WP 9

Recommendations for further improvement and investments of the current and future Hadron Research Infrastructures

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WP 9 members

Almost not yet started

Project start

Today

WP9 Networking COORD	Recommendations for further improvement and investments of the current and future Hadron Research Infrastructures														
9.1	Development of tools and criteria for an objective evaluation of the impact on public health of a new Hadron-Therapy facility														
9.2	General European guidelines for the preliminary proposal of the design of a new hadron-therapy facility														
9.3	Exploitation and recommendations for further improvement of existing and new Hadron RIs														

WP 9.1

Development of criteria and tools for an objective evaluation of the impact of a new Hadron-Therapy facility on the improvement of cancer treatment in certain European regions and countries and for Europe on the whole

- Analysis of the current European situation in terms of spatial distribution of the facilities already in function and planned.
- Highlights on the patient eligibility criteria for hadron-therapy established up to now, based on clinical experience, and determination of new potential indications
- Analysis of geographic, demographic and financial parameters related to the impact, (at National and European levels), of new facility locations.
- Development of guidelines and recommendations, based on a provisional model, for an objective selection of the location for new centre investments.

A data collection form has been created regarding existing facilities

1. General data
2. Epidemiological aspects and planned indications
3. Reimbursement data

General data

Name of the facility

Country

Ownership: (public , private, university hospital, PPP)

Present status (planned, financed, in construction, under commissioning, treating)

Ground breaking date (real or planned)

First patient date (real or planned)

Particle species

Number of treatment rooms

Beam delivery (active vs. passive or both), gantry , fixed lines, dedicated lines

Accelerating machine

Total cost

Indications and epidemiology

Indications						Epidemiology							
						Country population		Number of candidates					
						Quality of data							
	Already exisiting trial/protocol	**High priority**	**Low priority**	**Only selected / compassionate cases**	**No indication**	**Country and tumor speific data available**	**extrapolated data**	**expert opinion**	prevalence / 100000	incidence / 100000	pergentage treatable with Hadrontherapy	exisitng potential candidate	new patients per year
Salivary gland cancers												0	0
Skull base Chordoma / Chondrosarcoma												0	0
Malignant mucosal melanoma												0	0
Non SCC head and neck cancer												0	0
Paranasal sinuses SCC												0	0
Head and neck SCC												0	0
Head and neck sarcoma												0	0
Eye melanoma												0	0
Lacrimal gland/orbital cancer												0	0
Esthesioneuroblastoma												0	0
Meningioma												0	0
High grade glial tumors												0	0
Low grade glial tumors												0	0
Optic pathways glioma												0	0
Thyroid cancer												0	0

Reimbursement data 1 (comprehensive fee)

comprehensive cost

Carbon ions

full treatment	boost	stereotactic / special treatment	other

Protons

full treatment	boost	stereotactic / special treatment	other

Reimbursement data 2 (detailed billing)

treatment preparation							
imaging			immobilization		planning		
CT	MR	PET	immobilization procedure	personalized devices	image fusion	contouring	plan calculation / optimization

treatment						
treatment hardware			treatment session			
personalized bolus	personalized collimators		cost per session or	cost per GyE	position verification	
			average number of fractions			

supportive care		
visits	drugs	hospitalization
average number of visits		

Conclusions

- For WP 9 the first year has been mainly of preliminary activity
- The tools produced so far will be useful to start the core of WP 9 work in a focused way