Supplemental Atlas

Contouring guidelines for the full abdominopelvic bowel bag on treatment planning and cone beam computed tomography images

Legend and acronyms used in the atlas

Top left slice: a slice in the treatment planning CT images with bowel bag contour.

Top right slice: same slice in the treatment planning CT images without bowel bag contour.

Bottom left slice: same slice in the cone beam CT images with bowel bag contour.

Bottom right slice: same slice in the cone beam CT images without bowel bag contour.

Yellow lines: slices included in the atlas.

MM-px: Main Male atlas, page x.

UA-px: Upper Abdominal atlas, page x.

PF-px: Pelvic Female atlas, page x.

Cx: coronal slice with slice index x.

Sx: Sagittal slice with slice index x.

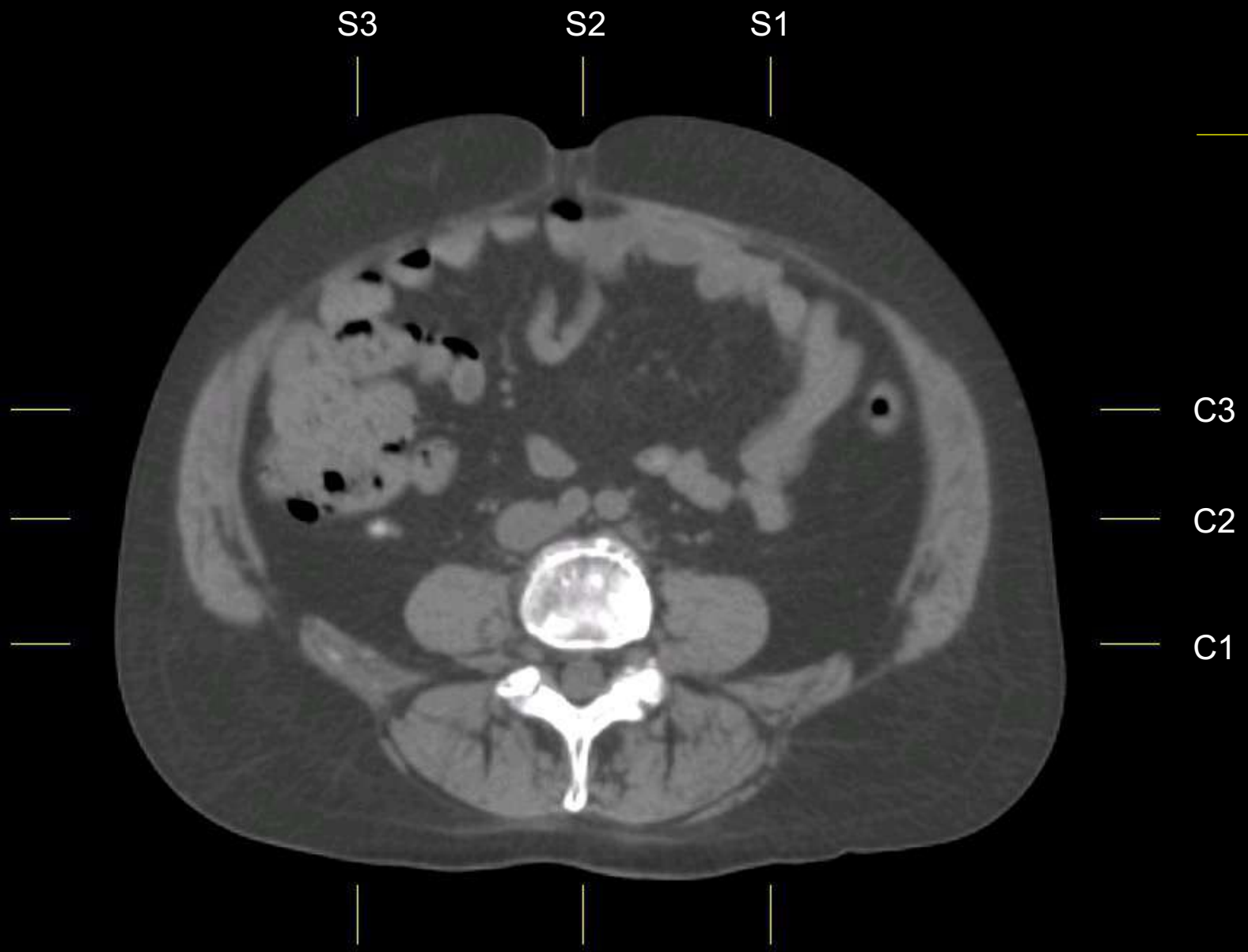
T(y)=+/-x: axial slice that is x cm from the reference CT slice (CT0). +x: superior of CT0. –x: inferior of CT0.

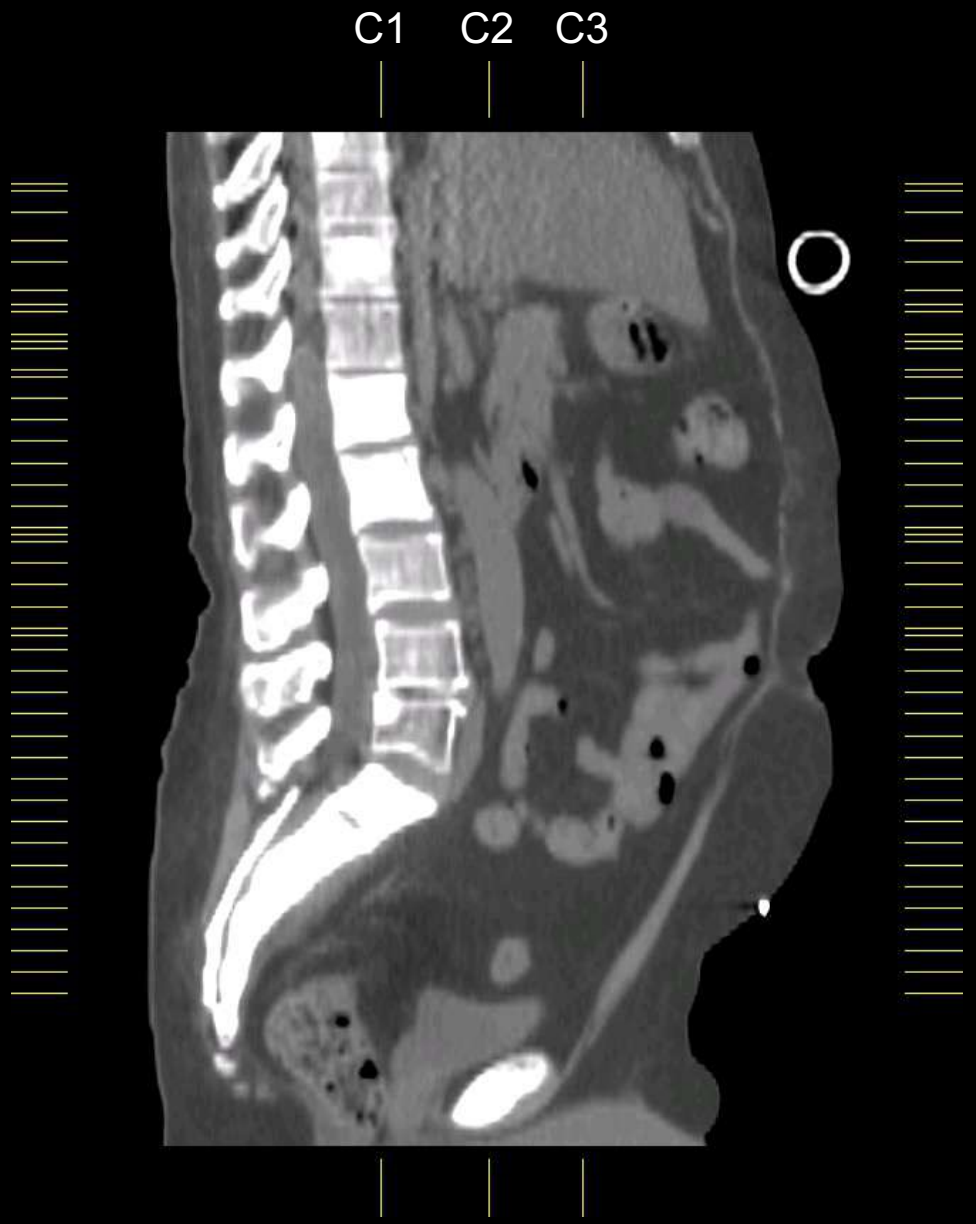
OD#x: Operational Definition #x, as defined in table 2 in the paper.

White dashed rectangle: location of the contour segment where an OD is applied.

White solid arrow: points to the contour segment that uses the specific OD references at the bottom of that page.

