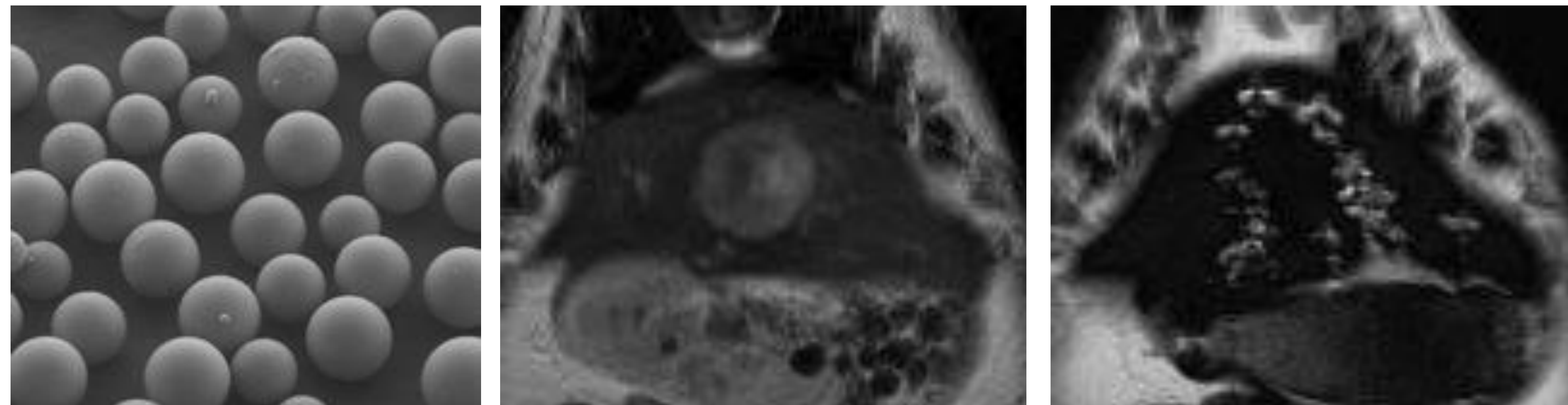


Interventional Oncology Laboratory

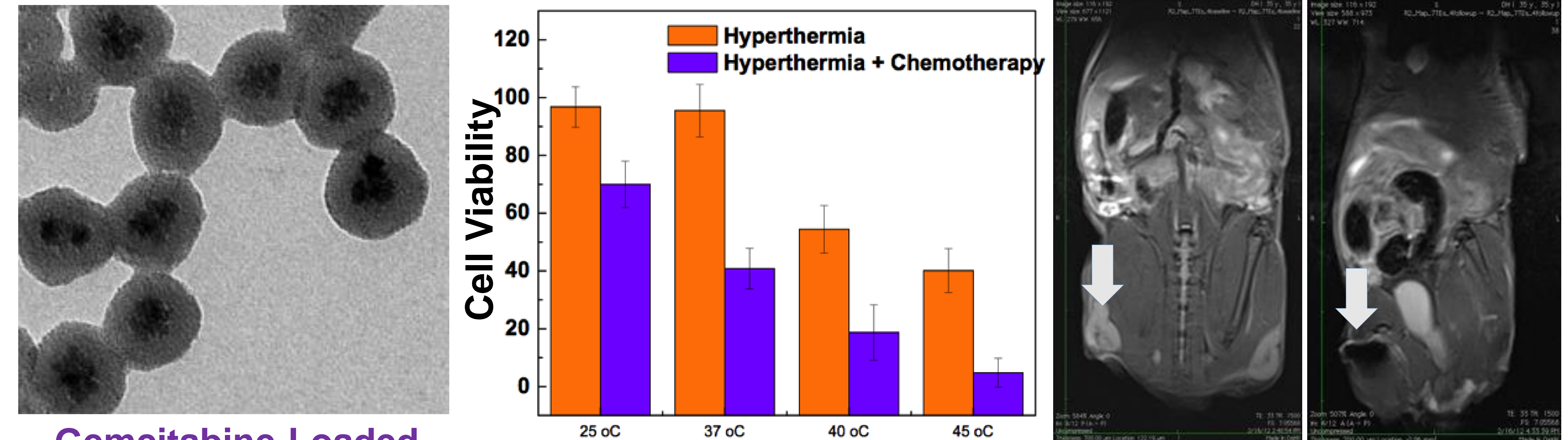
Zhuoli Zhang, Dong-Hyun Kim, Robert Lewandowski, Andrew Larson

