



**THERAPY. RESEARCH.
HOPE.**

WHO we are

A centre for ion therapy for cancer treatment and for research.

Our facility is unique in Austria and worldwide, there are only five comparable centres.

TUMOR THERAPY



Surgery

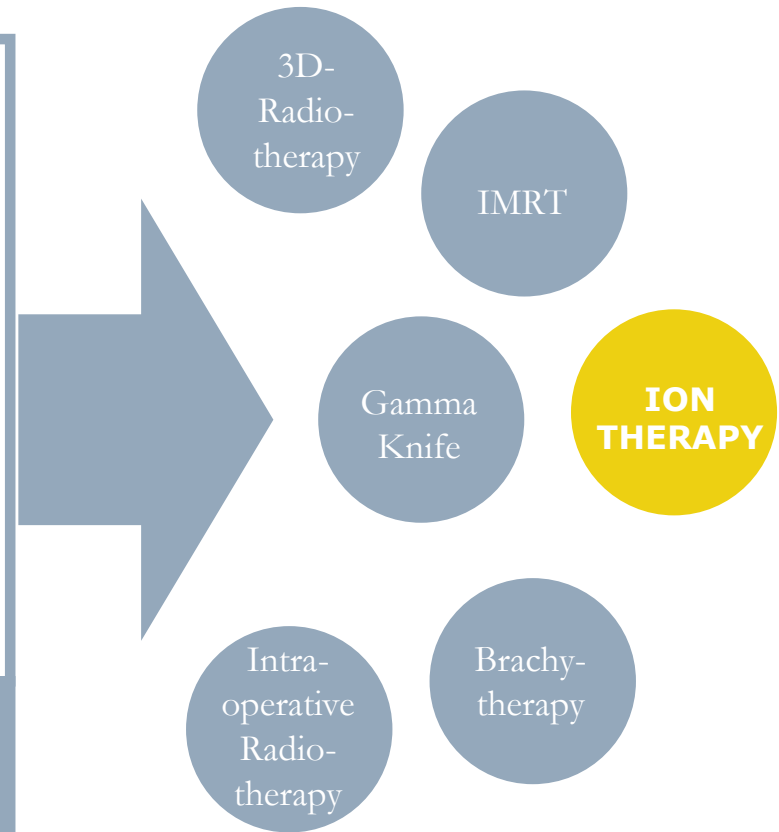


Radiation Therapy

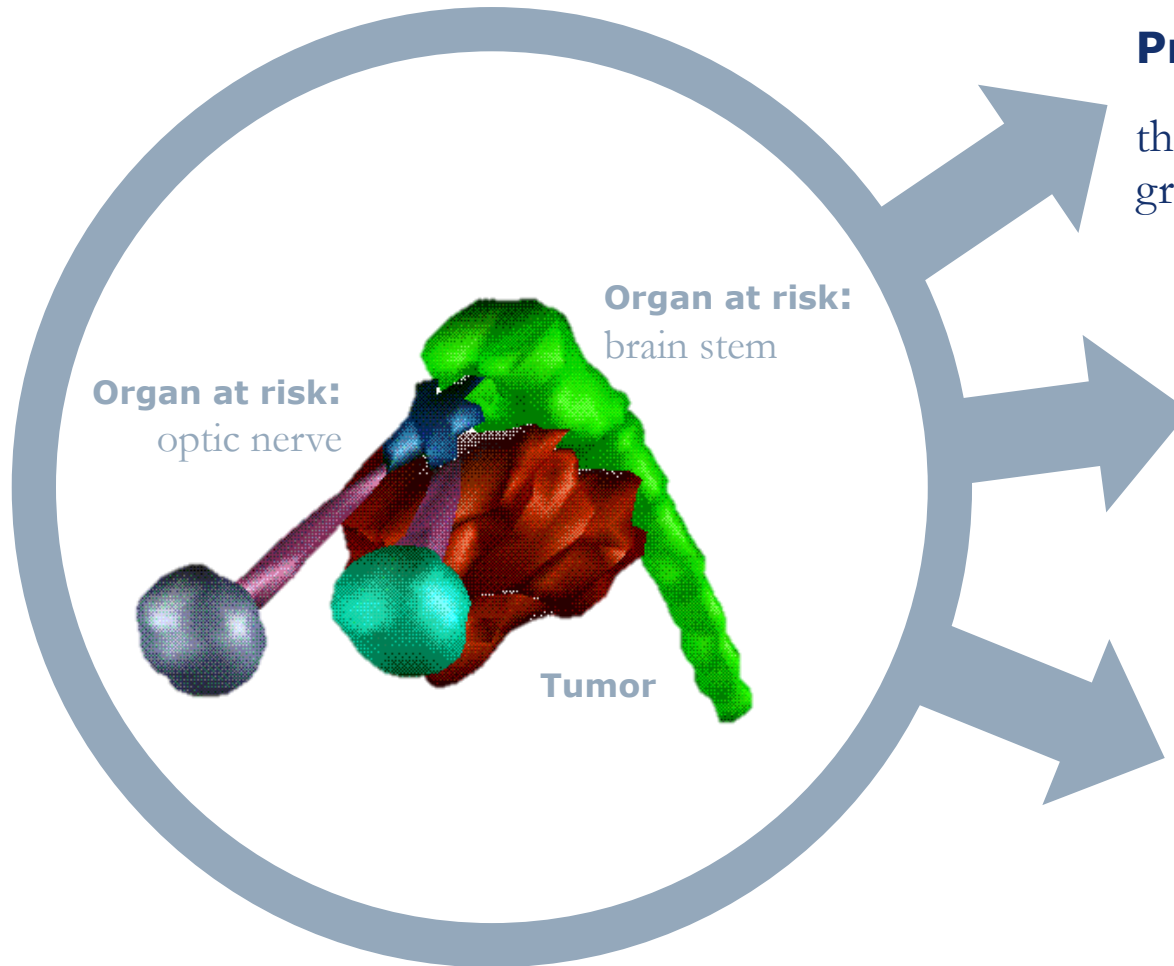


