# Hitachi and AccSys Deliver First PET Isotope Production System Utilizing Linear Accelerator

### Hitachi General Hospital Starts PET Program for Oncology This Spring

Tokyo, January 22, 2004 --- Hitachi, Ltd. (NYSE: HIT / TSE: 6501) and AccSys Technology, Inc. (Hitachi's subsidiary company) today announced that they have delivered the first dedicated radioisotope production system utilizing a Positron Tracer Production System, a linear accelerator developed by AccSys for use in Positron Emission Tomography (PET). Hitachi General Hospital of Hitachi, Ltd. will begin PET scans using isotopes produced with the system in the spring of 2004.

Hitachi and AccSys intend to bring this radioisotope production system to market from 2005.

Cancer has been the most common cause of death in Japan since 1981, accounting for about 30% of all deaths. As incident rates increase year by year, cancer detection technologies are improving worldwide. PET is one of the most accurate methods of cancer determination. Patients are injected with a compound that emits positrons or anti-electrons. When these positrons come into contact with electrons they annihilate or convert the mass into energy seen as coincident 511 keV gamma rays. The most common is an F18 labeled glucose called FDG. Cancer cells need high levels of glucose to replicate so malignant tumors absorb the FDG and the remaining pass through the body. PET scanners detect where the radiation is and reconstruct an image from this location. PET is very effective not only for early cancer detection, but also in neurology and cardiology in the research of various diseases such as Parkinson's disease. Alzheimer's disease and heart disease.

PET is gaining acceptance by many hospitals and medical institutions worldwide, as it is able to detect small tumors of less than 1.0 cm in size, which can be easily cured but are currently difficult to diagnose. With FDG, the sensitivity and specificity of PET is greater than that of other nuclear medicines and demonstrates a metabolic function that Computed Tomography (CT) and Magnetic Resonance Imager (MRI) cannot.

AccSys, the world's leading manufacturer of compact ion linear accelerator for medical, industrial and research operations, introduced the Positron Tracer Production System line of positron tracer production systems in 1998 as the modern alternative to older cyclotron accelerator technology. The flagship model of Positron Tracer Production System is specifically designed to produce clinical quantities of 18F-FDG (the most commonly used positron tracer in PET imaging). It is lighter and more

compact than competing cyclotron systems and can be installed in existing buildings at a much lower cost. Options include a multi-position target ladder with multiple targets that can produce all the commonly used PET radioisotopes. Each Positron Tracer Production System is easy and simple to operate due to the highly automated control software and user-friendly graphical interface. This makes it very suitable for clinical PET examinations.

Through the adoption of highly advanced cancer examination systems such as PET, Hitachi General Hospital will play a primary role as a cancer treatment facility in the northern part of Ibaraki prefecture in Japan.

Hitachi and AccSys plan to promote this new radioisotope production system worldwide through their worldwide sales network.

#### About Hitachi, Ltd.

Hitachi, Ltd. (NYSE: HIT), headquartered in Tokyo, Japan, is a leading global electronics company, with approximately 340,000 employees worldwide. Fiscal 2002 (ended March 31, 2003) consolidated sales totaled 8,191.7 billion yen (\$68.3 billion). The company offers a wide range of systems, products and services in market sectors, including information systems, electronic devices, power and industrial systems, consumer products, materials and financial services. For more information on Hitachi, please visit the company's Web site at http://www.hitachi.com.

#### For further information on the system:

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Information contained in this news release is current as of the date of the press announcement, but may be subject to change without prior notice.

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