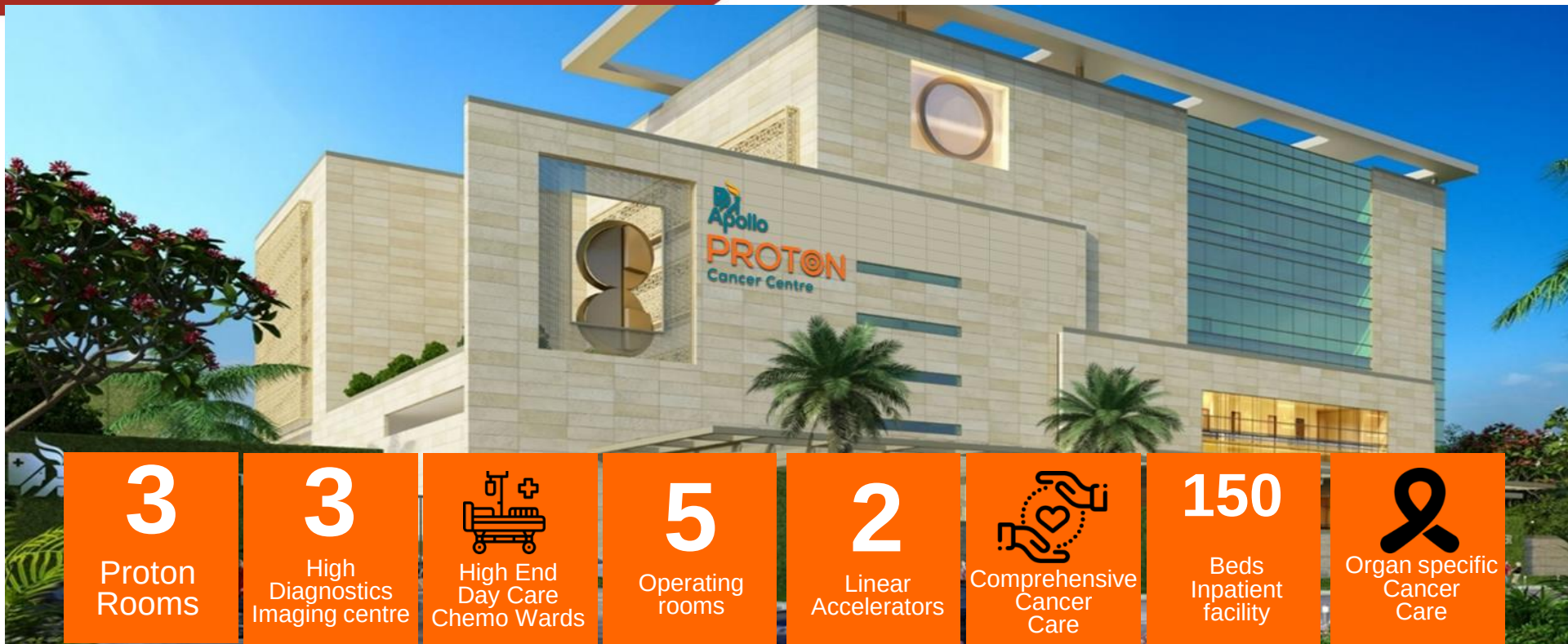
Apollo Proton Cancer Centre

- an introduction

South-East Asia's first and only Proton Therapy Centre



3 Proton Rooms	**3** High Diagnostics Imaging centre	High End Day Care Chemo Wards	**5** Operating rooms	**2** Linear Accelerators	Comprehensive Cancer Care	**150** Beds Inpatient facility	Organ specific Cancer Care

"India's First Dedicated Cancer Hospital accredited by JCI"

APOLLO PROTON CANCER CENTRE – ABOUT OUR FACILITY

The Apollo Proton Cancer Centre (APCC) is a 150-bed integrated cancer hospital that offers advance cancer care. It is South Asia & the Middle East's first Proton Therapy and a major milestone in India's concerted focus to battle and conquer cancer. Powered by the pencil beam proton therapy & cutting-edge multi room Proton Centre this is the first and only cancer hospital in India with a JCI accreditation the gold standard in quality

The hospital is a beacon of hope for over 3.5 billion people and is revolutionizing radiation oncology not just in India, but across multiple regions .

The advanced Proton Therapy at APCC is complemented by a fully integrated clinical team that offers the most advanced treatment procedures in surgical, radiation, medical oncology. True to the Apollo Pillars of Expertise and Excellence, the Centre brings together a powerful medical team helmed by some of the influential names in cancer care.

