

# **Cystatin C Referral Indications**

#### □Low muscle mass

- Above-knee amputee, or multiple amputee
- Para/quadriplegics
- Extended hospital stay with immobilization
- Genetic conditions affecting muscle function/development (e.g. Duchenne Muscular Dystrophy)

### □ Suspected creatinine assay interference unrelated to supplement use (e.g. creatine)

• Withhold all supplements for a minimum of 4 days prior to re-testing Cr

## □ Patient is prescribed medication affecting active tubular secretion of creatinine

- Amantadine
- Cobicistat
- Dolutegravir
- Olaparib (Lynparza®)

# Cystatin C Referral - Patient Requirements

□BMI <31

- □Normal TSH/FT4
- □No active hyper-inflammatory/autoimmune conditions
- □No history of acromegaly
- □Not taking rHGH or any other anabolic steroids
- $\Box$ Not on a high dose corticosteroid
  - Renal transplant recipients must be on lowest dose for at least 2 weeks for results to be clinically useful.

#### **References:**

- 1. KDIGO 2024 Clinical Practice Guideline for the Evaluation and Management of Chronic Kidney Disease. Kidney Int. 2024. 105(4): S117-314.
- 2. Pierre CC, et al. AACC/NKF Guidance Document on Improving Equity in Chronic Kidney Disease. 2023. J Appl Lab Med. 8(4): 789-816.
- 3. Sze L, et al. Impact of growth hormone on cystatin C. 2013. Nephron Extra. 3: 118-124.
- 4. Wiesli P, et al. Serum Cystatin C is Sensitive to Small Changes in Thyroid Function. Clin Chim Acta. 2003. 338(1): 87-90.
- 5. Bokenkamp A, , et al. Effect of Corticosteroid Therapy on Serum Cystatin C and β2-Microglobulin Concentrations. *Clin Chem.* 2002. 48: 1123-1126