

RE: confirming MRI stats

From: **Patrick Lyden** | plyden@usc.edu

Monday, May 3, 3:50 PM

To: **Ryan Cabeen** | Ryan.Cabeen@loni.usc.edu

Cc: **Jessica Lamb** | lambj@usc.edu, **Diniz, Marcio A** | Marcio.Diniz@cshs.org, '**Andre Rogatko (Andre.Rogatko@cshs.org)**' | Andre.Rogatko@cshs.org

Ryan,

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Many thanks Ryan,

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Monday, May 3, 11:45 PM

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From: **Patrick Lyden** | plyden@usc.edu

Tuesday, Jul 6, 6:26 AM

To: **Ryan Cabeen** | Ryan.Cabeen@loni.usc.edu

Can you remind me what conversion means in this context? From DICOM to NIFTI? Or something else.

From: **Ryan Cabeen** | Ryan.Cabeen@loni.usc.edu

To: **Patrick Lyden** | plyden@usc.edu

Tuesday, May 4, 2:45 AM

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From: **Patrick Lyden** | plyden@usc.edu

Tuesday, Jul 6, 6:39 AM

To: **Ryan Cabeen** | Ryan.Cabeen@loni.usc.edu

Two more follow up points:

Point #4 below, what are the units. You agreed with me that the volume units are in ml. Published data used units of mm3. I don't think these are the same thing: ml = cc3 = 1000mm3. Can you confirm that the linear units are mm, areal units mm2, and volume units mm3?

Point #5 below, Tissue volumes the same Days 2 and 30. Thanks for the graphic, it tells the tale. Because most sites had smaller lesions, and because lesion is not counted as tissue at Day 2, the mean tissue volumes tended lower at Day 2 (Counter intuitive). Could you regenerate the same graph, but split tissue into left and right? That will show the issue best, I think.

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From: **Patrick Lyden** | plyden@usc.edu

Wednesday, Jul 7, 10:58 AM

To: **Ryan Cabeen** | Ryan.Cabeen@loni.usc.edu

Thank you.

From: **Ryan Cabeen** | Ryan.Cabeen@loni.usc.edu

To: **Patrick Lyden** | plyden@usc.edu

Tuesday, Jul 6, 9:48 PM

For point #4, that's correct, the units are reported in mm^3 — my apologies for my lapse in recalling unit conversion!

For point #5, yes, I'll create additional plots that show left and right volumes as well. Should be interesting!

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Monday, May 3, 3:50 PM

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Thursday, Jul 8, 12:49 AM

To: **Patrick Lyden** | plyden@usc.edu

Here you go, the attached plots show the per-hemisphere tissue volumes by site and timepoint. Let me know if anything else would be helpful

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Wednesday, Jul 7, 10:58 AM

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Tuesday, Jul 6, 6:39 AM

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From: **Patrick Lyden** | plyden@usc.edu

Monday, Jul 12, 4:39 AM

To: **Ryan Cabeen** | Ryan.Cabeen@loni.usc.edu

This certainly answers—finally—our key concerns. Beautiful. It is clear that the hemisphere ipsi to the stroke (right) is smaller early and

recovers. But comparing at the contra (left) side, tissue has been lost. It is particularly interesting that UI has smaller contra hemisphere — somehow they ended up with smaller animals.

Thank you these data are most illuminating.

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