



ENLIGHT (FP5) – Personal view of the historical perspective and founding

some fragments of memories

Richard Pötter, MD

Some Personal Background and Motivation RP

- **General Internal Medicine Training + basic surgery (Hospital)**
- **Radiology Training (University)**
- **General Radiation Oncology Clinical Training (University)**
- **Specific interests: paediatrics, hodgkin, eye, prostate, gynaecol.
Side effects, imaging, planning treatment....**
- **Neutron radiotherapy in Münster/Germany 1985-1993, dT Gen
based on evidence from clinical series, (e.g. Hammersmith, Fermilab,.....)
based on prospective EORTC/RTOG trials (phase III)**
- **Member of EORTC Heavy Particle Therapy Group (Wambersie)**
- **Thesis 1989: Localization through Imaging for Radiation Oncology**

Some Personal Background and Motivation RP II

- **Vienna Medical University/General Hospital since 6/1993**
- **Contact with Prof. of Tech Univ Vienna 1993: AUSTRON project**
- **Project leader MedAustron 1995-2001**
- **André Wambersie, Visiting Professor at Vienna Univ. since 1995...**
- **Feasibility Study MedAustron 1998 (with Regler, Auberger)**
- **ESTRO Teaching Faculty since 1993 -.....**
- **President European Brachytherapy Group GEC ESTRO 1998-2003**
- **.....**

Mid 90ies - 2000: European Ion Beam Projects

- EULIMA (around 1990)
-
- Heidelberg/GSI – HIT
- TERA – CNAO
- MedAustron
- ETOILE
- UK
- Stockholm / Sweden
-
- ESTRO



PIMMS Design and Frame: challenge for Europe RO

Dear Jean Pierre, (Gerard, ESTRO President)

Vienna, summer 2000

On the occasion of the International Accelerator Conference which took place in Vienna last week, one day was devoted to Accelerator Development in Medicine. The machine designed by the CERN group was then presented (PIMMS: Proton Ion Medical Machine Study), as the most outstanding design at present available in Europe and most probably worldwide. This machine design is open for (European) users. As CERN is an international European organisation, it needs an international European counterpart on the side of the users which clearly should include radiation therapy, medical physics in radiotherapy and radiation biology. Such counterpart is urgently needed for the final development of the machine design including beam delivery systems, gantry etc, which finally will (hopefully) lead into the translation of such design into a clinical setting, wheresoever.

As we know, there are several regional and/or national groups working towards implementation of a proton/ion beam facility, among which are the Karolinska group in Sweden, the group in Germany, the group in North Italy (etc. in Trento, Milano), and maybe at other places.

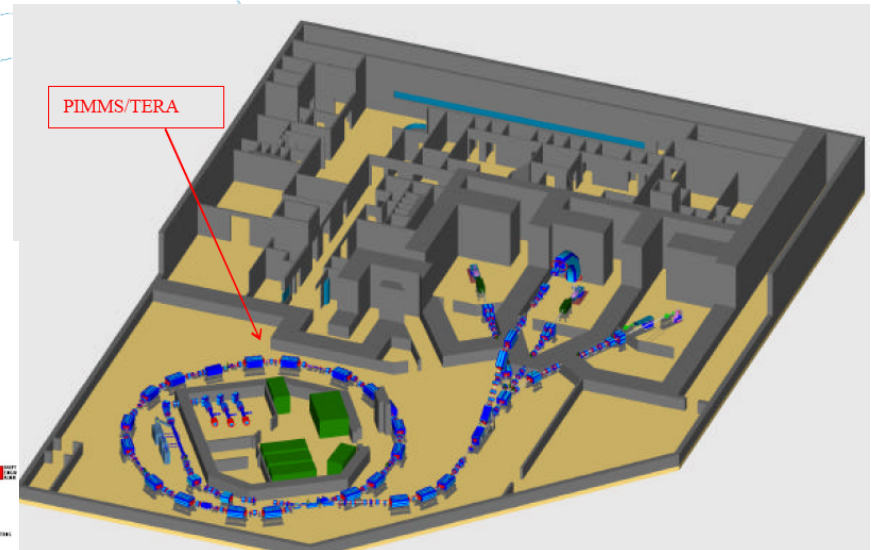
With kind regards from Vienna
Richard Pötter
(Project leader Med Austron)

• According to our recent discussions on this topic during various occasions, my opinion is, that ESTRO should take an initiative to combine these efforts into a cooperative European approach, addressing general issues which are

of.....

