Session 2.4
Supporting Human Health through Radiopharmaceutical Production

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Develop and produce radioisotopes and radiopharmaceuticals for diagnosis and therapy in nuclear medicine, contributing to the improvement of the quality of life of patients.

Nuclear and Energy Research Institute (IPEN) is a state autarchy managed technically and administratively by the Brazilian National Nuclear Energy Commission (CNEN) affiliated with the ministry of Science, Technology, Innovation and Communications and for Education purposes is associated with the University of Sao Paulo.

MISSION IPEN

Our commitment is to improve the quality of life of the population by producing scientific knowledge, developing technology, generating products and services, and training human resources.

MISSION Radiopharmacy Center

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$^{131}$I labelled molecules
Lyophilized production for labelling with $^{99m}$Tc

BRA6005 Nuclear Medicine 1976
$^{131}$I MIBG

$^{51}$Cr Labelled molecules

$^{99}$Mo/$^{99m}$Tc Generator

$^{67}$Ga

$^{123}$I

BRA6006 - Radiopharmaceuticals 1980

RLA - Quality Control of Nuclear Medicine Procedures in Vivo 1980

BRA 6008 - Radioisotopes in Clinical Medicine 1981

BRA6009 - Radioisotopes in Medicine 1982

BRA6010 - Radioisotopes in Medicine 1983

RLA - TC on production and control of radiopharmaceuticals 1983

BRA4039 - Production of Molybdenum-99 1989
$^{201}$TI
$^{153}$Sm-EDTMP
$^{18}$F-FDG
$^{131}$I capsule

BRA4040 - Radioisotope Production with a Cyclotron 1991
RLA - Quality Assurance in Nuclear Medicine 1993
RLA - TC on Radiopharmacy 1993
BRA6013 - Traceability of Radionuclide Measurements and QA in Medicine 1999

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Optimization of synthesis and quality control procedures for the preparation of fluorine-18 and iodine-123 labelled peptides

Preparación, controle de calidad y validación de radiofármacos de $^{99m}$Tc, basados em anticuerpos monoclorares

Development of Generator Technologies for Therapeutic Radionuclides ($^{188}$W-$^{188}$Re e $^{90}$Sr-$^{90}$Y)"

Development of therapeutic radiopharmaceuticals based on $^{177}$Lu for radionuclide therapy

Strengthening Quality Assurance in Nuclear Medicine

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$^{68}\text{Ga-DOTATATE}$

$^{18}\text{F-Choline}$

$^{18}\text{F-FLT}$

**CRP** – Development of Therapeutic Radiopharmaceuticals Based on $^{188}\text{Re}$ and $^{90}\text{Y}$ for Radionuclide Therapy – 2008

**CRP** - Developing Techniques for Small-Scale Indigenous Mo-99 Production using LEU Fission or Neutron Activation 2009

**CRP** – Preclinical Evaluation and Formulation of $^{177}\text{Lu}$ and $^{90}\text{Y}$ – Labelled and Monoclonal Antibodies for Cancer Therapy 2010

**CRP** - Development of $^{68}\text{Ga}$ based PET radiopharmaceuticals for management of cancer and other chronic diseases - 2013

**RLA** - Curso Regional de Capacitación sobre Validación 2016

**BRA6027** - Improving protocols in nuclear medicine services and in the development of new radiopharmaceuticals 2016

**CRP** - Copper-64 Radiopharmaceuticals for Theranostic Application 2017

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Thank you

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