Main Male

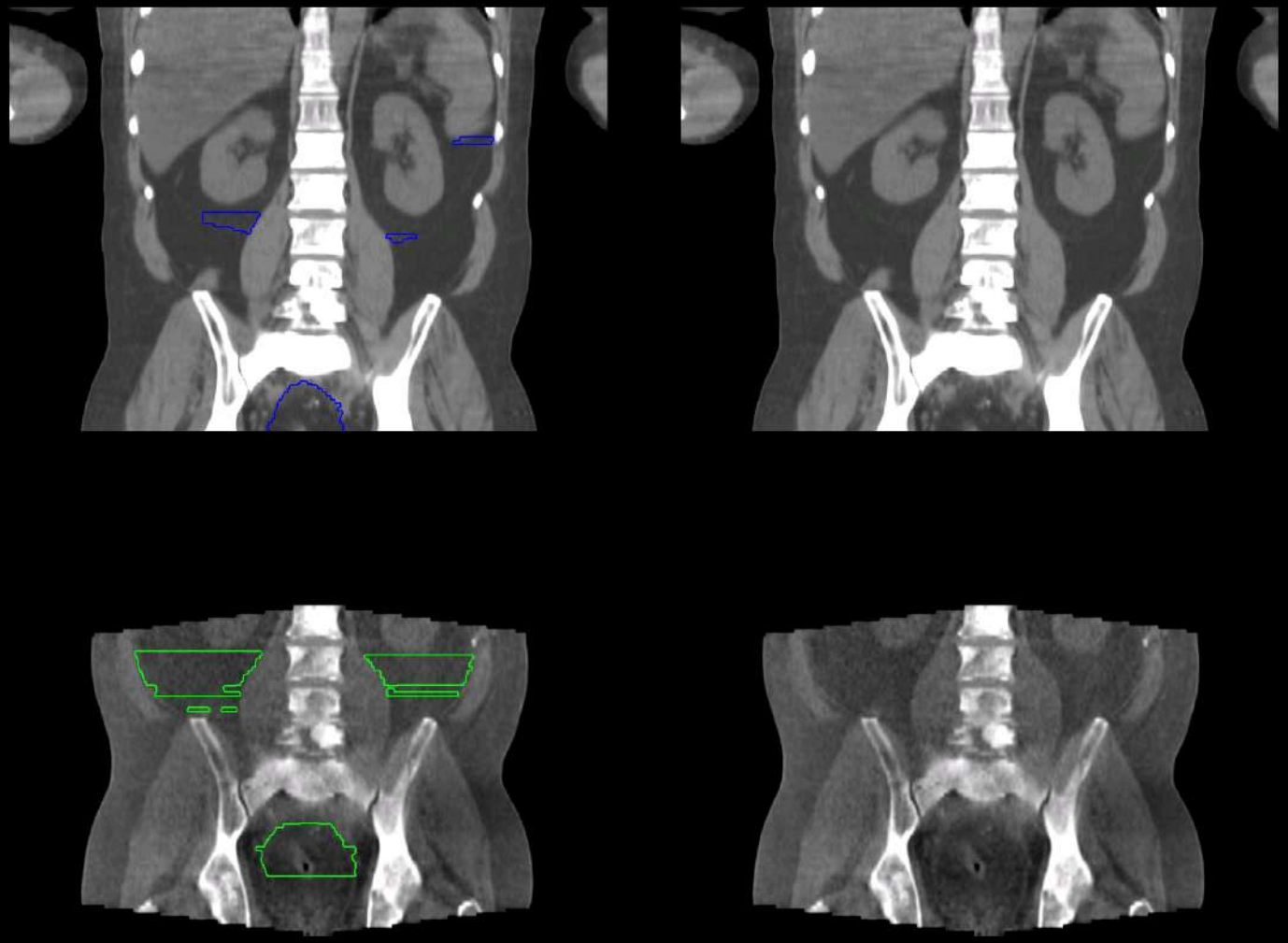

S3
S2
S1
Slices included in the atlas
C3
C2
C1



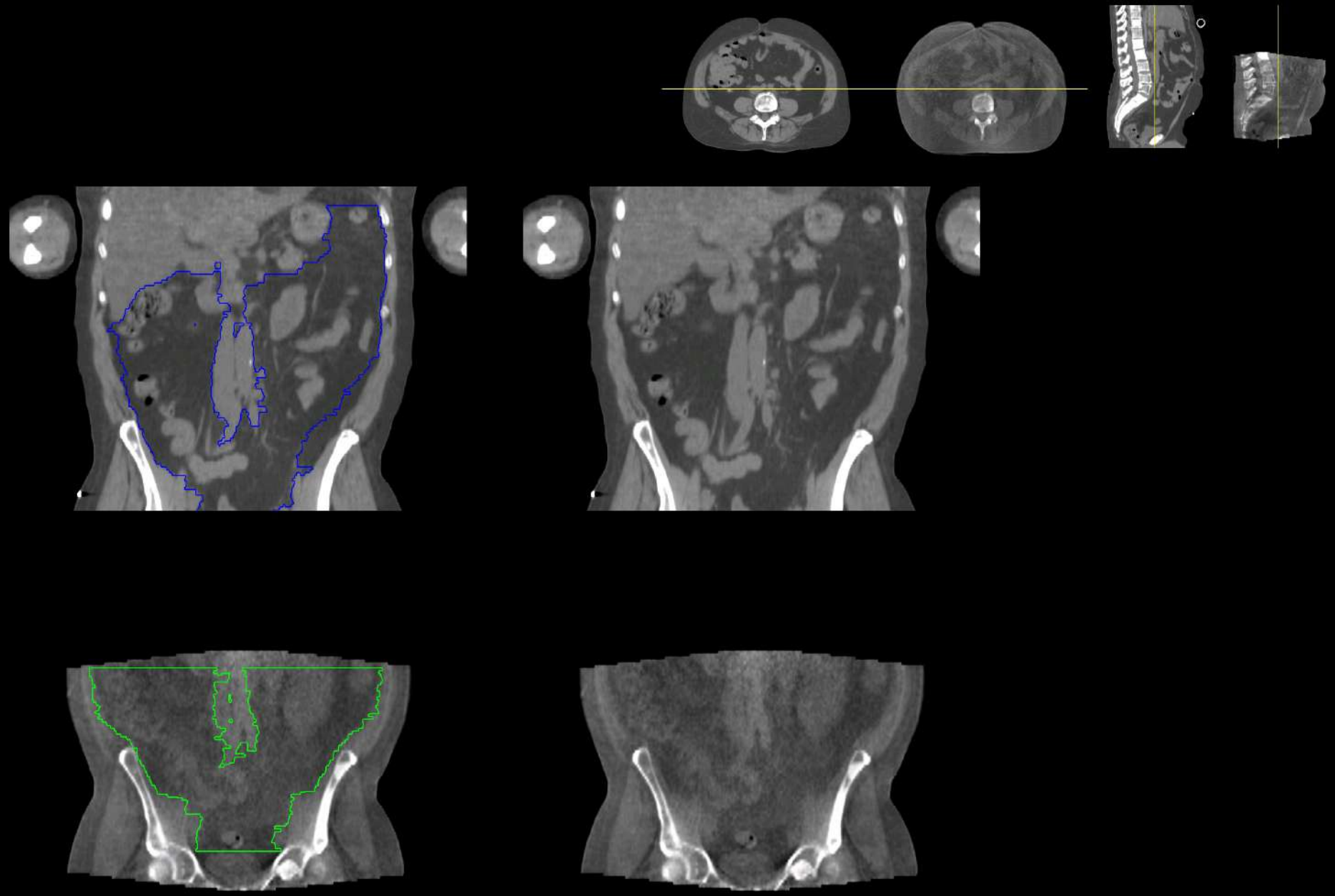
Slices included in the atlas

Slices included in the atlas

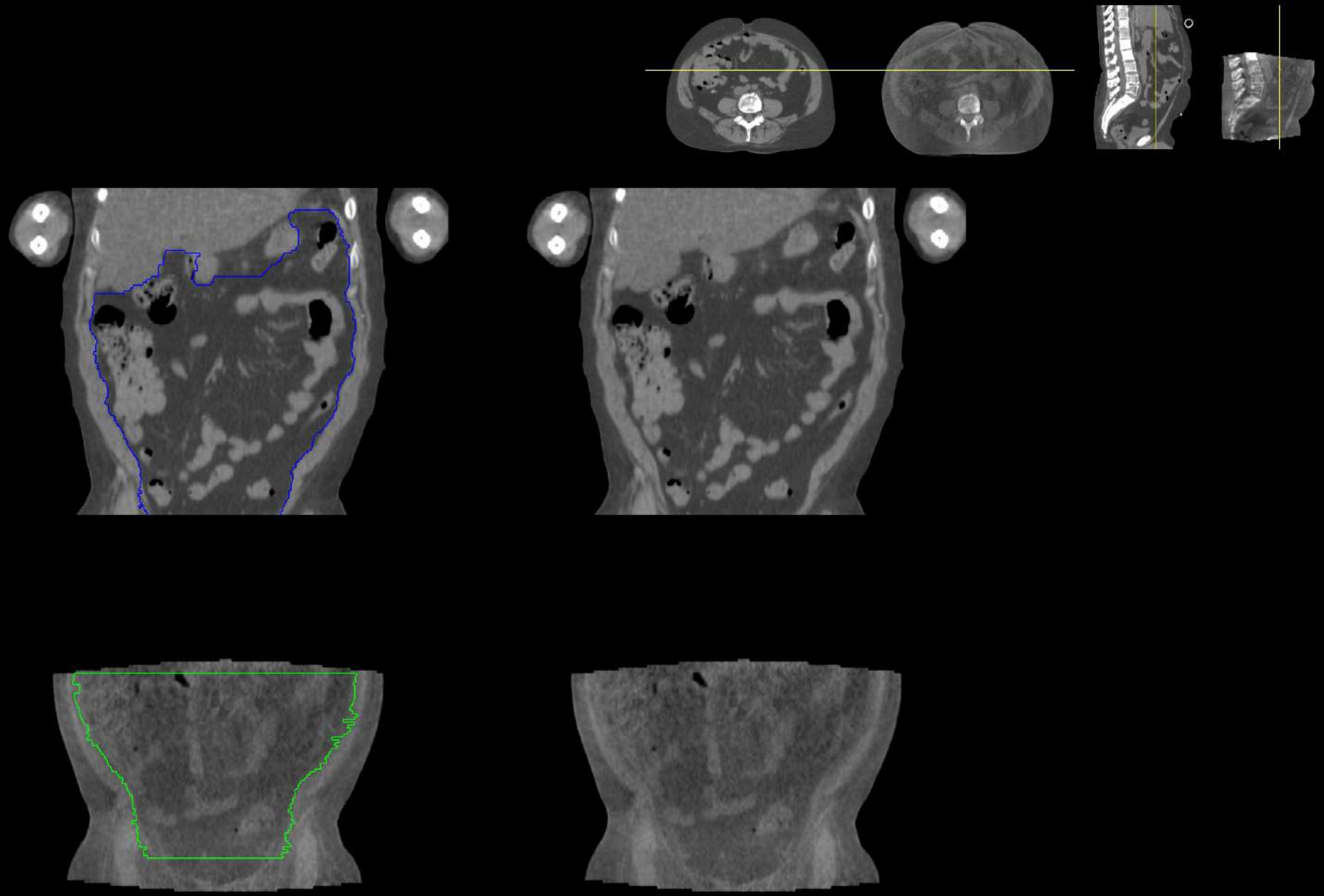
C1



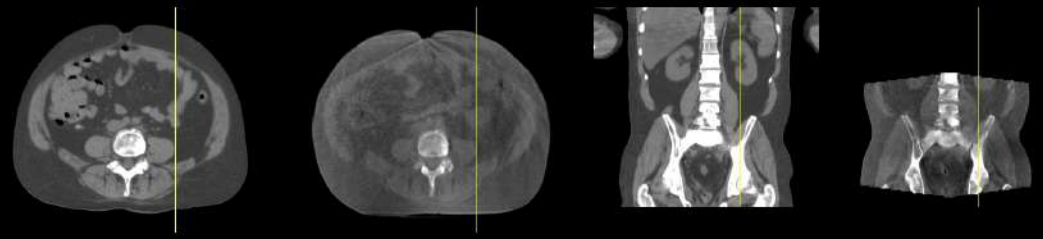
C2

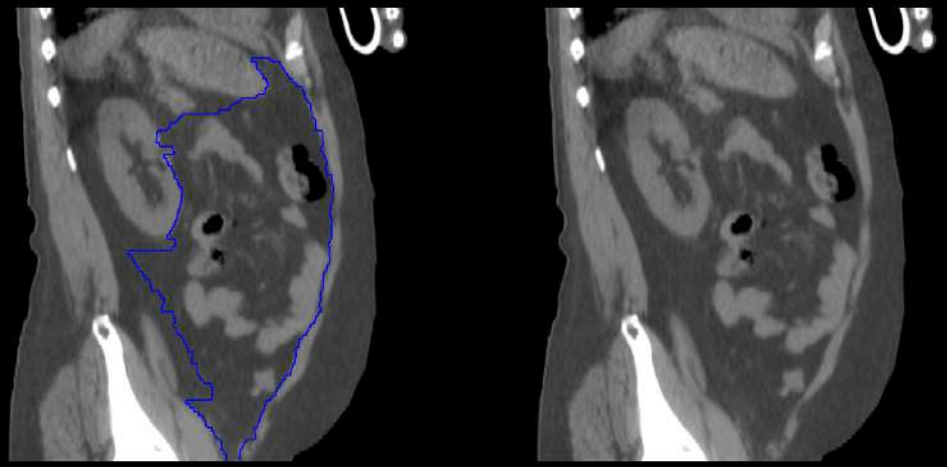


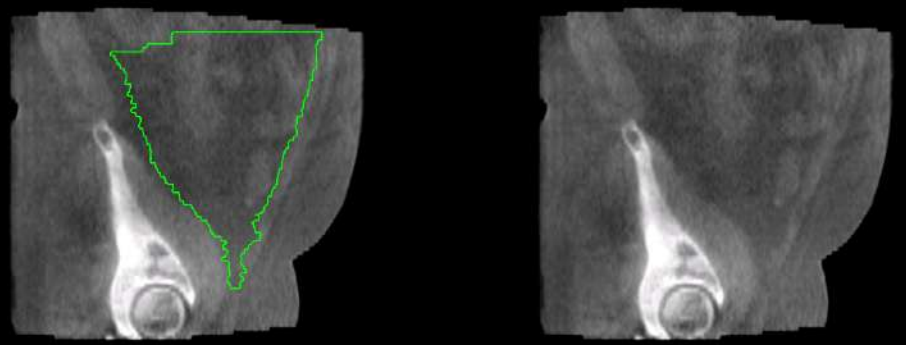
C3



S1







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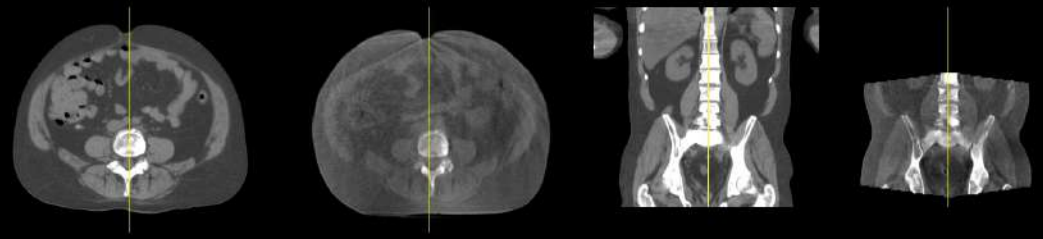
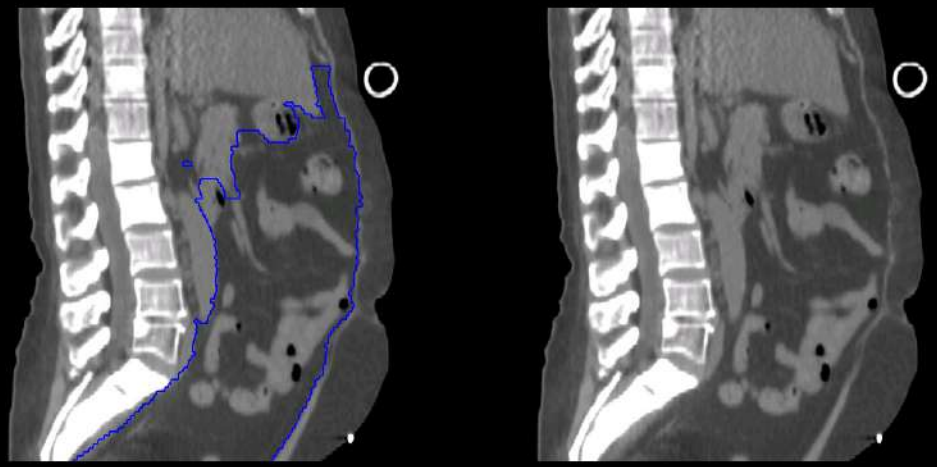
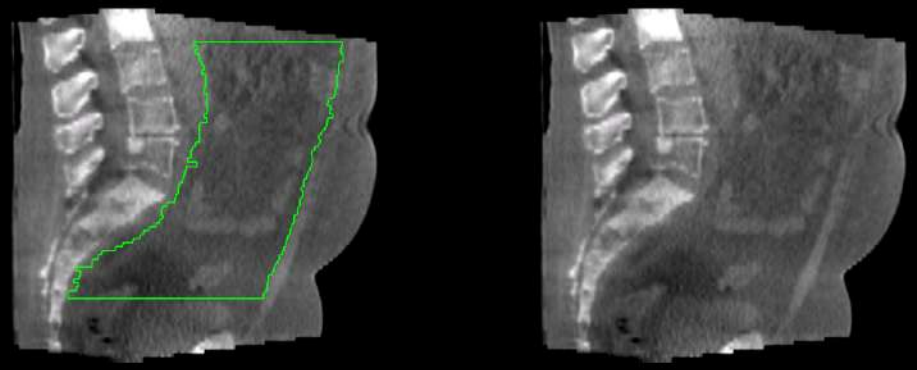
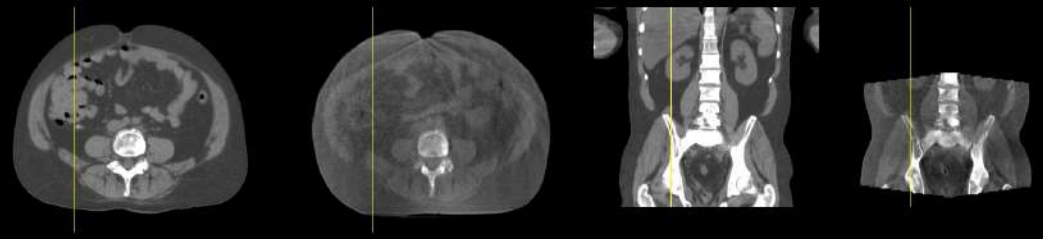
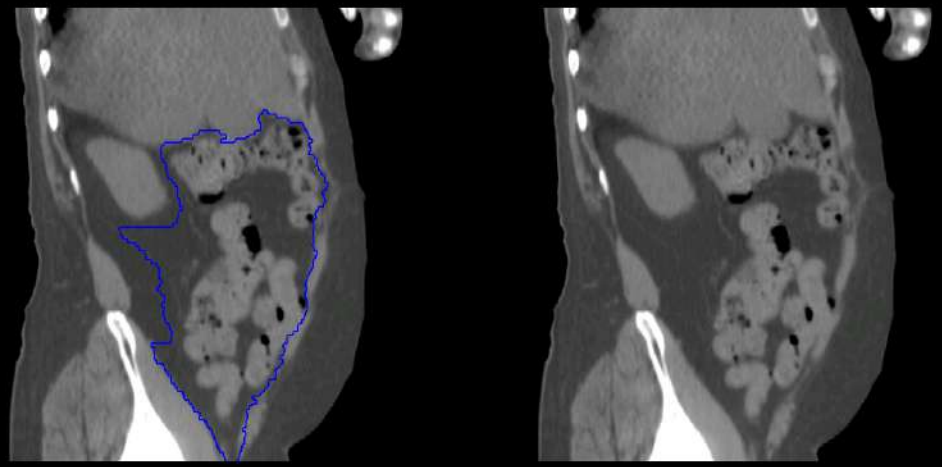


