

Implementing verifiable oncological imaging by quality assurance and optimisation

WP3 lead: Shane Foley

UCD, April 26









### Ongoing and recently concluded projects

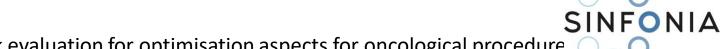
#### **MEDIRAD**

- CTRAD sophisticated dose evaluation tool (UoC)
- CT-IQURAD image quality assessment tool (OvGU)



### **SINFONIA**

Risk evaluation for optimisation aspects for oncological procedure



### **EURAMED** rocc'n'roll

Major focus evaluation, suggestions on AI-based optimisation



**EUCLID** 

Methodology to establish procedures (DRL establishment)









# **MEMBERS**









Politécnico de Coimbra

**IPC** 







**KUL** 



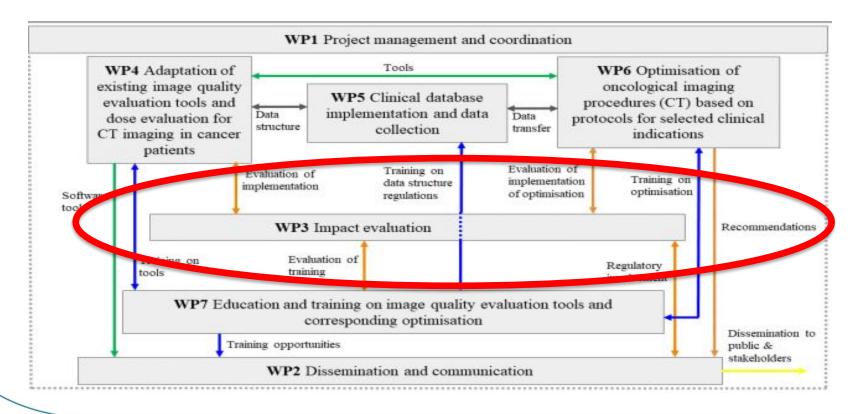
**STUK** 



# Objectives

- To implement a standardised way of optimisation in oncological imaging approaches in clinical practice by adapting and deploying tools for quantifiable image quality assessment as well as by validating commercially available software solutions for patient dose determination in imaging procedures, using the output of the MEDIRAD and other EC-funded projects.
- 2. To **implement such tools** and the proposed optimised procedures in (university) **hospitals throughout Europe** that are members of the i-Violin consortium,
- 3. To disseminate these tools and optimised procedures to interested hospitals and healthcare providers in Europe to contribute towards a harmonised and standardised oncological imaging approach.
- 4. To provide a **suitable education and training programme for radiologists, radiographers and medical physicists** to be able to use the harmonisation tools.
- 5. To **disseminate the results to policymakers, the medical societies** and other relevant stakeholders to foster uptake and implementation.







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VP o.	WP name	Lead	Start month	End month	Deliverables & Milestones
1	Project management and coordination	EIBIR	1	24	D1.3, D1.1, D1.2, D1.4 MS1, MS2
2	Dissemination and communication	OvGU	1	24	D2.2, D2.4, D2.3, D2.5, D2.1 MS3
3	Impact evaluation	UCD	6	24	D3.1, D3.2, D3.3 MS4, MS5
4	Adaptation of existing image quality evaluation tools and dose evaluation for CT imaging in cancer patients	OvGU	1	24	D4.1, D4.2 MS6, MS7
5	Clinical database implementation and data collection	UMC- Mainz	1	24	D5.1 MS8, MS9
6	Optimisation of oncological imaging procedures (CT) based on protocols for selected clinical indications	KUL	1	24	D6.1, D6.2 MS10, MS11
7	Education and training on image quality evaluation tools and corresponding optimisation	IPC	1	24	D7.1, D7.2 MS12

# Key facts

☐ Starting date: 1 September 2022

☐ End date: 31 August 2024

**□** Budget:

**□** 10 partners:

Total eligible costs	Funding rate (%)	Maximum grant amount				
1 172 487.81	80	937 990.23				

No.	Partner	Acronym		
1	EIBIR Gemeinnützige GmbH zur Förderung der Erforschung der Biomedizinischen Bildgebung	EIBIR		
2	Otto-Von-Guericke-Universitaet Magdeburg	OVGU		
3	Universitaetsmedizin der Johannes Gutenberg-Universitaet Mainz	UMC-Mainz		
4	Instituto Politecnico de Coimbra	IPC		
5	Panepistimio Kritis	UoC		
6	Klinicka Bolnica Dubrava Zagreb	UCHD		
7	Univerzitetni Klinicni Center Ljubljana	UMCL		
8	Katholieke Universiteit Leuven	KUL		
9	University College Dublin, National University of Ireland, Dublin	UCD		
10	Sateilyturvakeskus	STUK		