Chemotherapy

TUMOR THERAPY



RADIATION THERAPY



Prevents

the tumor cells from growing/spreading

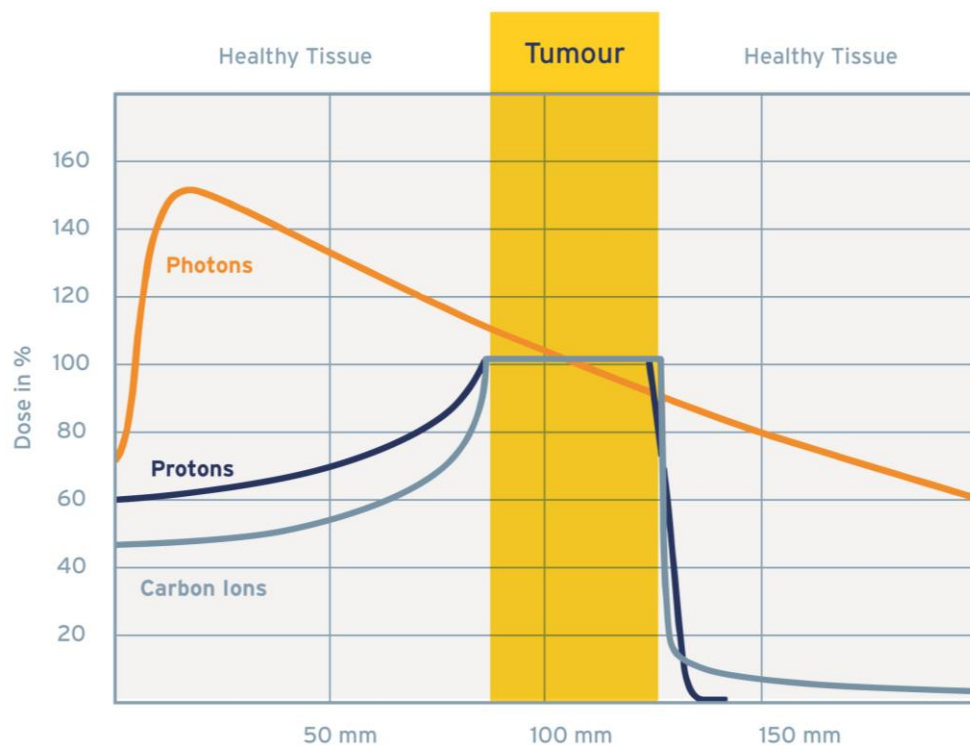
High dose

delivery is necessary in the tumor cells

Organs at risk

Dose tolerance is considerably lower, e.g. optic nerve, parotid gland, inner ear, ...

ION BEAM THERAPY



Lower exposure
