# Your Patient's Kidneys May Be at Risk
Are You on the Case?

Detecting Early Signs of Chronic Kidney Disease (CKD) in Patients With Type 2 Diabetes (T2D) Is Crucial to Delay End-Organ Damage

THE MAJORITY OF PRIMARY CARE PHYSICIANS (95%) RECOGNIZE T2D AS A MAJOR RISK FACTOR FOR CKD[1-3]

YET **88**% OF PATIENTS WITH CKD IN T2D GO UNDIAGNOSED[4,a]

To detect CKD early, explicit testing strategies are needed for patients with T2D who are at an increased risk of progression and may be asymptomatic[4]
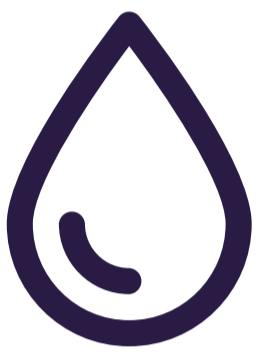
CURRENTLY, RECOMMENDED TESTS TO MONITOR KIDNEY DAMAGE (UACR) AND CHANGES IN KIDNEY FUNCTION (eGFR) ARE UNDERUTILIZED[4-6,a]:

85% OF PATIENTS WITH T2D RECEIVE TESTING FOR KIDNEY FUNCTION (eGFR)[a,b]

47% OF PATIENTS WITH T2D RECEIVE TESTING FOR KIDNEY DAMAGE (UACR)[a,b]

Other testing methods may fail to detect early signs of CKD in T2D[5-7]:

Albumin measurement alone may be adversely impacted by hydration status

Timed UACR collection is burdensome and adds little benefit to prediction or accuracy

Urine dipstick testing is insufficiently sensitive, only semi-quantitative, and not standardized across manufacturers

The American Diabetes Association (ADA) recommends that patients with T2D be monitored at least once a year for early detection of CKD using both UACR and eGFR tests[6]

KIDNEY DAMAGE (UACR ≥30 mg/g PRESENT FOR MORE THAN 3 MONTHS) ALONE CAN BE USED TO DIAGNOSE CKD IN PATIENTS WITH T2D AND MAY OCCUR BEFORE DECLINE IN KIDNEY FUNCTION (eGFR<60 mL/min/1.73 m^2)

Elevated UACR can occur before overt eGFR decline[8,9]

Patients with CKD and T2D are **3X MORE LIKELY TO DIE OF CARDIOVASCULAR-RELATED CAUSES THAN THOSE WITH T2D ALONE[10]**

DIAGNOSING CKD EARLY GIVES YOU THE OPPORTUNITY TO DELAY CKD PROGRESSION IN YOUR PATIENTS WITH T2D[4]

UACR is an early marker of kidney damage and an **INDEPENDENT PREDICTOR OF CARDIOVASCULAR MORTALITY[5,8,9,11]**

Early detection of CKD through annual screening for kidney damage (UACR) and assessment of kidney function (eGFR) can help you stay ahead of CKD progression in patients with T2D[4-6]

UACR eGFR

To learn more about CKD in T2D, visit:

www.ckd-t2d.com ↗

[a]Evidenced by a multi-center, observational study based in the United States that assessed the prevalence of CKD and the rate of undiagnosed CKD in 9307 adults with T2D (2011-2012).[4]

[b]In the 15 months prior to participation in the ADD-CKD study.[4]

eGFR, estimated glomerular filtration rate; UACR, urine albumin-to-creatinine ratio.

1. Centers for Disease Control and Prevention. Chronic Kidney Disease Surveillance System. Accessed August 2020. http://www.cdc.gov/ckd. **2.** CDC National Statistics Diabetes Report, 2020. Accessed September 2020. Available at: https://www.cdc.gov/diabetes/pdfs/data/statistics/national-diabetes-statistics-report.pdf. **3.** CDC National CKD fact sheet, 2019. Accessed September 2020. https://cdc.gov/kidneydisease/pdf/kidney_factsheet.pdf. **4.** Szczech LA, et al. *PLoS One.* 2014;9:e110535. **5.** Kidney Disease Improving Global Outcomes. *Kidney Int Suppl.* 2013;3:19–62. **6.** American Diabetes Association. *Diabetes Care.* 2020;43(Suppl 1):S1-S212. **7.** National Kidney Foundation. *Am J Kidney Dis.* 2007;49:S1-S180. **8.** Alicic RZ, et al. *Clin J Am Soc Nephrol.* 2017;12:2032-2045. **9.** Alkarian M. *Pediatr Nephrol.* 2015;30:65-74. **10.** Alkarian M, et al. *J Am Soc Nephrol.* 2013;24:302-308. **11.** Matsushita K, et al. *Lancet.* 2010;375(9731):2073-2081.