# BUDGET

DRK PACKAGE 2 VP3											
	A.1 Employees (or equivalent)										
	Junior experts/advisor	Junior experts/advisors/researchers			4,	132.67	16.00		66,122.72		Yes WP2, WP6, WP7
	Senior experts/adviso	Senior experts/advisors/researchers			10,0	047.00	2.20		22,103.40		Yes WP2, WP6, WP7
	Other	Other									
-											
Speakers											
Travel costs 3,600.00				0.00	0.	.00		Yes WP2, 1	WP6, WP7	training events (3), 2 tes budgeted for return flig	mbers (2) to clinical sites (3) and for im members x 6 travels, 300 hts.
Accomodation costs 2,400.00 0.0				0.00	0.	.00		Yes WP2, 1	WP6, WP7	Travel by UCD team members (2) to clinical sites (3) and for training events (3), 2 team members x 6 travels, 200 budget for accommodation for 2 nights.	
	Subsistence costs 2,400.00			0.00	0.	.00		Yes WP2, 1	WP6, WP7	Travel by UCD team members (2) to clinical sites (3) and for training events (3), 2 team members x 6 travels, 200 budgeted for 48 hours subsistence.	
Personnel		'	'								
	ORK PACKAGE 2	PACKAGE 2 VP3									
							Costs (actual costs)				
		Consumables					1,000.00				
		Conferences, seminars, workshops, trainings & events				0.00			·	<u> </u>	
This project is co-fur	This project is co-fur										
under grant agreeme		Information & p	Information & publications			3,000.00					
		Other expenses									



Project management



Proposal writing



Dissemination and communication





#### **Evaluation Summary Report**

#### **Evaluation Result**

Total score: 83.00 (Threshold: 70)

#### Criterion 1 - Relevance

Score: 26.00 (Threshold: 21/30.00, Weight: -)

The detailed criteria are set out in the call conditions (see Call document).

The i-Violin action proposal clearly contributes to Europe's Beating Cancer Plan.

The proposal sets an ambitious goal of adaptation of the image quality assessment tool for imaging procedures in the abdominal and pelvic areas of the human body. It touches a very important issue of radiation safety and optimization of exposure. The problem addressed in the proposal has a universal character and is valid in all countries using oncological imaging. This universal character is a strong point of the proposal.

#### Criterion 2.1 Quality — Project design and implementation

Score: 25.00 (Threshold: 21/30.00 , Weight: -)

The detailed criteria are set out in the call conditions (see Call document).

The proposal has a clear structure, presenting the concept in an easy to understand manner. The work packages have been described generally in a pertinent way, presenting appropriate division of responsibilities between proposal partner institutions.

However, in some part of the application the details are too scarce, e.g. in the description of WP3 Impact evaluation, the proposal does not sufficiently describe the planned survey. Similarly, in the description of WP6, task T6.1, interviews among hospital staff is mentioned, but it does not sufficiently provide estimated count of those interviews to be performed. Similarly, details on the various procedures to be developed for image quality assessment and dose evaluation are not fully reported and described tasks are more in terms of available platforms for the work to be carried out.

#### Criterion 3 - Impact

Score: 7.00 (Threshold: 7/10.00 , Weight: -)

The detailed criteria are set out in the call conditions (see Call document).

Ambition of the proposal is adequate to the objectives of the call and main activity will cover an extension of the image quality tool for chest CT, previously developed in another EC funded proposal (MEDIRAD), to other body regions (abdomen, pelvis). Short- and mid-term impacts are very clear and consistent with the need to test the developed tools in the clinical context and then involve more hospitals for harmonisation purposes across Europe.

For the long-term perspective, there is concern on the actual implementation of the developed CT procedures within commercial units since pertinent healthcare companies have not been directly involved among the target groups and only a generic co-operation with industry is mentioned.



## W P 1: Project management and coordination

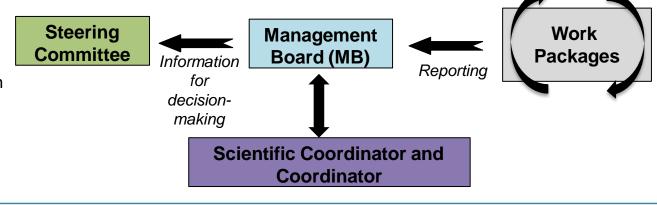
### **Communication**

Efficient collaboration and communication is key for the best possible outcome of the project. Keep all partners transparently informed about project status, work planning, etc.

WP information

#### **Communication tools**

- Email lists
- Online meeting tool
- Online collaboration platform





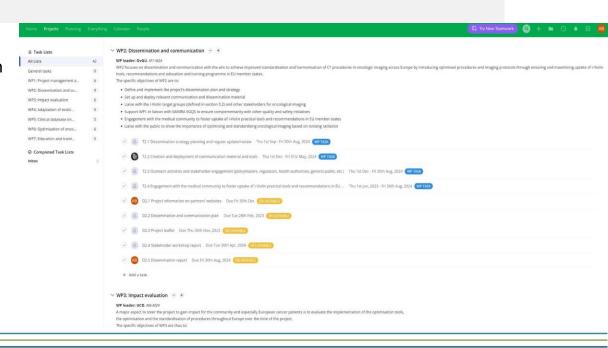
# W P 1: Project management and coordination

### **Teamwork**

### **EIBIR Teamwork platform**

 Allows secure consortium internal communication, secure file exchange, and efficient monitoring and quality assurance

All tasks and milestones will be tracked using this platform. General information (meeting agendas, reporting information, templates) will be distributed and shared centrally.





### LESSONS LEARNED

### Start early

Detail, detail, detail

Get UCD legal on board early...

Start recruitment early...

Expect issues with recruitment...

#### Timeline

- 18.8. 1st draft general concept scientific outline
- 23.8. WP descriptions 1st draft
- 25.8. 1st draft dissemination
- 27.8. 1st draft impact, 1st draft budgets
- 3.9. graphs/charts; first draft to partners



### LOOKING FORWARD TO QUESTIONS

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