



Workpackage 7

WP 7: Toxicity

Leader: Merck Serono, Strategic Innovation & Research & Portfolio Management

Superparamagnetic iron oxide particles contrast agents are currently used as contrast agents in clinical magnetic resonance imaging (MRI). In the frame of this project it is planned to synthesise long residence time particles coated with different polymers and decorated with peptides and/or proteins. Preferred use will be as contrast agent after single intra-articular administration in OA or RA patients. It has been shown that by modifying the size and the nature of the coating of the particles, the physico-chemical properties are altered that significantly modify the distribution and pharmacokinetics and consequently the possible clinical applications. During the course of the project it is foreseen that one nanoparticle preparation will be selected for further preclinical developments. Merck Serono is responsible for conducting such developments as described in WP 7 called "Toxicity". This will comprise analytical, formulation and process development as well as pharmacokinetic/distribution, safety pharmacology and toxicity studies. All animal studies will be performed in accordance with the regulatory guidance on the care and use of experimental animals.

Participants

- Merck Serono, Strategic Innovation & Research & Portfolio Management
- Ecole Polytechnique Fédérale de Lausanne, Institute of Materials, Powder Technology Laboratory

WP 1 | WP 2 | WP 3a | WP 3b | WP 4 | WP 5 | WP 6 | WP 8 | WP 9 |

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