

Media Release

## New radiopharmaceutical production facility opens

**Sydney:** A new state-of-the art facility opened today will provide hospitals with supplies of radiopharmaceuticals that will improve treatment and increase the chances of survival for thousands of Australians with a wide range of life-threatening diseases, such as cancer.

The Lucas Heights facility includes two medical cyclotrons that will produce a fluorine-18 used in PET<sup>1</sup> medical imaging systems. The FDG<sup>2</sup>-PET image allows doctors to more accurately 'see' disease in the body and provide targeted treatment.

Opened by the Minister for Innovation, Industry, Science and Research, Senator the Hon Kim Carr, the \$10 million facility built by PETNET Solutions Australia, is a wholly owned subsidiary of ANSTO<sup>3</sup>.

PETNET Solutions Australia Chairman, Dr Ron Cameron, said the new facility would increase the availability of FDG to hospitals in New South Wales, allowing more patients to have access to the PET nuclear medicine procedure.

"The PETNET Solutions facility will improve the capacity of Australian hospitals to enhance health outcomes for patients with diseases such as lung, breast and colorectal cancers, as well as lymphoma, heart disease and epilepsy," he explained.

FDG is essential for PET scanning as it lights up cancer 'hot spots' allowing precise images of the exact location of disease at an early stage in its development.

FDG has a short radioactive life span of about 110 minutes. This means that it is usable only for a few hours before the activity level diminishes. This prevents the importation of the radiopharmaceutical and requires local production.

"The new PETNET Solutions facility will help ensure greater availability of FDG for hospitals which potentially could reduce radiopharmaceutical costs and enable hospitals to use their capital investment for more PET scanners rather than cyclotrons, which carry a heavy price tag," said Dr Cameron. In Australia, FDG has been approved for use in detecting certain cancerous tumours, coronary artery disease and epilepsy.

PETNET Solutions is an integrated FDG production franchise developed globally by Siemens Medical Solutions. PET is the fastest growing medical imaging technique in the world however Australia is behind some developed countries in the use of this key diagnostic technology. The ratio of PET cameras to people is 10 times higher in the US than in Australia. With an ageing population and diseases such as cancer and heart disease on the increase, demand on the health system is expected to increase dramatically.

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<sup>1</sup> Positron Emission Tomography is a nuclear medicine imaging machine (camera) that can detect a unique positron emitting isotope, F-18.

<sup>2</sup> Fluor-deoxy-glucose is a sugar analogue that is labelled with F-18. In many cancers, there is substantially increase in sugar tumour uptake because of faster tumour growth compared to normal tissue. So disease can be localized when a patient is injected with FDG and imaged with this special PET camera.

<sup>3</sup> ANSTO is the Australian Nuclear Science and Technology Organisation, the country's national nuclear research and development organisation and the centre of Australian nuclear expertise. It is based at Lucas Heights in Sydney's South.

John Hodder, General Manager, PETNET Solutions Australia sees great advantage in having two cyclotrons at the Lucas Heights facility. “This will allow us to ensure a consistent supply of FDG for patients as well as to produce other compounds for research. And ultimately, more research on next generation pharmaceuticals will lead to better ways of localising and treating disease,” he said.

PETNET Solutions operates the largest international PET radiopharmaceutical production network with over 52 production and distribution centres worldwide, producing and distributing PET radiopharmaceuticals to hospitals, clinics, and research facilities for PET imaging.

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**For further information or to arrange a media interview please contact Jennifer Jolly on (0410 621 063) at Headline Public Relations on (02) 9555 2256.**