IAEA
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Atoms for Peace

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Using cyclotrons and PET scans to improve cancer diagnosis and treatment in Thailand

The challenge…

Cancer has been one of the leading causes of death in Thailand for over a decade, with more than 30 000 deaths annually and over 100 000 new cases reported each year. The aim of this project was to improve the national programme for cancer diagnosis and treatment, and to enhance the utilization of cyclotrons and positron emission tomography (PET) scans in the most effective way by sharing resources.

The project…

The project established a cyclotron facility and related laboratories in the National Cyclotron and PET Centre for the production of positron emitter radiopharmaceuticals. These are distributed around several PET imaging centres in Bangkok.

Advanced nuclear medicine instruments were installed, including PET/CT, cyclotrons and radiopharmaceutical production facilities for PET tracers. Training was provided through 12 fellowships, a scientific visit, four expert missions and two workshops

As a result of the project, medical diagnostics using nuclear medicine techniques to international standards are now available in Thailand.

Conducting a PET acceptance test

The impact…

The project has greatly improved the national programme for cancer treatment, facilitating access to improved health care and medical diagnostics using nuclear medicine techniques, as well as perfecting professional expertise in these fields. It has involved collaboration in research, education and high level technology with local institutes and abroad. This has resulted in good cooperation and the sharing of knowledge and experience among all nuclear medicine staff members in the country.

The project also led to a regional meeting and an international conference on cyclotrons and PET.

The entrance to the IPET 2007 international conference

THA/6/033: Establishing a cyclotron facility and positron emission tomography centres in Thailand