Launch of Cancer Staging Smartphone App, Vienna, September 16, 2015

A smart-phone App for cancer staging has been developed by the International Atomic Energy Agency (IAEA) and the Tata Memorial Centre (TMC), an autonomous institution under the Department of Atomic Energy, Government of India. This smart-phone App was launched at an event held in Vienna on September 16, 2015 on the side lines of the IAEA General Conference. The smart-phone App was conceptualised and developed by a 3-member medical team of TMC and nuclear medicine physicians at the IAEA, under an IAEA Regional Cooperative Agreement (RCA) Project. The IT development was undertaken by an Indian company.

Cancer is a leading cause of morbidity and mortality worldwide and for fighting the cancer menace, staging of cancer is a crucial approach to understand the extent, location and spread of tumour in the body. Staging helps doctors to develop an objective prognosis and design a correct treatment plan for each individual patient. Decision on use of surgery, chemotherapy or radiotherapy, or combination therapy, is based on the staging of the cancer.

For this purpose, TNM Cancer Staging is a system developed and updated by American Joint Committee on Cancer (AJCC) and the Union for International Cancer Control (UICC) and published as AJCC TNM staging manual to classify cancers based on the extent of its spread, on a globally recognised scale. The TNM staging system is based on the extent of the tumour (T), the extent of the lymph node spread (N) and presence of distance spread – metastasis (M). The smart-phone App for TNM cancer staging launched now will facilitate easy access and use of the manual.

The new cancer staging smart-phone app will be available for download on iOS, Android and Windows platforms, free of cost. Doctors across the world can make use of this application to assign an appropriate TNM Stage to the disease of their patients. It comes with a unique Interactive Search feature which acts as a stepwise guide for users by providing them with options of possible symptoms that finally lead to deriving the TNM Stage as per established standards. This initiative would be a valuable step in facilitating improvement of quality and uniformity of care for cancer worldwide and is a step towards empowering professionals about objective decision making thus improving the cancer management, which in turn will positively impact the cancer management outcome.

The above contribution of TMC is in line with its philosophy of ‘Cancer Care for One and All’, and of its sustained participation in activities that positively impact accessibility, affordability and quality of cancer care. Through this development initiative, the expertise of TMC will bring benefits to cancer patients throughout the world and further strengthen its support to the medical community.

India is happy to be a part of the launch of this tool and share its core competencies in the twin fields of cancer care and IT. The project is also another good example of the fruits of south –
south cooperation in the IAEA RCA Member States that will benefit the countries in other regions of the world too.

Tata Memorial Centre has been continuously engaged in the development and propagation of cost-effective and efficacious methodologies and tools, as well as networking initiatives, for strengthening cancer management. An important initiative of TMC in this direction has been the National Cancer Grid (NCG) instituted by the Department of Atomic Energy (DAE). The NCG is a network of cancer hospitals across India, which share human and intellectual resources to attain uniform standards of cancer care throughout the country irrespective of the patient’s financial and social status.

Another important contribution of TMC, along with the Bhabha Atomic Research Centre (BARC), has been the development of indigenous radiotherapy-related equipment, telecobalt machine called the Bhabhatron, and the Digital Radiotherapy Simulator called the Imagin. Radiotherapy has been established as an effective and a non-invasive modality of cancer treatment. However, the therapy cannot be availed by several patients due to shortage of equipment and facilities. To improve its accessibility, TMC has installed the equipment at various locations in India and in other countries like Vietnam, Nigeria and Mongolia.

TMC is also the Asia hub for the International Agency for Research on Cancer (IARC). As a part of this status, it aids the establishment of cancer registries across Asia. These registries in turn act as points of contact in development and implementation of cancer control in their respective regions. They also provide training and guidance to regional care providers from time to time. So far, the hospital has helped setting up cancer registries in ten countries across Asia. TMC-organised periodic training events, consulting activities, and site visits to several countries in the Asia Pacific Region bear testimony to the commitment of TMC to support cancer care at an international level.