



MEDICIS-PROMED

WP3: Theranostic radiopharmaceuticals for imaging/treatment (of ovarian cancer)



Kick-off meeting: recruitment and work status

CERN 9 Feb 2016

WP3 description

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WP3	New theranostic pharmaceuticals/surgery tools for personalized treatments of ovarian cancer	Lead: AAA	Research	M3 – M48
<p>Objectives Use new bioligands and combination of theranostics isotope pairs produced at CERN-MEDICIS and AAA to investigate their suitability on diagnosis, imaging, and treatment in small animal models.</p>				
<p>Description</p> <ul style="list-style-type: none"> - Multifunctional ^{161}Tb complexes for cell DNA specific targeting – C2Nradiopharma – CHUV – 2m – $\mu\text{PET-SPECT}$ in nude mice – EPFL - 8m – synthesis of bifunctional fluorescent-Auger emitting bioligand targeting ovarian cancer DNA - Industrial production of β/γ therapy radioisotope with mass separation system at high power cyclotrons – AAA - CERN-MEDICIS – 6m – Scandium mass separated beams - Laser molecular break-up in RFQ cooler for beam purification – CERN – PAX – 5 m – Industrial design - New robot-assisted instruments and delivery methods for brachytherapy – HUG - C2N – 3m – brachytherapy in small animals - Preclinical Imaging and Animal Models – Clinical Translation on ovarian cancer – CHUV - EPFL/ISREC – 3m – tests on pancreatic cancer in mice <p>The Lead beneficiary AAA will monitor the progress of the general goal of the Work Package while the different contributing institutes will define the scientific methodologies and the exact nature and timeframe of the intersectorial and eventual inter work package secondment for the various projects</p>				
<p>Deliverables</p> <ul style="list-style-type: none"> D3.1 Cell-nucleus targeting with bioligands for Auger-therapy – M36 D3.2 Laser molecular break-up in RFQ cooler for beam purification – M30 D3.3 Cyclotron production and mass-separation of $^{47/48/49}\text{Sc}$ – M36 D3.CH1 Preclinical Imaging and Animal Models – Clinical Translation on ovarian cancer – M36 D3.CH2 New robot-assisted instruments and delivery methods for brachytherapy – M32 				

WP3-Overview of ESR positions

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ESR	Inst.	Project	Status
1	CERN	Laser molecular break-up for isotope beam purification	Not recruited
6	AAA	Industrial production of β -/ γ therapy radioisotopes with mass separation system and high-power cyclotrons	Recruited (8/2/16)
8	C2TN	Multifunctional ^{161}Tb complexes for cell DNA specific targeting	
CH2	CHUV	Preclinical Imaging and Animal Models – Clinical Translation on ovarian cancer	Recruited (15/10/15)
CH3	HUG	New robot-assisted instruments and delivery methods for brachytherapy	Recruited

WP3-Overview of ESR positions

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ESR	Researcher	Profile	Project supervisor	PhD supervisor	Location	Secondment (subject)
1						
6	Roberto Formento	Nuclear engineer	L. Maciocco	F. Haddad (Nantes Univ.)	AAA-Nantes (Arronax)	CERN (mass separation)
8						
CH2	Francesco Ciccone	PhD in immunology and cancer	D. Viertl, J. Prior	J. Prior	Lausanne University Hospital	C2TN (multi-functional ^{161}Tb complexes)
CH3	Faraah Ben Mimoun	PhD student	D. Viertl L. Bühler	L. Bühler	Geneva University	Robot-assisted brachytherapy

WP3-Synergy among ESR projects

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