Aim
To establish a clinically acceptable dosimetric method which can then be used for all interventional procedures.

Purpose
Interventional radiological procedures can result in significant deterministic risks to the patient. Radiation-induced skin injuries have been reported by several authors after a variety of procedures.

Several methods for estimating skin dose are available. This study compares some possible methods of dosimetry for fluoroscopically-guided interventional procedures, using cardiac procedures as the test group.

Method
Patient dose is determined by two methods:
(a) direct measurement using an array of thermoluminescent dosemeters
(b) measurement of dose-area product (DAP) using a conventional DAP meter and both DAP and skin dose using a dual-chamber DAP meter.

Outcome
The results are used to provide:
- A comparison of methods for skin dose measurement.
- An assessment of the potential for 'hot spots' from cardiac procedures.
- Conversion factors for the approximate estimation of skin dose from measurements of dose area product for cardiac procedures.
- Skin doses and risks of deterministic effects from a survey of cardiac procedures.