

2005.01.24

The Institute of Nuclear Energy Research develops a new technique for manufacturing Octreotide, transferring the technology to Taiwan Panbiotic Laboratories - Drug shows promise in the treatment of diseases related to neuroendocrine tumors

The Institute of Nuclear Energy Research, Atomic Energy Council, Executive Yuan (hereafter shortened to INER) has developed a new process for manufacturing Octreotide, and obtained patents for this technique in Taiwan, the U.S. and New Zealand. The technology has been transferred to Taiwan Panbiotic Laboratories, which obtained a drug license from the Department of Health in October 2004, becoming the first pharmaceutical firm in Taiwan to produce Octreotide. This drug shows promise in the treatment of diseases related to neuroendocrine tumors.

Panbiotic Octreotide intravenous injection fluid (DOH No. 046547) is indicated for the treatment of acromegaly that does not respond to surgery, radiation therapy or dopamine agonist therapy. The drug is capable of controlling acromegaly symptoms and reducing plasma levels of growth hormone and Somatomedin-C, relieving symptoms related to gastrointestinal and pancreatic endocrine tumors, preventing pancreatic surgery complications, as well as treating gastroesophageal variceal bleeding and preventing rebleeding.

Octreotide is composed of eight different amino acids. It is produced by using solid phase synthesis to bind the eight amino acids on resin, and then performing cleavage, cyclization and purification steps to obtain the final product. This new manufacturing process is easy to perform, time-saving, and produces a product that is 99% pure.

INER will continue to promote new drug research that meets the needs of the domestic biopharmaceutical industry, developing new manufacturing techniques and transferring them to industry in the interests of making Taiwan's biopharmaceutical products more competitive in the international marketplace.