

Appendix A. Laboratory annotations when serum creatine is ordered alone and eGFR is calculated using the CKD-EPI 2021

Result	Laboratory annotation
eGFR ≥ 60 mL/min/1.73m ²	<p>Results rule out CKD stage 3-5. Assessment of urine ACR is required to definitively rule out or confirm CKD diagnosis. The KidneyWise toolkit (kidneywise.ca) recommends remeasuring eGFR and urine ACR annually for people with diabetes mellitus and less frequently in others unless clinical circumstances dictate otherwise.</p> <p>eGFR is calculated using the CKD-EPI 2021 equation which does not use a race-based adjustment.</p>
eGFR 30-59 mL/min/1.73m ²	<p>Results indicate mild to moderate CKD. If this is the first result with an eGFR <60, confirm results with repeat eGFR at least 3 months later. A urine ACR measurement is required to stage CKD and further evaluate risk of renal failure. Once results have been confirmed:</p> <p>If urine ACR >60, 5-year KFRE \geq 5%, or eGFR declines >5ml/min/1.73m² over a 6 month period, refer to nephrology.</p> <p>If eGFR remains between 30 and 59 mL/min/1.73m² and declines <5ml/min/1.73m² over a 6 month period measure eGFR and urine ACR every 6 months, or annually if eGFR is stable for \geq 2 years.</p> <p>See the KidneyWise toolkit (kidneywise.ca) for management recommendations and additional indications that may warrant referral to nephrology in the future.</p> <p>eGFR is calculated using the CKD-EPI 2021 equation which does not use a race-based adjustment.</p>
eGFR <30 mL/min/1.73m ²	<p>Results indicate severe CKD. If this is the first result with an eGFR <60, confirm results with repeat eGFR at least 3 months later.</p> <p>If results have been confirmed: Refer to nephrology and measure eGFR and urine ACR every 6 months, or annually if eGFR is stable for 2 or more years.</p> <p>See the KidneyWise toolkit (kidneywise.ca) for management recommendations and suggested investigations to be done while awaiting consultation.</p> <p>eGFR is calculated using the CKD-EPI 2021 equation which does not use a race-based adjustment.</p>

Appendix B. Laboratory annotations when albumin to creatine ratio (ACR) is ordered alone

Result	Laboratory annotation
ACR <3 mg/mmol	<p>Results rule out albuminuria. The KidneyWise toolkit (kidneywise.ca) recommends remeasuring eGFR and urine ACR annually for people with diabetes mellitus and/or an eGFR <60 and less frequently in others unless clinical circumstances dictate otherwise.</p>
ACR 3-60 mg/mmol	<p>Results indicate mild to moderate albuminuria and elevated risk of CKD progression. If this is the first result with an ACR ≥ 3, confirm with at least 2 of 3 elevated results within 3 months.</p> <p>If there is hematuria (>20rbc/hpf confirmed on urine microscopy), refer to nephrology.</p> <p>An eGFR is required to stage CKD and further evaluate risk of renal failure. See the KidneyWise toolkit (kidneywise.ca) for management recommendations and other indications that may warrant referral to nephrology.</p>
ACR >60 mg/mmol	<p>Results indicate moderate to severe albuminuria and very high risk of CKD progression.</p> <p>If this is the first result with an ACR ≥ 3, confirm with at least 2 of 3 elevated results within 3 months. If results have been confirmed, refer to nephrology and remeasure ACR and eGFR annually, or more frequently if ACR is increasing or eGFR is declining.</p> <p>See the KidneyWise toolkit (kidneywise.ca) for management recommendations and suggested investigations to be done while awaiting consultation.</p>

Appendix C. Laboratory annotations when serum creatinine and albumin to creatine ratio (ACR) are ordered together

