

## Backgrounder

## **PET/CT Information**

- A PET/CT scanner is a diagnostic tool primarily used to detect cancer and its spread, assisting with treatment recommendations and prognosis. It can also be used to detect neurological and cardiac conditions and for the diagnosis and treatment of epilepsy, dementia and movement disorders.
- PET/CT stands for positron emission tomography/ computed tomography.
- The full-body, three-dimensional imaging tool provides a more thorough picture of organs and tissues in the body, yielding clinical information not available from diagnostic tests such as MRI exams (magnetic resonance imaging) or CT scans (computed tomography).
- With the help of radiologists, physicians are able to pinpoint the location of cancer within the body. For example, a PET/CT scan can help determine if a mass is malignant or benign, detect cancer in normal-sized lymph nodes, and differentiate between scarring and a recurrent tumour.
- Patients will receive earlier diagnoses and faster treatment.
- The new PotashCorp PET/CT Centre at Royal University Hospital (RUH) began serving patients in May 2013. Once fully operational, it is expected to provide 1,900 scans per year of patients, and will assist in the education of future radiologists. The scanner will also be used for research.
- PotashCorp matched \$1 million in donations for the PET/CT Centre. The new centre will complement the hospital's current MRI unit. In 1990, Saskatchewan's first MRI was made possible thanks to a \$1 million matching gift from PotashCorp.
- A PET-CT scan can help to reduce the need for invasive examinations or surgical procedures, resulting in better health for people in Saskatchewan.
- This PET/CT scanner can conduct diagnostic tests on up to seven clients a day and is operating three days a week. The service will expand as demand increases.
- Specific medical isotopes are used to create a radiopharmaceutical, which is injected into a vein
  in the body. The liquid is absorbed by organs and tissues, enabling the PET/CT to create detailed
  images of the area being examined.
- The University of Saskatchewan's planned cyclotron will be able to supply some of the medical isotopes for the PET/CT when the cyclotron begins production in 2016.
- Model: PET/CT Discovery 710 the newest PET/CT offered by GE Healthcare and the first of its kind in Canada.
- See more about medical imaging: www.health.gov.sk.ca/diagnostic-imaging-network

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