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\\Kamil

Renzo_playground

executed_3rd

executeds

localizer
used_for_NOVA_visual
usedwith_whole_brain
renzo_surface_coil
renzo_surface_coil_0.5

\\Kamil\Renzo_playground\executed_3rd\executeds\localizer

TA: 0:28 PM: REF Voxel size: 0.4×0.4×5.0 mmPAT: Off Rel. SNR: 1.00 : qfl

Properties

| | |
|---|--------------------|
| Prio recon | Off |
| Load images to viewer | On |
| Inline movie | Off |
| Auto store images | On |
| Load images to stamp segments | On |
| Load images to graphic segments | On |
| Auto open inline display | Off |
| Auto close inline display | Off |
| Start measurement without further preparation | Off |
| Wait for user to start | Off |
| Start measurements | Single measurement |

Routine

| | |
|--------------------|--------------------|
| Slice group | 1 |
| Slices | 9 |
| Dist. factor | 300 % |
| Position | R2.0 A15.8 H7.3 mm |
| Orientation | Transversal |
| Phase enc. dir. | A >> P |
| Slice group | 2 |
| Slices | 5 |
| Dist. factor | 300 % |
| Position | R2.0 A14.7 H4.5 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| Slice group | 3 |
| Slices | 2 |
| Dist. factor | 100 % |
| Position | R2.4 A12.0 H4.5 mm |
| Orientation | Coronal |
| Phase enc. dir. | R >> L |
| AutoAlign | --- |
| Phase oversampling | 0 % |
| FoV read | 200 mm |
| FoV phase | 100.0 % |
| Slice thickness | 5.0 mm |
| TR | 8.0 ms |
| TE | 3.69 ms |
| Averages | 1 |
| Concatenations | 16 |
| Filter | Elliptical filter |
| Coil elements | R01 |

Contrast - Common

| | |
|-------------------|---------|
| TR | 8.0 ms |
| TE | 3.69 ms |
| TD | 0 ms |
| MTC | Off |
| Magn. preparation | None |
| Flip angle | 40 deg |
| Fat suppr. | None |
| Water suppr. | None |
| SWI | Off |

Contrast - Dynamic

| | |
|----------------|------------|
| Averages | 1 |
| Averaging mode | Short term |
| Reconstruction | Magnitude |
| Measurements | 1 |

Contrast - Dynamic

| | |
|-----------------|------------------|
| Multiple series | Each measurement |
|-----------------|------------------|

Resolution - Common

| | |
|-----------------------|---------|
| FoV read | 200 mm |
| FoV phase | 100.0 % |
| Slice thickness | 5.0 mm |
| Base resolution | 256 |
| Phase resolution | 80 % |
| Phase partial Fourier | Off |
| Interpolation | On |

Resolution - iPAT

| | |
|----------|------|
| PAT mode | None |
|----------|------|

Resolution - Filter Image

| | |
|-------------------|-----|
| Image Filter | Off |
| Distortion Corr. | Off |
| Prescan Normalize | Off |
| Normalize | Off |
| B1 filter | Off |

Resolution - Filter Rawdata

| | |
|-------------------|-----|
| Raw filter | Off |
| Elliptical filter | On |

Geometry - Common

| | |
|------------------|--------------------|
| Slice group | 1 |
| Slices | 9 |
| Dist. factor | 300 % |
| Position | R2.0 A15.8 H7.3 mm |
| Orientation | Transversal |
| Phase enc. dir. | A >> P |
| Slice group | 2 |
| Slices | 5 |
| Dist. factor | 300 % |
| Position | R2.0 A14.7 H4.5 mm |
| Orientation | Sagittal |
| Phase enc. dir. | A >> P |
| Slice group | 3 |
| Slices | 2 |
| Dist. factor | 100 % |
| Position | R2.4 A12.0 H4.5 mm |
| Orientation | Coronal |
| Phase enc. dir. | R >> L |
| FoV read | 200 mm |
| FoV phase | 100.0 % |
| Slice thickness | 5.0 mm |
| TR | 8.0 ms |
| Multi-slice mode | Sequential |
| Series | Interleaved |
| Concatenations | 16 |

Geometry - AutoAlign

| | |
|-----------------|--------------------|
| Slice group | 1 |
| Position | R2.0 A15.8 H7.3 mm |
| Orientation | Transversal |
| Phase enc. dir. | A >> P |
| Slice group | 2 |
| Position | R2.0 A14.7 H4.5 mm |
| Orientation | Sagittal |

Geometry - AutoAlign

| | |
|---------------------|--------------------|
| Phase enc. dir. | A >> P |
| Slice group | 3 |
| Position | R2.4 A12.0 H4.5 mm |
| Orientation | Coronal |
| Phase enc. dir. | R >> L |
| AutoAlign | --- |
| Initial Position | R2.0 A15.8 H7.3 |
| R | 2.0 mm |
| A | 15.8 mm |
| H | 7.3 mm |
| Initial Rotation | 0.00 deg |
| Initial Orientation | Transversal |

Geometry - Saturation

| | |
|-----------------|----------|
| Saturation mode | Standard |
| Fat suppr. | None |
| Water suppr. | None |
| Special sat. | None |

Geometry - Tim CT

| | |
|-----------------|---------|
| Tim CT mode | Off |
| Slices | 2 |
| Slice thickness | 5.0 mm |
| Dist. factor | 100 % |
| FoV read | 200 mm |
| FoV phase | 100.0 % |
| Segments | 1 |

