25 years old with AS and CKD

MCD: AS and CKD



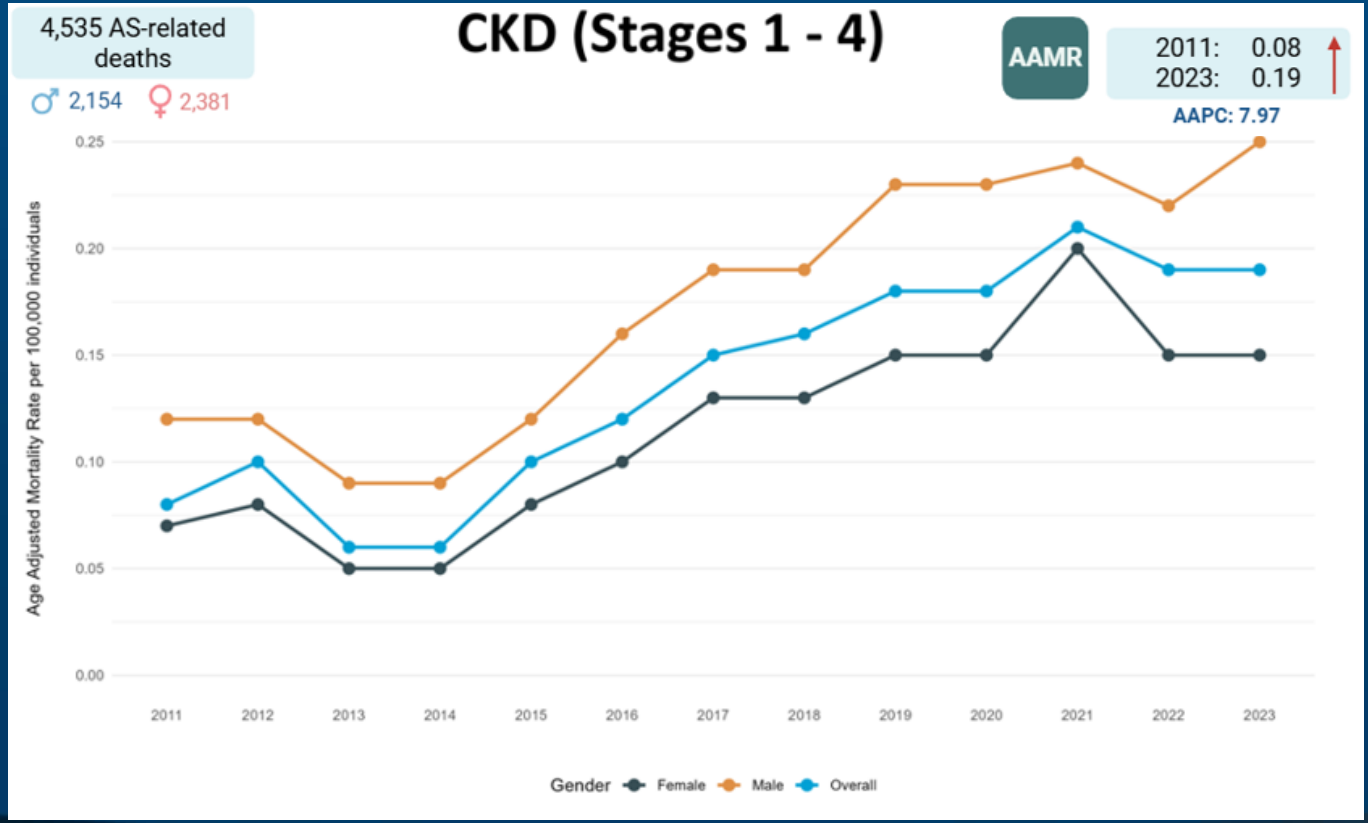
Age-adjusted mortality rates (AAMRs) per 100,000 were analyzed using Joinpoint regression

Mortality trends and average annual percentage change (AAPC) calculation

Results stratified by:
CKD stage severity (CKD stages 1 – 4 versus CKD stage 5 and ESRD) & Sex

