

MRI CONTRAST GFR GUIDELINES

PURPOSE

- To ensure the appropriate and safe use of gadolinium contrast agents according to current ACR guidelines.

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 and/or with a low GFR who are to receive IV gadolinium contrast do not need to sign an informed consent form and Nephrology approval is not required. If the patient is on hemodialysis, it is preferred that the patient undergo dialysis soon after receiving IV contrast (if possible). 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, Elucirem and 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) are associated with NSF but are not used at any St. Vincents or Optimal Imaging location.
- Use the 2021 CKD-EPI equation when calculating a GFR from an iStat device. See website 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 any patients receiving Clariscan, Gadavist or Eovist (group II agents), GFR does not need to be checked.
- However, if a current GFR is available, use the following guidelines:

GFR

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