

Title	Positron Emission Tomography (PET) – Diagnostic and Clinical Use
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Aim

To update the knowledge on diagnostic and clinical use of PET by summarizing the findings of recent health technology assessment (HTA) reports and systematic reviews of relevance.

Conclusions and results

The report is based on 14 HTA reports and 3 systematic reviews.

- Many references in the reports overlap, and they generally conclude in agreement. The clinical use of PET as diagnostic tool has increased during the period, despite the lack of good documentation on clinical effectiveness. The main areas of use are still within oncology, neurology, and cardiology.
- HTA reports published after the INAHTA report of 1999 and the SMM report in 2000 conclude that PET is more accurate than other diagnostic procedures for several indications in oncology and should therefore be used.
- This applies mainly in diagnosing non-small cell lung cancer (NSCLC) and solitary pulmonary nodules, staging of Hodgkin's disease, identifying metastasis from malignant melanoma and colorectal cancer, and in finding tumors in the head/neck.
- It is important to note that PET is still in the development phase. Hence, examinations should be performed within the framework of clinical trials since there is a need for knowledge collected systematically.

It is also important to note that "PET scanning should be used only if the results of the test will affect patient management".

Methods

A literature search for 2001–2003 was performed in the following databases: Health Technology Assessment (HTA) database, Database of Abstracts of Reviews of Effectiveness (DARE), NHS Economic Evaluation Database (NHSEED), TRIP database.