

Multimodal Imaging of luciferase transgenic dendritic cells using magnetic resonance imaging (MRI) based tracking after allogeneic hematopoietic cell transplantation

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Project overview: Insight into the trafficking pattern of dendritic cell (DC) populations into lymphoid and non-lymphoid tissues after allogeneic hematopoietic cell transplantation (aHCT) is critical to understand the complex processes that regulate graft-versus-host disease. We were able to generate a platform for in vivo bioluminescence (BLI) and magnetic resonance imaging (MRI) based cell trafficking studies by labelling luciferase transgenic DC with superparamagnetic iron oxide (SPIO) Nano particles bound to a murine IgG antibody.