Diagnosis of skin cancer: The VivaScope imaging system (and other alternative technologies identified in scoping)

The VivaScope imaging system is a non-invasive reflectance confocal microscope system designed to help diagnose potentially malignant skin lesions. It produces a highly magnified image of skin cells that is reportedly comparable to that of a skin specimen (biopsy) which is examined under a microscope in a laboratory. In addition, the VivaScope imaging system provides information on the upper layer of skin and captures in vivo real time effects, such as blood flow, which can be used to inform clinical decisions. The VivaScope imaging system is designed for use in dermatology outpatient and surgery settings in conjunction with, or as an alternative to, dermoscopy in the investigation of suspicious lesions, and as a real time biopsy tool and guide for surgery. It is claimed that the VivaScope imaging system has higher diagnostic accuracy than visual assessment of skin lesions by eye or dermatoscope, which could potentially result in fewer invasive biopsies. It is also claimed that use of the VivaScope imaging system could lead to identification of tumours at a more curable stage, give more accurate presurgical margins and provide better treatment monitoring. This could result in fewer hospital visits and lower treatment costs. The NICE Diagnostics Assessment Programme will assess the clinical and cost-effectiveness of the VivaScope imaging system (and other alternative technologies identified in scoping) in order to make recommendations on its use in the NHS.