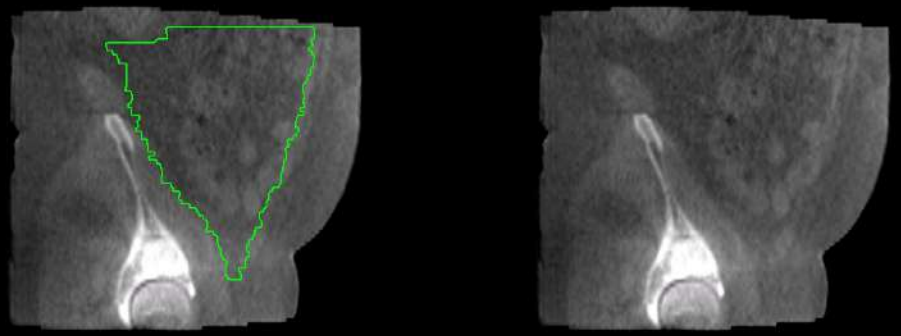




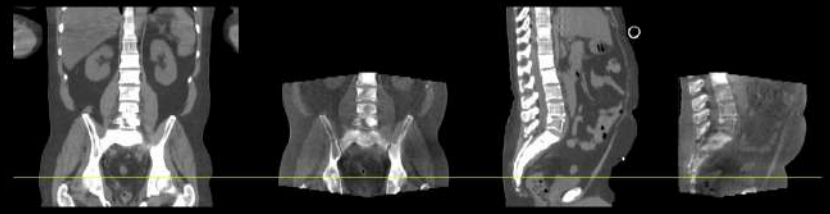
S3

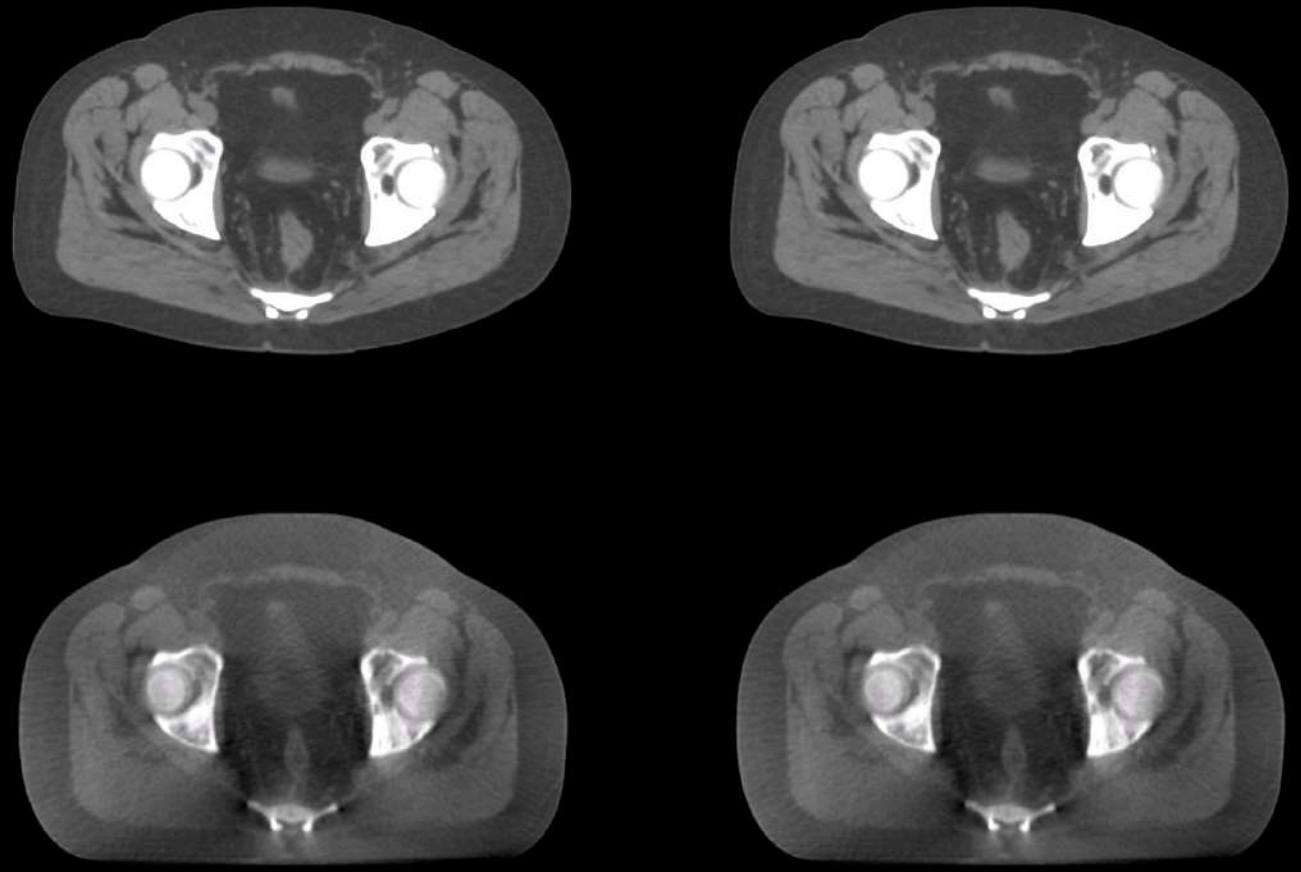




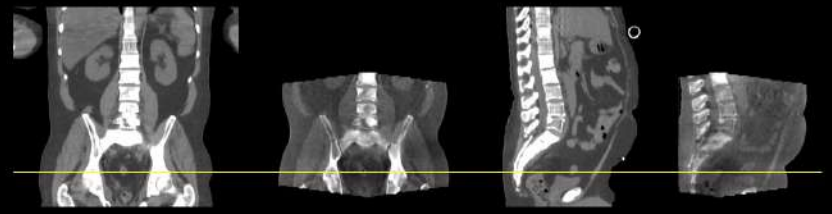


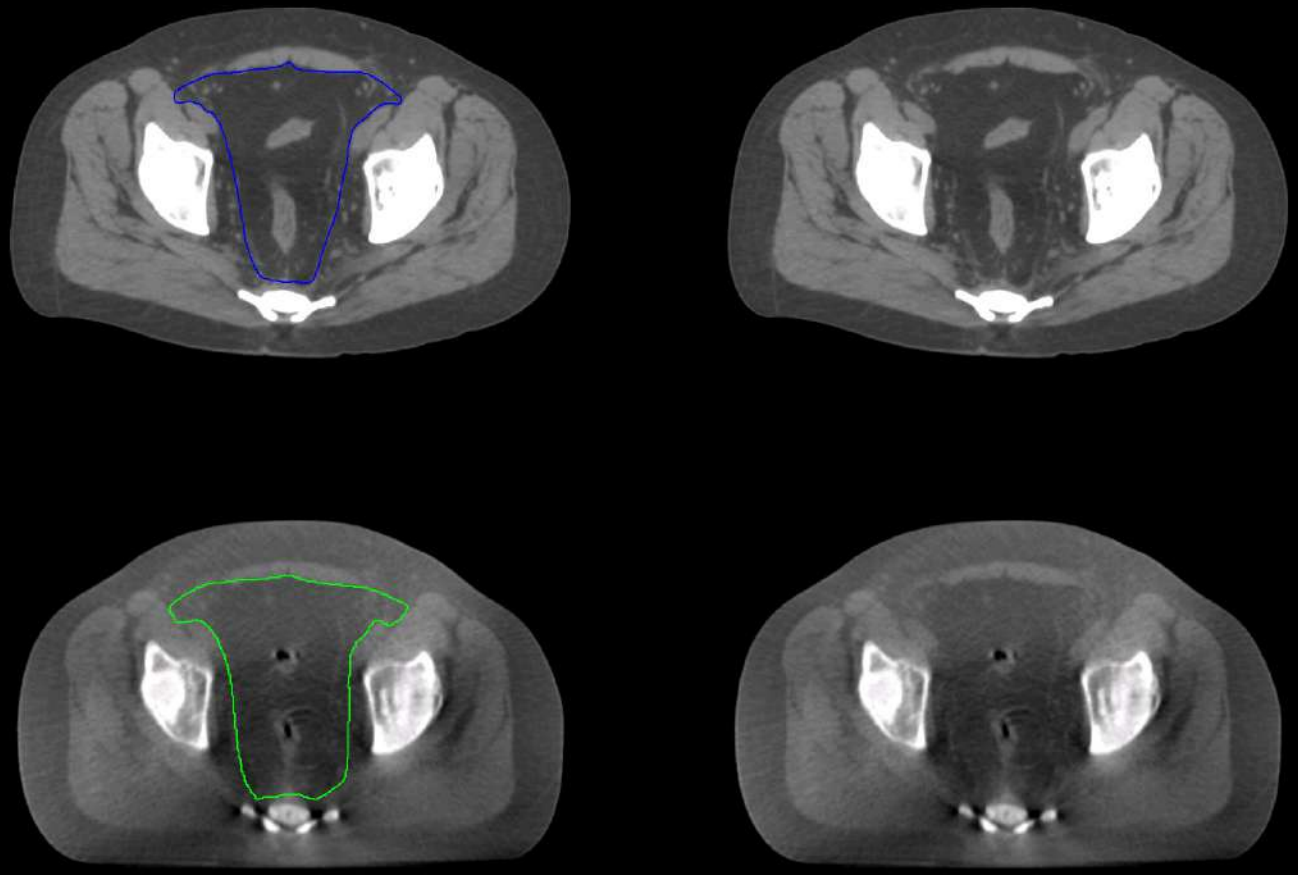
T(y)=-3.60



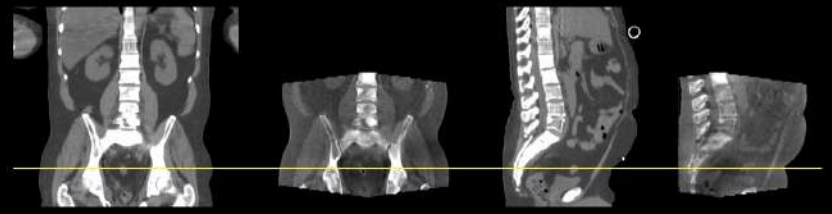


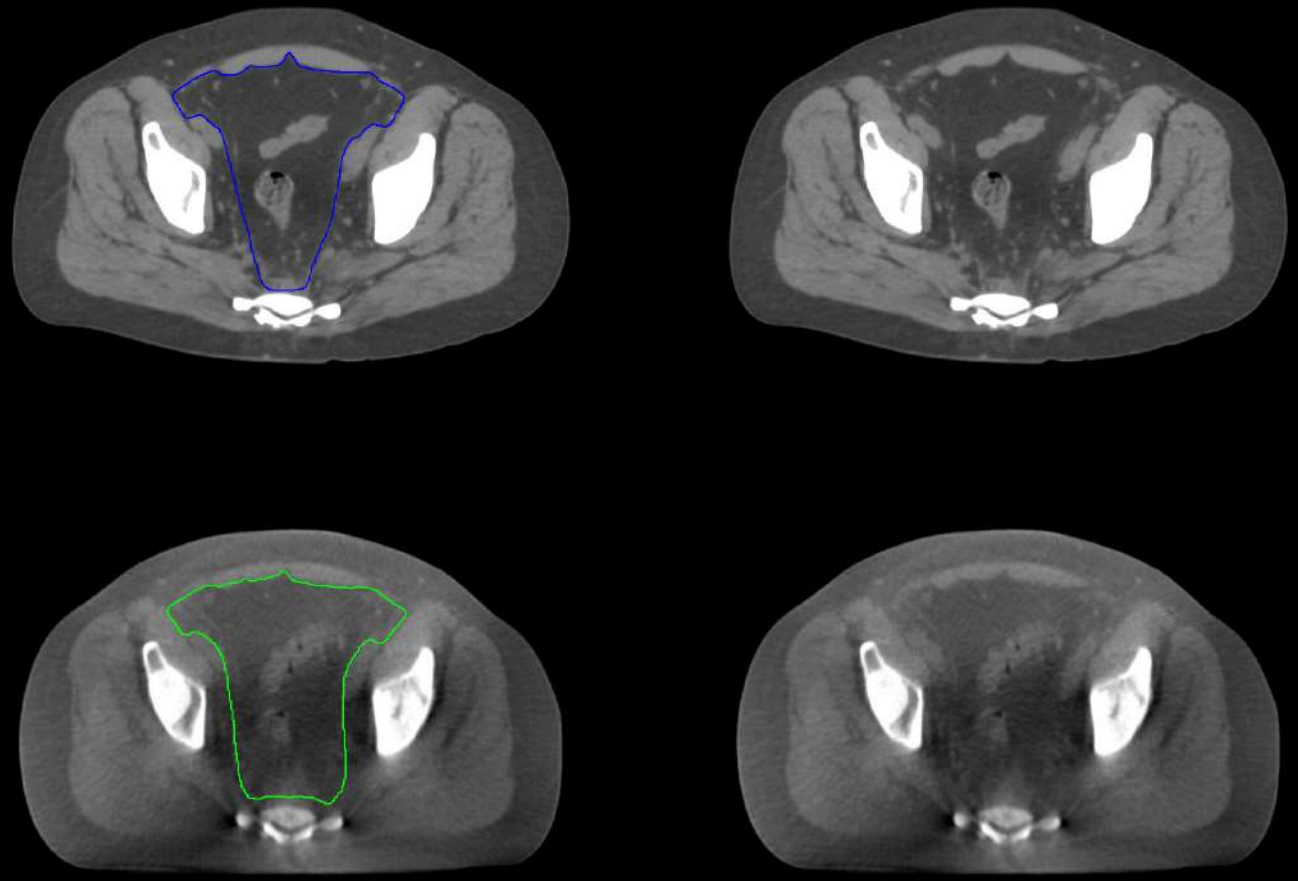
T(y)=-2.70



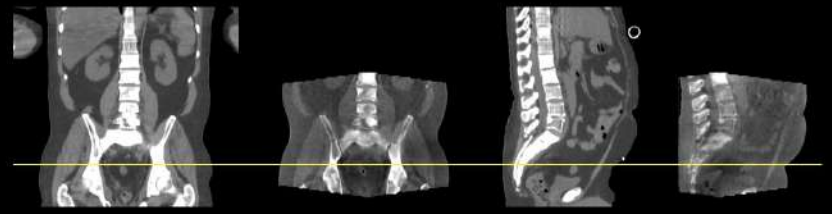


