UCONN HEALTH	**DEPARTMENT OF RADIOLOGY**
	Intravenous Contrast Policy

A. EFFECTIVE DATE:	10/18/2022
B. PURPOSE:	To provide screening guidelines to identify patients that may have a contraindication for IV contrast administration. To define medical oversight of patients receiving contrast media.
C. POLICY:	Patients with one or more of the below risk factors associated with contrast-induced nephropathy (CIN) or Nephrogenic Systemic Fibrosis (NSF), must have a Creatinine blood test performed within 30 days prior to the exam date. A GFR value should be determined- either by the lab result, or calculated using the MDRD formula (when not available from the lab). These results are needed before the patient is injected with contrast media. If no serum creatinine or GFR is available, the radiology technician will contact the Radiologist or the ordering provider's team to determine the course of action. Contrast may be given based on medical necessity with approval from the ordering clinician and/or radiologist. Contrast is administered only when a Radiologist or covering physician is on site for direct supervision. The department of Diagnostic Imaging utilizes the Emergency Department Attending physician for oversight when a Radiologist is not present on site. The performing technologist will document placement and removal of peripheral IVs for administration of IV contrast in the patient's EMR under LDA assessment (lines, drains and airways). Documentation of the contrast type, and dose (volume) will be documented in the EMR under the MAR (medication administration report). Creatinine and GFR lab values are documented in the patient's EMR.
D. SCOPE:	Diagnostic Imaging
E. PROCEDURES, GUIDELINES AND PROTOCOLS:	**Risk Factors for Contrast-induced Nephropathy/Nephrogenic Systemic Fibrosis** • Age> 60 • History of renal disease, including renal failure, dialysis, kidney transplant, single kidney, renal cancer, acute kidney injury, renal surgery. • History of hypertension requiring medical therapy • History of diabetes mellitus • Metformin or Metformin-containing drug combinations (Iodinated contrast only)

	CT Scan IV Contrast Dosing Regimen: Determined as per approved imaging protocol. Adjustments to contrast dose (volume) or rate will be directed by the supervising radiologist. • GFR greater than or equal to 30 mL/ min/ 1.73m^2: May administer IV contrast (Omnipaque 350) • GFR less than 30 mL/ min/ 1.73m^2 IV contrast is not recommended, contrast may be given based on medical necessity with approval from clinician and/or radiologist. • Stroke Alert cases in need of CT Head / CTA Head/ CTA Neck should not be postponed pending results of GFR. (For Stroke Alert cases requiring perfusion imaging, the absence of GFR information favors CT Perfusion over MR perfusion.) **MRI** IV Contrast Dosing Regimen: Determined by a "weight-based" calculation. **Gadavist; Eovist:** 0.5 ml contrast per10 lbs of patient weight for a maximum dose of 10 ml. (NB Cardiac MRI exams utilize a calculated dose equivalent to twice the weight based dose as per protocol.) • GFR greater than 60 mL/ min/ 1.73m^2 : May administer IV contrast (Eovist/ Gadavist). • GFR 30-60 mL/ min/ 1.73m^2 : May administer *full* dose of Gadavist. GFR less than 30 mL/min/1.73m2: Group 2 agents including Gadavist can be considered if the benefits outweigh the risks as determined by the referring provider or Radiologist
F. REFERENCES:	None
G. RELATED POLICIES:	None
H. SEARCH WORDS:	None

I. ENFORCEMENT:	Violations of this policy or associated procedures may result in appropriate disciplinary measures in accordance with University By-Laws, General Rules of Conduct for All University Employees, applicable collective bargaining agreements, the University of Connecticut Student Code, or other applicable University Policies .
J. FINAL APPROVALS:	1. Bruce T. Liang, MD (Signed) 11/07/2022 Bruce T. Liang, MD Date **Interim Chief Executive Officer & EVP for Health Affairs** **Dean, School of Medicine** 2. Anne Horbatuck (Signed) 11/01/2022 Anne D. Horbatuck, RN, BSN, MBA Date **Clinical Policy Committee Co-Chair** 3. Scott Allen, MD (Signed) 11/03/2022 Scott Allen, MD Date **Clinical Policy Committee Co-Chair** 4. Caryl Ryan (Signed) 11/02/2022 Caryl Ryan, MS, BSN, RN Date **Chief Operating Officer, JDH** **VP Quality and Patient Services & Chief Nursing Officer**
K. REVISION HISTORY :	Date Issued: 12/13/2002 Date Revised: 10/18/2022 Date Reviewed: