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Patient management and clinical outcomes associated with a recorded diagnosis of stage 3 chronic kidney disease: the REVEAL-CKD study

01. BACKGROUND



Guidelines for the treatment of CKD recommend **early intervention and management** to slow disease progression



We investigated **changes in prescribing practices and eGFR decline following a CKD diagnosis** in patients in the USA with **stage 3 CKD**

02. METHODS

Data were extracted from **TriNetX**, a database of integrated electronic medical records and claims data from patients in the USA



Eligible patients:

- Age ≥ 18 years
- Two eGFR measurements indicative of stage 3 CKD (≥ 30 and < 60 mL/min/1.73 m²) recorded 91–730 days apart from 2015 to 2020
- Lack of ICD-9/10 code for CKD any time before and up to 6 months after second qualifying eGFR measurement
- CKD diagnosis ≥ 6 months after second qualifying eGFR measurement

03. RESULTS

26,851 ▶ patients

57.4% ▶ female

71.3 years ▶ mean age

Median annual decline in **eGFR** (mL/min/1.73 m²) **significantly decreased** following a CKD diagnosis^a

Before **-3.20** (95% CI: -3.38, -3.00)

After **-0.74** (95% CI: -0.96, -0.53)

The rate of prescribing of guideline-recommended drugs **increased significantly** in the 180 days after (versus the 180 days before) a CKD diagnosis

ACE inhibitors ↑ **87%**

ARBs ↑ **91%**

MRAs ↑ **123%**

SGLT-2 inhibitors ↑ **62%**

Delayed CKD diagnosis (by 1-year increments) was associated with **elevated risk** of:

CKD progression (stage 4/5) ↑ **40%**

Kidney failure (transplant or chronic dialysis) ↑ **63%**

MACE+ (composite of MI, stroke and hHF) ↑ **8%**

04. CONCLUSION

An **early recorded diagnosis of stage 3 CKD** is an important first step to **reduce the risk of disease progression and associated complications.**