System - Miscellaneous

| | |
|---------------------|----------------------|
| Positioning mode | REF |
| Table position | F |
| Table position | 0 mm |
| MSMA | S - C - T |
| Sagittal | R >> L |
| Coronal | A >> P |
| Transversal | H >> F |
| Coil Combine Mode | Sum of Squares |
| Save uncombined | Off |
| Matrix Optimization | Off |
| AutoAlign | --- |
| Coil Select Mode | Off - AutoCoilSelect |

System - Adjustments

| | |
|--------------------------|----------|
| B0 Shim mode | Tune up |
| B1 Shim mode | TrueForm |
| Confirm freq. adjustment | Off |
| Assume Dominant Fat | Off |
| Assume Silicone | Off |
| Adjustment Tolerance | Auto |

System - Adjust Volume

| | |
|-------------|-------------|
| Position | Isocenter |
| Orientation | Transversal |
| Rotation | 0.00 deg |
| A >> P | 263 mm |
| R >> L | 350 mm |
| F >> H | 350 mm |
| Reset | Off |

System - Tx/Rx

| | |
|-------------------|----------------|
| Frequency 1H | 297.213376 MHz |
| Correction factor | 1 |
| Gain | High |
| Img. Scale Cor. | 1.000 |

System - Tx/Rx

| | |
|---------------------|-----------|
| Reset | Off |
| ! Ref. amplitude 1H | 200.000 V |

Physio - Signal1

| | |
|-----------------|--------|
| 1st Signal/Mode | None |
| TR | 8.0 ms |
| Concatenations | 16 |
| Segments | 1 |

Physio - Cardiac

| | |
|-------------------|---------|
| Magn. preparation | None |
| Fat suppr. | None |
| Dark blood | Off |
| FoV read | 200 mm |
| FoV phase | 100.0 % |
| Phase resolution | 80 % |

Physio - PACE

| | |
|----------------|-----|
| Resp. control | Off |
| Concatenations | 16 |

Inline - Common

| | |
|----------------------|-----|
| Subtract | Off |
| Measurements | 1 |
| StdDev | Off |
| Liver registration | Off |
| Save original images | On |

Inline - MIP

| | |
|----------------------|-----|
| MIP-Sag | Off |
| MIP-Cor | Off |
| MIP-Tra | Off |
| MIP-Time | Off |
| Save original images | On |

Inline - Soft Tissue

| | |
|--------------|-----|
| Wash - In | Off |
| Wash - Out | Off |
| TTP | Off |
| PEI | Off |
| MIP - time | Off |
| Measurements | 1 |

Inline - Composing

| | |
|------------------|-----|
| Distortion Corr. | Off |
|------------------|-----|

Sequence - Part 1

| | |
|---------------------|------------|
| Introduction | On |
| Dimension | 2D |
| Phase stabilisation | Off |
| Asymmetric echo | Off |
| Contrasts | 1 |
| Flow comp. | No |
| Multi-slice mode | Sequential |
| Bandwidth | 320 Hz/Px |

Sequence - Part 2

| | |
|--------------------------|------------|
| Segments | 1 |
| Acoustic noise reduction | Active |
| RF pulse type | Normal |
| Gradient mode | Normal |
| Excitation | Slice-sel. |
| RF spoiling | On |

Sequence - Assistant

| | |
|------|-----|
| Mode | Off |
|------|-----|

\\Kamil\Renzo_playground\executed_3rd\executeds\used_for_NOVA_visual

TA: 16:12 PM: REF Voxel size: 0.8×0.8×0.8 mmPAT: 3 Rel. SNR: 1.00 : RenzLa4

compiled in KOREA by
Suhuyn**Properties**

| | |
|---|--------------------|
| Prio recon | Off |
| Load images to viewer | On |
| Inline movie | Off |
| Auto store images | On |
| Load images to stamp segments | Off |
| Load images to graphic segments | Off |
| Auto open inline display | Off |
| Auto close inline display | Off |
| Start measurement without further preparation | Off |
| Wait for user to start | Off |
| Start measurements | Single measurement |

Routine

| | |
|--------------------|----------------------|
| Slab group | 1 |
| Slabs | 1 |
| Position | R3.4 P2.2 H2.5 mm |
| Orientation | T > C-36.5 > S0.1 |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Slice oversampling | 0.0 % |
| Slices per slab | 26 |
| FoV read | 177 mm |
| FoV phase | 100.0 % |
| Slice thickness | 0.82 mm |
| TR 1 | 64.34 ms |
| TR 2 | 4016.02 ms |
| TE 1 | 23.0 ms |
| Averages | 1 |
| TE segmentation | 1 |
| Filter | Distortion Corr.(3D) |
| Coil elements | A32 |

Contrast - Common

| | |
|-------------------|-------------------|
| TR 1 | 64.34 ms |
| TR 2 | 4016.02 ms |
| TE 1 | 23.0 ms |
| Multi-echo dTE | 60.0 ms |
| MTC | Off |
| Magn. preparation | Non-sel. IR T1map |
| Flip angle | 33 deg |
| Fat suppr. | None |
| Number of TIs | 2 |

Contrast - Dynamic

| | |
|-------------------|-----------|
| Averages | 1 |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 240 |
| Pause after meas. | 0.0 s |

Resolution - Common

| | |
|-----------------------|---------------------|
| FoV read | 177 mm |
| FoV phase | 100.0 % |
| Slice thickness | 0.82 mm |
| Base resolution | 216 |
| Phase resolution | 100 % |
| Slice resolution | 100 % |
| Phase partial Fourier | 6/8 <- 8 iterations |
| Slice partial Fourier | Off |