eGFR result	ACR result	KFRE result	Laboratory annotation
eGFR ≥ 60 mL/min/1.73m ²	ACR <3 mg/mmol	KFRE not applicable	<p>Results rule out CKD stage 3-5 and albuminuria. The KidneyWise toolkit (kidneywise.ca) recommends remeasuring eGFR and urine ACR annually for people with diabetes mellitus and less frequently in others unless clinical circumstances dictate otherwise.</p> <p>eGFR is calculated using the CKD-EPI 2021 equation which does not use a race-based adjustment.</p>
eGFR ≥ 60 mL/min/1.73m ²	ACR 3-60 mg/mmol	KFRE not applicable	<p>Results indicate mild to moderate albuminuria reflecting increased risk of CKD progression. If this is the first result with an ACR ≥ 3, confirm with at least 2 of 3 elevated results within 3 months.</p> <p>If there is hematuria (>20rbc/hpf confirmed on urine microscopy), refer to nephrology.</p> <p>Remeasure eGFR and urine ACR annually for patients with diabetes mellitus.</p> <p>See the KidneyWise toolkit (kidneywise.ca) for further management recommendations including when to refer to nephrology.</p> <p>eGFR is calculated using the CKD-EPI 2021 equation which does not use a race-based adjustment.</p>
eGFR ≥ 60 mL/min/1.73m ²	ACR >60 mg/mmol	KFRE not applicable	<p>Results indicate moderate to severe albuminuria and high risk of CKD progression.</p> <p>If this is the first result with an ACR >60, confirm with at least 2 of 3 elevated ACR results within 3 months.</p> <p>If results have been confirmed, refer to nephrology.</p> <p>See the KidneyWise toolkit (kidneywise.ca) for management recommendations and suggested investigations to be done while awaiting consultation.</p> <p>eGFR is calculated using the CKD-EPI 2021 equation which does not use a race-based adjustment.</p>
eGFR 30-59 mL/min/1.73m ²	ACR <3 mg/mmol	5-year KFRE <5%	<p>Results indicate mild to moderate CKD with low risk of progression to renal failure.</p> <p>If this is the first result with an eGFR <60, confirm with repeat eGFR measurement at least 3 months later. Once results have been confirmed, measure eGFR and urine ACR every 6 months, or annually if eGFR is stable for ≥ 2 years.</p> <p>See the KidneyWise toolkit (kidneywise.ca) for further management recommendations including when to refer to nephrology.</p> <p>The KFRE (kidney failure risk equation) is a risk prediction model used to estimate the risk of renal failure in people with an eGFR of less than 60 ml/min/1.73m².</p> <p>eGFR is calculated using the CKD-EPI 2021 equation which does not use a race-based adjustment.</p>

eGFR result	ACR result	KFRE result	Laboratory annotation
eGFR 30-59 mL/min/1.73m ²	ACR <3 mg/mmol	5-year KFRE ≥5%	<p>Results indicate mild to moderate CKD and increased risk of progression of renal failure in the next 5 years.</p> <p>If this is the first result with an eGFR<60, confirm with a repeat eGFR measurement at least 3 months later. If results have been confirmed, refer to nephrology and measure eGFR and urine ACR every 6 months, or annually if eGFR is stable for ≥ 2 years.</p> <p>See the KidneyWise toolkit (kidneywise.ca) for further management recommendations and suggested investigations to be done while awaiting consultation.</p> <p>The KFRE (kidney failure risk equation) is a risk prediction model used to estimate the risk of renal failure in people with an eGFR of less than 60 ml/min/1.73m².</p> <p>eGFR is calculated using the CKD-EPI 2021 equation which does not use a race-based adjustment.</p>
eGFR 30-59 mL/min/1.73m ²	ACR 3-60 mg/mmol	5-year KFRE <5%	<p>Results indicate mild to moderate CKD with mild to moderate albuminuria reflecting increased risk of CKD progression.</p> <p>If this is the first result with an eGFR <60, confirm with repeat eGFR measurement at least 3 months later. If this is the first result with ACR ≥3, confirm with at least 2 of 3 elevated ACR results within 3 months.</p> <p>Once results have been confirmed, measure eGFR and urine ACR every 6 months, or annually if eGFR is stable for ≥ 2 years.</p> <p>If there is hematuria (>20rbc/hpf confirmed on urine microscopy), refer to nephrology.</p> <p>See the KidneyWise toolkit (kidneywise.ca) for further management recommendations including when to refer to nephrology.</p> <p>The KFRE (kidney failure risk equation) is a risk prediction model used to estimate the risk of renal failure in people with an eGFR of less than 60 ml/min/1.73m².</p> <p>eGFR is calculated using the CKD-EPI 2021 equation which does not use a race-based adjustment.</p>
eGFR 30-59 mL/min/1.73m ²	ACR 3-60 mg/mmol	5-year KFRE ≥5%	<p>Results indicate mild to moderate CKD and elevated risk of renal failure within the next 5 years.</p> <p>If this is the first result with an eGFR <60, confirm with repeat eGFR measurement at least 3 months later. If this is the first result with ACR ≥3, confirm with at least 2 of 3 elevated ACR results within 3 months.</p> <p>If results have been confirmed, refer to nephrology, measure eGFR and urine ACR every 6 months, or annually if eGFR is stable for ≥ 2 years.</p> <p>See the KidneyWise toolkit (kidneywise.ca) for management recommendations and suggested investigations to be done while awaiting consultation.</p> <p>The KFRE (kidney failure risk equation) is a risk prediction model used to estimate the risk of renal failure in people with an eGFR of less than 60 ml/min/1.73m².</p> <p>eGFR is calculated using the CKD-EPI 2021 equation which does not use a race-based adjustment.</p>