MRI of SPIO-Labeled Radioembolization Microspheres¹



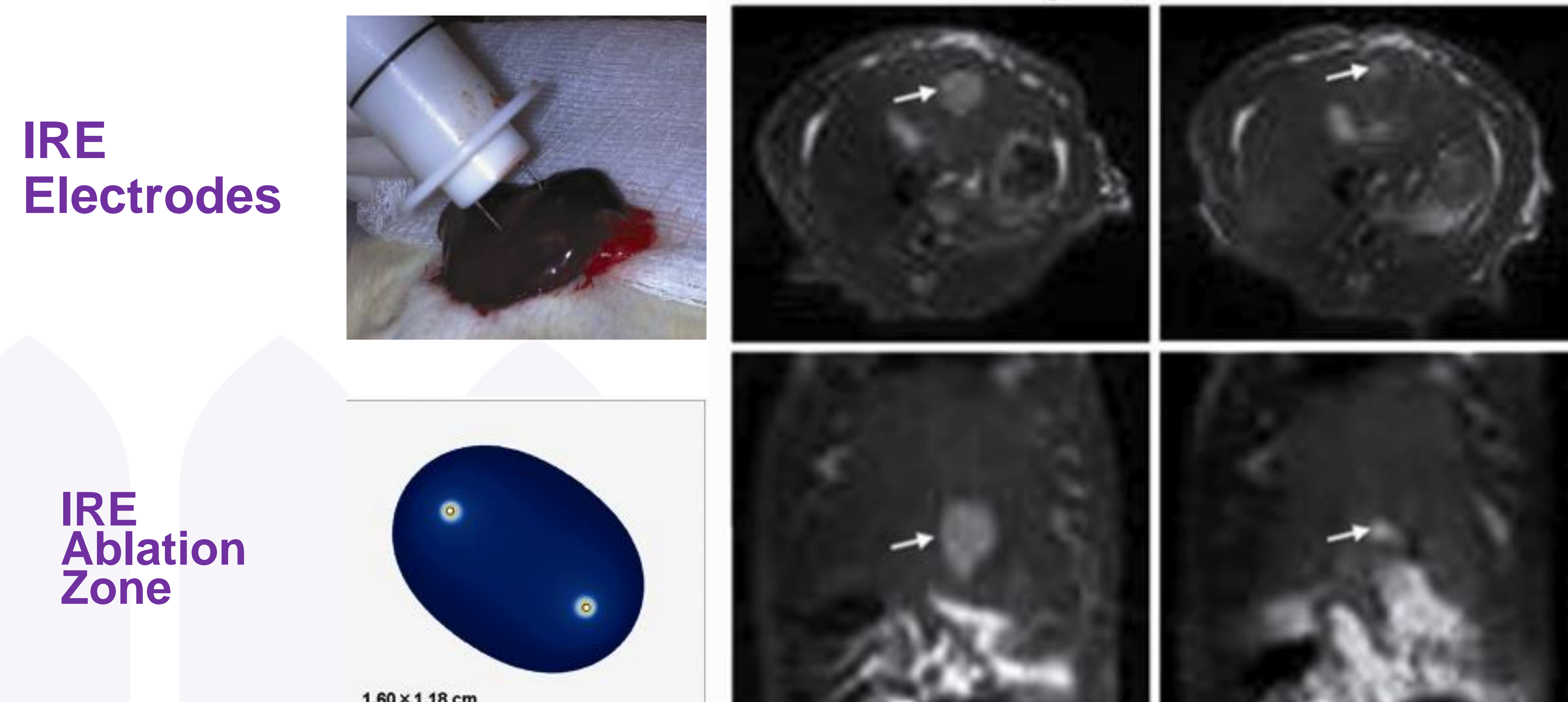
SPIO-Labeled Microspheres Rabbit Liver Tumor Post-Infusion MRI

