

## **GFR GUIDELINES FOR IV GADOLINIUM CONTRAST**

### **GENERAL GUIDELINES/COMMENTS**

- All patients who receive IV gadolinium contrast must read the Patient Medication Guide and sign the acknowledgement form prior to receiving contrast. The patient's next of kin or power of attorney can sign the form if the patient is unable.
- Patients in acute kidney injury (AKI) and/or with a low GFR who are to receive IV gadolinium contrast do not need to sign an informed consent form and do not need Nephrology approval prior to receiving IV contrast. If the patient is on hemodialysis, it is preferred that the patient receive IV contrast soon before the next scheduled dialysis session. The dialysis schedule should not be adjusted otherwise.
- Per current research the risk for nephrogenic systemic fibrosis (NSF) when using group II agents (Clariscan, Gadavist, Dotarem, Multihance, Prohance or Eovist) is sufficiently low to nonexistent. However IV gadolinium contrast should be administered to patients with renal dysfunction only when essential and when another imaging modality cannot answer the clinical question.
- Group I agents (Omniscan, Magnevist and Optimark) have the most association with NSF but are not used at any St. Vincents or Optimal Imaging location.
- IV gadolinium contrast either does not or only exceptionally rarely causes CI-AKI when administered at standard doses. However gadolinium contrast is more nephrotoxic than iodinated contrast when given in iso-attenuated doses (e.g. far above standard doses).
- Use the 2021 CKD-EPI equation when calculating a GFR from an iStat device. See website [https://www.kidney.org/professionals/KDOQI/gfr\\_calculator](https://www.kidney.org/professionals/KDOQI/gfr_calculator). Be sure to click on the pediatric version for patients less than 18 years of age.

### **PATIENTS RECEIVING GROUP II AGENTS**

- For patients receiving Clariscan, Gadavist or Eovist (group II agents), GFR does not need to be checked on any patient regardless of patient history.
- However if a current GFR is available, use the following guidelines:

GFR	
<b>≥30 mL/min</b>	Administer IV contrast <u>without</u> consulting a radiologist.
<b>&lt;30 mL/min</b> ON dialysis	Administer IV contrast <u>only after approval</u> of a radiologist. Dialyze as soon after as possible.
<b>&lt;30 mL/min</b> NOT ON dialysis	Administer IV contrast <u>only after approval</u> of a radiologist.