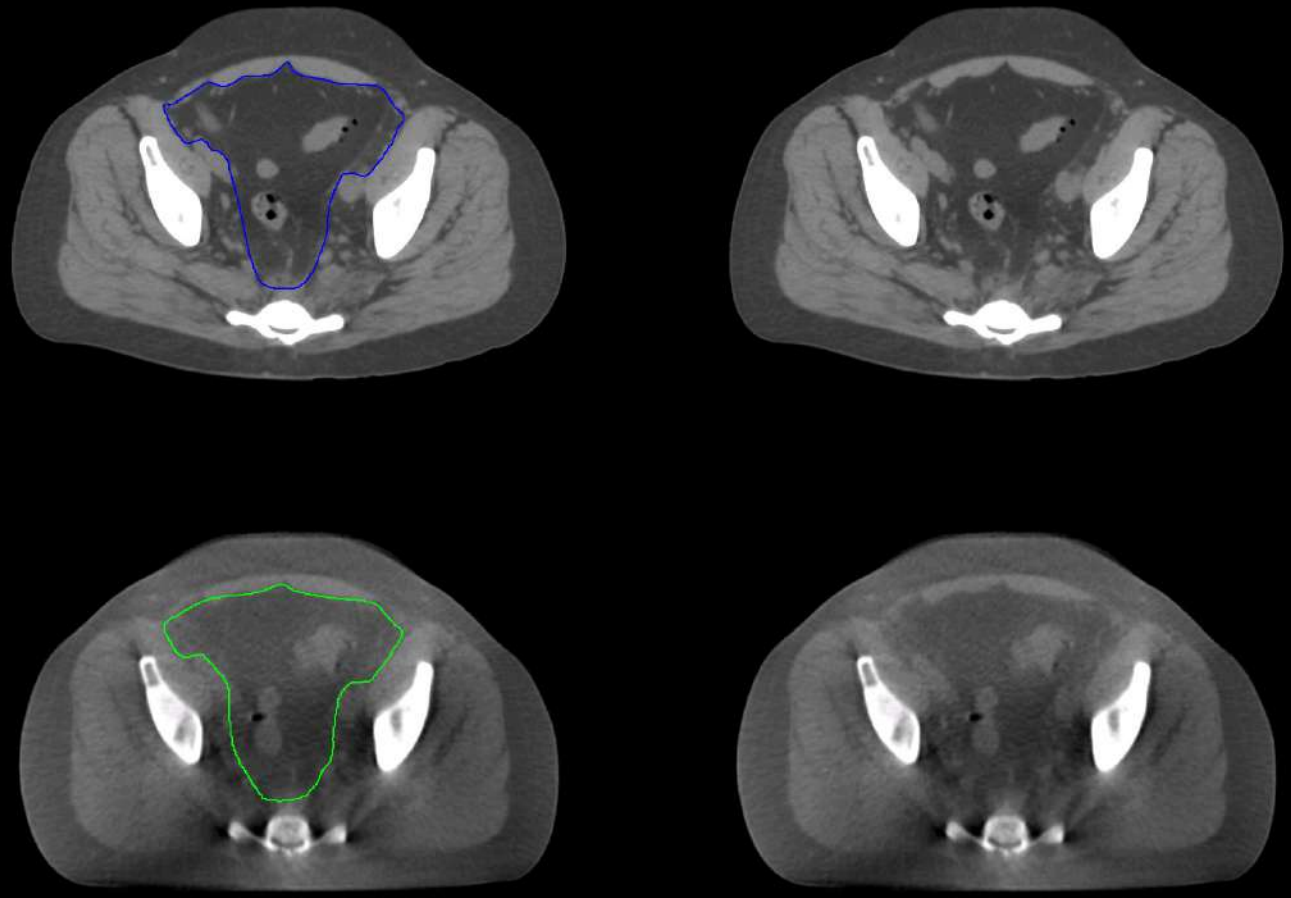
T(y)=-1.80



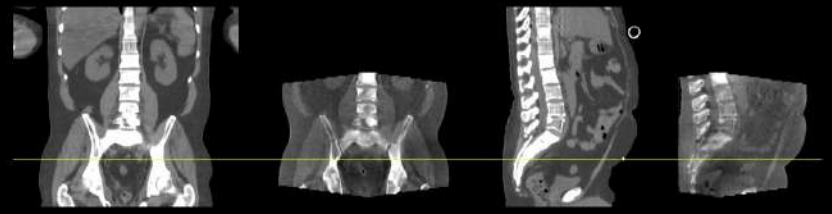


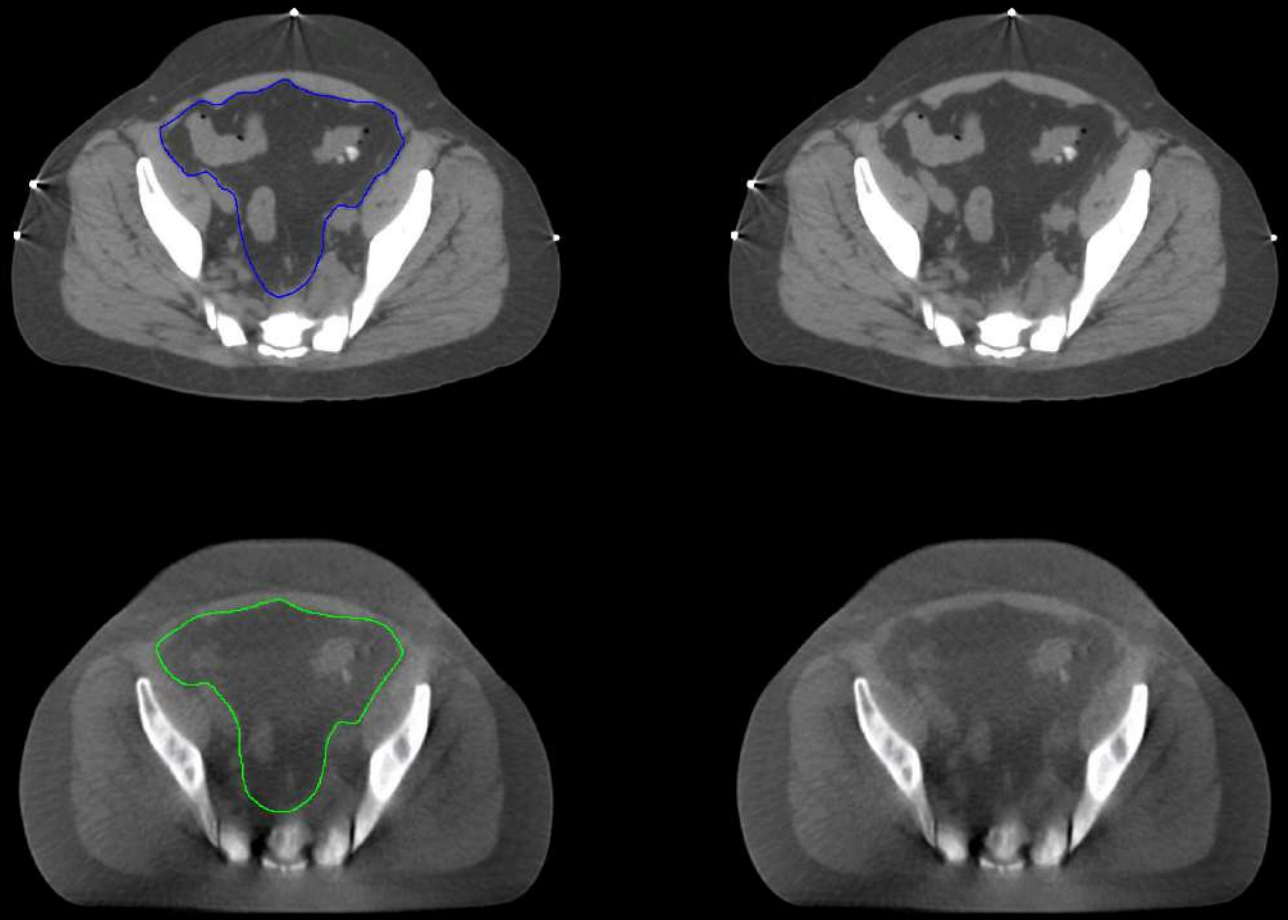
T(y)=-0.90



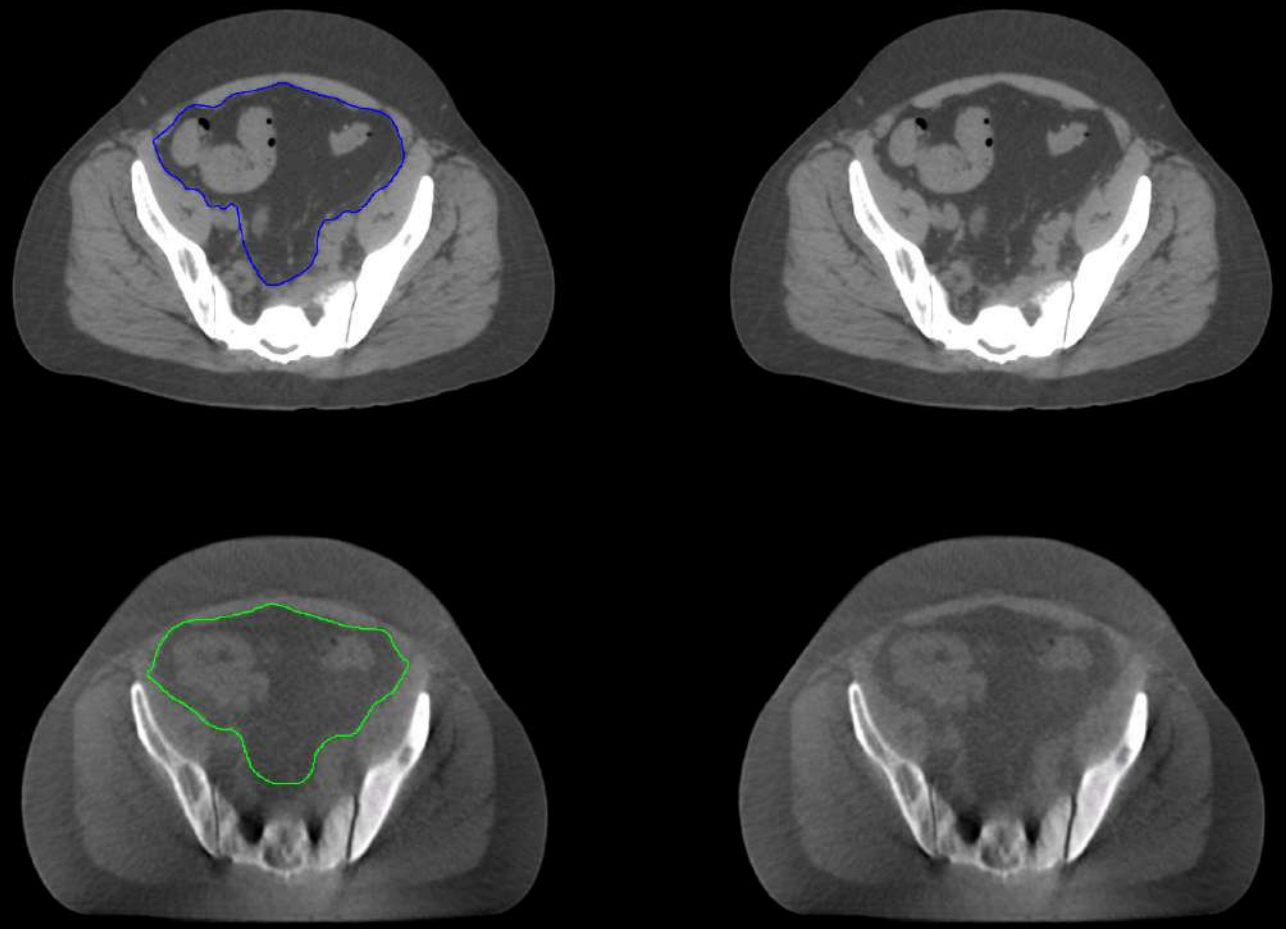


T(y)=-0.00

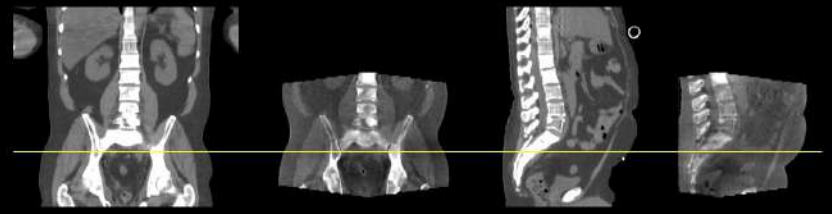


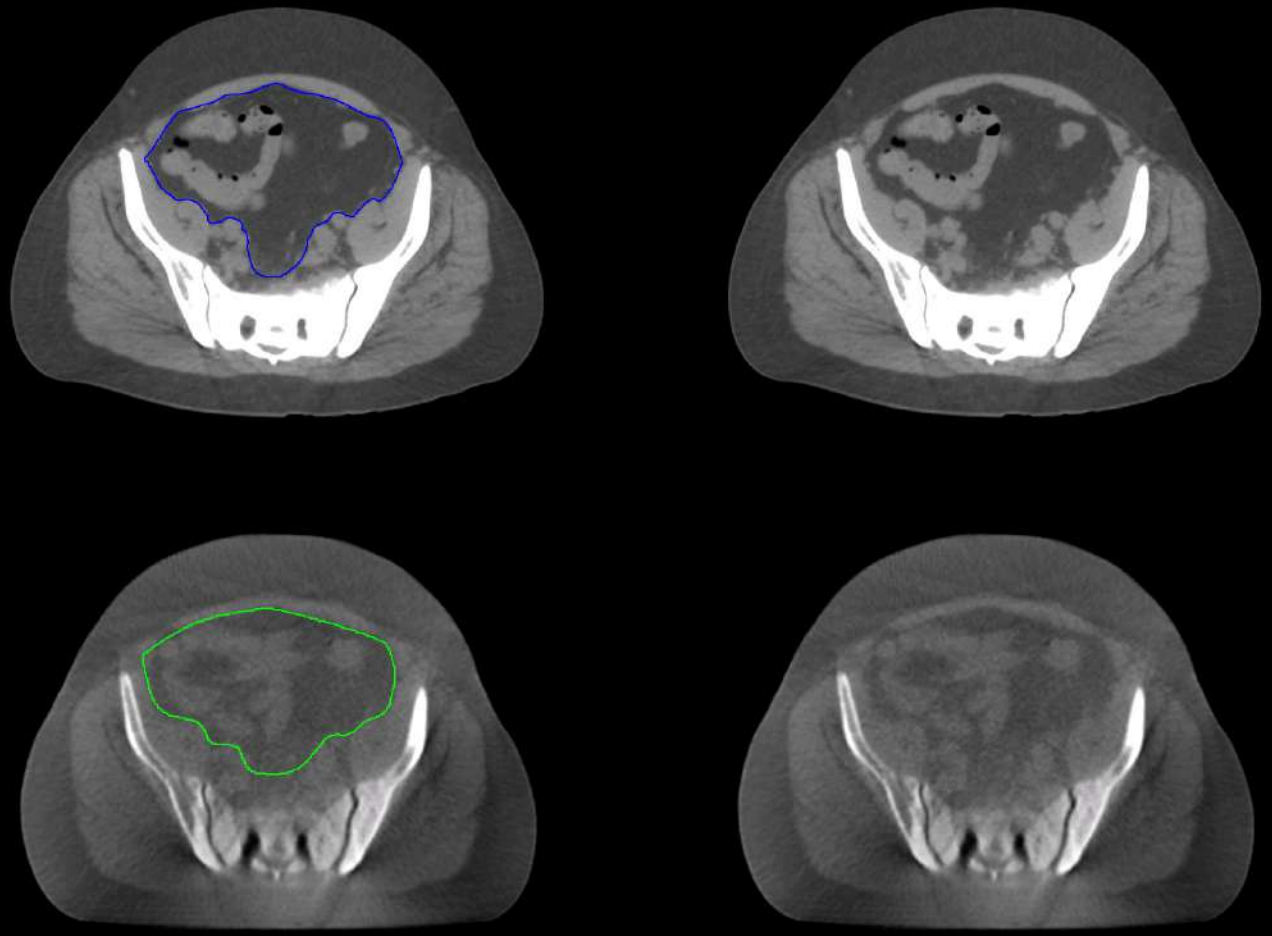


T(y)=0.90

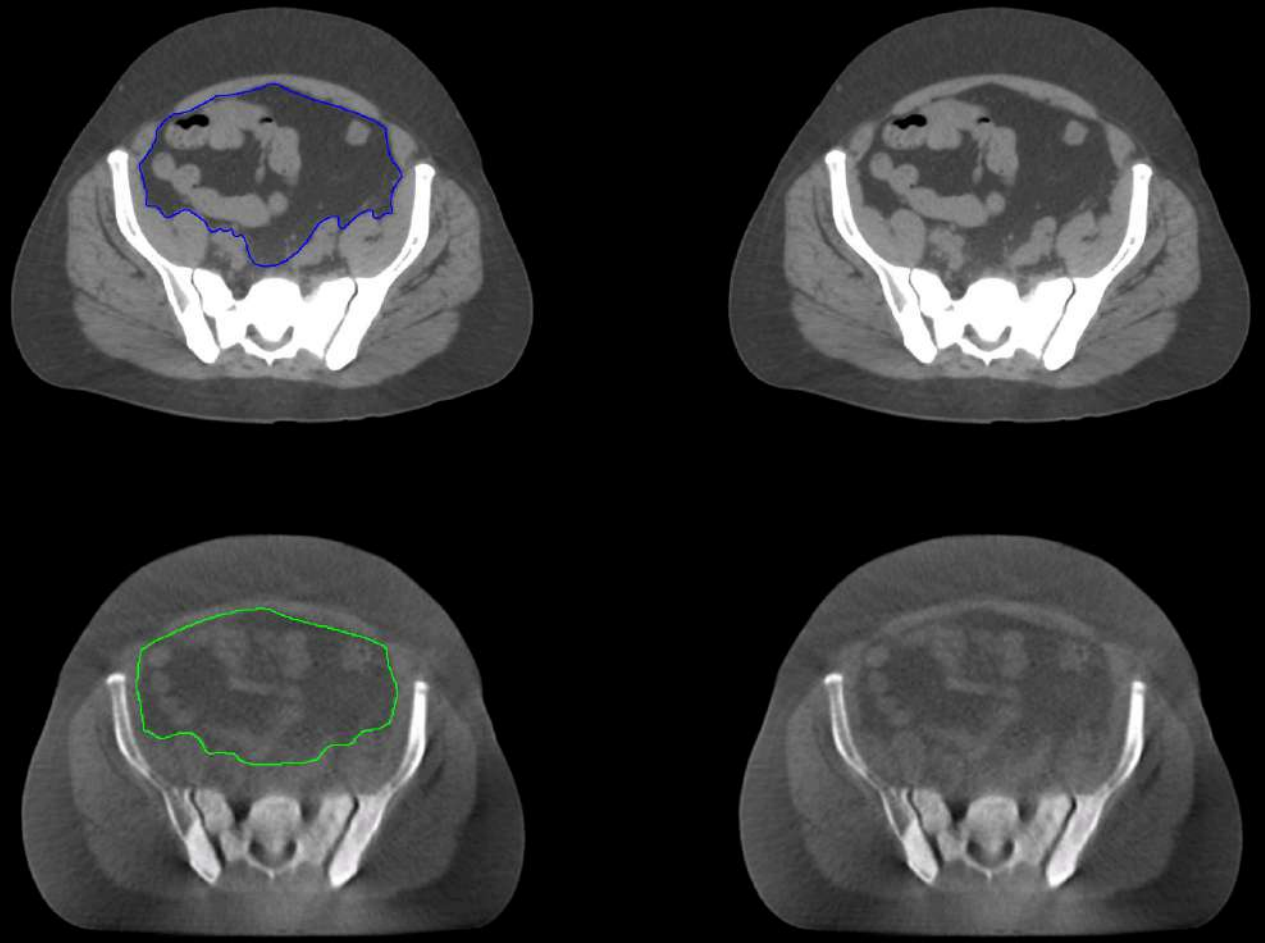


T(y)=1.80

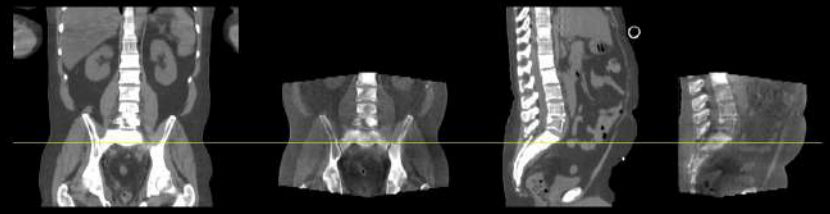