Clinical Expertise

- Robotic Surgery
- Cancer Management
- Bone & Joint
- Cardiac Care
- Transplants
- Interventional Radiology
- Brain & Spine
- Metabolic & Bariatric Surgeries
- Diagnostics

Overview

1. CMT approach

2. Well managed proton centre with pencil beam technology and with capacity to treat over 50 pts and each patient is around a CMT approach

3. Digital Pet ct – 1 st in India

4. International Tumor Board .

5. 3 Tesla MRI .

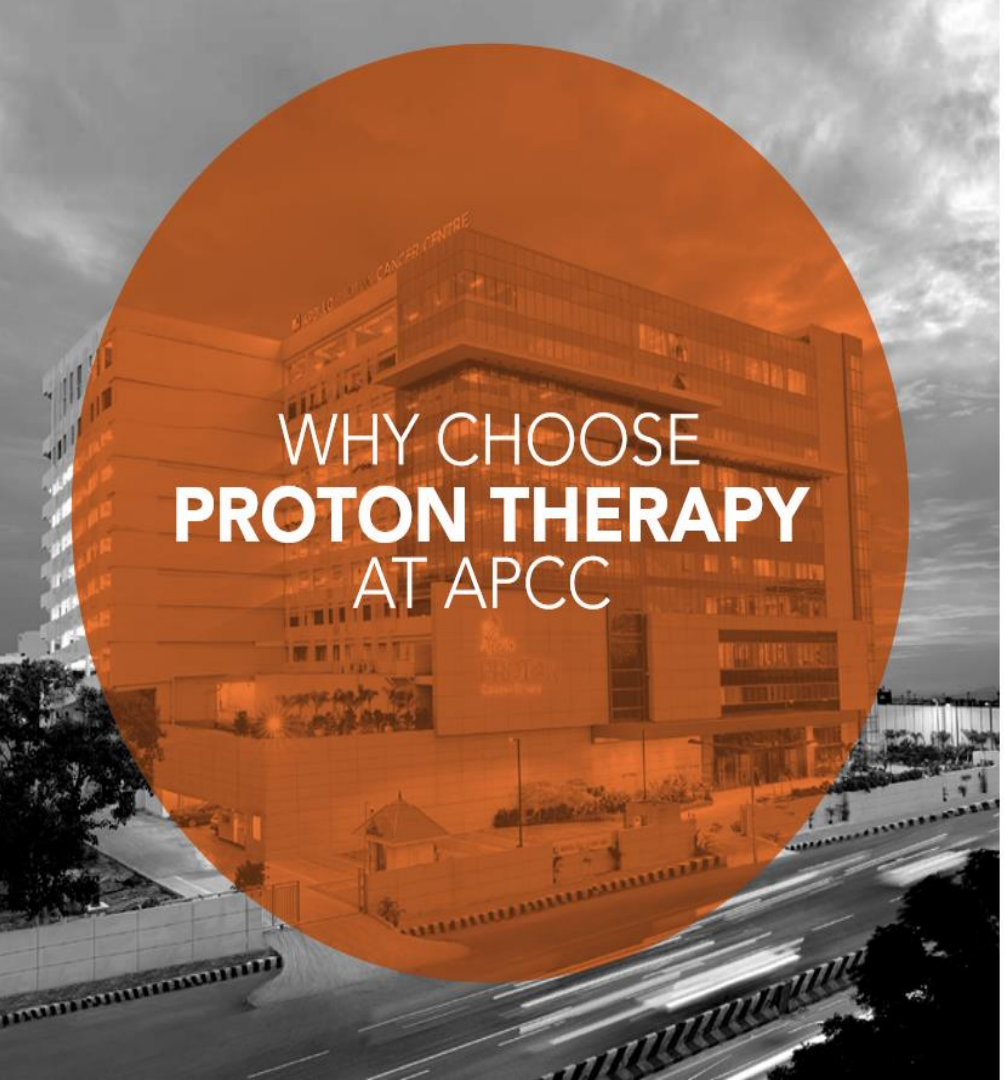
6 . Integrated and Advanced cancer centre

7. Approx 1000 proton therapy cases treated successfully

8. Only dedicated cancer centre accredited with JCI

9. Digital Pathology

10. Clinical teams with over three decades of experience .



WHY CHOOSE **PROTON THERAPY** AT APCC

PINNACLE OF **RADIATION THERAPY**

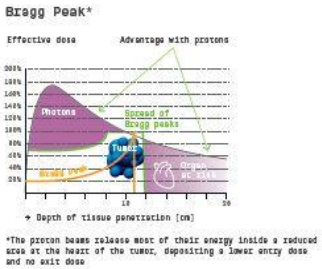
A medical procedure anchored on sub-millimetre accuracy, an advanced therapy that attacks cancerous cells and spares healthy tissues, when offered by a renowned institution can be a boon for patients seeking affordable and accessible cancer care.

