Nanomedicine for target-specific imaging and treatment of atherosclerosis: development and initial clinical feasibility

FP7- Large Scale Integrating EU Project
NMP 2012-2017

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16 partners
4 industrials + 2 clinical centers + Foundation for Clinical Nanomedicine

10 countries
Nanosystems for imaging or treatment of CVD

The nanostructure

The shell

The core

The imaging agent or drug (inside/outside)

The targeting
Nanosystems for imaging or treatment of thrombus

AKA Silva et al, Theranostics + Cover June 2014
M. Suzuki et al., Nanomedicine 2015
M. Juenet et al., Future Sci OA 2015

T. Bonnard et al., Theranostics 2014
T. Bonnard et al., Acta Biomaterialia 2014
GMP production of drug loaded liposomes
Partner 5 + Partner 8 + Partner 14

Preclinical evaluation of GMP drug loaded liposomes
Partner 5 + Partner 8

Pharmaceutical development and preclinical evaluation of a GMP-grade anti-inflammatory nanotherapy
Nanomedicine: Nanotechnology, Biology and Medicine, 2015, 11 (5), 1133-40

Clinical evaluation of GMP drug loaded liposomes
Partner 8 + Partner 5

Prednisolone-containing liposomes accumulate in human atherosclerotic macrophages upon intravenous administration
Nanomedicine: Nanotechnology, Biology and Medicine, 2015 11 (5), 1039-46
NanoAthero Achievements
Starting February 2013

- About 16 visits/meetings
- More than 30 publications
- One clinical trial accomplished, one for 2016
- 14 items in exploitable knowledge + 41 dissemination activities

+ Start of new projects between Partners