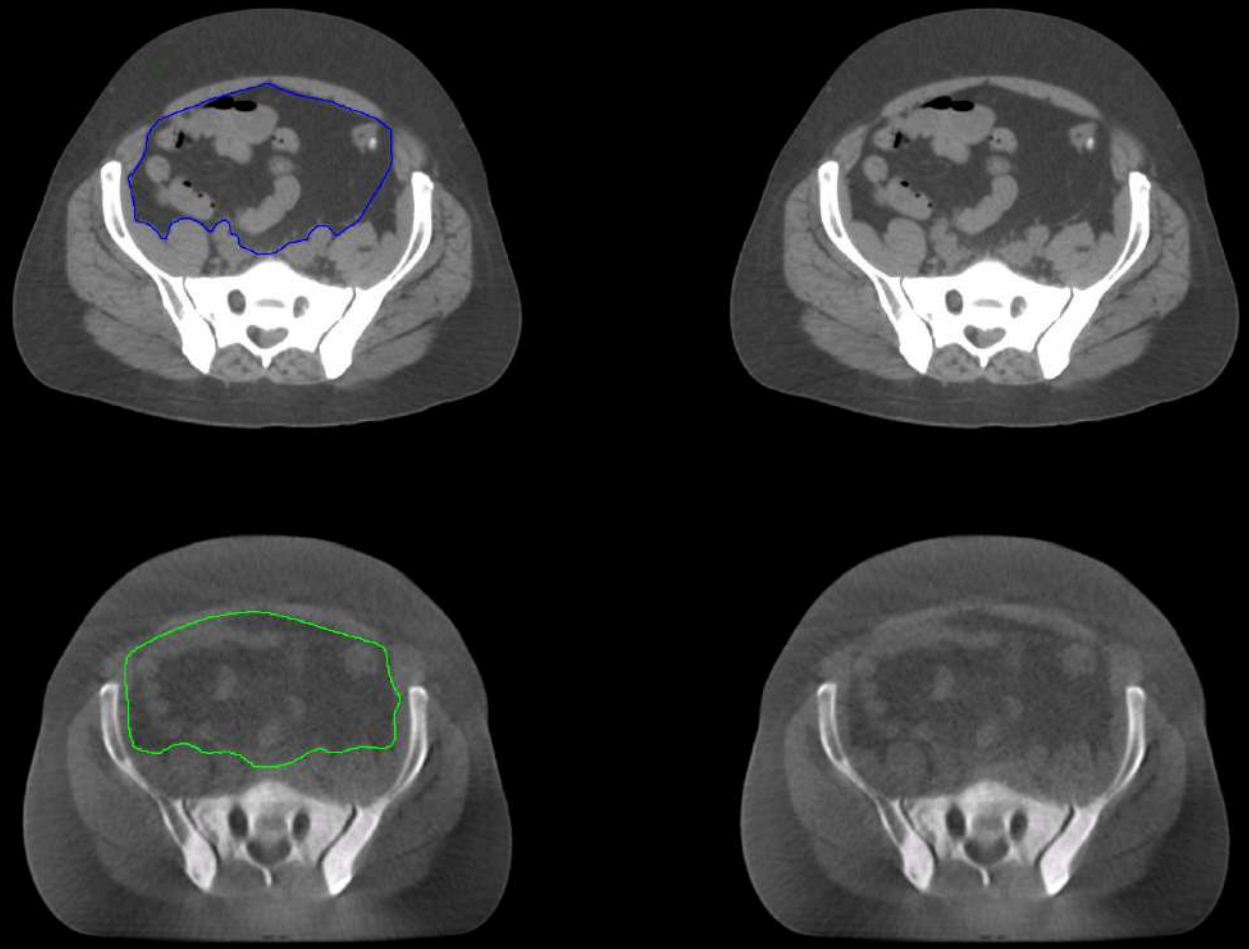


T(y)=2.70

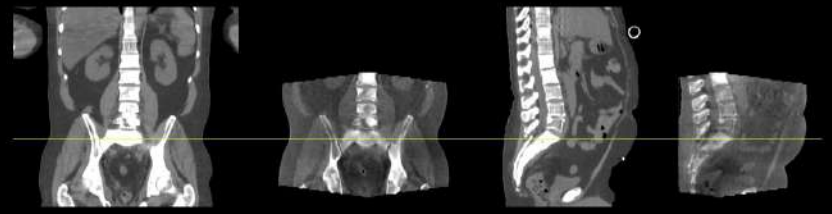


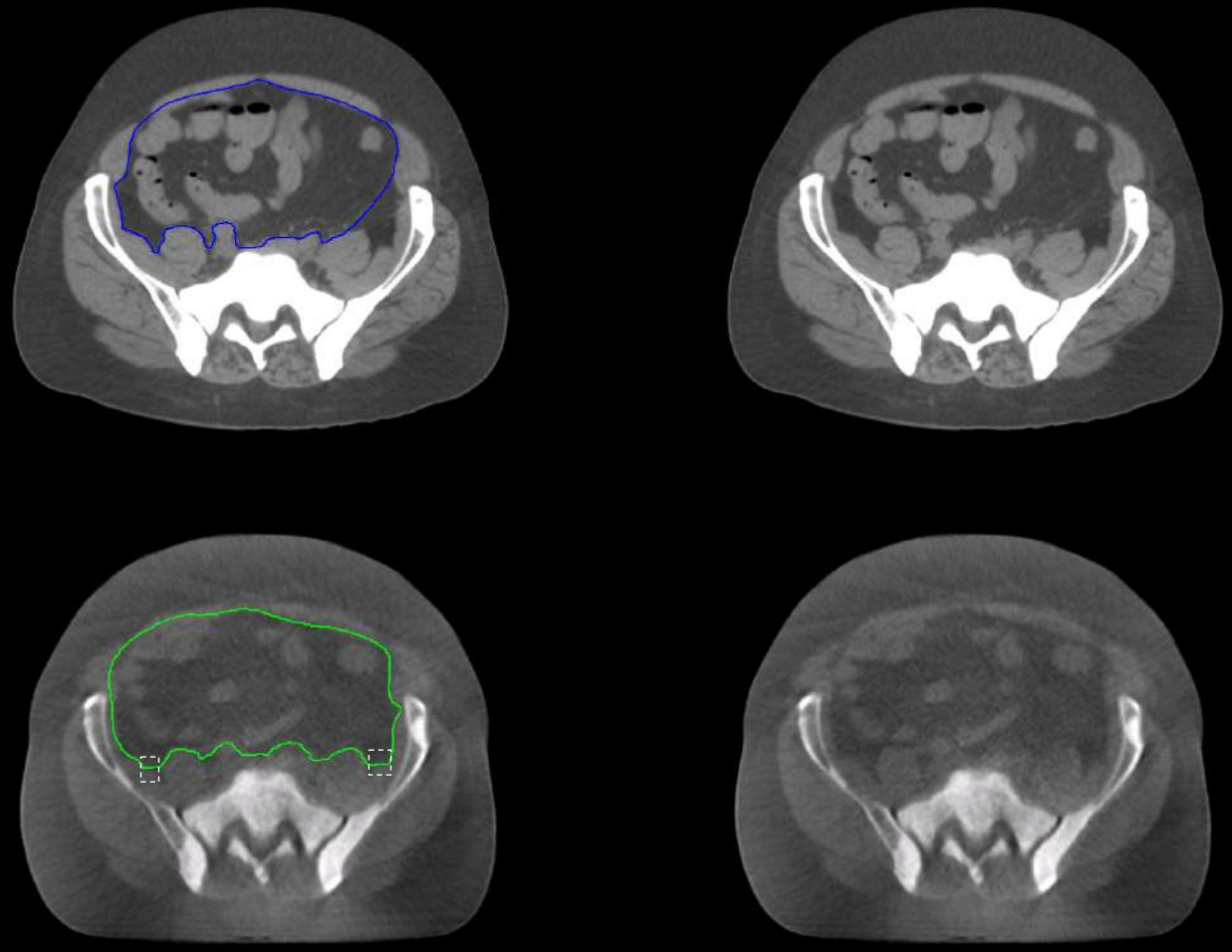
T(y)=3.60



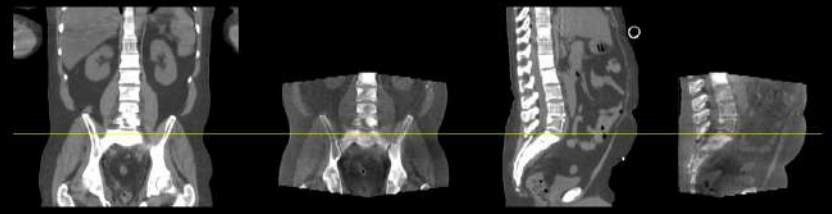


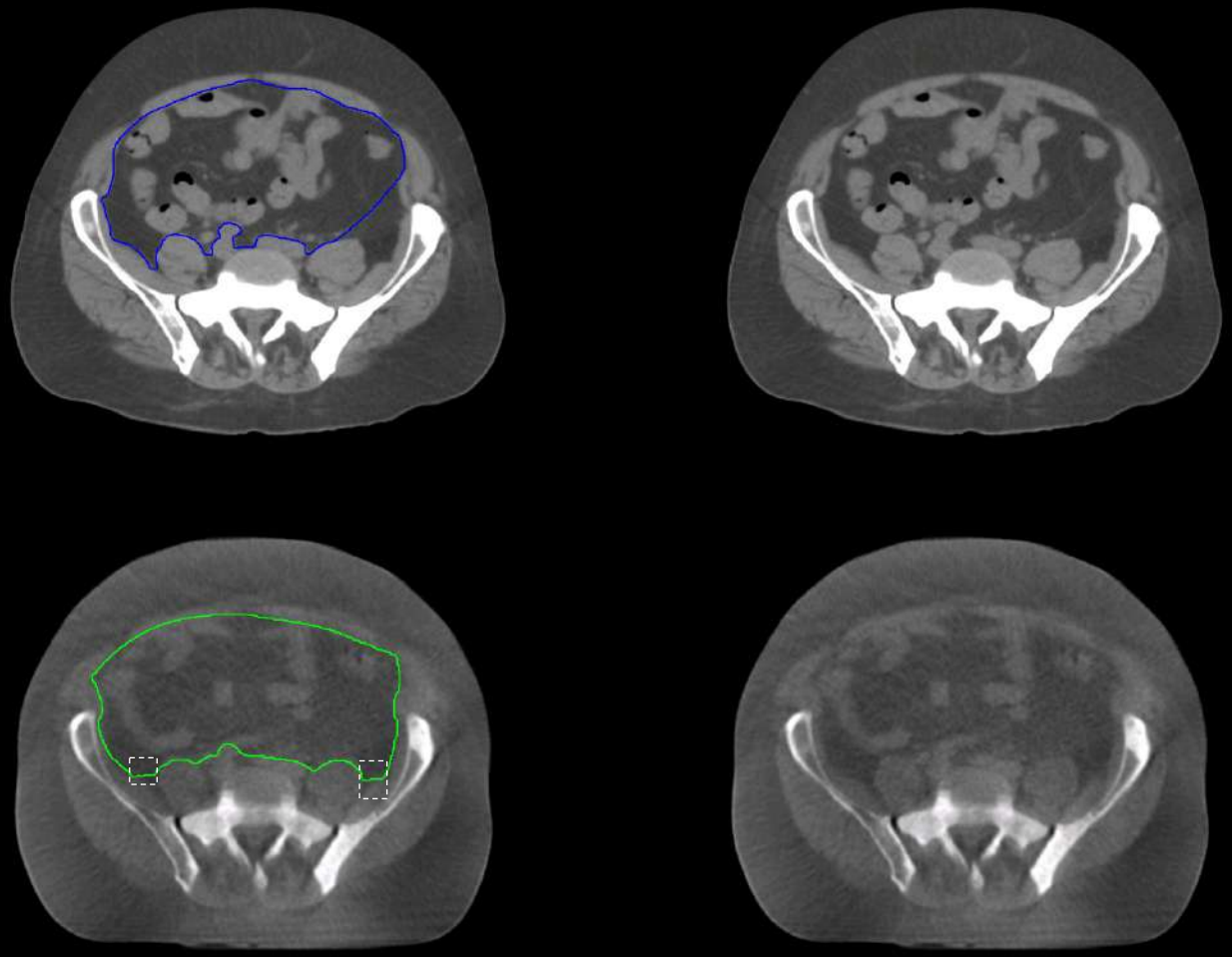
T(y)=4.50





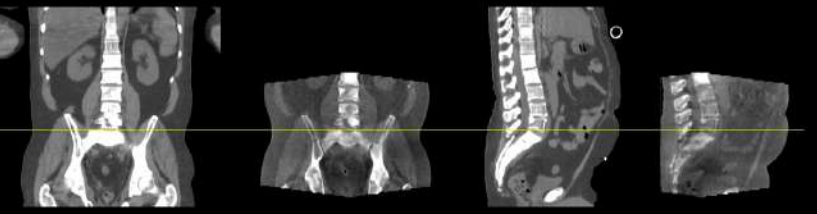
T(y)=5.40

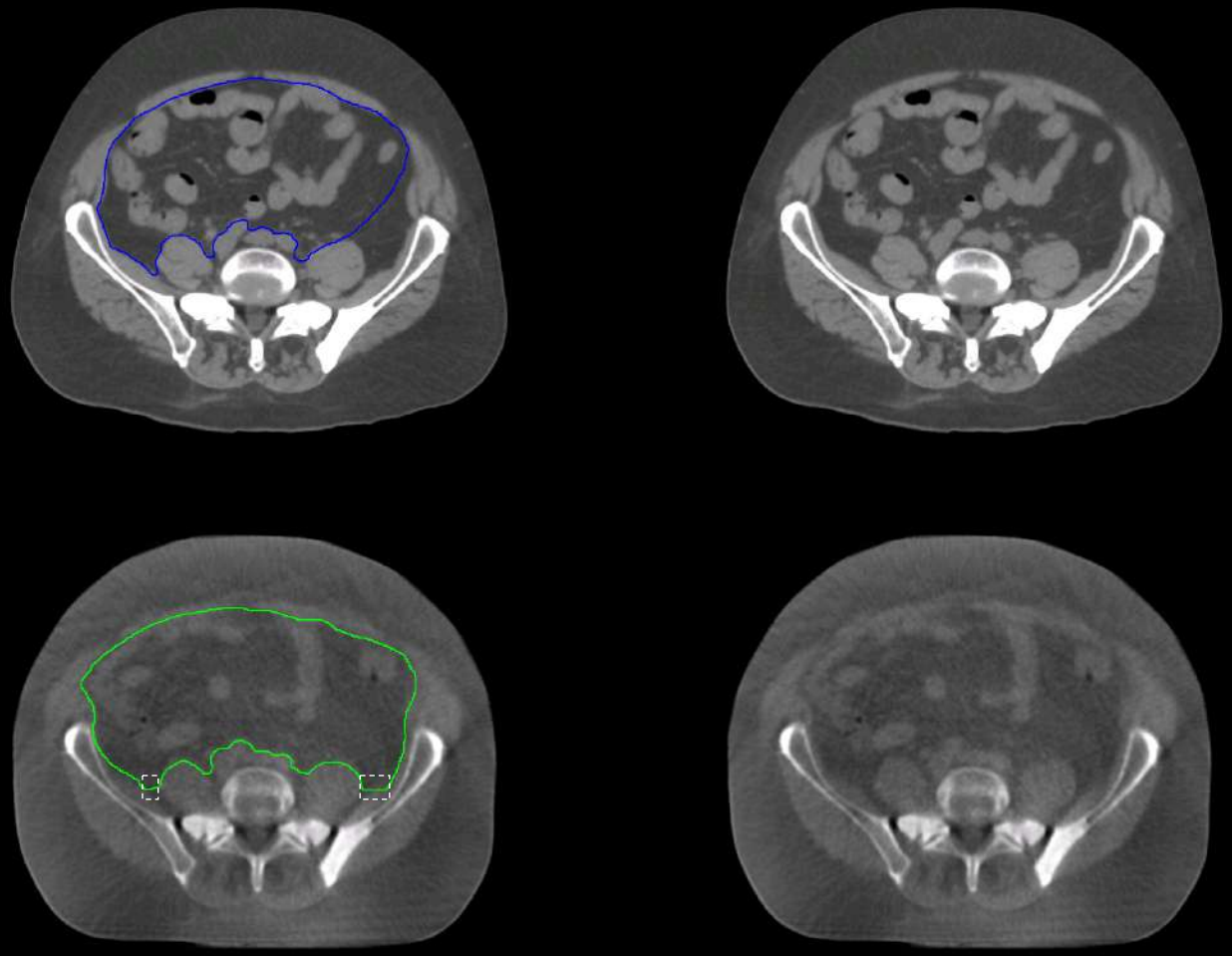




MM-p23

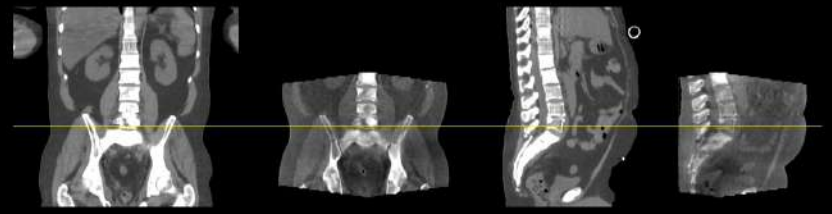