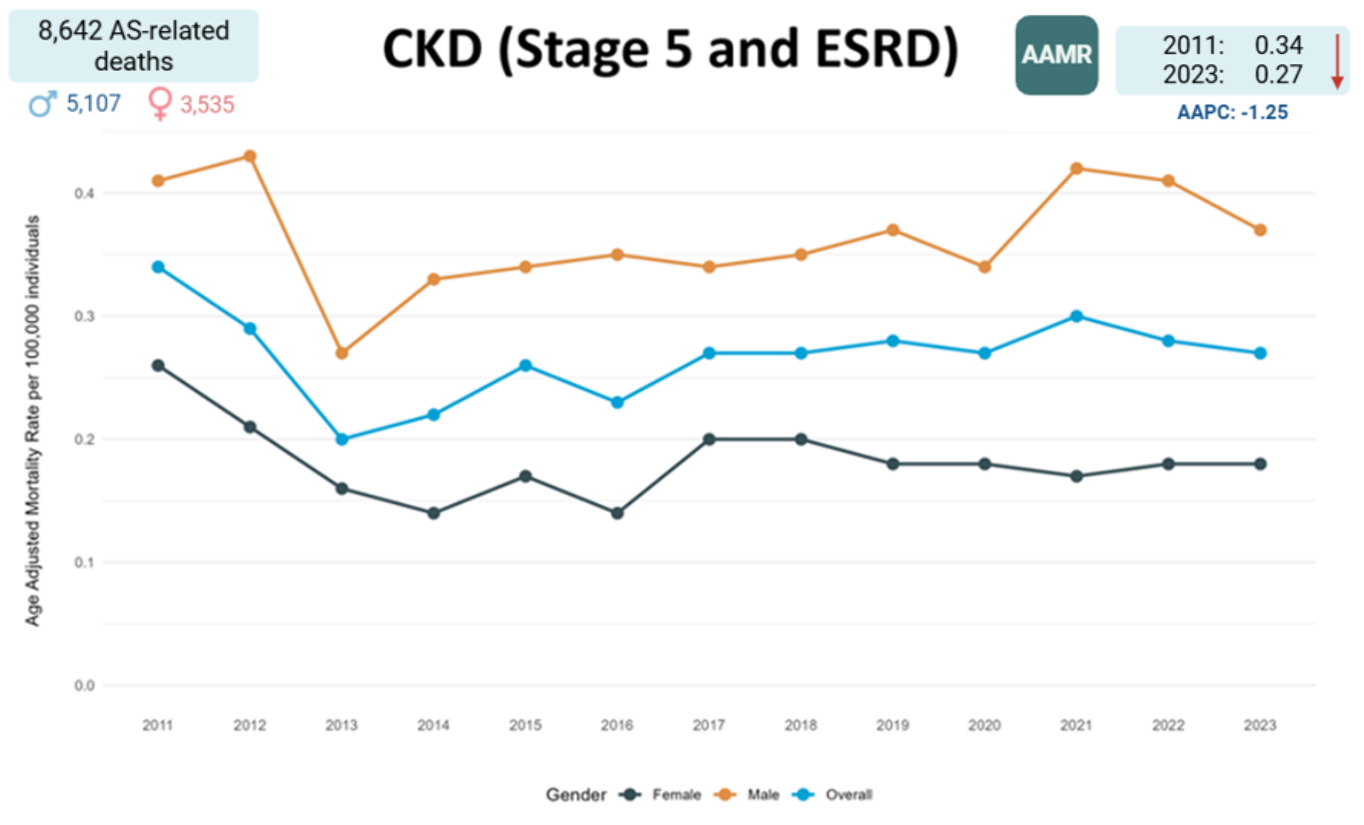
Results

Increasing AS-related mortality from 2011 to 2023



Results

Decreasing AS-related mortality from 2011 to 2023



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Conclusion

- Our analysis revealed
  - Increasing AS-related mortality in early/moderate-stage CKD
  - Decreasing AS-related mortality in CKD stage 5/ESRD

- Further investigation into stage-specific management strategies and assessment of potential disparities in treatment access across CKD populations is required.

Thank you!