Resolution - Common

| | |
|---------------|-----|
| Interpolation | Off |
|---------------|-----|

Resolution - iPAT

| | |
|---------------------|--------------|
| PAT mode | CAIPIRINHA |
| Acc. factor PE | 3 |
| Ref. lines PE | 45 |
| Acc. factor 3D | 1 |
| Ref. lines 3D | 24 |
| CAIPI 3D Shift | 0 |
| Reference scan mode | GRE/separate |
| CAIPIRINHA mode | Free |

improved_GRAPPA
kernel size 4x5
regularization 300**Resolution - Filter Image**

| | |
|-------------------|-----|
| Image Filter | Off |
| Distortion Corr. | On |
| Mode | 3D |
| Unfiltered images | Off |
| Prescan Normalize | Off |
| Normalize | Off |
| B1 filter | Off |

<- recon failed without this

Resolution - Filter Rawdata

| | |
|-------------------|-----|
| Raw filter | Off |
| Elliptical filter | Off |

Geometry - Common

| | |
|--------------------|-------------------|
| Slab group | 1 |
| Slabs | 1 |
| Position | R3.4 P2.2 H2.5 mm |
| Orientation | T > C-36.5 > S0.1 |
| Phase enc. dir. | A >> P |
| Slice oversampling | 0.0 % |
| Slices per slab | 26 |
| FoV read | 177 mm |
| FoV phase | 100.0 % |
| Slice thickness | 0.82 mm |
| TR 1 | 64.34 ms |
| TR 2 | 4016.02 ms |
| Multi-slice mode | Interleaved |
| Series | Ascending |
| TE segmentation | 1 |

Geometry - AutoAlign

| | |
|---------------------|-------------------|
| Slab group | 1 |
| Position | R3.4 P2.2 H2.5 mm |
| Orientation | T > C-36.5 > S0.1 |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Initial Position | R3.4 P2.2 H2.5 |
| R | 3.4 mm |
| P | 2.2 mm |
| H | 2.5 mm |
| Initial Rotation | 0.00 deg |
| Initial Orientation | T > C |
| T > C | -36.5 |
| > S | 0.1 |

Geometry - Saturation

| | |
|-----------------|----------|
| Saturation mode | Standard |
| Fat suppr. | None |

System - Miscellaneous

| | |
|---------------------|----------------|
| Positioning mode | REF |
| Table position | H |
| Table position | 0 mm |
| MSMA | S - C - T |
| Sagittal | R >> L |
| Coronal | A >> P |
| Transversal | F >> H |
| Coil Combine Mode | Sum of Squares |
| Save uncombined | Off |
| Matrix Optimization | Off |
| AutoAlign | --- |
| Coil Select Mode | Default |

System - Adjustments

| | |
|--------------------------|----------|
| B0 Shim mode | Standard |
| B1 Shim mode | TrueForm |
| Confirm freq. adjustment | Off |
| Assume Dominant Fat | Off |
| Assume Silicone | Off |
| Adjustment Tolerance | Auto |

System - Adjust Volume

| | |
|---------------|-------------------|
| ! Position | R9.2 P2.2 H4.4 mm |
| ! Orientation | T > C-32.6 > S0.1 |
| ! Rotation | 0.00 deg |
| ! A >> P | 177 mm |
| ! R >> L | 177 mm |
| ! F >> H | 44 mm |
| Reset | Off |

System - Tx/Rx

| | |
|---------------------|-----------------------|
| Frequency 1H | 297.213376 MHz |
| Correction factor | 1 |
| Gain | Low |
| Img. Scale Cor. | 1.000 |
| Reset | Off |
| ! Ref. amplitude 1H | 220.000 V <- use 250, |

if SAR allows

BOLD

| | |
|-------------------------|----------|
| GLM Statistics | Off |
| Dynamic t-maps | Off |
| Ignore meas. at start | 0 |
| Ignore after transition | 0 |
| Model transition states | On |
| Temp. highpass filter | On |
| Threshold | 4.00 |
| Paradigm size | 20 |
| Meas[1] | Baseline |
| Meas[2] | Baseline |
| Meas[3] | Baseline |
| Meas[4] | Baseline |
| Meas[5] | Baseline |
| Meas[6] | Baseline |
| Meas[7] | Baseline |
| Meas[8] | Baseline |
| Meas[9] | Baseline |
| Meas[10] | Baseline |
| Meas[11] | Active |
| Meas[12] | Active |
| Meas[13] | Active |
| Meas[14] | Active |
| Meas[15] | Active |
| Meas[16] | Active |
| Meas[17] | Active |

Note, that 10 min
SAR is limit.
scan might stop
after 5min

BOLD

| | |
|-------------------|--------|
| Meas[18] | Active |
| Meas[19] | Active |
| Meas[20] | Active |
| Motion correction | Off |
| Spatial filter | Off |
| Measurements | 240 |

Sequence - Part 1

| | |
|------------------|-------------|
| Introduction | On |
| Dimension | 3D |
| Reordering | Linear |
| Asymmetric echo | Off |
| Contrasts | 1 |
| Multi-slice mode | Interleaved |
| Echo spacing | 1.01 ms |
| Bandwidth | 1102 Hz/Px |

Sequence - Part 2

| | |
|---------------|-----------|
| EPI factor | 54 |
| Segmentation | 1 |
| RF pulse type | Normal |
| Gradient mode | Fast |
| Excitation | Slab-sel. |
| RF spoiling | On |
| Turbo factor | 26 |

Sequence - Special

| | |
|--------------------|---------------------|
| PATRef FA | 12 deg |
| RF duration | 2500 us |
| RF BWT product | 25 |
| Slab Scale | 90 % |
| Ernst T1 | 2500 ms |
| PATRef prep. shots | 10 |
| Volume dummy shots | 0 |
| Dummy Measurements | 0 |
| Invert PE | Off |
| Invert 3D | Off |
| Min. TE if PF | On |
| Are you Renzo? | On |
| Echo Time Shift | On |
| Water Exc. | -none- |
| External PC | per Series |
| HSN RF power scale | 2.00 <- 3 is better |
| Inversion Delay | 650000 us |
| Relaxation Delay | 0 us |