MRI-Guided Chemohyperthermia for Pancreatic Cancer⁴



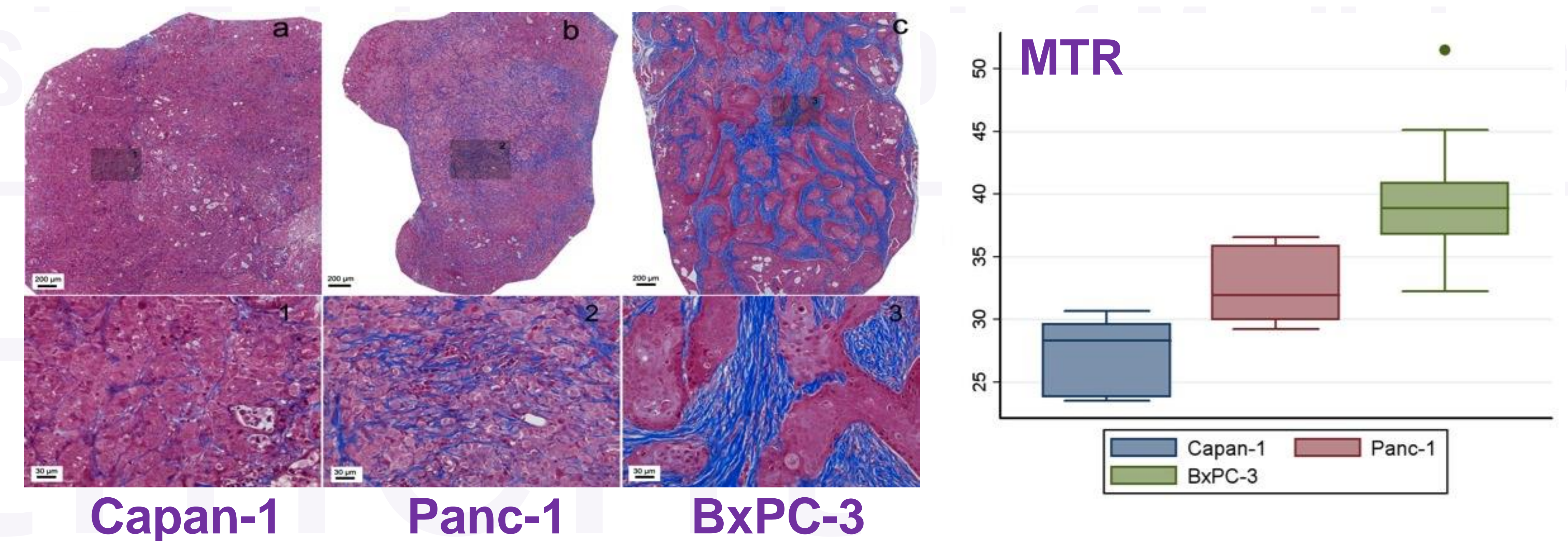
Gemcitabine-Loaded Magnetic Nanospheres In vitro Response Assay MRI of Nanosphere Delivery to PDAC Xenografts

Irreversible Electroporation (IRE) Ablation of Liver Tumors²



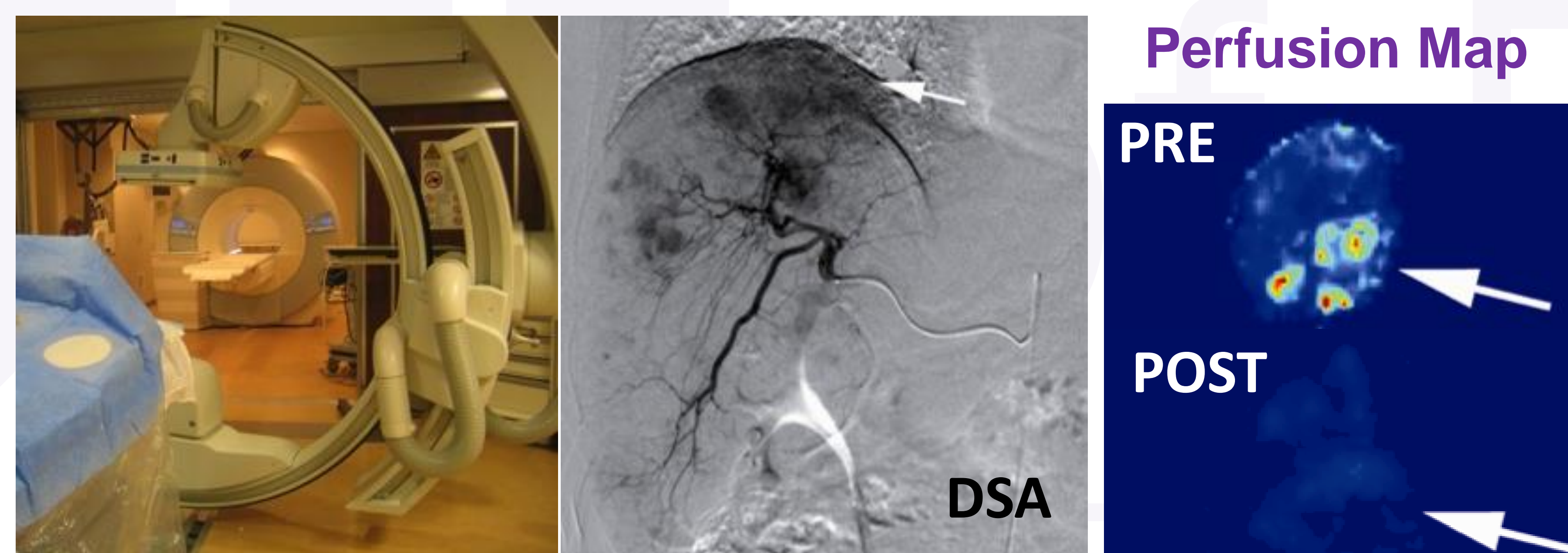
IRE Electrodes IRE Ablation Zone MRI of Liver Tumors After IRE

