

	University/company/group	COST Member		Country	Expertise	Main Facility	Website
		Name	Surname				
WG3							
1	Trinity College Dublin	Adrielle	Prina-Mello	Ireland	Extensive expertise in: Physico-chemical characterization (PCC), in vitro experiment (2D and 3D in vitro models), static and dynamic models, multiparametric lead candidate identification, toxicity screening, biocompatibility, cell viability, hyperthermia testing and complementary expertise in safety (environmental, health and safety)	PCC: DLS, NTA, EM, TEM, TEM-EDX, AFM, Raman, and other more specific. in vitro: full cell culture and cell signalling facility for nanomaterials handling with assays, SOPs, guidance protocols and ISO protocols. Specialised in vitro cell culture system with microfluidics and 3D chambers. in vitro advanced and imaging techniques & methodologies: high content screening, high throughput screening, flow cytometry, confocal (single and 2- photon), AFM-Raman. in vitro assays: SOP development and validation. Hyperthermia: 5 celes system for in vitro and in vivo.	
2	Trinity College Dublin	Oliviero	Gobbo	Ireland	<i>in vivo</i> experiment, animal model of cancer, Pharmacokinetics, MRI	7T MRI small animal scanner, magneTherm system for hyperthermia (Dermot Brougham)	
3	University of Patras	Aristides	Bakandritsos	Greece	Synthesis and characterization, nanoparticles (~80 nm) with high magnetization and response to magnetic manipulation, dense PEGylation (0.5 chains/nm ²) and ability to carry doxorubicin, cisplatin and other drugs.	Magnetic hyperthermia, magnetophoresis and full facilities for molecular and nanostructural characterization	https://sites.google.com/site/arisbak/
4	Galdakao Usansolo Hospital, Faculty of Medicine, University of the Basque Country	Jose Javier	Echevarria-Uraga	Spain	Transarterial Embolization of Human Tumours, Interventional Radiology. In vivo experiments with rat models of liver metastases. Evaluation of liver tumour animal models (mice and rats) with ultrasound and MRI.	Interventional Radiology Suite. Experimental Surgery Operation Room	
5	NCSR Demokritos	Eleni K.	Efthimiadou	Greece	Synthesis and characterization of multi stimuli nanocontainers (NCs), nanoparticles (NPs) and Quantum Dots (QDs). SEM and TEM morphological characterization. Dynamic light scattering (DLS). Loading of anticancer, anti-inflammatory and antimicrobial study. Mechanism of drug release under different conditions. In vitro toxicity in healthy and cancer cell lines. In vivo HeLa, U87MG and PC3 xenografts. Toxicological, tumor efficacy and hyperthermia treatment protocols.	FT-IR (Perkin Elemer), UV-vis, Raman, BET, SEM, HPLC, GPC, XRD, TGA, NMR, EPR. Facility for in vitro studies. Hyperthermia, Animal house.	www.inn.demokritos.gr
6	UCIBIO/REQUIMTE-Faculty of Pharmacy University of Porto, Portugal	Sofia	Costa Lima	Portugal	1. Production of delivery systems based on polymeric and lipidic nanoparticles for active and passive targeting (using sepcific ligands or pH-sensitive or temperature-responsive). 2. Incorporation of magnetic nanoparticles on delivery systems. 3. physico-chemical characterisation of the nanoparticles (DLS, TEM, Cryo-SEM, FTIR, ITC) and in vitro drug release studies under defined mimetic conditions. 4. Cellular studies using mammalian cell lines (in vitro toxicity, uptake and internalization	DLS, FTIR, ITC, DSC, HPLC, LC-MSMS, NMR, EPR, TEM, SEM, Cryo-SEM, uv-vis, fluorimetry, confocal microscopy, optical microscopy, flow cytometry	