Sequence - Assistant

| | |
|------|-----|
| Mode | Off |
|------|-----|

\\Kamil\Renzo_playground\executed_3rd\executeds\usedwith_whole_brain

TA: 10:26 PM: REF Voxel size: 0.8×0.8×0.8 mmPAT: 6 Rel. SNR: 1.00 : RenzLa4

Properties

| | |
|---|--------------------|
| Prio recon | Off |
| Load images to viewer | On |
| Inline movie | Off |
| Auto store images | On |
| Load images to stamp segments | Off |
| Load images to graphic segments | Off |
| Auto open inline display | Off |
| Auto close inline display | Off |
| Start measurement without further preparation | Off |
| Wait for user to start | Off |
| Start measurements | Single measurement |

Routine

| | |
|--------------------|----------------------|
| Slab group | 1 |
| Slabs | 1 |
| Position | L0.0 A7.0 H10.0 mm |
| Orientation | T > C-12.9 |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Slice oversampling | 0.0 % |
| Slices per slab | 104 |
| FoV read | 177 mm |
| FoV phase | 100.0 % |
| Slice thickness | 0.82 mm |
| TR 1 | 61.56 ms |
| TR 2 | 7742.92 ms |
| TE 1 | 22.0 ms |
| Averages | 1 |
| TE segmentation | 1 |
| Filter | Distortion Corr.(3D) |
| Coil elements | A32 |

Contrast - Common

| | |
|-------------------|-------------------|
| TR 1 | 61.56 ms |
| TR 2 | 7742.92 ms |
| TE 1 | 22.0 ms |
| Multi-echo dTE | 60.0 ms |
| MTC | Off |
| Magn. preparation | Non-sel. IR T1map |
| Flip angle | 33 deg |
| Fat suppr. | None |
| Number of TIs | 2 |

Contrast - Dynamic

| | |
|-------------------|-----------|
| Averages | 1 |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 80 |
| Pause after meas. | 0.0 s |

Resolution - Common

| | |
|-----------------------|---------|
| FoV read | 177 mm |
| FoV phase | 100.0 % |
| Slice thickness | 0.82 mm |
| Base resolution | 216 |
| Phase resolution | 100 % |
| Slice resolution | 100 % |
| Phase partial Fourier | 6/8 |
| Slice partial Fourier | Off |

Resolution - Common

| | |
|---------------|-----|
| Interpolation | Off |
|---------------|-----|

Resolution - iPAT

| | |
|---------------------|--------------|
| PAT mode | CAIPIRINHA |
| Acc. factor PE | 3 |
| Ref. lines PE | 45 |
| Acc. factor 3D | 2 |
| Ref. lines 3D | 24 |
| CAIPI 3D Shift | 1 |
| Reference scan mode | GRE/separate |
| CAIPIRINHA mode | Free |

Resolution - Filter Image

| | |
|-------------------|-----|
| Image Filter | Off |
| Distortion Corr. | On |
| Mode | 3D |
| Unfiltered images | Off |
| Prescan Normalize | Off |
| Normalize | Off |
| B1 filter | Off |

Resolution - Filter Rawdata

| | |
|-------------------|-----|
| Raw filter | Off |
| Elliptical filter | Off |

Geometry - Common

| | |
|--------------------|--------------------|
| Slab group | 1 |
| Slabs | 1 |
| Position | L0.0 A7.0 H10.0 mm |
| Orientation | T > C-12.9 |
| Phase enc. dir. | A >> P |
| Slice oversampling | 0.0 % |
| Slices per slab | 104 |
| FoV read | 177 mm |
| FoV phase | 100.0 % |
| Slice thickness | 0.82 mm |
| TR 1 | 61.56 ms |
| TR 2 | 7742.92 ms |
| Multi-slice mode | Interleaved |
| Series | Ascending |
| TE segmentation | 1 |

Geometry - AutoAlign

| | |
|---------------------|--------------------|
| Slab group | 1 |
| Position | L0.0 A7.0 H10.0 mm |
| Orientation | T > C-12.9 |
| Phase enc. dir. | A >> P |
| AutoAlign | --- |
| Initial Position | L0.0 A7.0 H10.0 |
| L | 0.0 mm |
| A | 7.0 mm |
| H | 10.0 mm |
| Initial Rotation | 0.00 deg |
| Initial Orientation | T > C |
| T > C | -12.9 |
| > S | 0.0 |

Geometry - Saturation

| | |
|-----------------|----------|
| Saturation mode | Standard |
| Fat suppr. | None |

System - Miscellaneous

| | |
|---------------------|----------------|
| Positioning mode | REF |
| Table position | H |
| Table position | 0 mm |
| MSMA | S - C - T |
| Sagittal | R >> L |
| Coronal | A >> P |
| Transversal | F >> H |
| Coil Combine Mode | Sum of Squares |
| Save uncombined | Off |
| Matrix Optimization | Off |
| AutoAlign | --- |
| Coil Select Mode | Default |

System - Adjustments

| | |
|--------------------------|----------|
| B0 Shim mode | Standard |
| B1 Shim mode | TrueForm |
| Confirm freq. adjustment | Off |
| Assume Dominant Fat | Off |
| Assume Silicone | Off |
| Adjustment Tolerance | Auto |

