



TREATMENT EFFICIENCY SUBCOMMITTEE

Co-chairs:

[Frank Emert](#) - [Heng Li](#) - [Sung Yong Park](#)

SC Meeting, June 12, 2024, 10:45 – 11:30, Singapore

GOOD CLINICAL PROTON PRACTICE (GCPP)

- Initiative launched under PTCOG Treatment Efficiency Subcommittee
- Ultimate goal to be an independent PTCOG subcommittee

Current members:

Robabeh Rahimi¹, Frank Emert², Kuang Ling Chen³, Estelle Batin⁴, Xing Li³, Mark Zakhary¹, Alessandra Bolsi²

¹Maryland University, ²Paul Scherrer Institute, ³Inova, ⁴Ohio State University

Actively recruiting new members

GCPP :: Challenge & Idea

The challenge

- Proton therapy is **one of the most innovative treatment strategies** in oncological external beam radiation therapy.
- As such, it is subject to a **highly dynamic research and development process**, which generally drives the ongoing adaptation to the state of the art in science and technology.
- This represents a **key challenge for** the establishment and dissemination of **consistent and up-to-date clinical PT treatment standards** within a heterogeneous landscape of proton therapy centers with different levels of development and experience.

The idea

GCPP was founded with the idea to support and supplement proton therapy

- ✓ in such a way that it **contributes to** the establishment and dissemination of **consistent, high-level standards** across all (available) PT centers.
- ✓ to enable **effective and efficient patient treatments** in its broad clinical application.
- ✓ to establish **an exchange platform** between interested centers - regardless of their institutionalized level of development or experience – **to develop, discuss and document** these **standards**.

GCPP :: Objectives & Consequence

The objectives

GCPP is (partially) oriented on the concept of ‹‹**Good Clinical Practice**›› (**GCP**),

- which has proven itself internationally for many years as a **methodological framework for the design, conduct and analysis of clinical trials**.
- in the sense that - apart from ethical regulations – each clinical EBRT (including PT) trial requires **scientifically well-founded implementation and standardized execution**.
- whereby - in the case of a clinical proton or particle study - the focus is on **ensuring standardized, reproducible treatment conditions** in addition to the radio-oncological therapy concept for a specific indication.

The consequence

These conditions must be realized through the **application of complex quality assurance procedures, compliance with defined irradiation techniques and concepts**, whereby they are generally **based on guaranteed, mostly medical-physical environmental requirements**.

GCPP :: Name & Business Approach

The name

- Since evidence-based clinical studies in various forms related to the technological implementation and compliance with **GCP** guidelines continue to be the gold standard for establishing new, improved treatment procedures - especially within EBRT - this provided the motivation for the extended naming to **GCPP** in the field of proton and particle therapy along the mentioned criteria.

The business approach

- ✓ GCPP is **not intended to hinder normal competition** between clinical facilities, which ensures that patients can freely choose their treatment facility.
- ✓ GCPP aims to **support the joint long-term success of proton therapy** as a radiotherapy method by **providing the best possible organizational support** for the corresponding treatment outcomes under known, documented application conditions **in communication and exchange** between many participants **on a voluntary basis**.

GCPP :: First application example

The couch notes