HERE IS WHY PROTON THERAPY AT APCC IS SAFER AND MORE EFFECTIVE:

- In conventional therapy, the X-ray beam delivers an 'exit dose' along the path beam, which can damage normal tissue or organs.
- Proton Therapy uses high-energy proton beams, instead of X-rays, to treat cancer. These high precision beams attack only the cancer cells.
- The point where most energy is released by the proton path beam can be accurately set to conform to the shape and depth of a tumour.
- Offered in a multi-room environment, considered as the pinnacle of Radiation Oncology.
- Powerful cyclotrons, fully- revolving gantries and state-of-the-art delivery modes in the treatment process ensure unprecedented precision.

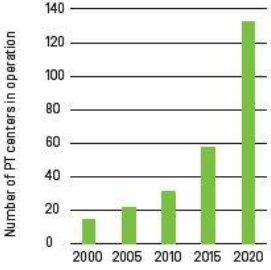
10 reasons why one should consider proton therapy

1 Physics of Protons

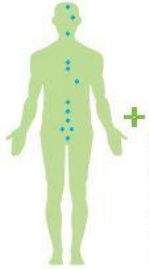


*The proton beams release most of their energy inside a reduced area at the heart of the tumor, depositing a lower entry dose and no exit dose

2 Become a Leading Center



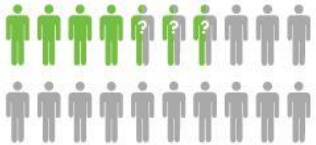
3 Expanding Indications



NCCN guidelines:**

Central Nervous System Cancers
Head and Neck Cancers
Non-Small Cell Lung Cancers
Hepatocellular Carcinoma
Eosophagial and Esophagogastric Junction Cancers

4 Proper Patient Selection

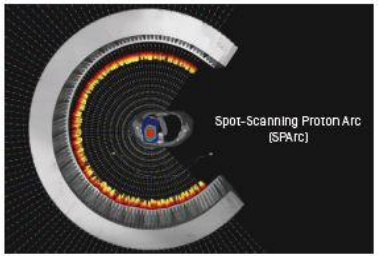


5 Large Patient Population

23%

23% of patients are treated using proton therapy in centers who are equipped with both photon and proton therapy*