T(y)=6.30

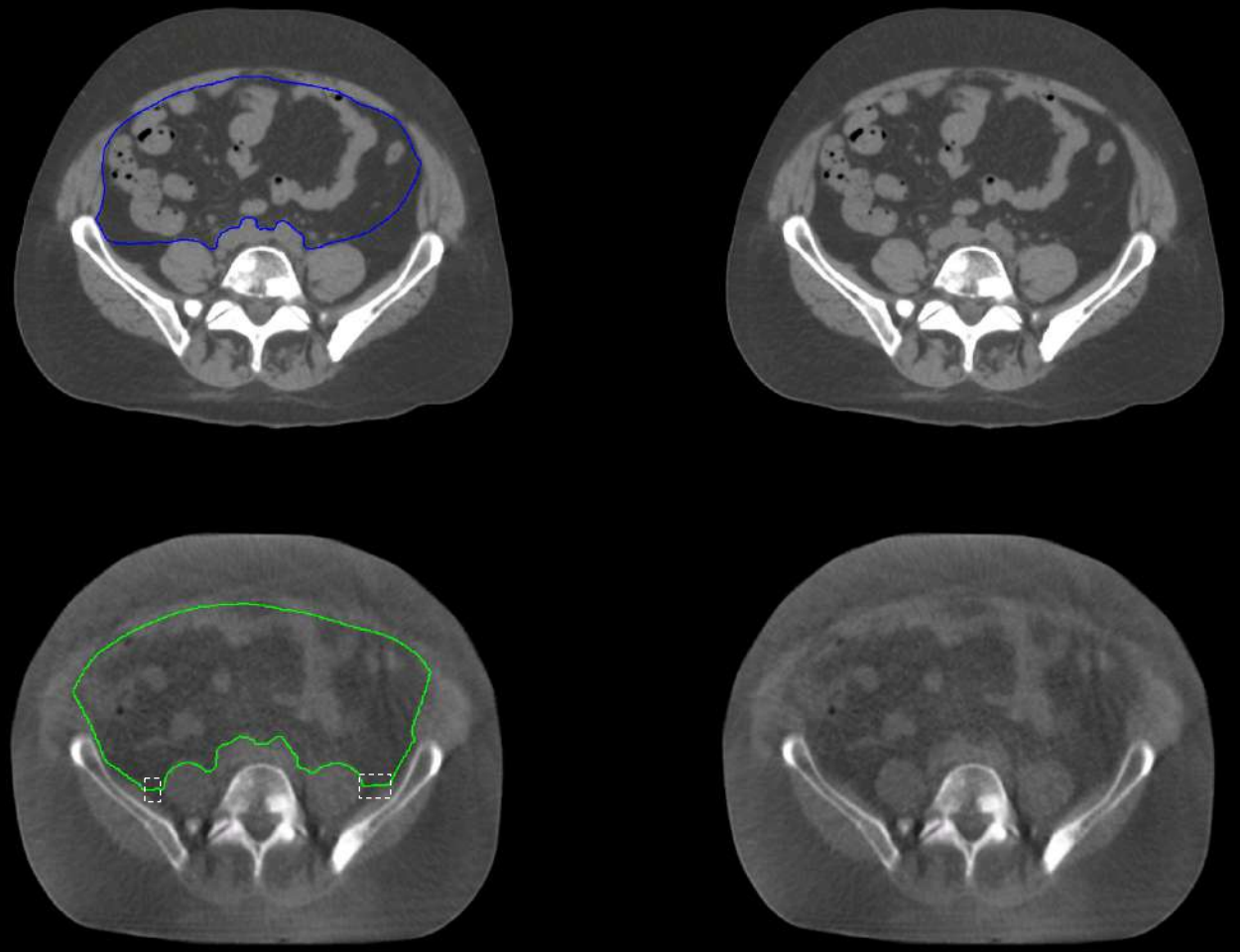




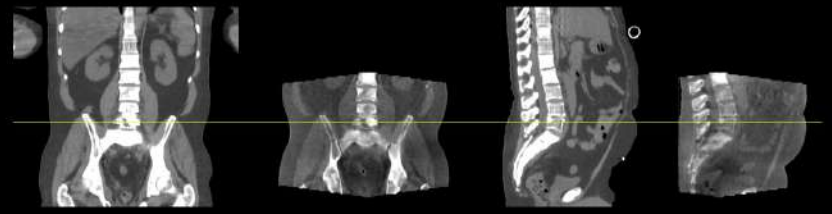
MM-p24

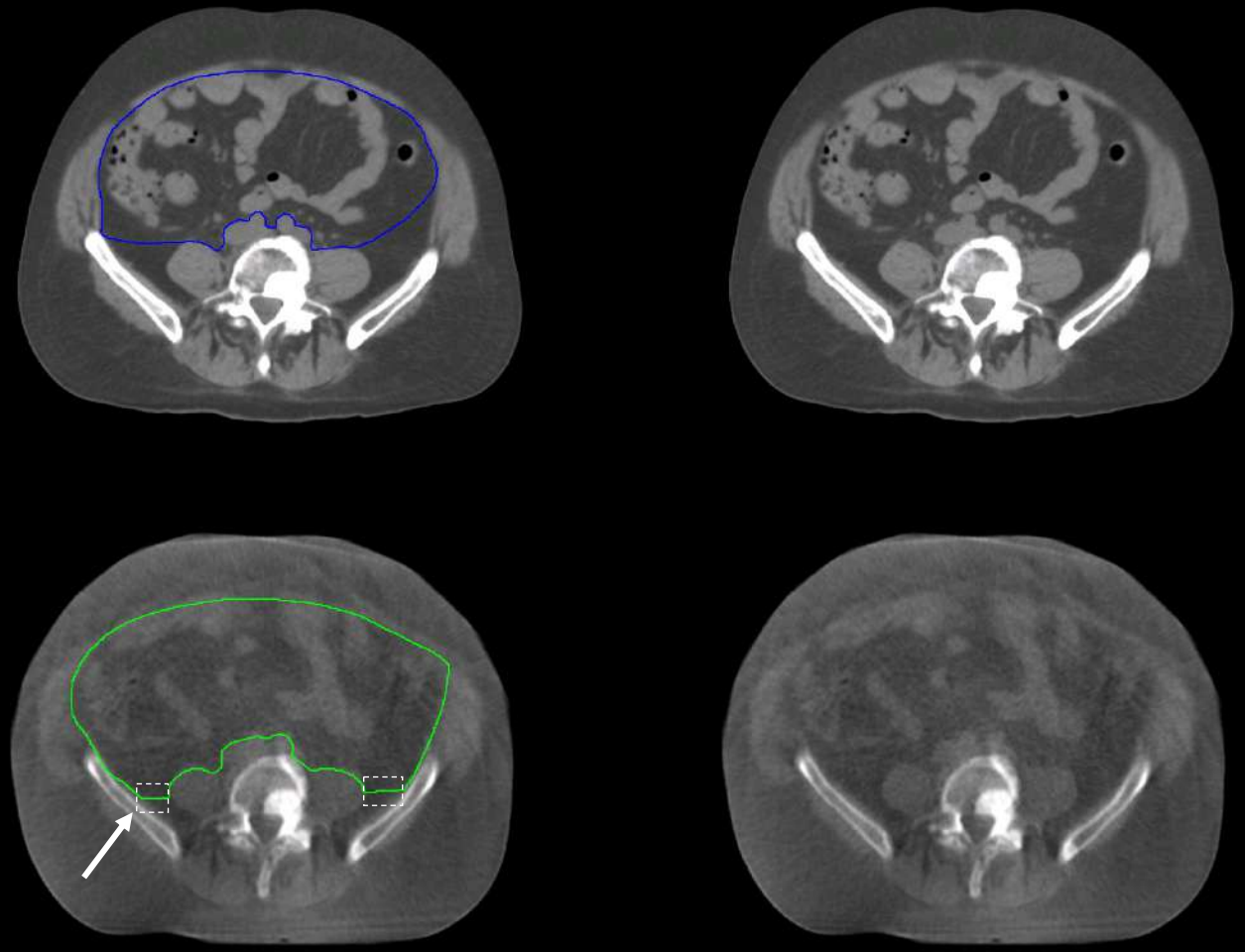
T(y)=7.20





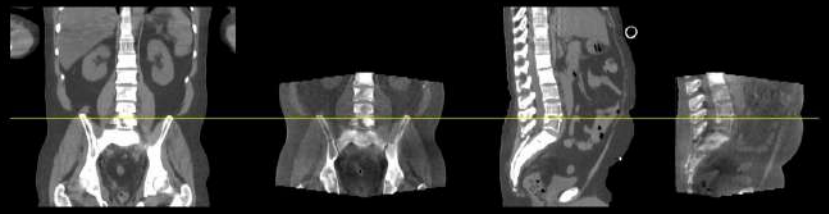
T(y)=8.10

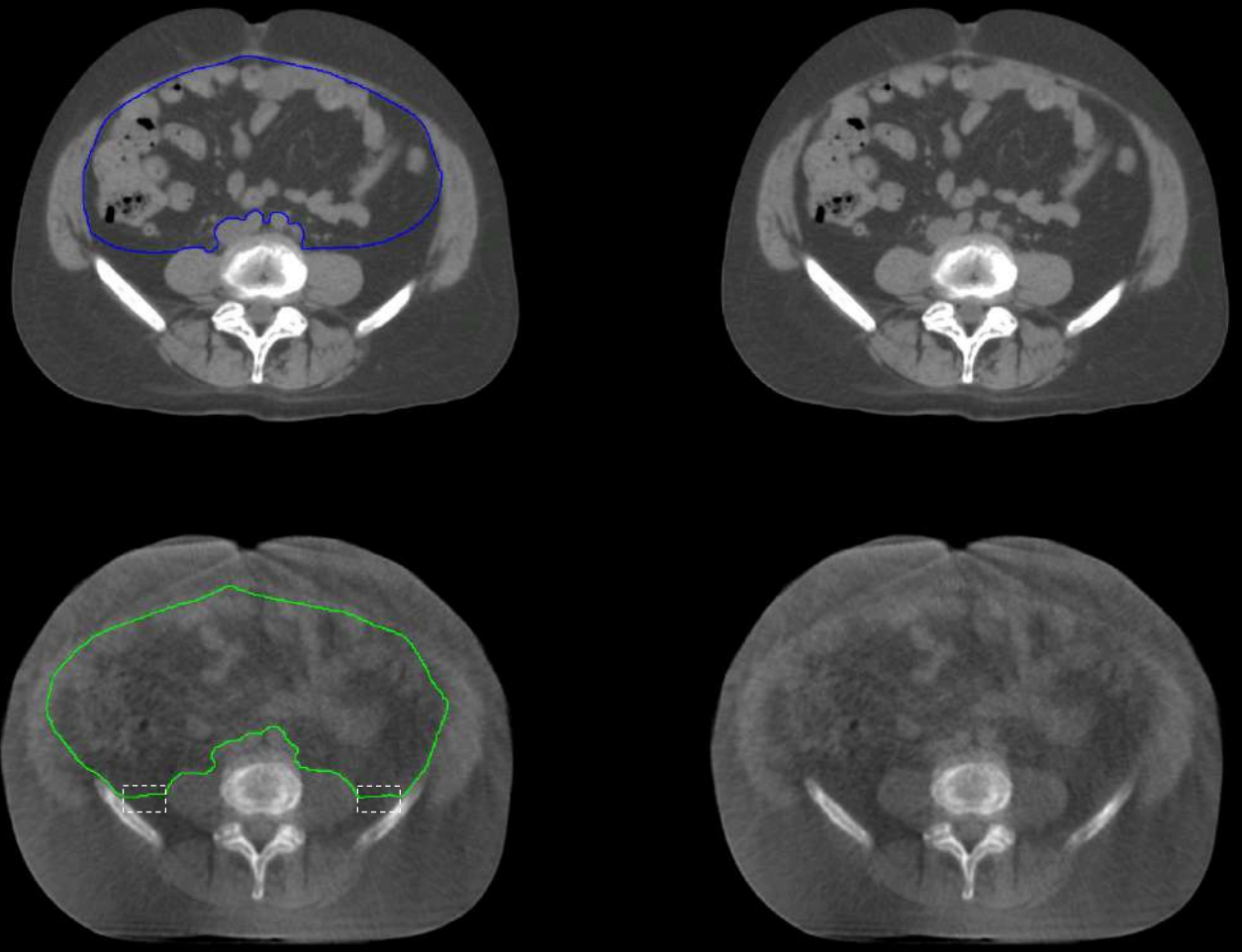




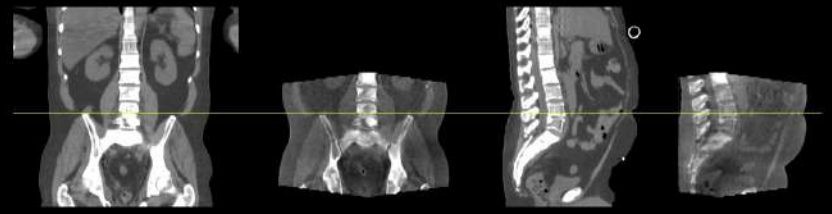
OD#1: lateral line from the lateral-most aspect of the psoas major to intersect the iliacus

