IN A NUTSHELL

The knowledge platform for general practitioners

Glomerular Filtration Rate (GFR)

The glomerular filtration rate describes the flow rate of the filtered fluid through the kidney. Various formulas are available to calculate the estimated glomerular filtration rate (eGFR), which is central to the assessment of kidney function.

The CKD-EPI formula was published in 2009 and is considered the most reliable formula. The Cockcroft-Gault calculation takes weight into account and helps to estimate renal function in patients with sarcopenia or who are underweight.

Creatinine

mmol/l ?

Age

years

Body weight

kg ?

Sex

○ Male ○ Female

Black race

○ Yes ○ No

CKD-EPI

ml/min/1.73m²

MDRD

ml/min/1.73m²

Cockcroft-Gault

ml/min

Interpretation

eGFR (ml/min/1.73m²)	Category	Interpretation
? 90	G1	Normal renal function
60-89	G2	Mildly decreased renal function
45-59	G3a	Mildly to moderately decreased renal function
30-44	G3b	Moderately to severely decreased renal function
15-29	G4	Severely decreased renal function
< 15	G5	Kidney failure

References

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