6 Be an Innovator



7 More Compact and Affordable Solutions

8 High Throughput

12 minutes for a pelvic with two fields

Up to 30 fractions per day in 9-10 hours

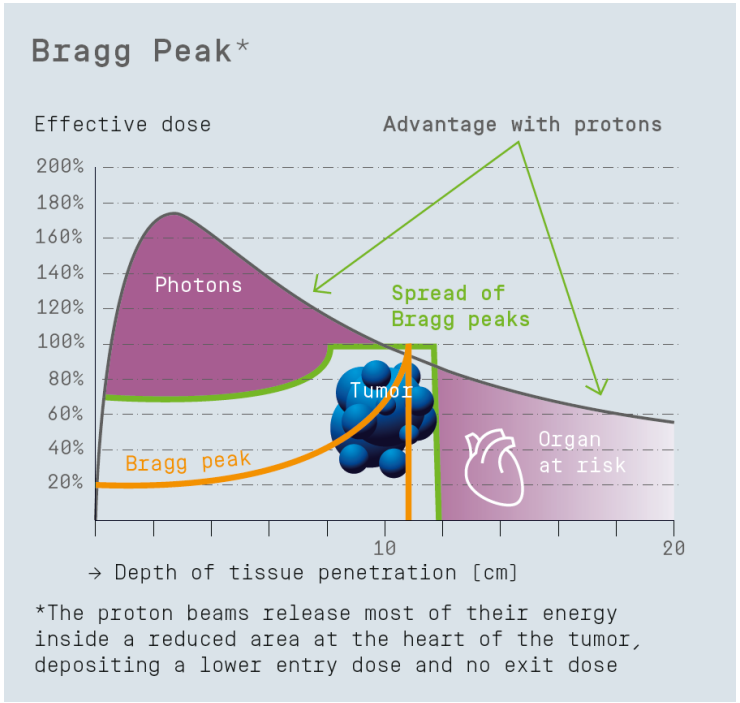
98.24% average uptime in 2018

WELLS-KNIGHTON HEALTH SYSTEM

9 Participate in Clinical Trials

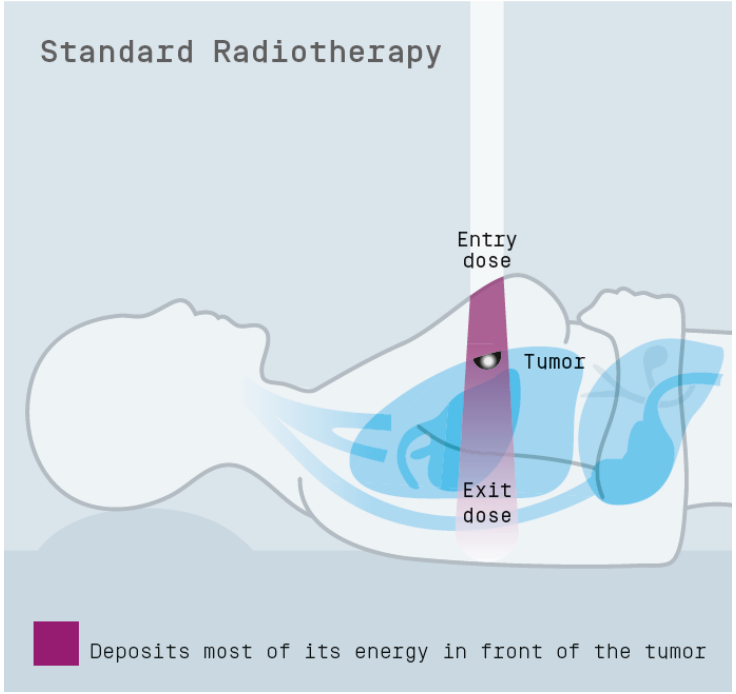
10 Fast Installation Time

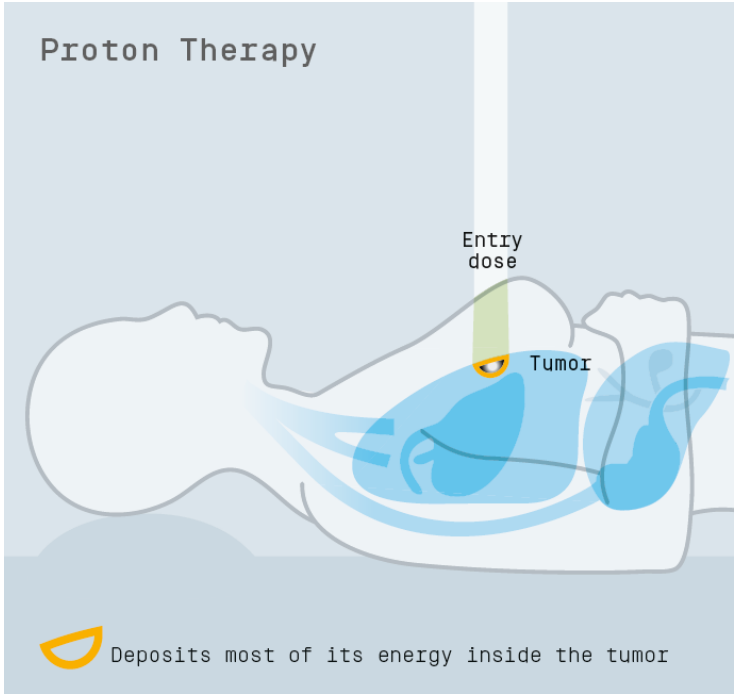
The Bragg peak



- Minimal radiation exposure of healthy organs
- Potential to reduce the risk of secondary cancers
- Potential to improve the quality of life for patients during and after treatment
- Possibility of retreatment

