



**EMPIR** Joint Research Project

# Metrology for clinical implementation of dosimetry in molecular radiotherapy

## EUROPEAN WORKSHOP ON THE CLINICAL IMPLEMENTATION OF DOSIMETRY FOR MOLECULAR RADIOTHERAPY

National Physical Laboratory, Teddington, Middlesex, TW11 0LW, UK Monday 20th - Tuesday 21st May 2019

### Workshop agenda and details

#### THE WORKSHOP

The workshop will present the final results of the three year EMPIR funded project MRTDosimetry. New protocols for comparison of quantitative imaging and commissioning of a Molecular Radiotherapy (MRT) dose calculation platform will be presented in the context of multi-centre comparison exercises performed within the project.

The outputs from the project will be put into context with presentations covering activity measurement, quantitative imaging and dosimetry in a clinical environment, in support of clinical trials and from a commercial prospective. The latest guidance on dosimetry and quantitative imaging for MRT from the EANM, MIRD and ICRP will be presented for discussion.

#### REGISTRATION

The workshop is free to attend but registration is required.

Please register for the meeting at, https://mrtdosimetry2019.eventbrite.co.uk









































#### **A**GENDA

	Day 1: Monday 20 <sup>th</sup> May 2019	
09:00	Registration and Coffee (NPL Reception)	
10:00	Welcome TBC (National Physical Laboratory, United Kingdom)	(10 min)
10:10	Introduction to the MRTDosimetry project and workshop Andrew Robinson - National Physical Laboratory, United Kingdom	(20 min)
Session 1	: Activity Measurement	
10:30	Primary standardisation and nuclear data for Ho-166 Sean Collins - National Physical Laboratory, United Kingdom	(25 min)
10:55	New branching ratio for Y-90 positron emission Giuseppe Lorusso - National Physical Laboratory, United Kingdom	(25 min)
11:20	New activity transfer instrument Kelley Ferreira - National Physical Laboratory, United Kingdom	(25 min)
11:45	Clinical use of secondary standard ion chamber Steve Jeans – The Christie NHS Foundation Trust, United Kingdom	(25 min)
12:10	Activity calibration for clinical trials (Title TBC) Erland Eikeland – Bayer AS	(20 min)
12:30	Lunch (NPL Reception)	
Session 2	: Quantitative Imaging	
13:30	<u>Teaching Seminar: "Calibration and verification of QI"</u> Michael, Lassmann and Johannes Tran-Gia, University of Würzburg, Germany	(60 min)
14:30	Monte Carlo simulation of SPECT imaging Gunjan Kayal – SCK.CEN, Belgium and INSERM, France	(45 min)
15:15	Camera intercomparison for Lu-177 quantification in the Netherlands Steffie Peters - Radboud university medical center, The Netherlands	(20 min)
15:35	Imaging and dosimetry for Ho-166 microspheres Gerrit van de Maat - Quirem Medical	(20 min)
15:55	Coffee break (NPL Reception)	, ,
Session 3	: Dosimetry for MRT	
16:30	<u>Teaching Seminar: "Commissioning of a dosimetry platform for MRT"</u> Jill Tipping and Nick Calvert, The Christie NHS Foundation Trust, United Kingdom	(60 min)
17:30	Primary standard of Absorbed dose  Vere Smyth - National Physical Laboratory, United Kingdom	(20 min)
18:00	Drink reception and networking at NPL	,,
19:30	End of the first day	











































Day 2: Tuesday 21st May 2019			
Session 4	: Dosimetry for MRT (cont.)		
09:00	External dosimetry auditing for multicentre clinical trials		
	Jan Taprogge - The Royal Marsden, United Kingdom		
		(30 min)	
09:30	NTCP Uncertainties		
	Maurice Cox - National Physical Laboratory, United Kingdom	(20 min)	
09:50	Hermes Medical Solutions dosimetry systems	(20 min)	
05.50	Helena McMeekin – Hermes Medical Solutions		
		(15 min)	
10:05	Dosisoft dosimetry system	, ,	
	Sébastien Vauclin - DOSIsoft		
		(15 min)	
10:20	QDose dosimetry system		
	Tobias Meyer – ABX-CRO	(45 : )	
10.45		(15 min)	
10:45	Coffee break (NPL Reception) : International Guidelines		
36331011 3	. International Guidelines		
11:15	EANM		
	Mark Konijnenberg – Erasmus MC, The Netherlands		
44.45		(30 min)	
11:45	MIRD  Robert Hobbs - Johns Hopkins Medicine Department of Radiation Oncology, USA		
	· · · · · · · · · · · · · · · · · · ·	(30 min)	
12:15	ICRP	(30 11111)	
	Glenn Flux - The Royal Marsden Hospital & Institute of Cancer Research, United Kingdom		
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13:00	Lunch (NPL Reception)		
Session 6	: Uptake of the project outputs and way forward		
14:00	Impact and uptake of the project		
	Vere Smyth - National Physics Laboratory, United Kingdom		
		(30 min)	
14:30	Database of reference images and DICOM conversion tool		
	Jérémie Dabin, SCK.CEN, Belgium and Andrew Robinson, - National Physical Laboratory, UK		
		(20 min)	
14:50	Scientific advisor comments		
	Irène Buvat, INSERM/CEA, France		
	Markus Luster, Department of Nuclear Medicine, University of Marburg, Germany	(20 min)	
15:10	Roundtable discussion	(20 /////)	
		(50 min)	
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16:00	End of the workshop		





































