USE WITH CAUTION.

Risks: Renal impairment can alter the pharmacokinetics, leading to increased exposure to the parent drug and its inactive metabolites. Less than 1% of the total dose is excreted unchanged by the kidneys, and approximately 70% is eliminated renally as metabolites. Duloxetine is not directly nephrotoxic but may indirectly affect renal function through haemodynamic changes or cardiovascular adverse effects. Reduced clearance in patients with chronic kidney disease (CKD) increases the risk of drug accumulation, orthostatic hypotension, and other dose-related adverse reactions. The drug may also cause hyponatraemia or the syndrome of inappropriate antidiuretic hormone secretion (SIADH), particularly in older adults or in combination with other serotonergic agents.

Risk monitoring: Monitor renal function (urea, creatinine), blood pressure, and signs of fluid retention or cardiovascular toxicity. Assess serum sodium regularly, especially during the first weeks of therapy. Observe for dizziness, orthostatic hypotension, or signs of drug accumulation. Consider CYP2D6 genotyping when clinically relevant.

Dose adjustment: For patients with mild to moderate renal impairment (creatinine clearance > 30 ml/min), no dose adjustment is generally required, but therapy should begin with a low starting dose. For severe renal impairment (CKD G4–G5, CrCl ≤ 30 ml/min), duloxetine is not recommended. When treatment is considered in patients with CrCl around 30 ml/min, some experts suggest starting at 30 mg once daily and titrating slowly, not exceeding 60 mg/day.

Recommendation:

Use with caution in patients with renal impairment. Avoid duloxetine in patients with CrCl ≤ 30 ml/min. Regularly monitor renal function and serum sodium, particularly in older adults or in those receiving interacting medications.