

1/ Hey [#NephTwitter](#)! Welcome to a [#tweetorial](#) [#xtorial](#) brought to you by

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2/ ★ Our author is Agavriiloaei Bogdan [@AgavriiloaeiB](#) nephrologist from Romania. Our topic: Dulaglutide in CKD and how it reduced CKD progression



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3/ 👍 There are no conflicts of interest. Please also check out [#KIReportsCommunity](#) educational [#blogposts](#) at <https://kireportscommunity.org>. FOLLOW US at [@KIReports](#)

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4/ ? Quick poll before we dive in! What is the first-line treatment in patients with CKD + type 2 diabetes?

T2D + CKD → GLP-1 RA if high CV/kidney risk or unmet targets (KDIGO Diabetes and CKD Guideline draft 2026, 1A)

5/ 📍 Our [#Tweetorial](#) is about Dulaglutid in CKD and the mechanism beyond CKD progression VA by [@NephroSeeker](#)

## Dulaglutide Effect on Proteins Associated With Chronic Kidney Disease Progression



Post-hoc analysis of AWARD-7 trial



**Participants**  
dulaglutide (n=124) vs  
insulin glargine (n=125)



**Outcomes**  
6-month change in circulating  
Joslin Kidney Panel (JKP) proteins

21 JKP proteins were associated with end-stage kidney disease risk

Baseline

JKP protein levels were similar between groups



**At 6 months**

Fourteen JKP proteins rose with glargine and fell with dulaglutide

Seven proteins were unchanged



**Dominant effect**

Inflammatory/apoptotic pathway suppression with dulaglutide

Eight TNF receptors significantly lower vs glargine



**Additional effect**

Smaller but significant differences in CD160, WFDC2, DLL1, LAYN, SYND1, and EPHA2



**Kidney injury marker 1**

KIM-1 decreased in both groups, with no treatment difference

**KI REPORTS**  
Kidney International Reports\*

**Conclusion:** Six months of dulaglutide reduced 14 JKP proteins, predominantly linked to inflammatory and fibrotic pathways, supporting a biological basis for its reno-protective effects.

McFarlin BE et al, 2026. VA by Cristina Popa, MD

### 6/ 🚨 What if the drug you use for obesity could also save kidney?

▶▶ Type 2 diabetes mellitus is one of the most common etiologies of CKD.

▶▶ Dulaglutide slowed the decline in kidney function in CKD + type 2 diabetes

<https://pubmed.ncbi.nlm.nih.gov/29910024/>

### 7/GLP-1 receptor agonist

✓ Many glucose-lowering drugs rely on kidney clearance, limiting options in advanced kidney disease.

✓ Dulaglutide, a long-acting GLP-1 RA is not renally cleared & offers lower hypoglycaemia risk in CKD.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC4894510/>

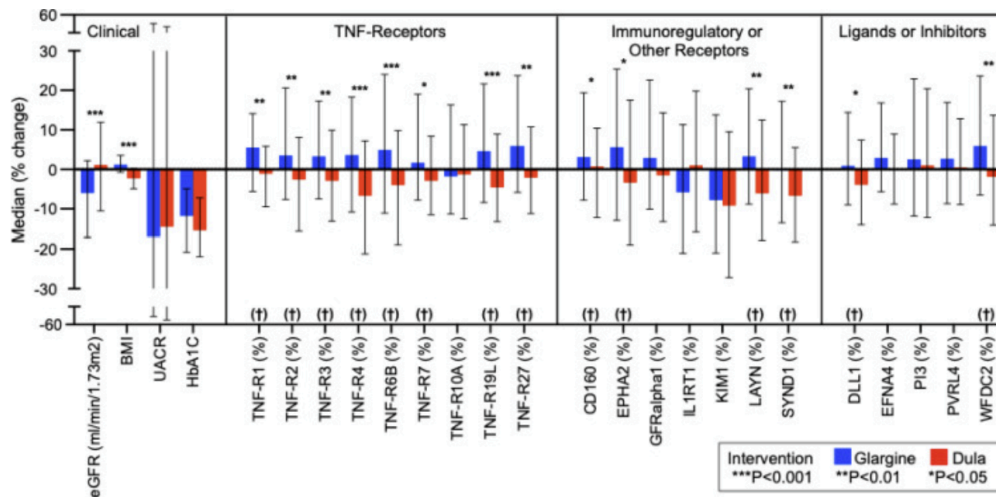
### 8/Dulaglutide in CKD + type 2 diabetes

💊 In the AWARD-7 study, dulaglutide preserved kidney function better than insulin glargine, with higher eGFR at 52 weeks.

