



Client Notice

10th of February 2022

Alpha Laboratories is pleased to announce that it will be the first community laboratory in Canada to automatically provide the Kidney Failure Risk Equation for CKD monitoring

The incidence of chronic diseases in our community continues to increase and cause a significant burden to our community and healthcare system. Diagnosis of Chronic Kidney Disease (CKD) is lab-based – defined primarily by creatinine eGFR. Monitoring of the complications associated with advanced CKD are also primarily lab-based – anemia, metabolic acidosis, hyperkalemia, and hyperphosphatemia. Albuminuria, although recognized as a risk factor since the late 1990s has a very poor testing rate. 90% of CKD cases are at low risk of progression, and primary care practice is well-positioned to care for these cases. For individuals at high risk of CKD progression, if caught early in the disease course, risk factors can successfully be managed and progression to end-stage kidney disease (ESKD) can be slowed or halted. Validated risk prediction tools can identify patients according to their level of risk for CKD, and in turn, optimize the timing of referral to nephrology specialist care, provide prognostic information for patients and healthcare providers, and support transplant and dialysis resource management.

The Kidney Failure Risk Equation, KFRE was developed in 2011 and has been widely validated in diverse populations. Using just 4 easily accessible pieces of laboratory information (age, sex, eGFR, and urine albumin-to-creatinine ratio (urine ACR)), the equation calculates the likelihood that a person's kidneys will fail in the next 2 to 5 years requiring dialysis or transplantation. The KFRE is integrated into national and international clinical practice guidelines and in several electronic health records. In addition, the KFRE is also an integral component of the *KidneyWise Clinical Toolkit* from the Ontario Renal Network and is included as part of the criteria for nephrology referral (a 5-year risk of kidney failure $\geq 5\%$)

Effective 14th of February, you will now see the Kidney Failure Risk Equation (KFRE) 5-year risk score automatically calculated in the Alpha Labs report for patients with an eGFR 30 – 59 mL/min/1.73m², *when urine ACR is also ordered*. For patients with an eGFR ≥ 60 mL/min/1.73m², urine ACR remains the ideal laboratory test to assess the risk of progression.

We hope you find this additional information helpful in counseling patients, triaging referrals to nephrology, and choosing appropriate disease-modifying therapies for your patients with CKD. More information including videos, infographics, and a CKD handbook, is available at <https://www.ontariorenalnetwork.ca/en/kidney-care-resources/clinical-tools/primary-care>.

Idelta Coelho
Executive Vice President,
Alpha Laboratories

Dr. Paul Yip
Director of Biochemistry,
Alpha Laboratories