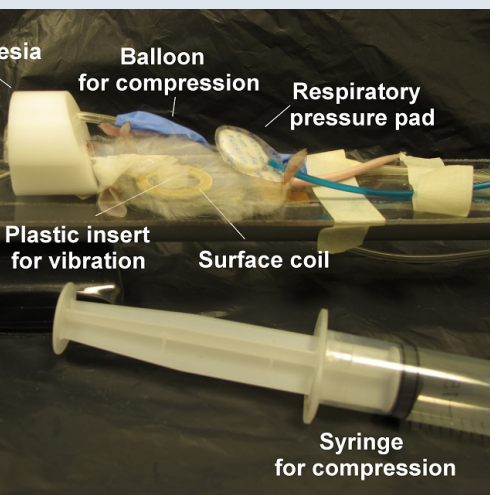


Susceptibility of tumoral blood perfusion to an external mechanical compression : study with no contrast MRI

Objective: In this preliminary study, the balance between the different forces interacting in the tumor is disrupted by an external compression and the perfusion component is evaluated using the FLAIR technique.

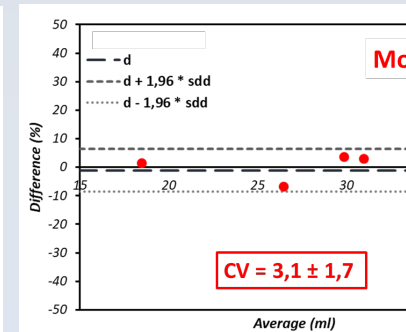
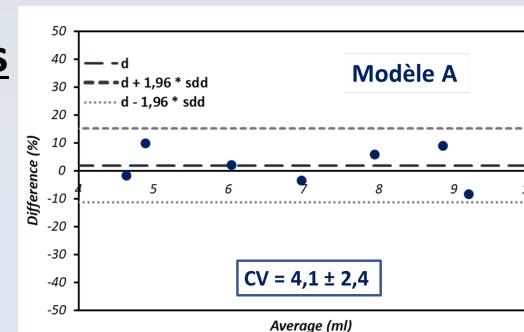
Methods

on 10 mice ("necrotic" model: A (n=5), model: B (n=5))

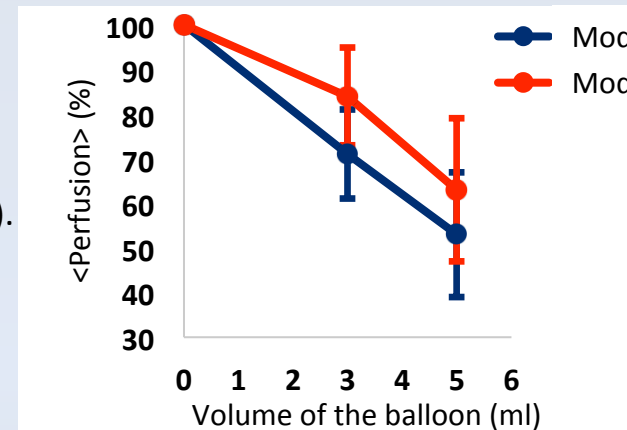


- Repeatability perfusion (FAIR-RARE method)
- MR perfusion acquired at different compression levels.

Results



Average perfusion:
- **6.8ml/min/100g** (model A)
- **29.2ml/min/100g** (model B).



Conclusion: MR perfusion are repeatable and an external compression exerted on the tumor can reduce the perfusion component even for more necrotic tumor.