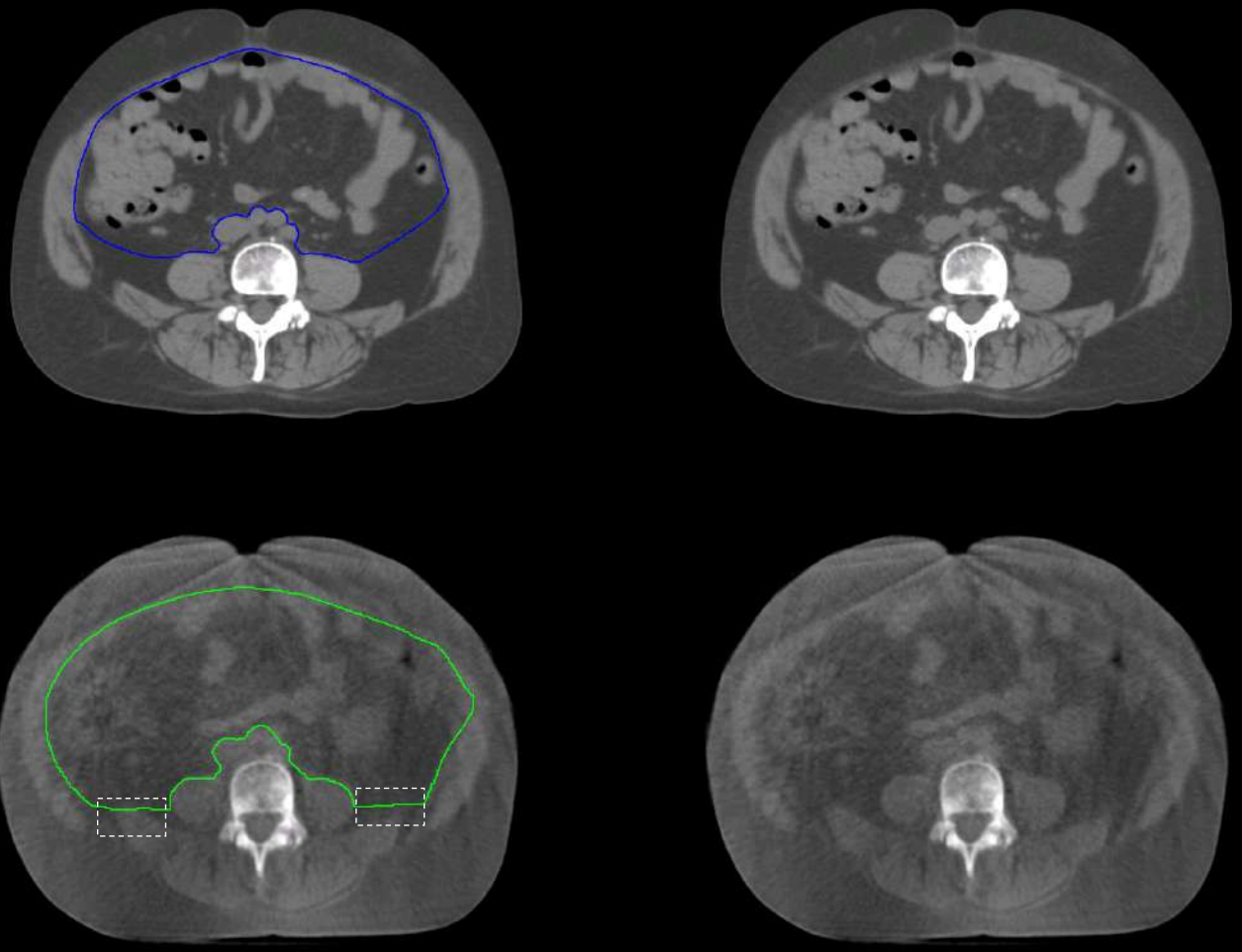
T(y)=9.00



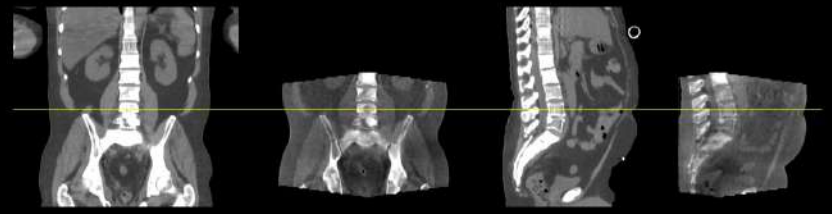


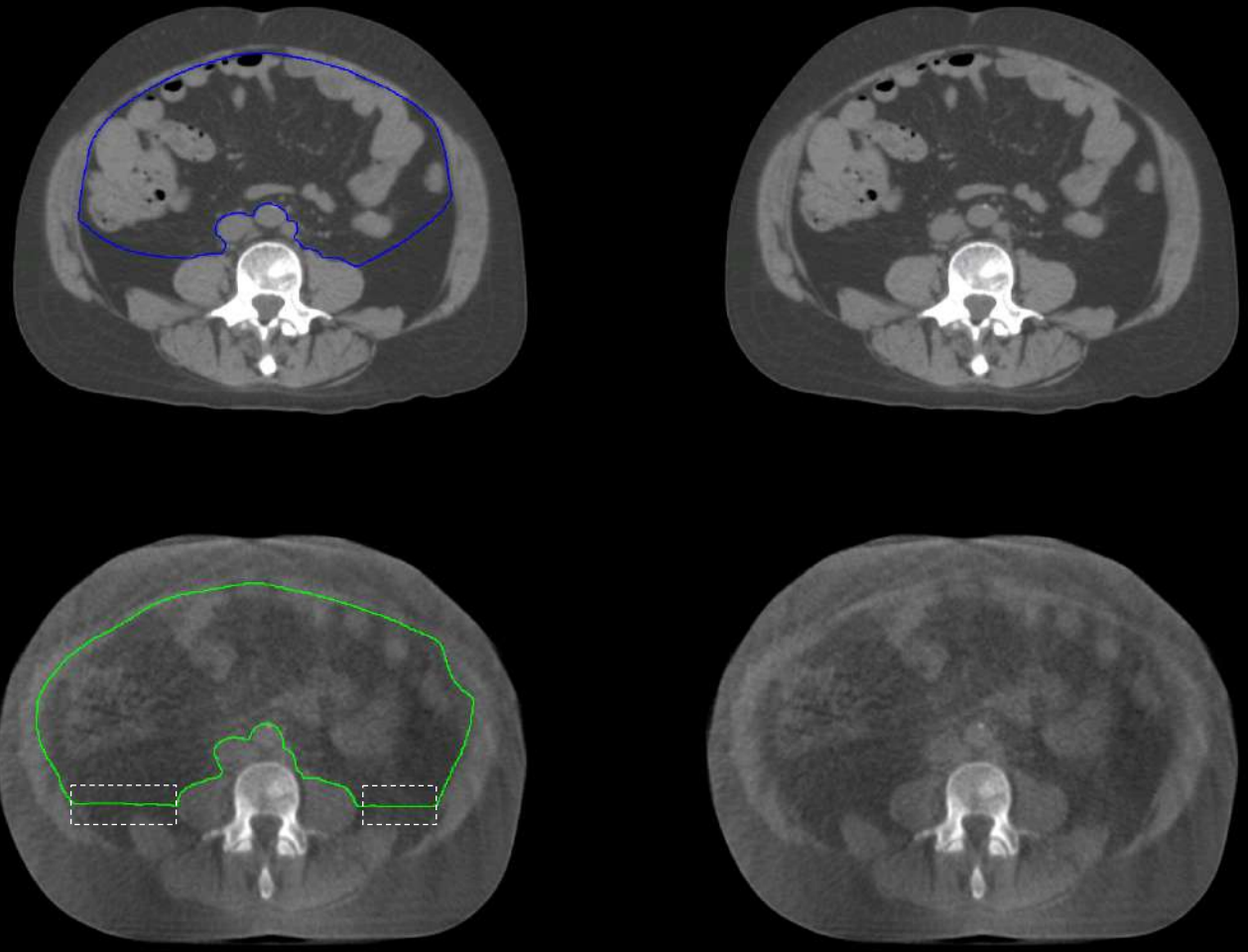
T(y)=9.90



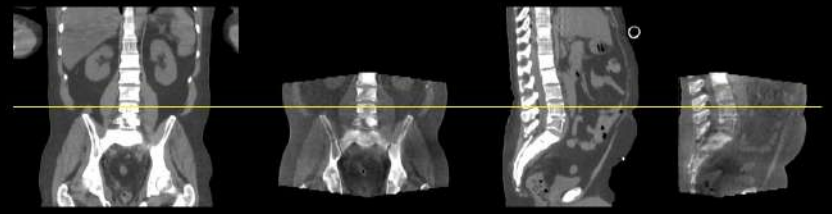


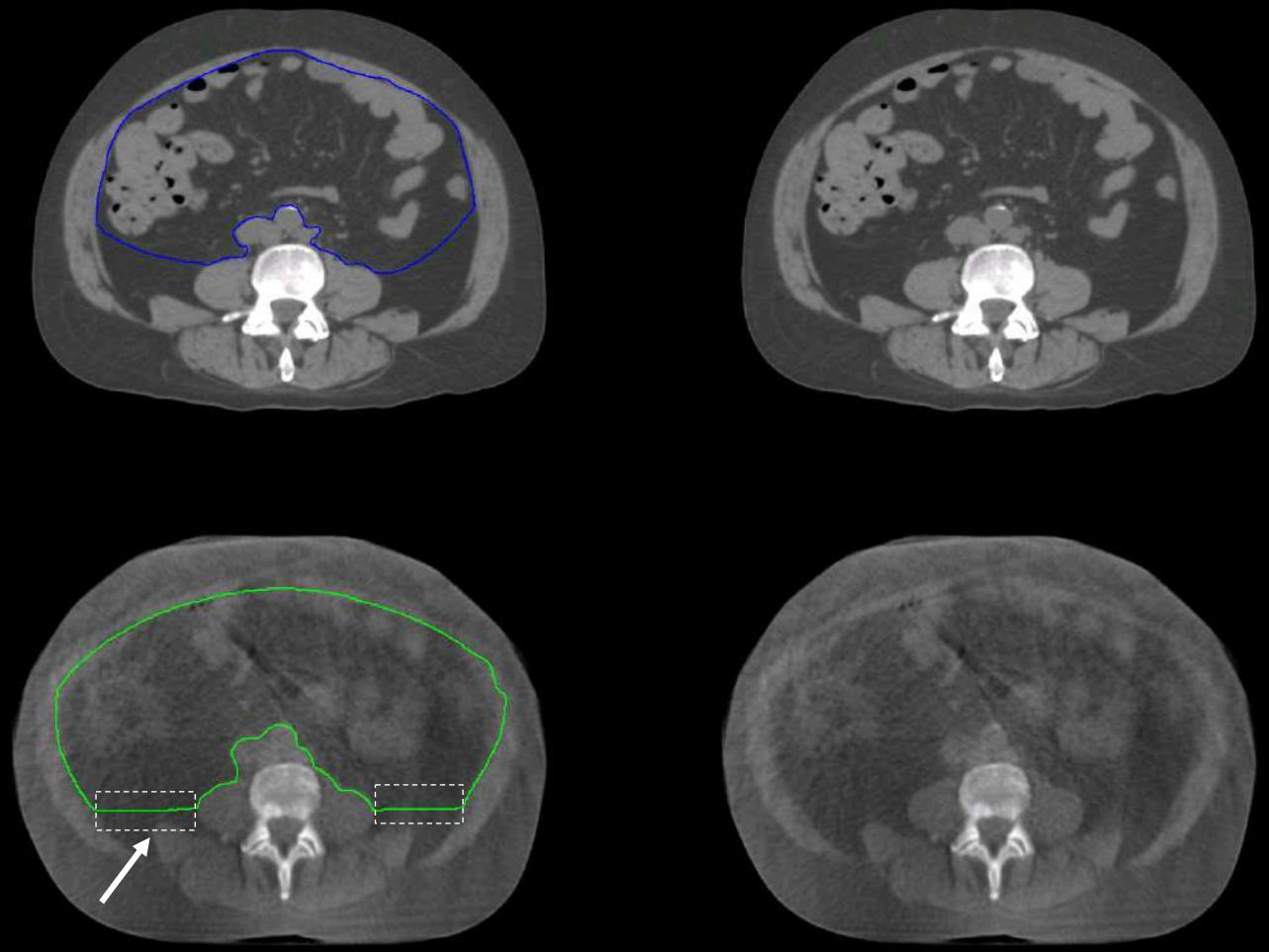
T(y)=10.80





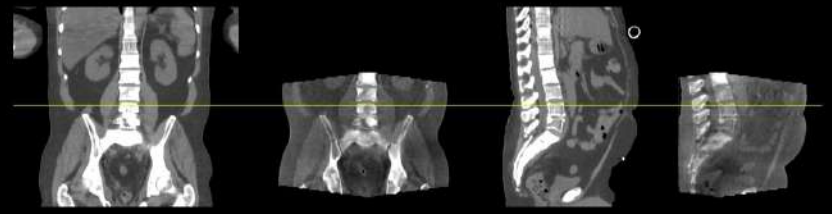
T(y)=11.40

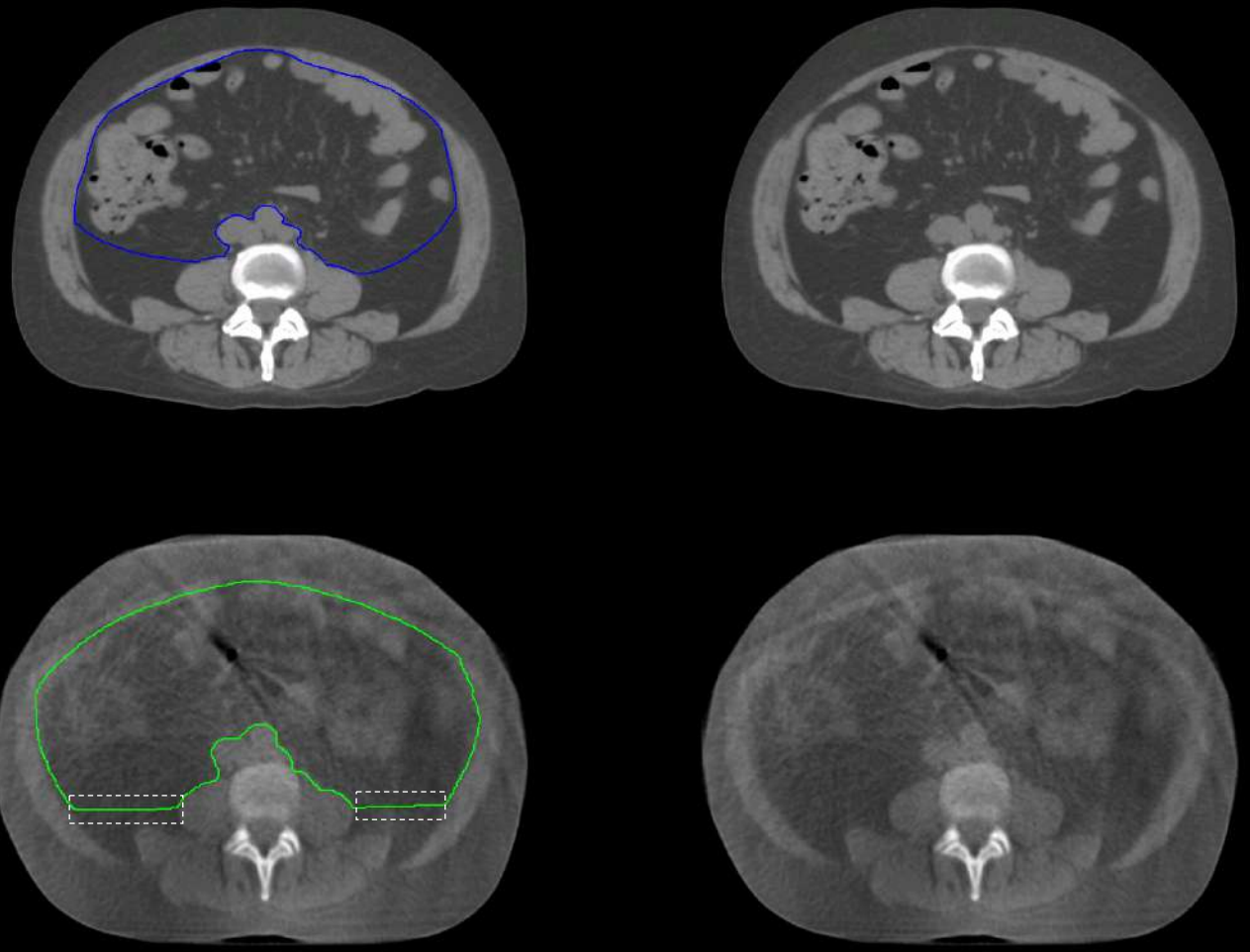




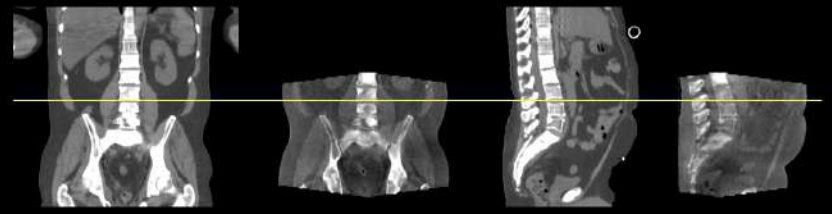