to radiation of healthy tissue

Reduction
of side effects and long-term
damages

Photons:
„Conventional“
Radiation Therapy

**Protons,
Carbon Ions:**
Ion Beam Therapy

OUR FACILITY

Irradiation Rooms

Three rooms for patient treatment

Research

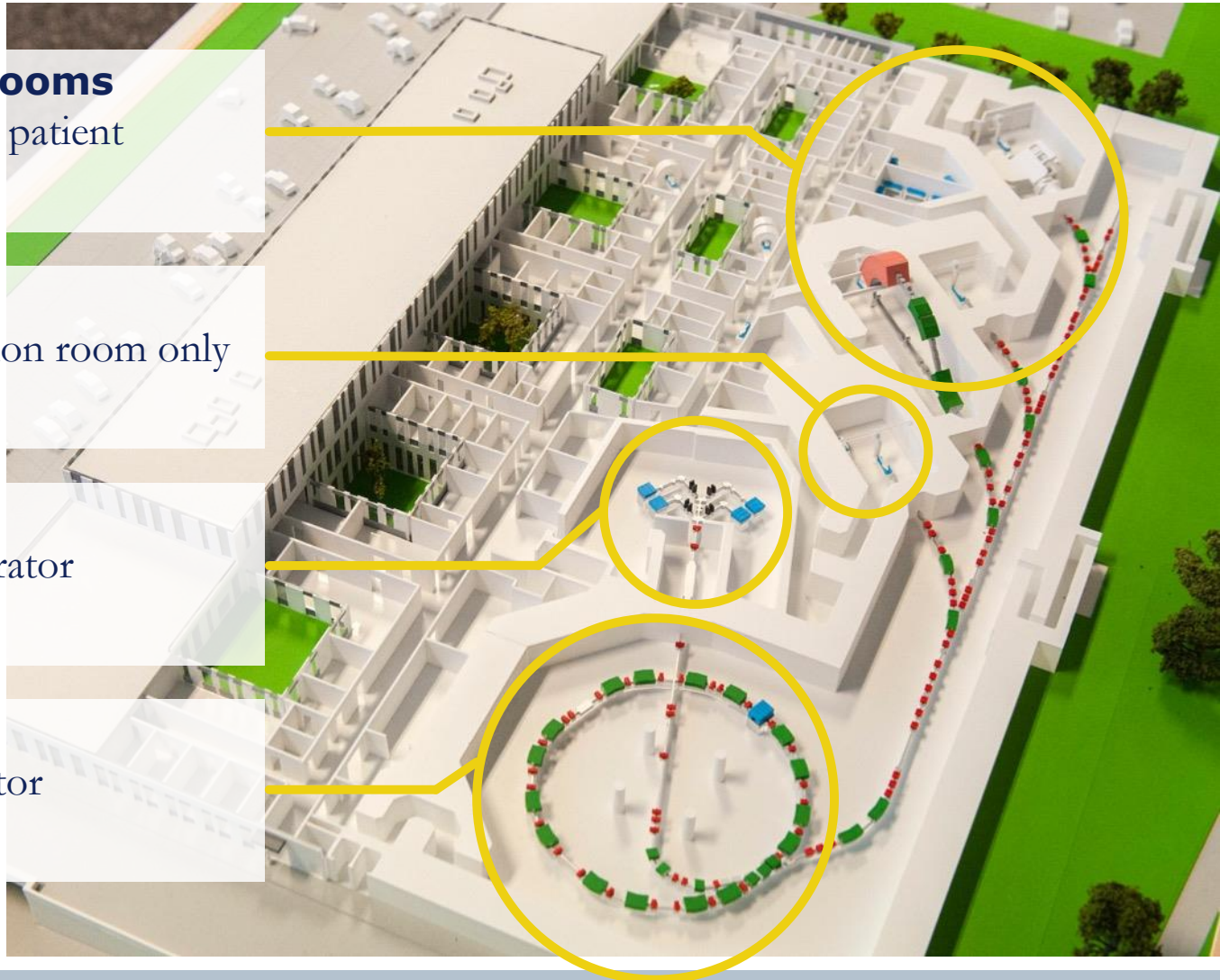
Separate irradiation room only for scientific use