eGFR result	ACR result	KFRE result	Laboratory annotation
eGFR 30-59 mL/min/1.73m ²	ACR >60 mg/mmol	5-year KFRE <5%	<p>Results indicate mild to moderate CKD with moderate to severe albuminuria and high risk of CKD progression.</p> <p>If this is the first result with an eGFR <60, confirm with repeat eGFR measurement at least 3 months later. If this is the first result with ACR ≥3, confirm with at least 2 of 3 elevated ACR results within 3 months.</p> <p>If results have been confirmed, refer to nephrology and measure eGFR and urine ACR every 6 months, or annually if eGFR is stable for ≥2 years.</p> <p>See the KidneyWise toolkit (kidneywise.ca) for management recommendations and suggested investigations to be done while awaiting consultation.</p> <p>The KFRE (kidney failure risk equation) is a risk prediction model used to estimate the risk of renal failure in people with an eGFR of less than 60 ml/min/1.73m².</p> <p>eGFR is calculated using the CKD-EPI 2021 equation which does not use a race-based adjustment.</p>
eGFR 30-59 mL/min/1.73m ²	ACR >60 mg/mmol	5-year KFRE ≥5%	<p>Results indicate CKD, moderate to severe albuminuria, and elevated risk of progression to renal failure in the next 5 years.</p> <p>If this is the first result with an eGFR <60, confirm with repeat eGFR measurement at least 3 months later. If this is the first result with ACR ≥3, confirm with at least 2 of 3 elevated ACR results within 3 months.</p> <p>If results have been confirmed, refer to nephrology and measure eGFR and urine ACR every 6 months, or annually if eGFR is stable for ≥ 2 years.</p> <p>See the KidneyWise toolkit (kidneywise.ca) for management recommendations and suggested investigations to be done while awaiting consultation.</p> <p>The KFRE (kidney failure risk equation) is a risk prediction model used to estimate the risk of renal failure in people with an eGFR of less than 60 ml/min/1.73m².</p> <p>eGFR is calculated using the CKD-EPI 2021 equation which does not use a race-based adjustment.</p>
eGFR <30 mL/min/1.73m ²	ACR <3 mg/mmol	Provide KFRE measurement (referral always recommended)	<p>Results indicate severe CKD.</p> <p>If this is the first result with an eGFR <30, confirm with a repeat eGFR measurement at least 3 months later. If results have been confirmed, refer to nephrology and remeasure eGFR and urine ACR every 6 months, or annually if eGFR is stable for ≥ 2 years.</p> <p>See the KidneyWise toolkit (kidneywise.ca) for further management recommendations and suggested investigations to be done while awaiting consultation.</p> <p>The KFRE (kidney failure risk equation) is a risk prediction model used to estimate the risk of renal failure in people with an eGFR of less than 60 ml/min/1.73m².</p> <p>eGFR is calculated using the CKD-EPI 2021 equation which does not use a race-based adjustment.</p>

eGFR result	ACR result	KFRE result	Laboratory annotation
eGFR <30 mL/min/1.73m ²	ACR 3-60 mg/mmol	Provide KFRE measurement (referral always recommended)	<p>Results indicate severe CKD and a significant risk of renal failure within the next 5 years.</p> <p>If this is the first result with an eGFR <60, confirm with repeat eGFR measurement at least 3 months later. If this is the first result with ACR ≥3, ACR results should be confirmed by at least 2 of 3 elevated ACR results within 3 months.</p> <p>If results have been confirmed, refer to nephrology and remeasure eGFR and urine ACR every 6 months, or annually if eGFR is stable for ≥ 2 years.</p> <p>See the KidneyWise toolkit (kidneywise.ca) for management recommendations and suggested investigations to be done while awaiting consultation.</p> <p>The KFRE (kidney failure risk equation) is a risk prediction model used to estimate the risk of renal failure in people with an eGFR of less than 60 ml/min/1.73m².</p> <p>eGFR is calculated using the CKD-EPI 2021 equation which does not use a race-based adjustment.</p>
eGFR <30 mL/min/1.73m ²	ACR >60 mg/mmol	Provide KFRE measurement (referral always recommended)	<p>Results indicate severe CKD, moderate to severe albuminuria, and a significant risk of renal failure within the next 5 years.</p> <p>If this is the first result with an eGFR <60, confirm with repeat eGFR measurement at least 3 months later. If this is the first result with ACR ≥3, confirm with at least 2 of 3 elevated ACR results within 3 months.</p> <p>If results have been confirmed, refer to nephrology and measure eGFR and urine ACR every 6 months, or annually if eGFR is stable for ≥ 2 years.</p> <p>See the KidneyWise toolkit (kidneywise.ca) for management recommendations and suggested investigations to be done while awaiting consultation.</p> <p>The KFRE (kidney failure risk equation) is a risk prediction model used to estimate the risk of renal failure in people with an eGFR of less than 60 ml/min/1.73m².</p> <p>eGFR is calculated using the CKD-EPI 2021 equation which does not use a race-based adjustment.</p>