

**Position statement on the use of Digital Mammography  
for Breast Screening in England  
January 2006**

The NHSBSP digital Steering Group have concluded that all of the currently commercially available direct digital mammography systems<sup>1</sup> (DR), but only one<sup>2</sup> of the commercially available computed radiography (CR) systems meet the image quality and dose standards expected when tested against the agreed European Standards for Digital Mammography<sup>3</sup>. The UK has made a significant contribution to the development of these standards and has adopted them for the NHS Breast Screening Programme.

Technical performance data, other clinical trials in Europe<sup>4</sup> and the recent American DMIST<sup>5</sup> study provides evidence to support the European Guidelines and the view of the NHS Breast Screening Programme that DR mammography systems are equivalent to the film screen systems currently in use. However, these systems still need to be evaluated in a clinical setting in the UK to evaluate practical issues such as throughput, use of previous films in softcopy reporting, compatibility with existing IT systems etc. These evaluations are ongoing and their conclusions will be reviewed by the NHSBSP Digital Steering Group prior to being made publicly available.

The majority of commercially available CR Systems do not meet the technical requirements for image quality and dose in the European standards. Nor is there any clinical trial data to attest their efficacy in a clinical setting.

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<sup>1</sup> Fischer Senoscan, Sectra Microdose, Siemens Novation, GE 2000D and DS, Lorad Selenia

<sup>2</sup> Fuji Profect CR System

<sup>3</sup> Van Engen R, Young KC, Bosmans H and Thijssen M. The European protocol for the quality control of the physical and technical aspects of mammography screening. Part B: Digital mammography. In: European Guidelines for Breast Cancer Screening, 4th Edition. Luxembourg: European Commission, 2005 (In press and available on line at [www.euref.org](http://www.euref.org) )

<sup>4</sup> Per Skanne MD, PhD, Kari Young, MD, Arnulf Skjennald, MD, PhD; Population –based Mammography Screening: Comparison of Screen-Film and Full-Filed Digital Mammography WITH Soft-copy Reading-Oslo 1 Study; Radiology 2003; Volume 229; 877-884

Per Skaane, MD, PhD, Arnulf Skennald, MD, PhD,; Screen-Film Mammography versus Full-Field Digital Mammography with Soft-Copy Reading: Randomized Trial in a Population-based Screening Program –The Oslo 11 Study; Radiology 2004; Volume 232; 197-204.

<sup>5</sup> Pisano ED, Cole EB, Kistner EO et al. Interpretation of Digital Mammograms: Comparison of Speed and Accuracy of Soft-Copy versus Printed-Film Display. Radiology 2002; 223:482-488

Pisano et al ;New England Journal of Medicine in October 2005 (volume 353 pages 1773-83).