Ion Sources

and linear accelerator

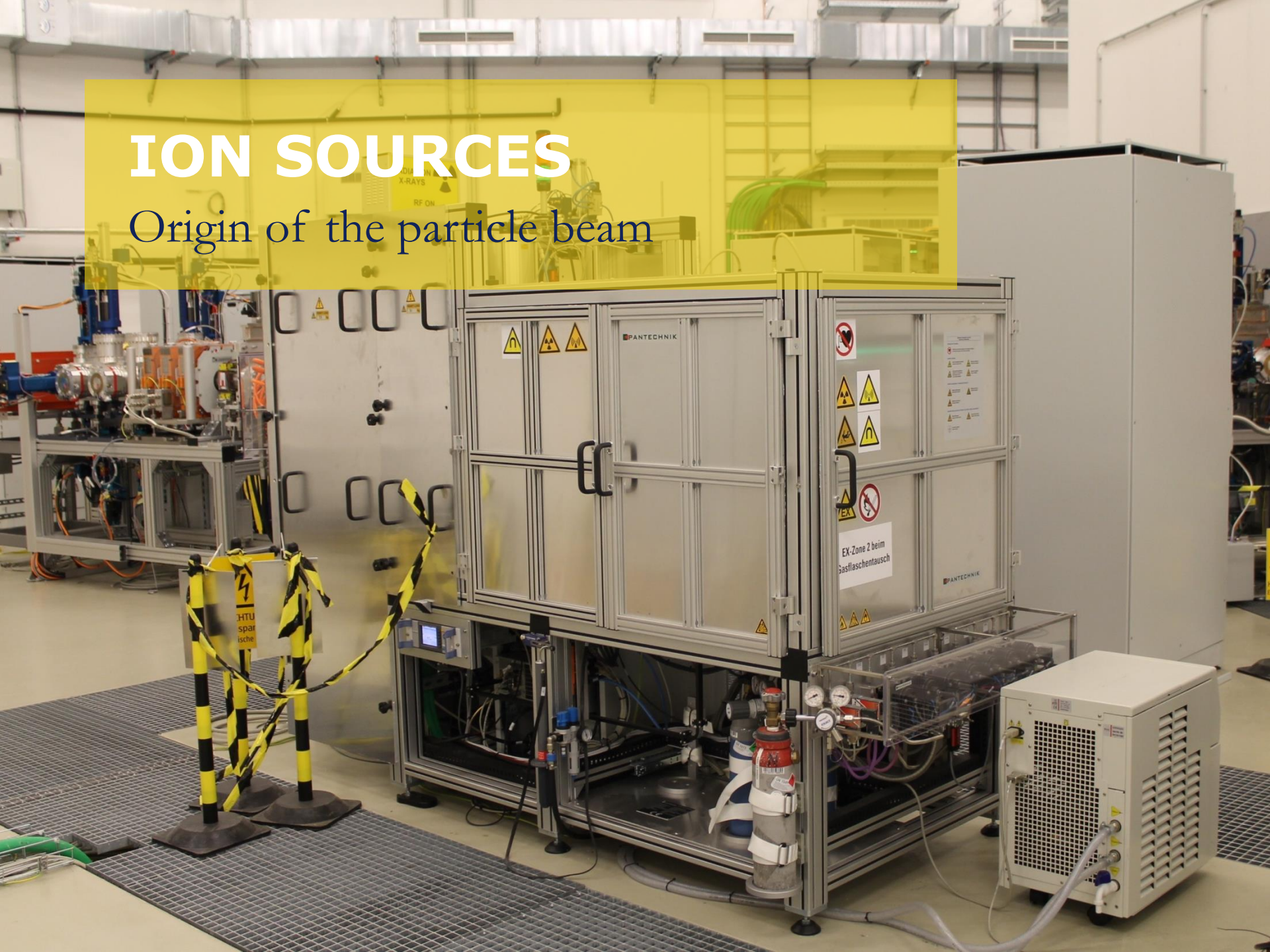
Synchrotron

Circular accelerator



ION SOURCES

Origin of the particle beam





ION SOURCES

Origin of the particle beam



LINEAR ACCELERATOR

First step of acceleration

SYNCHROTRON