Standard Radiotherapy and Proton Therapy



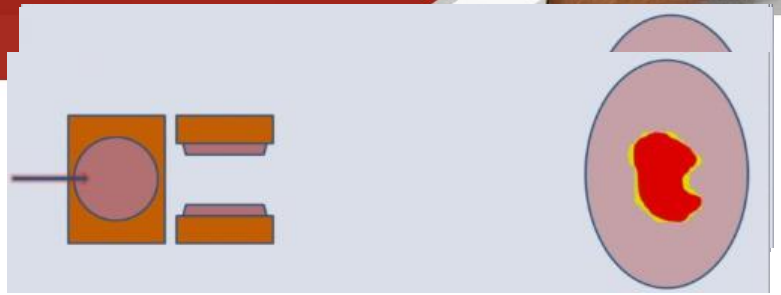


Modern Proton Beam therapy

Pencil Beam technology (IMPT)

RaySearch Laboratories

RayStation



Cone beam CT
IGRT

Monte Carlo algorithms

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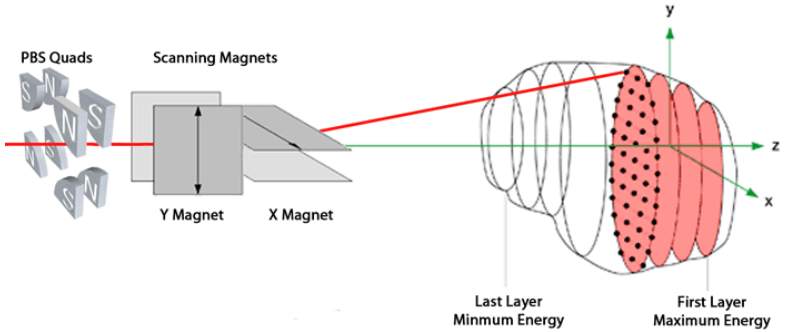
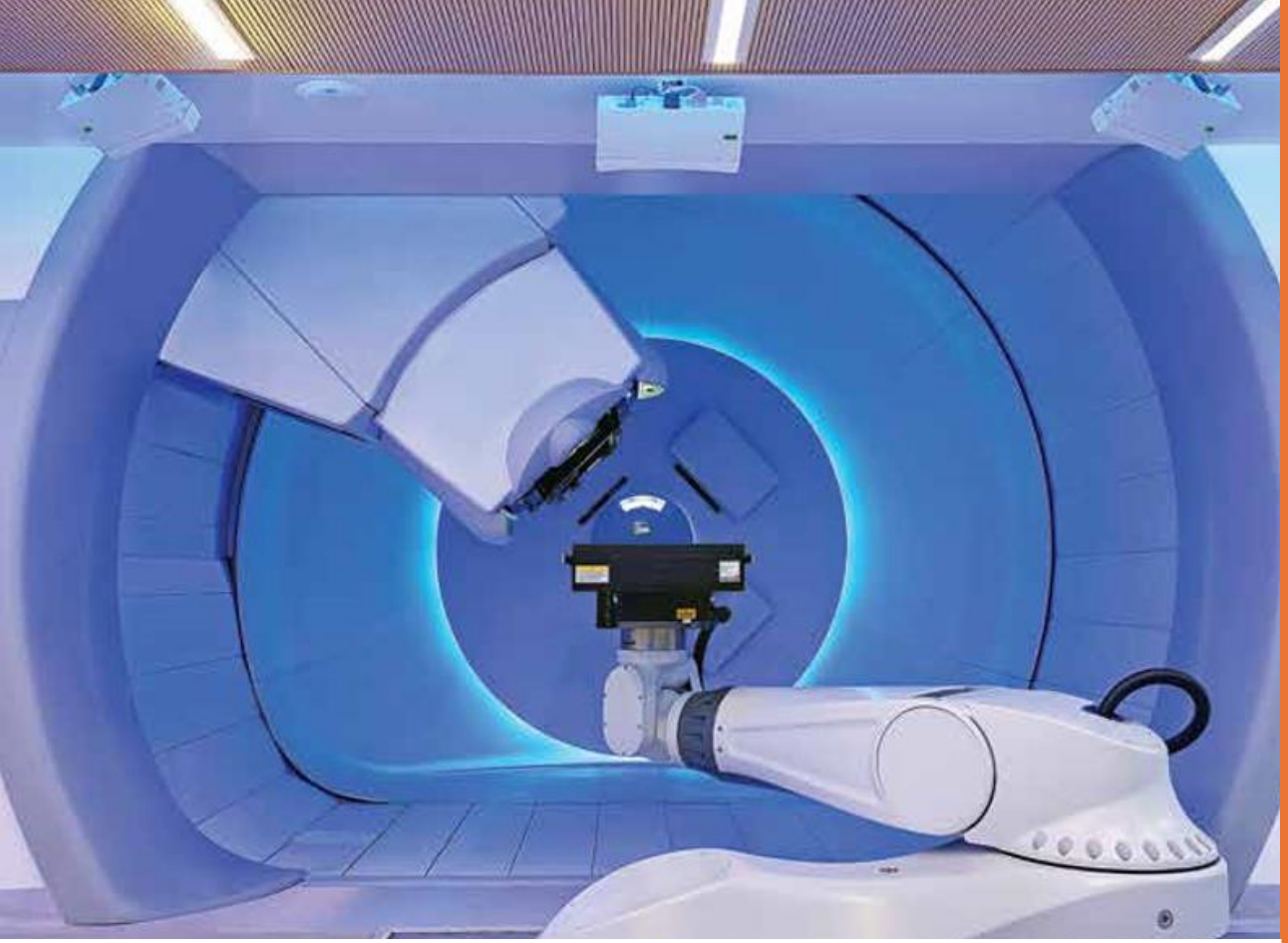