System - Adjust Volume

| | |
|---------------|--------------------|
| ! Position | R0.2 A6.3 H13.5 mm |
| ! Orientation | T > C-13.8 > S-0.4 |
| ! Rotation | 0.00 deg |
| ! A >> P | 177 mm |
| ! R >> L | 171 mm |
| ! F >> H | 91 mm |
| Reset | Off |

System - Tx/Rx

| | |
|---------------------|----------------|
| Frequency 1H | 297.213376 MHz |
| Correction factor | 1 |
| Gain | Low |
| Img. Scale Cor. | 1.000 |
| Reset | Off |
| ! Ref. amplitude 1H | 220.000 V |

BOLD

| | |
|-------------------------|----------|
| GLM Statistics | Off |
| Dynamic t-maps | Off |
| Ignore meas. at start | 0 |
| Ignore after transition | 0 |
| Model transition states | On |
| Temp. highpass filter | On |
| Threshold | 4.00 |
| Paradigm size | 20 |
| Meas[1] | Baseline |
| Meas[2] | Baseline |
| Meas[3] | Baseline |
| Meas[4] | Baseline |
| Meas[5] | Baseline |
| Meas[6] | Baseline |
| Meas[7] | Baseline |
| Meas[8] | Baseline |
| Meas[9] | Baseline |
| Meas[10] | Baseline |
| Meas[11] | Active |
| Meas[12] | Active |
| Meas[13] | Active |
| Meas[14] | Active |
| Meas[15] | Active |
| Meas[16] | Active |
| Meas[17] | Active |

BOLD

| | |
|-------------------|--------|
| Meas[18] | Active |
| Meas[19] | Active |
| Meas[20] | Active |
| Motion correction | Off |
| Spatial filter | Off |
| Measurements | 80 |

Sequence - Part 1

| | |
|------------------|-------------|
| Introduction | On |
| Dimension | 3D |
| Reordering | Linear |
| Asymmetric echo | Off |
| Contrasts | 1 |
| Multi-slice mode | Interleaved |
| Echo spacing | 1.01 ms |
| Bandwidth | 1102 Hz/Px |

Sequence - Part 2

| | |
|---------------|-----------|
| EPI factor | 54 |
| Segmentation | 1 |
| RF pulse type | Normal |
| Gradient mode | Fast |
| Excitation | Slab-sel. |
| RF spoiling | On |
| Turbo factor | 26 |

Sequence - Special

| | |
|--------------------|------------|
| PATRef FA | 12 deg |
| RF duration | 2500 us |
| RF BWT product | 25 |
| Slab Scale | 90 % |
| Ernst T1 | 2500 ms |
| PATRef prep. shots | 10 |
| Volume dummy shots | 0 |
| Dummy Measurements | 0 |
| Invert PE | Off |
| Invert 3D | Off |
| Min. TE if PF | On |
| Are you Renzo? | On |
| Echo Time Shift | On |
| Water Exc. | -none- |
| External PC | per Series |
| HSN RF power scale | 2.00 |
| Inversion Delay | 650000 us |
| Relaxation Delay | 0 us |

Sequence - Assistant

| | |
|------|-----|
| Mode | Off |
|------|-----|

\\Kamil\\Renzo_playground\\executed_3rd\\executeds\\renzo_surface_coil

TA: 17:15 PM: REF Voxel size: 0.7×0.7×0.8 mmPAT: 3 Rel. SNR: 1.00 : RenzLa4

Properties

| | |
|---|--------------------|
| Prio recon | Off |
| Load images to viewer | On |
| Inline movie | Off |
| Auto store images | On |
| Load images to stamp segments | Off |
| Load images to graphic segments | Off |
| Auto open inline display | Off |
| Auto close inline display | Off |
| Start measurement without further preparation | Off |
| Wait for user to start | Off |
| Start measurements | Single measurement |

Routine

| | |
|--------------------|----------------------|
| Slab group | 1 |
| Slabs | 1 |
| Position | R2.4 P11.9 H1.1 mm |
| Orientation | C > T-18.8 |
| Phase enc. dir. | F >> H |
| AutoAlign | --- |
| Slice oversampling | 0.0 % |
| Slices per slab | 26 |
| FoV read | 137 mm |
| FoV phase | 100.0 % |
| Slice thickness | 0.82 mm |
| TR 1 | 64.83 ms |
| TR 2 | 4278.1 ms |
| TE 1 | 23.0 ms |
| Averages | 1 |
| TE segmentation | 1 |
| Filter | Distortion Corr.(3D) |
| Coil elements | R01 |

Contrast - Common

| | |
|-------------------|-------------------|
| TR 1 | 64.83 ms |
| TR 2 | 4278.1 ms |
| TE 1 | 23.0 ms |
| Multi-echo dTE | 60.0 ms |
| MTC | Off |
| Magn. preparation | Non-sel. IR T1map |
| Flip angle | 33 deg |
| Fat suppr. | Fat sat. |
| Number of TIs | 2 |

Contrast - Dynamic

| | |
|-------------------|-----------|
| Averages | 1 |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 240 |
| Pause after meas. | 0.0 s |

Resolution - Common

| | |
|-----------------------|---------|
| FoV read | 137 mm |
| FoV phase | 100.0 % |
| Slice thickness | 0.82 mm |
| Base resolution | 192 |
| Phase resolution | 100 % |
| Slice resolution | 100 % |
| Phase partial Fourier | 6/8 |
| Slice partial Fourier | Off |

Resolution - Common

| | |
|---------------|-----|
| Interpolation | Off |
|---------------|-----|

Resolution - iPAT

| | |
|---------------------|--------------|
| PAT mode | CAIPIRINHA |
| Acc. factor PE | 3 |
| Ref. lines PE | 45 |
| Acc. factor 3D | 1 |
| Ref. lines 3D | 24 |
| CAIPI 3D Shift | 0 |
| Reference scan mode | GRE/separate |
| CAIPIRINHA mode | Free |