Acceleration up to 200,000 km/s

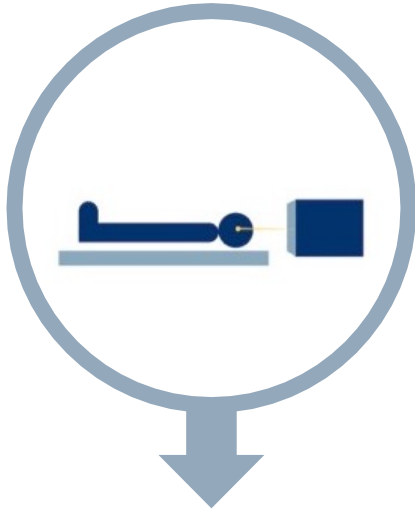




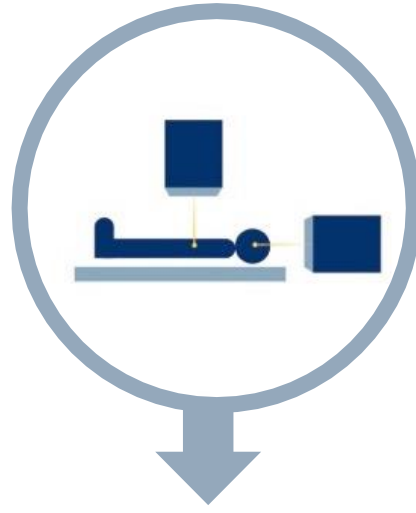
PATIENT POSITIONING

in the millimeter domain

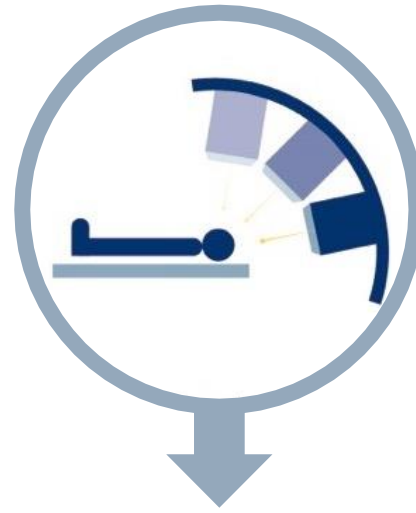
ROOMS & MODALITIES IN FULL OPERATION



Horizontal