Ultraprecise dose sculpting of most complex tumour shape



Over 1000 Cancer Patients Successfully Treated with Proton Therapy

THE BEST IN
PROTON

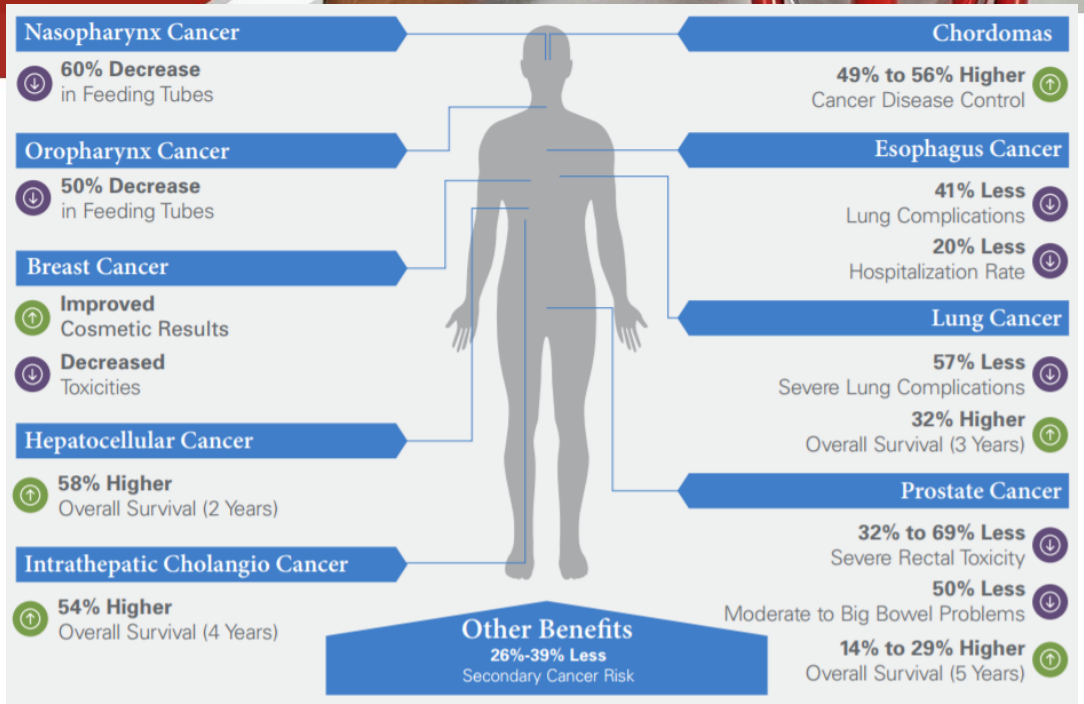
On par with international standards, APCC is powered by PROTEUS®PLUS – a unique proton therapy solution designed to treat even the most complex tumours.

ADVANTAGES INCLUDE:

- Enables surgeons to perform highly innovative treatment methods like Image-Guided Intensity Modulated Proton Therapy (IMPT).
- With IMPT, radiation oncologists can accurately set the precision, depth and intensity of a proton beam as per the contours of a tumour.
- PROTEUS®PLUS combines the fine precision of the Pencil Beam Scanning (PBS) delivery mode with the accuracy of 3D Cone-Beam Computed Tomography (CBCT) imaging and the adaptive capacity of In-room CT.