Magnetization Transfer MRI of Desmoplasia in Pancreatic Cancer⁵

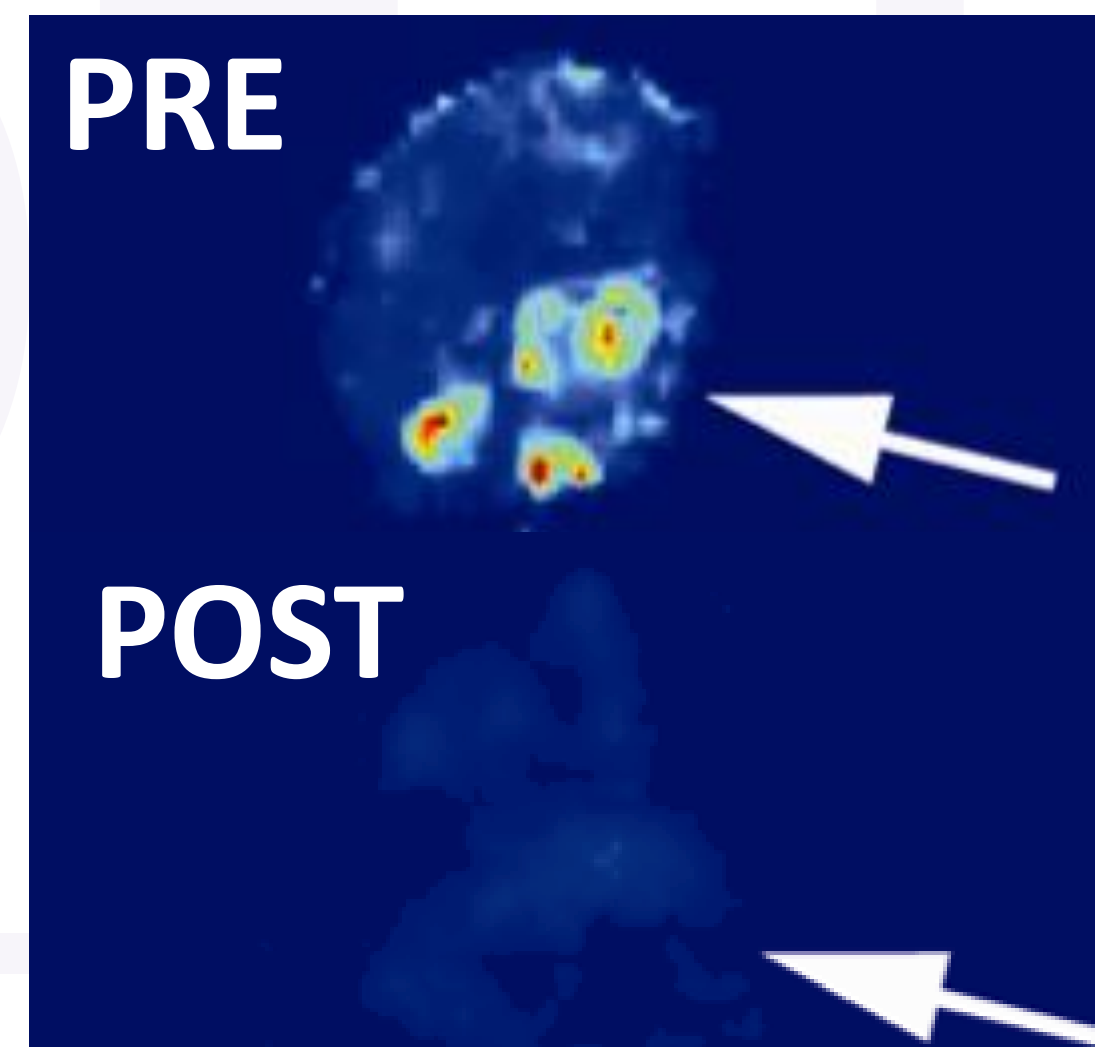


Capan-1 Panc-1 BxPC-3

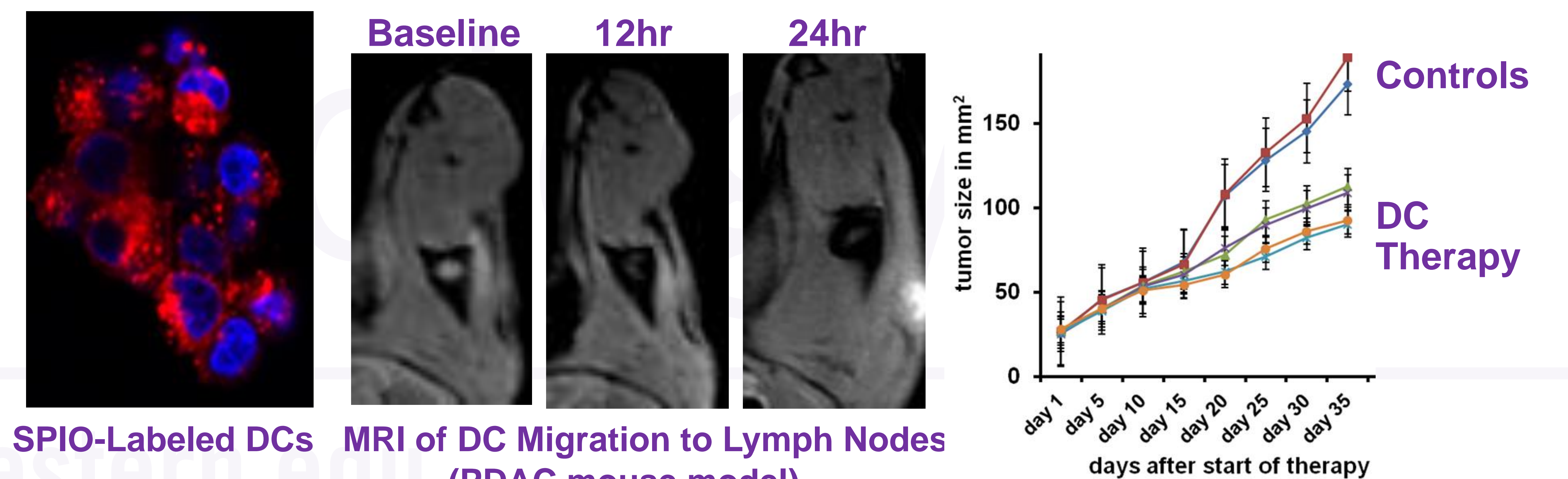
MRI of Tumor Perfusion During Chemoembolization³



Perfusion Map



MRI of Antigen-Loaded Dendritic Cell Migration⁶



SPIO-Labeled DCs MRI of DC Migration to Lymph Nodes (PDAC mouse model)

1. Gupta et al. Radiology 2008 Dec;249(3):845-54
2. Guo et al. Cancer Research 2010 Feb 15;70(4):1555-63
3. Larson et al. Radiology 2008 Mar; 246(3):964-71
4. Kim et al. Adv Healthc Mater 2014 May;3(5):714-24
5. Li et al. NMR Biomed 2013 Dec;26(12):1688-95
6. Zhang et al. Radiology 2014 Sep 15 (Epub ahead of print)