Fixed Beam



Horizontal & Vertical
Fixed Beam



Gantry



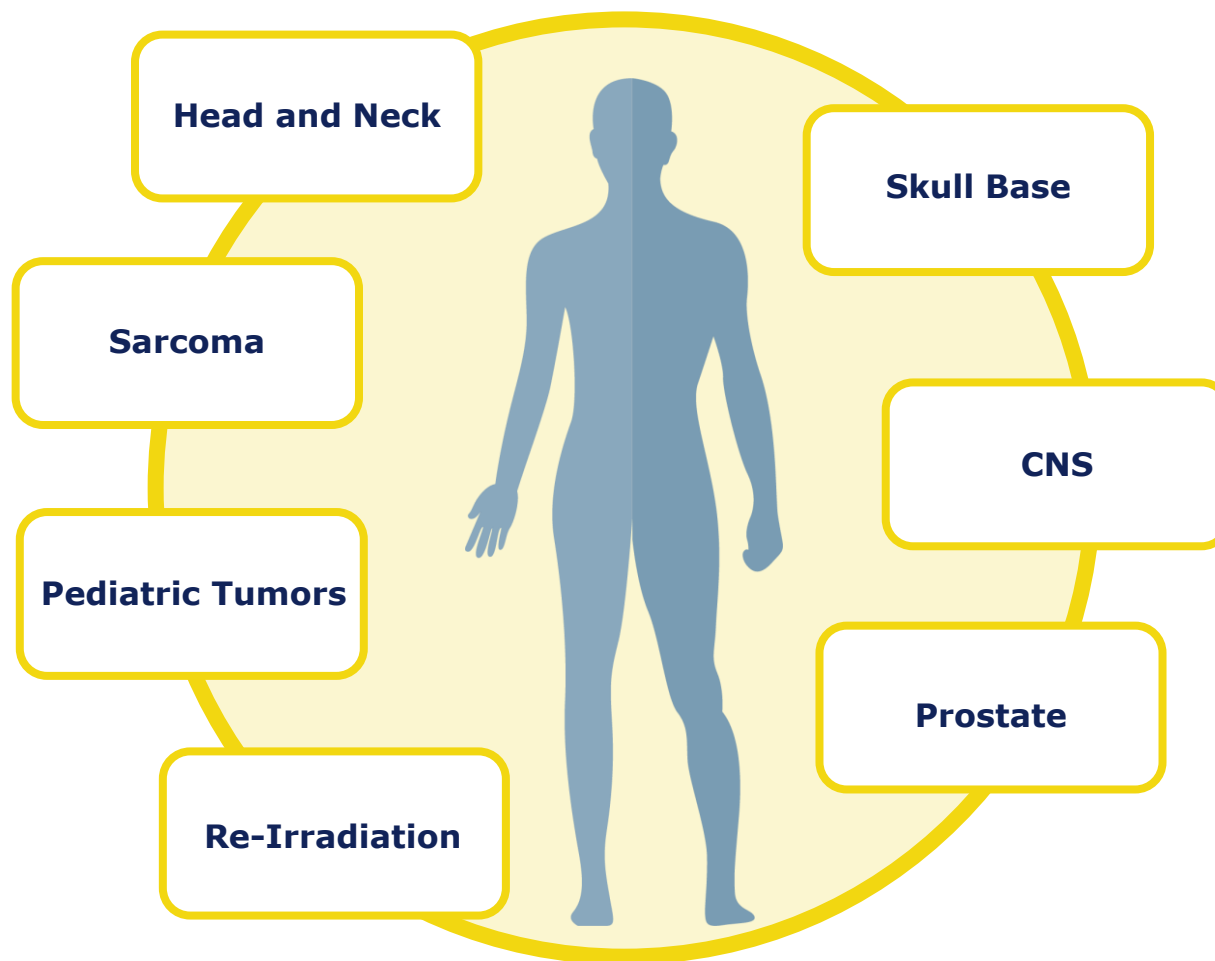
Horizontal
Fixed Beam



Patient Treatment

Research

INDICATIONS 2017



Mainly „established“ indications, suitable for horizontal beam line

INDICATIONS 2020