From screening to diagnostic tests and treatment procedures, every definitive step at APCC focuses on a singular goal to help cancer patients reclaim life.

Which patients can benefit from Protons?



Courtesy of Dr Steven Frank, MD Anderson Cancer Center

Potential benefits of Proton Therapy for patients

Improvement of local control

Reduced side effects

Lower risk of secondary cancers

Treatment of choice for **re-irradiation**

Apollo PROTON Cancer Centre

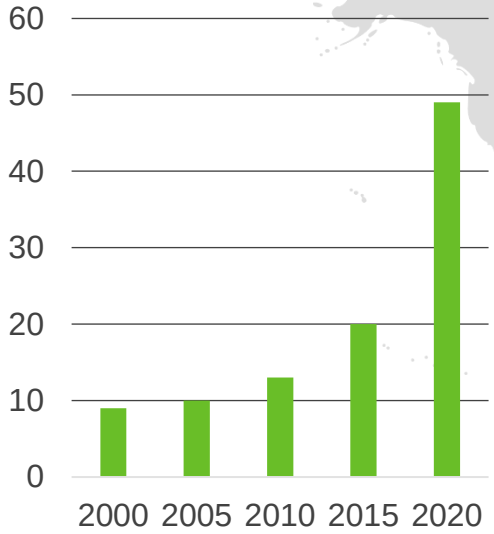
APOLLO PROTON PARTNERS

Our goal of partnership is to improve the access to PROTON THERAPY ACROSS THE GLOBE

The number of Proton Therapy centers* is growing fast

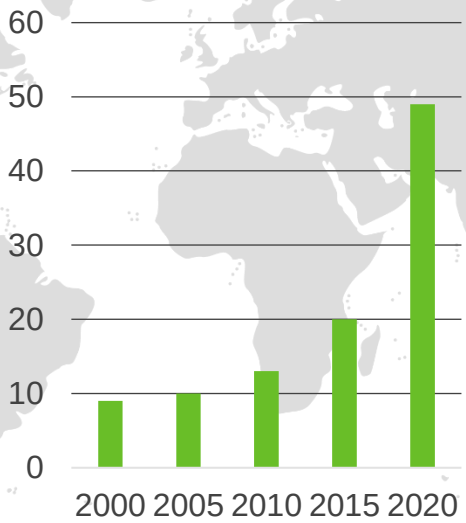
North America

Accumulated number of treating centers



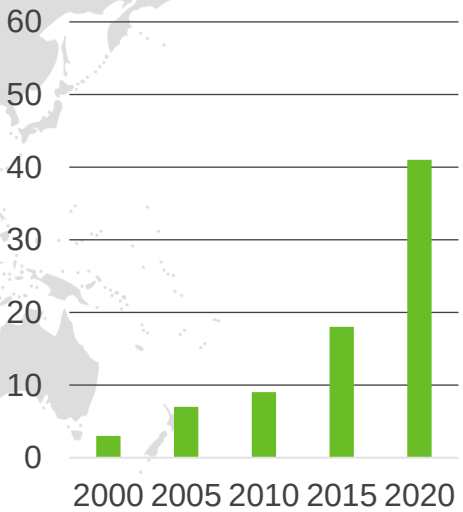
EMEA, Latin America, Russia CIS

Accumulated number of treating centers



Asia Pacific

Accumulated number of treating centers



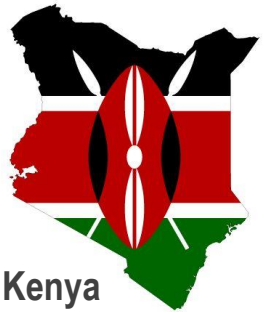
* Include research and academic centers. See the list of centers in annex.

