Patient with CIED and indicated radiotherapy

- Inform treating cardiologist and inform patient
- Determine patients’ pacing-dependency
- If ICD, Inform if anti-tachycardia therapy can be switched off by magnet
- If CIED check-up > 3 months ago, plan check-up prior to start of radiotherapy

- Photon beam energy <10MV
- Estimate dose on CIED (seed rawing for indication)
- Minimize dose on CIED with treatment plan optimisation

DOSE 0-10 Gy

- Pacing independent patient and
- Dose on CIED <2 Gy

YES

LOW RISK
- Audiovisual monitoring of patient
- In case ICD: program tachycardia therapy off or use magnet
- Letter to cardiologist
- ICDs: weekly check-ups

INTERMEDIATE RISK
See LOW RISK plus:
- Crashcart present during RT
- Weekly check-up CIED
- Possibility of external pacing
- Trained staff with cardiology expertise can be present within 10 minutes (if not, patients should be referred to another institute)

DOSE > 10 Gy

- Reconsider radiotherapy or CIED relocation

NO

HIGH RISK
- In exceptional cases a decision to start RT can be made
- Safety measures which are at least those used for intermediate risk patients
- ECG-monitoring during every fraction
- CIED checked within 24 hours by pacemaker technician

Extra CIED check after last RT fraction by pacemaker technologist (at 1, 3 and 6 months)