

### Transcript Details

This is a transcript of an educational program. Details about the program and additional media formats for the program are accessible by visiting: <https://reachmd.com/programs/spotlight-chronic-kidney-disease-type-2-diabetes/patients-with-chronic-kidney-disease-and-type-2-diabetes-are-at-risk-of-cardiovascular-complications/11740/>

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## Patients With Chronic Kidney Disease & Type 2 Diabetes Are at Risk of Cardiovascular Complications

Announcer:

Welcome to *Spotlight on Chronic Kidney Disease in Type 2 Diabetes* on ReachMD. This medical industry feature, titled “Patients with Chronic Kidney Disease & Type 2 Diabetes are at Risk for Cardiovascular Complications,” is sponsored by Bayer and is intended for physicians.

Here's your host, Dr. Peter McCullough.

Dr. McCullough:

Hello. I'm Dr. Peter McCullough, and I am a Professor of Medicine at Baylor University Medical Center in Dallas, Texas, specializing in cardiology. My research focuses on the role of chronic kidney disease, or CKD, as a cardiovascular risk state.

Patients with CKD and type 2 diabetes have a higher occurrence of cardiovascular comorbidities, such as stroke or myocardial infarction, more than patients with type 2 diabetes alone. Over a 10-year period, patients with CKD and type 2 diabetes are 3 times more likely to die of cardiovascular-related causes than patients with type 2 diabetes alone. To address this disparity, we have to look at the drivers of disease progression. CKD progression is dependent on the combined effects of metabolic, hemodynamic, inflammatory and fibrotic factors, the latter of which are largely unaddressed. A major driver of this inflammation and fibrosis is the overactivation of the mineralocorticoid receptor, or MR. Under normal conditions, the MR influences electrolyte and fluid balance as well as tissue repair. However, under certain conditions, such as type 2 diabetes, the MR can become pathologically overactivated. Once overactivated, the MR produces proinflammatory cytokines and profibrotic proteins which can lead to injury and structural changes in the kidney and heart, worsening renal and cardiovascular disease. Without addressing inflammation and fibrosis in the kidneys, there is a residual risk of CKD progression in cardiovascular events.

Announcer:

This program was sponsored by Bayer. If you missed any part of this discussion or to find others in this series, visit [reachmd.com/chronickidneydisease](https://reachmd.com/chronickidneydisease). This is ReachMD. Be part of the knowledge.