7	University of Lyon, Université Jean Monnet, Saint-Etienne, UMR 3738, CHU Saint-Etienne	Claire	Billotey	France	Murine tumor models. Human (especially nuclear medicine) and small animal multimodalities imaging. Cell labeling tracking and trafficking via a magnetic or radioactive labeling. Qualitative (via optical imaging) and quantitative (via radiolabelling of the compounds) In vivo biodistribution and biokinetic studies. Pre-clinical assessing of a new theranostic probes, clinical assessing of radioactive probes (dedicated toSPECT or PET imaging and/or brachytherapy or targeted/metabolic internal radiotherapy). Specifications of a new probe dedicated to imaging or therapeutic mediated by physical agent. Pre-clinical toxicologic tests.	Dedicated small animal SPECT (NanoSpect,Bioscan) and in vivo optical imaging system (ORCAIBT-512G, Hamamatsu phonics, Massy, France), laboratory dedicated to the radiolabeling (ASN agreement), sample gamma counter, osmometer, Phmeter, animal facilities allowing housing of radioactivity bearing animals Small animal Imaging platform with whole-bodyincluding facilities allowing radioactivity. Fluorescent optical microscope, cell culture facilities (P2 level). Access to pre-clinical Photon Irradiator (ERT) (Precision X-rays Inc-), Metasystem automated microscopic and 7T Dedicated small animal MRI (Biospec™ system equipped with 400 mT/m) and micro-PET-CT.	CLICK to see cell lines
8	Technological Education of Athens	Spiridon	Spirou	Greece	In vivo imaging of radiolabelled NPs using home-made gamma-cameras (planar and tomographic; static and dynamic images), development of gamma-cameras and imaging systems for specific purposes, Monte Carlo simulations of imaging systems, image reconstruction software development Development and clinical implementation of Intensity-Modulated Radiation Therapy, dose calculation, dosimetry and measurements	Off-site access to radiation therapy facilities	http://www.bme.teiath.gr/nj/index.html

9	AIT Austrian Institute of Technology GmbH	Myrtille	Simkó	Austria	Cell and molecular biology, Nanotechnologies, Toxicology, Radiation biology, In vitro technologies, Electromagnetic fields (EMF), Dosimetry, Reactive oxygen species, Signal transduction, Risk assessment, Comparative analysis	different EMF-exposure setups, cell biology (in vitro) laboratory,	
10	University of Belgrade, Vinca Institute of Nuclear Sciences, Laboratory for radioisotopes	Sanja	Vranjes-Djuric	Serbia	Synthesis of nanoparticles (magnetic, fullerenes, Sn-colloids...), albumin microspheres (loaded with MNPs), different compounds (used as radionuclide vehicles in nuclear medicine), their radiolabelling with beta (177Lu, 90Y, 131I, 153Sm) and gamma emitters (99mTc, 111In, 125I), production and quality control of radiopharmaceuticals for use in nuclear medicine (diagnosis and therapy), In vitro stability studies in serum, protein binding, lipophilicity of radiolabelled materials, Pharmacokinetics studies on mice, rats (radiotracer methods)	HPLC with gamma detector, Uv-vis, FTIR (Nicolet is50), freeze dryers, gamma counters, dose calibrators, vivarium of the Vinča Institute with healthy Wistar rats (facilities for animal care), Vinca's ethical committee; soon (but we still don't have) instrument for hyperthermia; certified Lab for production and quality control of radiopharmaceuticals for human use, Physics lab (also on this COST) has: MPMS 5XL SQUID, MS4 Mossbauer Spectrometer, XRD	
11	EPFL	Esther	Amstad	Switzerland	iron oxide nanoparticle synthesis and stabilization.	iron oxide nanoparticles synthesis facility, dynamic light scattering, optical microscopy, electron microscopy, TGA, DSC, FTIR, Magnotherm	
12	University of Bordeaux	Franck	Couillaud	France	Tumor models on immunodeficient and immunocompetent mice for optical imaging. Transgenic mice for optical imaging and thermo-inducible therapies. Drug delivery and thermo-controlled gene therapies. Fluorescence-based biodistribution studies. Pre-clinical assessing of new theranostic probes	Molecular biology, Biochemistry, cell culture, animal handling. Imaging: Bioluminescence, Fluorescence, Fluorescence tomography, peroperative fluorescence, endoscopic confocal microscopy. High intensity focused ultrasound, in vivo electroporation, mouse magnetic hyperthermy.	