PIMMS Design

- Realised at CNAO and under construction at MedAustron



ESTRO Hadron Therapy Group (Protocol)

1st Meeting, December 3rd 2000: 10.00-13.00

Location: Department of Radiotherapy and Radiobiology, University of Vienna

Participants: Thomas Auberger (Innsbruck/Med AUSTRON) TA
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Joseph Remillieux (Lyon/Project Rhone-Alpes) R
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André Wambersie (Belgium, Director ICRU) AW
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Guest: Ulrike Mock MD, Vienna

Apologies from Ugo Amaldi, Milano/TERA (e – mail: ugo.amaldi@cern.ch); Anders Brahme (Stockholm, Radiumhemmet) (anders.brahme@kf.si); Jürgen Debus (Heidelberg / DKFZ - GSI) e – mail j.debus@dkfz-heidelberg.de, Jean Pierre Gerard, Lyon (Rhone-Alpes) (e-mail: jean-pierre.gerard@chu-lyon.fr); Roberto Orecchia, (Milano/TERA) (rorecchia@ieo.cilea.it), Hans Hoffman (CERN) (e – mail: hans.hoffmann@cern.ch)

ESTRO Hadron Therapy Group: 2000/2001

-The main goal of this group was proposed to be creating a joint platform covering the different aspects of heavy ion therapy for the different projects in Europe which should lead to a close European cooperation.....
- The 2nd meeting of the ESTRO Hadron Therapy Group is projected to take place on the occasion (end) of the next Med AUSTRON international advisory board meeting which is scheduled to take place March, 16th - 18th 2001.



Topics / Workpackages defined 3rd Dec 2000, EHTG

- Beam delivery system
 - Gantries, moving beams,
- Beam specification demands
 - Ion species, energy ranges ,
- Treatment planning, patient positioning, quality assurance
 - CT / MR / PET, Biological models,
- Communication of methods and results
 - recommendations for dose prescription, recording and reporting
- Medical aspects of heavy ion radiotherapy
 - Epidemiology, patient selection, literature review,

ESTRO Activities around 2000, developments at CERN

- **EC funded projects (G. Heeren, C. Verfaillie)**

ESQUIRE (H. Svensson, A. Dutreix)

GENEPI (M. Baumann, G. Heeren)

- **Brachytherapy Physics Network (Brachyqs)**

- **Brachytherapy Working Groups**

Endovascular Working Group

Prostate Working Group

Gynaecologic Working Group, later network

and:CERN „discovered“ medical applications (H. Hoffmann)

Developments in 2001/2002

- **The birth of ENLIGHT, some impressions**

meetings in Vienna, Geneva, Brussels....

networking of „important“ persons,

e.g. U. Amaldi, H. Svensson, A. Brahme,

putting together an application 10/2001

meeting at CERN in Geneva

granting of the application spring 2002

start in autumn 2002 with working groups and WPs

start with meetings, last in Oropa 2005....

Achievements in the framework of “activities”

- Intensified and “practical” collaboration between groups / ion beam centres
- Intensified collaboration between “professions” needed for ion beam therapy – more recently also with “imaging” disciplines
- EC project applications and funding
- Growth of ENLIGHT group
- Training of new generation of researcher

European Activities: the last decade

- ENLIGHT
- RELIGHT
- ENLIGHT++
- UILCE
- PARTNER
- ENVISION
- ENTERVISION
-***Research & Development and Education & Training „House“***



Vision for 2022, + beyond 20 years of ENLIGHT....

To build a European multi-centre hadron R&D and E&T „house“
in close cooperation with ESTRO, EORTC, groups.....++

- Joint basic and translational biology and physics research +.....
- Joint clinical research, hypothesis driven, „patient model“....
- Joint combinations of any of these research activities ...
- Joint education and training ++..

We need young leadership in radiation oncology/hadron therapy!

We need young visionary people to design and shape our future!

We need young powerful people to strengthen our interests!

We need young communicative people who talk and work together!