Resolution - Filter Image

| | |
|-------------------|-----|
| Image Filter | Off |
| Distortion Corr. | On |
| Mode | 3D |
| Unfiltered images | Off |
| Prescan Normalize | Off |
| Normalize | Off |
| B1 filter | Off |

Resolution - Filter Rawdata

| | |
|-------------------|-----|
| Raw filter | Off |
| Elliptical filter | Off |

Geometry - Common

| | |
|--------------------|--------------------|
| Slab group | 1 |
| Slabs | 1 |
| Position | R2.4 P11.9 H1.1 mm |
| Orientation | C > T-18.8 |
| Phase enc. dir. | F >> H |
| Slice oversampling | 0.0 % |
| Slices per slab | 26 |
| FoV read | 137 mm |
| FoV phase | 100.0 % |
| Slice thickness | 0.82 mm |
| TR 1 | 64.83 ms |
| TR 2 | 4278.1 ms |
| Multi-slice mode | Interleaved |
| Series | Ascending |
| TE segmentation | 1 |

Geometry - AutoAlign

| | |
|---------------------|--------------------|
| Slab group | 1 |
| Position | R2.4 P11.9 H1.1 mm |
| Orientation | C > T-18.8 |
| Phase enc. dir. | F >> H |
| AutoAlign | --- |
| Initial Position | R2.4 P11.9 H1.1 |
| R | 2.4 mm |
| P | 11.9 mm |
| H | 1.1 mm |
| Initial Rotation | 90.00 deg |
| Initial Orientation | C > T |
| C > T | -18.8 |
| > S | 0.0 |

Geometry - Saturation

| | |
|-----------------|----------|
| Saturation mode | Standard |
| Fat suppr. | Fat sat. |

System - Miscellaneous

| | |
|---------------------|----------------|
| Positioning mode | REF |
| Table position | H |
| Table position | 0 mm |
| MSMA | S - C - T |
| Sagittal | R >> L |
| Coronal | A >> P |
| Transversal | F >> H |
| Coil Combine Mode | Sum of Squares |
| Save uncombined | Off |
| Matrix Optimization | Off |
| AutoAlign | --- |
| Coil Select Mode | Default |

System - Adjustments

| | |
|--------------------------|----------|
| B0 Shim mode | Standard |
| B1 Shim mode | TrueForm |
| Confirm freq. adjustment | Off |
| Assume Dominant Fat | Off |
| Assume Silicone | Off |
| Adjustment Tolerance | Auto |

System - Adjust Volume

| | |
|---------------|--------------------|
| ! Position | R5.3 P5.6 H12.6 mm |
| ! Orientation | C > T-8.9 > S0.1 |
| ! Rotation | -89.98 deg |
| ! F >> H | 92 mm |
| ! R >> L | 177 mm |
| ! A >> P | 28 mm |
| Reset | Off |

System - Tx/Rx

| | |
|---------------------|----------------|
| Frequency 1H | 297.213376 MHz |
| Correction factor | 1 |
| Gain | Low |
| Img. Scale Cor. | 0.300 |
| Reset | Off |
| ! Ref. amplitude 1H | 220.000 V |

BOLD

| | |
|-------------------------|----------|
| GLM Statistics | Off |
| Dynamic t-maps | Off |
| Ignore meas. at start | 0 |
| Ignore after transition | 0 |
| Model transition states | On |
| Temp. highpass filter | On |
| Threshold | 4.00 |
| Paradigm size | 20 |
| Meas[1] | Baseline |
| Meas[2] | Baseline |
| Meas[3] | Baseline |
| Meas[4] | Baseline |
| Meas[5] | Baseline |
| Meas[6] | Baseline |
| Meas[7] | Baseline |
| Meas[8] | Baseline |
| Meas[9] | Baseline |
| Meas[10] | Baseline |
| Meas[11] | Active |
| Meas[12] | Active |
| Meas[13] | Active |
| Meas[14] | Active |
| Meas[15] | Active |
| Meas[16] | Active |
| Meas[17] | Active |

BOLD

| | |
|-------------------|--------|
| Meas[18] | Active |
| Meas[19] | Active |
| Meas[20] | Active |
| Motion correction | Off |
| Spatial filter | Off |
| Measurements | 240 |

Sequence - Part 1

| | |
|------------------|-------------|
| Introduction | On |
| Dimension | 3D |
| Reordering | Linear |
| Asymmetric echo | Off |
| Contrasts | 1 |
| Multi-slice mode | Interleaved |
| Echo spacing | 1.2 ms |
| Bandwidth | 930 Hz/Px |

Sequence - Part 2

| | |
|---------------|-----------|
| EPI factor | 48 |
| Segmentation | 1 |
| RF pulse type | Normal |
| Gradient mode | Fast |
| Excitation | Slab-sel. |
| RF spoiling | On |
| Turbo factor | 26 |

Sequence - Special

| | |
|--------------------|------------|
| PATRef FA | 12 deg |
| RF duration | 2500 us |
| RF BWT product | 25 |
| Slab Scale | 90 % |
| Ernst T1 | 2500 ms |
| PATRef prep. shots | 10 |
| Volume dummy shots | 0 |
| Dummy Measurements | 0 |
| Invert PE | Off |
| Invert 3D | Off |
| Min. TE if PF | On |
| Are you Renzo? | On |
| Echo Time Shift | On |
| Water Exc. | -none- |
| External PC | per Series |
| Saturation RF | per Shot |
| HSN RF power scale | 2.00 |
| Inversion Delay | 650000 us |
| Relaxation Delay | 0 us |