No difference in UACR between dulaglutide and insulin?

Likely explained by low baseline albuminuria (~200 mg/g) + 20–25% normoalbuminuria.

<https://pubmed.ncbi.nlm.nih.gov/29910024/>



## 9/Targeting inflammation

🔥 Dulaglutide reduces inflammatory signaling (IL-6/TNF pathways), lowering key biomarkers such as TNF-R1, TNF-R2, TNF-R4 and TNF-R6B.

## 10/Limiting kidney fibrosis

🏠 Dulaglutide attenuates fibrotic signaling, with reductions in profibrotic markers like DLL1, LAYN, and SYND1.

## 11/Beyond glycaemia

🥒 By modulating injury pathways, dulaglutide reduces biomarkers linked to tubular stress and cell death, including TNF-related receptors and KIM-1.

## 12/Metabolic-inflammatory modulation

⚖️ Dulaglutide improves metabolic-inflammatory interplay, lowering multiple CKD progression biomarkers (e.g., CD160, WFDC2, EPHA2) alongside glycaemic control.

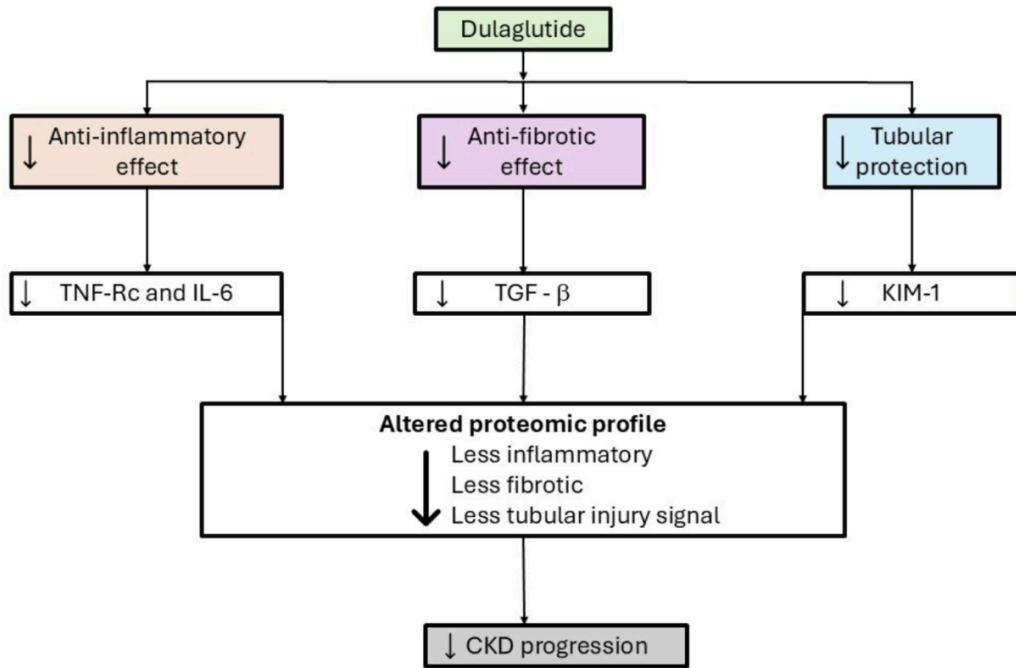
## 13/Summary

🧠 Inflammation + fibrosis + tubular injury — all targeted simultaneously

📊 Slows eGFR decline vs insulin (AWARD-7)

Huge thanks for joining us! Full summary + blog post 🙌 <https://kireportscommunity.org>

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