Global Proton Centers are partnering exclusively with Apollo

Kazakhstan

Malaysia

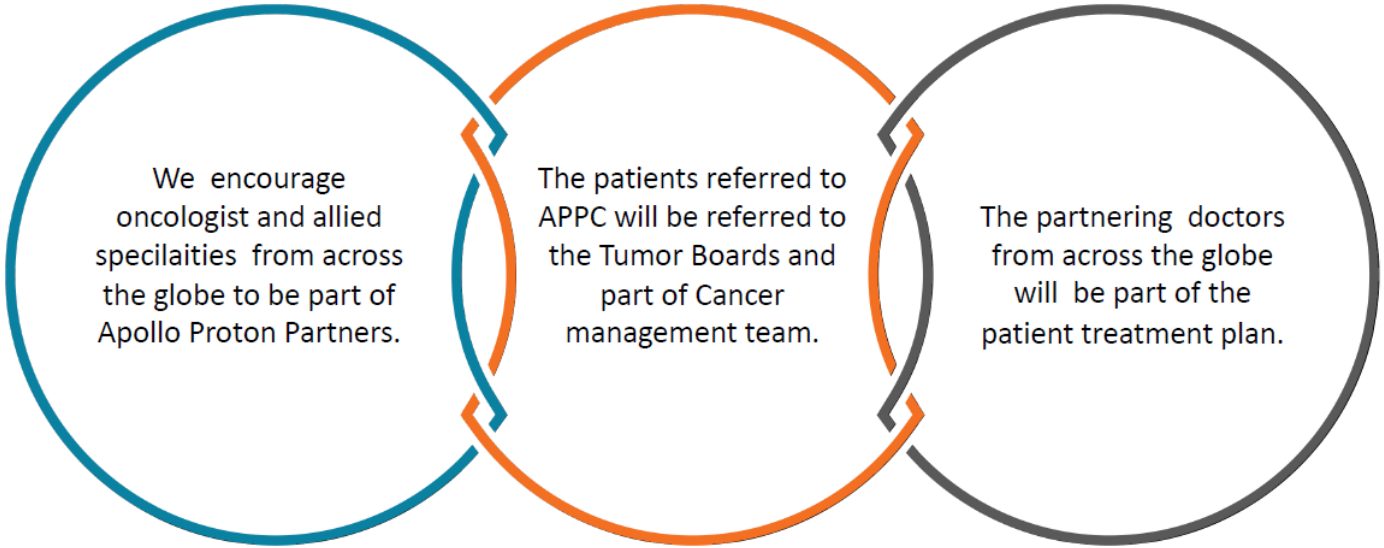
Indonesia



Kenya

Slovenia

Partnership within Apollo



Advantages

- Tele- consultation
- Patient centric cancer management team with organ specific tumour boards
- Comprehensive 360 degree cancer care management
- Apollo Proton Advisory board
- Genomics molecular profiling
- Digital pathology
- Access to vast pool of medical resources
- Proton observation program
- Centralized planning for radiation
- Invitation for Apollo Cancer Conclaves
- Preferred proton therapy tariffs
- Academic collaboration for multi-centric clinical research programs

Apollo PROTON Cancer Centre

New Areas of partnerships

- **Skill development** of clinical and paramedical staff of partner hospitals
- **LIVE workshops** in Surgical Oncology delivered on site at partner hospital by Apollo clinicians
- **Master classes** on topics of relevance in medical oncology, radiation oncology, surgical oncology and nuclear medicine delivered by AHEL clinicians to the clinicians at partner hospitals
- **Joint Tumor Board participation** (organ specific tumor boards) from clinicians + joint participation in **AHEL Proton Advisory Board**
- Conducting **Joint Scientific Research** projects, academic conferences and symposia related to Medical/Surgical/Radiation Oncology applications & newer trends in cancer management. This shall include multi centric clinical research programs.
- Invitation for **AHEL Medical Conclaves**

New Areas of partnerships

- **Referral of clinically eligible patients with severe disease or rare clinical presentation** from Mauritius partner hospitals and clinicians to receive specialized medical treatment at AHEL network Hospitals in India
- **Teleconsultation & Expert Opinion with clinicians from AHEL** made available for Mauritius patients to use and clinically eligible patients post teleconsultation can be referred to Apollo Hospitals
- **Clinical partnership:** Key clinicians from AHEL from the specialties listed below shall be invited by Mauritius partner hospitals to offer OP/IP clinical services at partner hospital with necessary MoH licences procured for such clinicians by partner hospital.
    a. Surgical Oncologist
    b. Radiation Oncologist
    c. Medical Oncologist
    d. Nuclear Medicine Specialist
    e. Hemato Oncology
    f. Pediatric Oncology

Benefits of Partnering with Apollo Proton Cancer Centre

- Access to a wider range of expertise, advanced technology and care
- Improves patient care and clinical outcomes through DMG
- Best use of technology and better clinical outcome
- Cost effective treatment when compared to International centres
- Continuum of Care
- Joint publications & trail studies
- Joint tumour board discussion for better treatment planning

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