



Glomerular Filtration Rate (GFR) Study Preparation Requirements

Total duration of study: 4 hours.

Bleeding time: 2 blood samples are taken 1 - 2 and 3 - 4 hours post injection.

Pregnancy: Not contraindicated but clear clinical indication is required.

Breast feeding: Stopped for duration of study. Mothers are advised to express milk prior to study.

Medication: Some drugs can reduce renal function e.g. diuretics (frusemide), aminoglycoside antibiotics, penicillins, sulphonamides and aluminium (Blathen et al, 1978) and therefore all medications being taken should be recorded prior to the study being performed.

Biochemistry: recent U&E and eGFR is required.

Previous studies: Required.

Diet: Excessive intake of drinks containing caffeine including tea, coffee and Coke should be avoided after 10 pm the night before the test because of their diuretic effect (Clomius et al, 1979). Protein load may increase GFR (Wilkinson et al, 1991) and it is recommended to avoid high protein meals before the study. Since neither carbohydrate nor fat loads affect GFR, a light meal, low in protein would optimise accuracy and reproducibility. (Levine et al, 1986). A light breakfast is recommended. If the test straddles the lunch period then a light lunch e.g. sandwiches can be taken. Exercise has been shown to have a variable effect on GFR (Merrill et al, 1948, Kachadorian et al, 1970, Wilkinson et al, 1991). Strict bed rest is unnecessary, but some restriction of activity is necessary for good reproducibility.

Allergy: None.

Hydration: Patient is encouraged to drink water prior and during study.

Scanning time: Patient and clinical specific.

Pregnancy: Not contraindicated but clear clinical indication needs to be specified. [ACR - SPR Practice Guideline for Imaging Pregnant or Potentially Pregnant Adolescents and Women with Ionizing Radiation.](#)

Breast feeding: No interruption .

Medication: Kindly have your clinician speak directly with Nuclear Physician for full preparation.

Biochemistry: Recent U&E

Previous studies: Required.

Diet: No specific diet. Eat as usual. Bring a snack for duration of study.

Allergy: None.

Hydration: Patient is encouraged to drink water prior and during study.