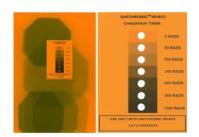
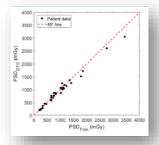
Comparison of peak skin dose and dose map obtained with real-time software and radiochromic films in patients undergoing abdominopelvic embolization

Joël Greffier^{a,b,*}, Asmaa Belaouni^a, Djamel Dabli^{a,b}, Jean Goupil^a, Romain Perolat^a, Philippe Akessoul^a, Tarek Kammoun^a, Adel Hoballah^a, Jean Paul Beregi^a, Julien Frandon^a

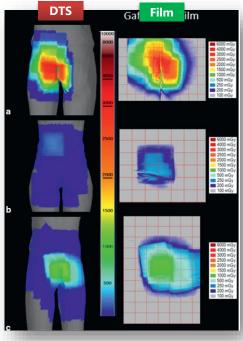
☐ Peak skin dose (PSD) was measured using (1) DTS and (2) Radiochromic films for abdominal procedures (including TACE, PAE, UAE), and results were compared (n = 40).



Radiochromic film



For all procedures, a substantial correlation was found between DTS-PSD & Film-PSD.



Similar dose maps in terms of size, shape, and positions were found between the DTS and the Film QA-XR software.

..., this PSD software (DTS) has many advantages. In addition to the accuracy of the PSD calculation and of the dose map generated, it allows real-time visualization of the dose map, thus sensitizing the operators. Two studies performed in interventional cardiology showed that DTS consequently reduces the PSD for long and complex procedures. Another advantage is that it allows choosing a digital anthropomorphic phantom model of morphology close to that of the patient, improving the calculation of both the PSD and dose map.

^a Department of Medical Imaging, CHU Nimes, Univ Montpellier, Medical Imaging Group Nimes, EA 2992, 30000 Nimes, France

b Department of Medical Physics, CHU Nimes, Univ Montpellier, 34000 Montpellier, France