

# RENAL DISEASE IN TYPE 2 DIABETES IN EUROPE

## Diabetic kidney disease (DKD)

Diabetic kidney disease (DKD) is a condition caused by diabetes in which the kidney acting as filters cannot clean the blood as well as healthy kidneys, leading to **excess fluid and toxic waste accumulation** in the blood and body<sup>1</sup>



The two most prominent risk factors of DKD are:<sup>1,2</sup>

Cardiovascular disease,  
especially high blood pressure

high blood sugar



Of the **60 million** people living with diabetes in Europe, around **40%** will develop DKD<sup>2</sup>



The prevalence of DKD is projected to rise in line with the increasing prevalence of diabetes

Between 1990 and 2012, the number of deaths attributed to DKD rose by

**94%** →

one of the highest observed for all chronic diseases<sup>2</sup>

DKD is the leading cause for progression to end-stage renal disease (ESRD), accounting for

**50%**

of cases in the developed world<sup>3</sup> and is considered a 'medical catastrophe of worldwide dimensions'<sup>4</sup>



DKD has a major impact on patients' physical, emotional, and financial wellbeing



DKD is associated with a high risk of cardiovascular disease (heart attack, heart failure and stroke).<sup>1,5</sup>

DKD also amplifies the risk of other diabetes complications, including:<sup>1,5</sup>



A reduced quality of life



Infections



Fatigue



Depression



Adverse drug reactions



Premature death

Despite the high physical and economic burden, there have been **no treatment advances for DKD in the last 15 years.**



1. CDC. National Chronic Kidney Disease Fact Sheet, 2017. Available at: [https://www.cdc.gov/kidneydisease/pdf/kidney\\_factsheet.pdf](https://www.cdc.gov/kidneydisease/pdf/kidney_factsheet.pdf) Last accessed July 2018. 2. Alicic R., et al. Diabetic Kidney Disease: Challenges, Progress, and Possibilities. Clin J Am Soc Nephrol. 2017; 12(12):2032-2045. 3. Tuttle KR., et al. Diabetic kidney disease: a report from an ADA Consensus Conference. Diabetes Care. 2014; 37(10):2864-83. 4. Mora-Fernandez C., et al. Diabetic kidney disease: from physiology to therapeutics. J Physiol. 2014; 592: 3997-4012. 5. Thomas M., Cooper M., and Zimmet P. Changing epidemiology of type 2 diabetes mellitus and associated chronic kidney disease. Nature Review Nephrology. 2015; (12): 73-81.