Sequence - Assistant

| | |
|------|-----|
| Mode | Off |
|------|-----|

\\Kamil\Renzo_playground\executed_3rd\executeds\renzo_surface_coil_0.5

TA: 6:26 PM: REF Voxel size: 0.5×0.5×1.2 mmPAT: 3 Rel. SNR: 1.00 : RenzLa4

Properties

| | |
|---|--------------------|
| Prio recon | Off |
| Load images to viewer | On |
| Inline movie | Off |
| Auto store images | On |
| Load images to stamp segments | Off |
| Load images to graphic segments | Off |
| Auto open inline display | Off |
| Auto close inline display | Off |
| Start measurement without further preparation | Off |
| Wait for user to start | Off |
| Start measurements | Single measurement |

Routine

| | |
|--------------------|----------------------|
| Slab group | 1 |
| Slabs | 1 |
| Position | R2.4 P11.9 H1.1 mm |
| Orientation | C > T-18.8 |
| Phase enc. dir. | F >> H |
| AutoAlign | --- |
| Slice oversampling | 0.0 % |
| Slices per slab | 26 |
| FoV read | 137 mm |
| FoV phase | 100.0 % |
| Slice thickness | 1.20 mm |
| TR 1 | 55.32 ms |
| TR 2 | 7567.16 ms |
| TE 1 | 19.0 ms |
| Averages | 1 |
| TE segmentation | 1 |
| Filter | Distortion Corr.(3D) |
| Coil elements | R01 |

Contrast - Common

| | |
|-------------------|-------------------|
| TR 1 | 55.32 ms |
| TR 2 | 7567.16 ms |
| TE 1 | 19.0 ms |
| Multi-echo dTE | 60.0 ms |
| MTC | Off |
| Magn. preparation | Non-sel. IR T1map |
| Flip angle | 33 deg |
| Fat suppr. | Fat sat. |
| Number of TIs | 2 |

Contrast - Dynamic

| | |
|----------------------|-----------|
| Averages | 1 |
| Averaging mode | Long term |
| Reconstruction | Magnitude |
| Measurements | 50 |
| Pause after meas. 1 | 0.0 s |
| Pause after meas. 2 | 0.0 s |
| Pause after meas. 3 | 0.0 s |
| Pause after meas. 4 | 0.0 s |
| Pause after meas. 5 | 0.0 s |
| Pause after meas. 6 | 0.0 s |
| Pause after meas. 7 | 0.0 s |
| Pause after meas. 8 | 0.0 s |
| Pause after meas. 9 | 0.0 s |
| Pause after meas. 10 | 0.0 s |
| Pause after meas. 11 | 0.0 s |

Contrast - Dynamic

| | |
|----------------------|-------|
| Pause after meas. 12 | 0.0 s |
| Pause after meas. 13 | 0.0 s |
| Pause after meas. 14 | 0.0 s |
| Pause after meas. 15 | 0.0 s |
| Pause after meas. 16 | 0.0 s |
| Pause after meas. 17 | 0.0 s |
| Pause after meas. 18 | 0.0 s |
| Pause after meas. 19 | 0.0 s |
| Pause after meas. 20 | 0.0 s |
| Pause after meas. 21 | 0.0 s |
| Pause after meas. 22 | 0.0 s |
| Pause after meas. 23 | 0.0 s |
| Pause after meas. 24 | 0.0 s |
| Pause after meas. 25 | 0.0 s |
| Pause after meas. 26 | 0.0 s |
| Pause after meas. 27 | 0.0 s |
| Pause after meas. 28 | 0.0 s |
| Pause after meas. 29 | 0.0 s |
| Pause after meas. 30 | 0.0 s |
| Pause after meas. 31 | 0.0 s |
| Pause after meas. 32 | 0.0 s |
| Pause after meas. 33 | 0.0 s |
| Pause after meas. 34 | 0.0 s |
| Pause after meas. 35 | 0.0 s |
| Pause after meas. 36 | 0.0 s |
| Pause after meas. 37 | 0.0 s |
| Pause after meas. 38 | 0.0 s |
| Pause after meas. 39 | 0.0 s |
| Pause after meas. 40 | 0.0 s |
| Pause after meas. 41 | 0.0 s |
| Pause after meas. 42 | 0.0 s |
| Pause after meas. 43 | 0.0 s |
| Pause after meas. 44 | 0.0 s |
| Pause after meas. 45 | 0.0 s |
| Pause after meas. 46 | 0.0 s |
| Pause after meas. 47 | 0.0 s |
| Pause after meas. 48 | 0.0 s |
| Pause after meas. 49 | 0.0 s |

Resolution - Common

| | |
|-----------------------|---------|
| FoV read | 137 mm |
| FoV phase | 100.0 % |
| Slice thickness | 1.20 mm |
| Base resolution | 272 |
| Phase resolution | 100 % |
| Slice resolution | 100 % |
| Phase partial Fourier | 6/8 |
| Slice partial Fourier | Off |
| Interpolation | Off |

Resolution - iPAT

| | |
|---------------------|--------------|
| PAT mode | CAIPIRINHA |
| Acc. factor PE | 3 |
| Ref. lines PE | 45 |
| Acc. factor 3D | 1 |
| Ref. lines 3D | 24 |
| CAIPI 3D Shift | 0 |
| Reference scan mode | GRE/separate |
| CAIPIRINHA mode | Free |

