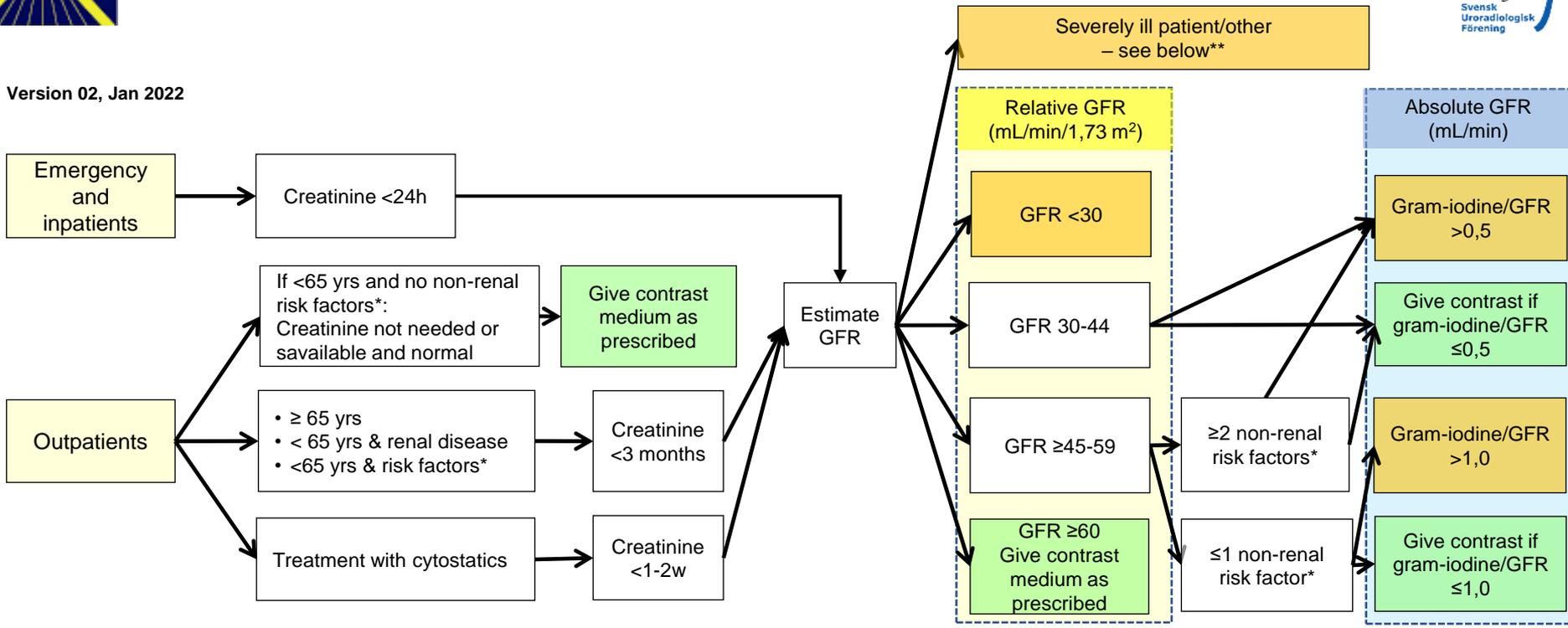




Risk assessment of contrast medium-induced acute kidney injury (CI-AKI) at CT

Version 02, Jan 2022



Green boxes

Radiographer/radiology nurse may give contrast medium as prescribed or change to low kV-protocol with reduced contrast medium dose to reach an adequate gram-iodine/GFR ratio without consulting a radiologist.

Orange boxes

Consult a radiologist!

Evaluate each patient individually according to the text to the right. Give contrast medium if the benefit outweighs the risk.

For further details see reference regarding Swedish guidelines: Eur Radiol. 2018;28:5384-95

1. Evaluate GFR, stable or conditions indicating unstable renal function (see orange box below) making GFR unreliable and assess number of non-renal risk factors. Risk increases with increasing g-I/GFR ratio and decreasing GFR, especially below 30 mL/min/1.73 m².
2. If major risk for CI-AKI consider if a) scan without contrast medium will give adequate information b) another diagnostic modality could be used and c) the dose could be reduced by low kV-technique if contrast medium must be used.

- *Non-renal risk factors to assess:**
1. Diabetes mellitus
 2. Chronic heart failure NYHA III/IV
 3. NSAID, nephrotoxic drugs
 4. Dehydrated (vomiting, diarrhoea, ileus)

- **Severely ill patient /other**
1. ICU-patient, multiple comorbidities, deteriorated general condition
 2. Unstable renal function (shock, acute heart failure, sepsis, acute renal disease, etc.)
 3. Recent major surgery
 4. Repeated contrast medium injections within 72h
 5. Falsely raised creatinine-based estimated GFR (e.g. abnormal low muscle mass or liver cirrhosis)