RADIOPHARMACEUTICAL USAGE—ASIA/PACIFIC TRENDS

Helen M Garnett

Australian Nuclear Science and Technology Organisation, Australia

ABSTRACT

The Pacific Rim has over 50% of the worlds population but, except for Australia, Japan and North America, there is a relatively low utilisation of radiopharmaceuticals. The number of nuclear medicine cameras in Asian countries, excluding Japan, just exceeds the number of cameras in Australia. Japan and Australia each have over 16 cameras per million population. It is estimated that the Republic of Korea, Taiwan, Singapore and Hong Kong have 2-5 cameras per million population while the remaining countries appear to have less than 1 camera per million.

In Australia diagnostic nuclear medicine is now being used at a frequency which means every Australian is likely to have a nuclear medicine procedure in their life time, a statistic similar to that for the USA. Over 50% of the Medicare rebated procedures in Australia are for bone scans with heart, thyroid and lung scans the next most common procedures.

In USA and Australia, oncology is a growing area of application. Palliative and therapeutic applications of radiopharmaceuticals are increasing. Positron emission tomography is proving valuable for whole body evaluation of cancer and in Australia studies are underway to estimate the cost effectiveness of this modality. Effective use of PET for cancer diagnosis may influence the uptake of emerging therapeutic radiopharmaceutical applications.

As nuclear medicine practice grows in Asia a question to be considered is: Will the patterns of utilisation become similar to those of the countries in the Asia/Pacific region where utilisation of radiopharmaceuticals is commonplace today, or will the utilisation of radiopharmaceuticals show very different trends? Factors which may influence the future scenarios will be explored.