Resolution - Filter Image

| | |
|-------------------|-----|
| Image Filter | Off |
| Distortion Corr. | On |
| Mode | 3D |
| Unfiltered images | Off |
| Prescan Normalize | Off |
| Normalize | Off |
| B1 filter | Off |

Resolution - Filter Rawdata

| | |
|-------------------|-----|
| Raw filter | Off |
| Elliptical filter | Off |

Geometry - Common

| | |
|--------------------|--------------------|
| Slab group | 1 |
| Slabs | 1 |
| Position | R2.4 P11.9 H1.1 mm |
| Orientation | C > T-18.8 |
| Phase enc. dir. | F >> H |
| Slice oversampling | 0.0 % |
| Slices per slab | 26 |
| FoV read | 137 mm |
| FoV phase | 100.0 % |
| Slice thickness | 1.20 mm |
| TR 1 | 55.32 ms |
| TR 2 | 7567.16 ms |
| Multi-slice mode | Interleaved |
| Series | Ascending |
| TE segmentation | 1 |

Geometry - AutoAlign

| | |
|---------------------|--------------------|
| Slab group | 1 |
| Position | R2.4 P11.9 H1.1 mm |
| Orientation | C > T-18.8 |
| Phase enc. dir. | F >> H |
| AutoAlign | --- |
| Initial Position | R2.4 P11.9 H1.1 |
| R | 2.4 mm |
| P | 11.9 mm |
| H | 1.1 mm |
| Initial Rotation | 90.00 deg |
| Initial Orientation | C > T |
| C > T | -18.8 |
| > S | 0.0 |

Geometry - Saturation

| | |
|-----------------|----------|
| Saturation mode | Standard |
| Fat suppr. | Fat sat. |

System - Miscellaneous

| | |
|---------------------|----------------|
| Positioning mode | REF |
| Table position | H |
| Table position | 0 mm |
| MSMA | S - C - T |
| Sagittal | R >> L |
| Coronal | A >> P |
| Transversal | F >> H |
| Coil Combine Mode | Sum of Squares |
| Save uncombined | Off |
| Matrix Optimization | Off |
| AutoAlign | --- |
| Coil Select Mode | Default |

System - Adjustments

| | |
|--------------|----------|
| B0 Shim mode | Standard |
|--------------|----------|

System - Adjustments

| | |
|--------------------------|----------|
| B1 Shim mode | TrueForm |
| Confirm freq. adjustment | Off |
| Assume Dominant Fat | Off |
| Assume Silicone | Off |
| Adjustment Tolerance | Auto |

System - Adjust Volume

| | |
|---------------|--------------------|
| ! Position | R5.3 P5.6 H12.6 mm |
| ! Orientation | C > T-8.9 > S0.1 |
| ! Rotation | -89.98 deg |
| ! F >> H | 92 mm |
| ! R >> L | 177 mm |
| ! A >> P | 28 mm |
| Reset | Off |

System - Tx/Rx

| | |
|---------------------|----------------|
| Frequency 1H | 297.213376 MHz |
| Correction factor | 1 |
| Gain | Low |
| Img. Scale Cor. | 0.300 |
| Reset | Off |
| ! Ref. amplitude 1H | 220.000 V |

BOLD

| | |
|-------------------------|----------|
| GLM Statistics | Off |
| Dynamic t-maps | Off |
| Ignore meas. at start | 0 |
| Ignore after transition | 0 |
| Model transition states | On |
| Temp. highpass filter | On |
| Threshold | 4.00 |
| Paradigm size | 20 |
| Meas[1] | Baseline |
| Meas[2] | Baseline |
| Meas[3] | Baseline |
| Meas[4] | Baseline |
| Meas[5] | Baseline |
| Meas[6] | Baseline |
| Meas[7] | Baseline |
| Meas[8] | Baseline |
| Meas[9] | Baseline |
| Meas[10] | Baseline |
| Meas[11] | Active |
| Meas[12] | Active |
| Meas[13] | Active |
| Meas[14] | Active |
| Meas[15] | Active |
| Meas[16] | Active |
| Meas[17] | Active |
| Meas[18] | Active |
| Meas[19] | Active |
| Meas[20] | Active |
| Motion correction | Off |
| Spatial filter | Off |
| Measurements | 50 |

Sequence - Part 1

| | |
|------------------|-------------|
| Introduction | On |
| Dimension | 3D |
| Reordering | Linear |
| Asymmetric echo | Off |
| Contrasts | 1 |
| Multi-slice mode | Interleaved |
| Echo spacing | 1.36 ms |

Sequence - Part 1

| | |
|-----------|-----------|
| Bandwidth | 836 Hz/Px |
|-----------|-----------|

Sequence - Part 2

| | |
|---------------|-----------|
| EPI factor | 34 |
| Segmentation | 2 |
| RF pulse type | Normal |
| Gradient mode | Fast |
| Excitation | Slab-sel. |
| RF spoiling | On |
| Turbo factor | 26 |

Sequence - Special

| | |
|--------------------|------------|
| PATRef FA | 12 deg |
| RF duration | 2500 us |
| RF BWT product | 25 |
| Slab Scale | 90 % |
| Ernst T1 | 2500 ms |
| PATRef prep. shots | 10 |
| Volume dummy shots | 0 |
| Dummy Measurements | 0 |
| Invert PE | Off |
| Invert 3D | Off |
| Min. TE if PF | On |
| Are you Renzo? | On |
| Echo Time Shift | On |
| Water Exc. | -none- |
| External PC | per Series |
| Saturation RF | per Shot |
| HSN RF power scale | 2.00 |
| Inversion Delay | 650000 us |
| Relaxation Delay | 0 us |

Sequence - Assistant

| | |
|------|-----|
| Mode | Off |
|------|-----|