OD#1: lateral line from the lateral-most aspect of the psoas major to intersect the transverse abdominis

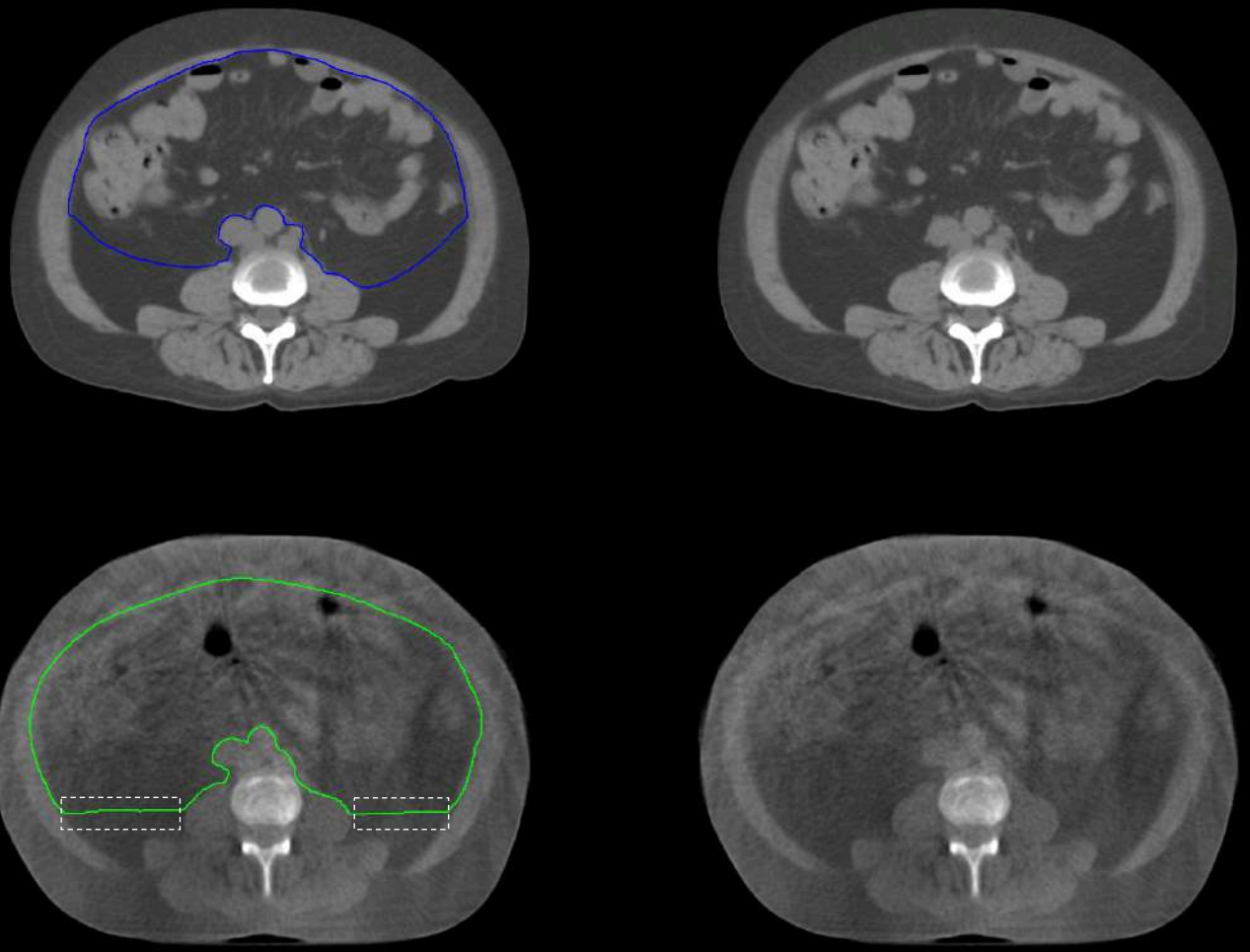
T(y)=11.70



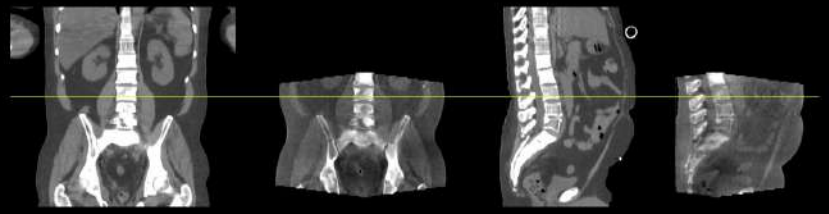


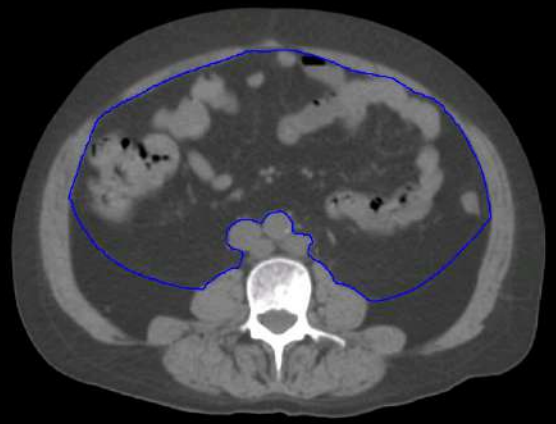
T(y)=12.60

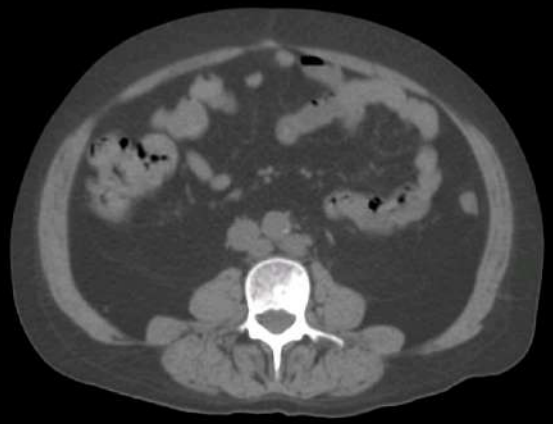


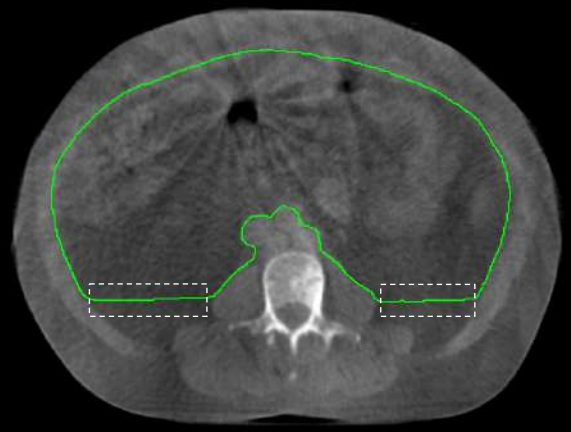


T(y)=13.50

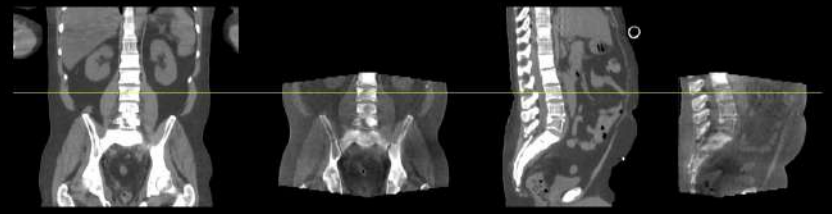


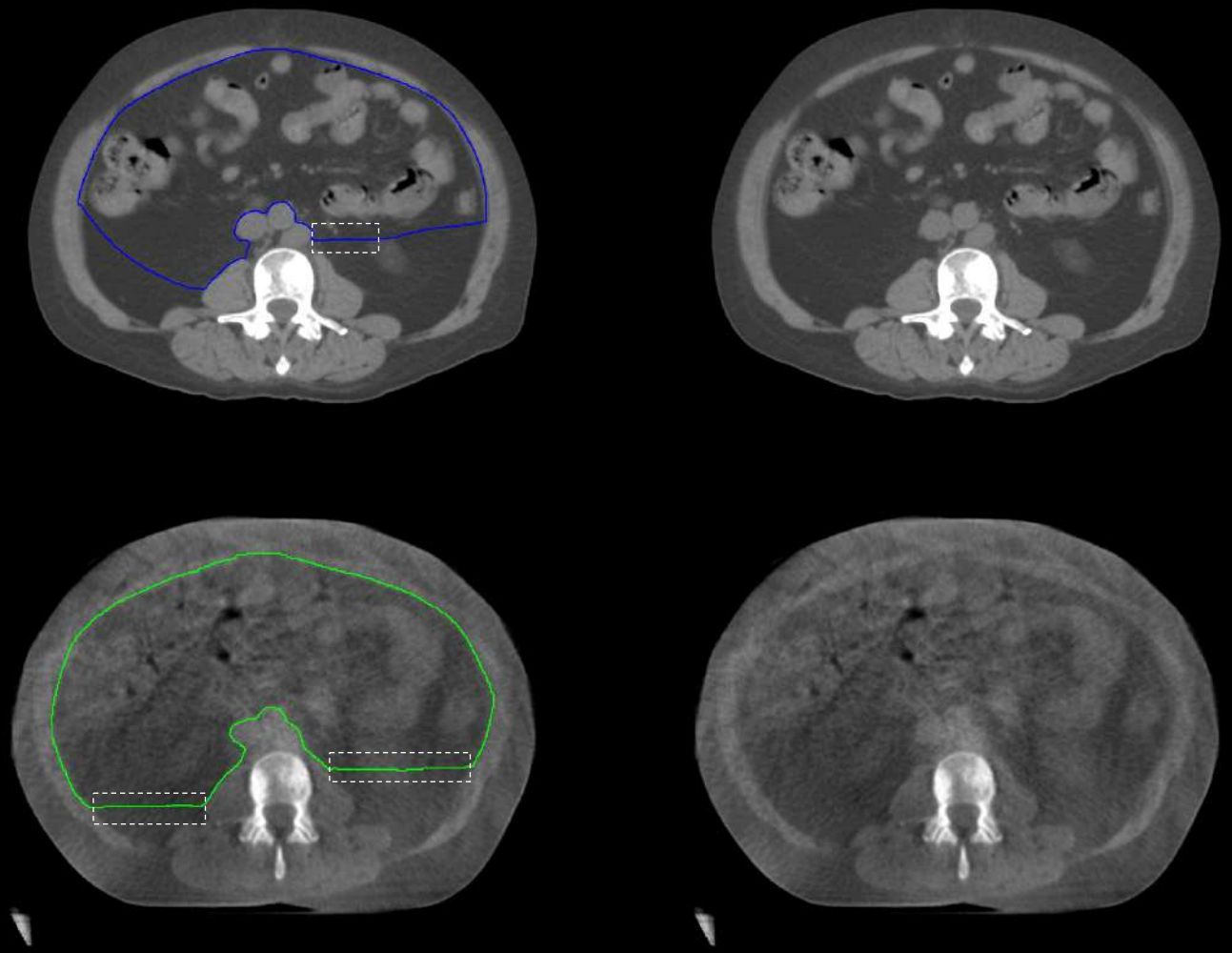




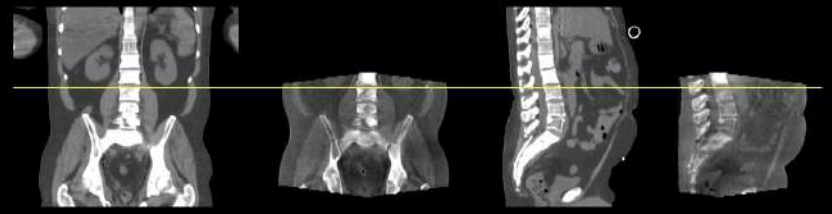


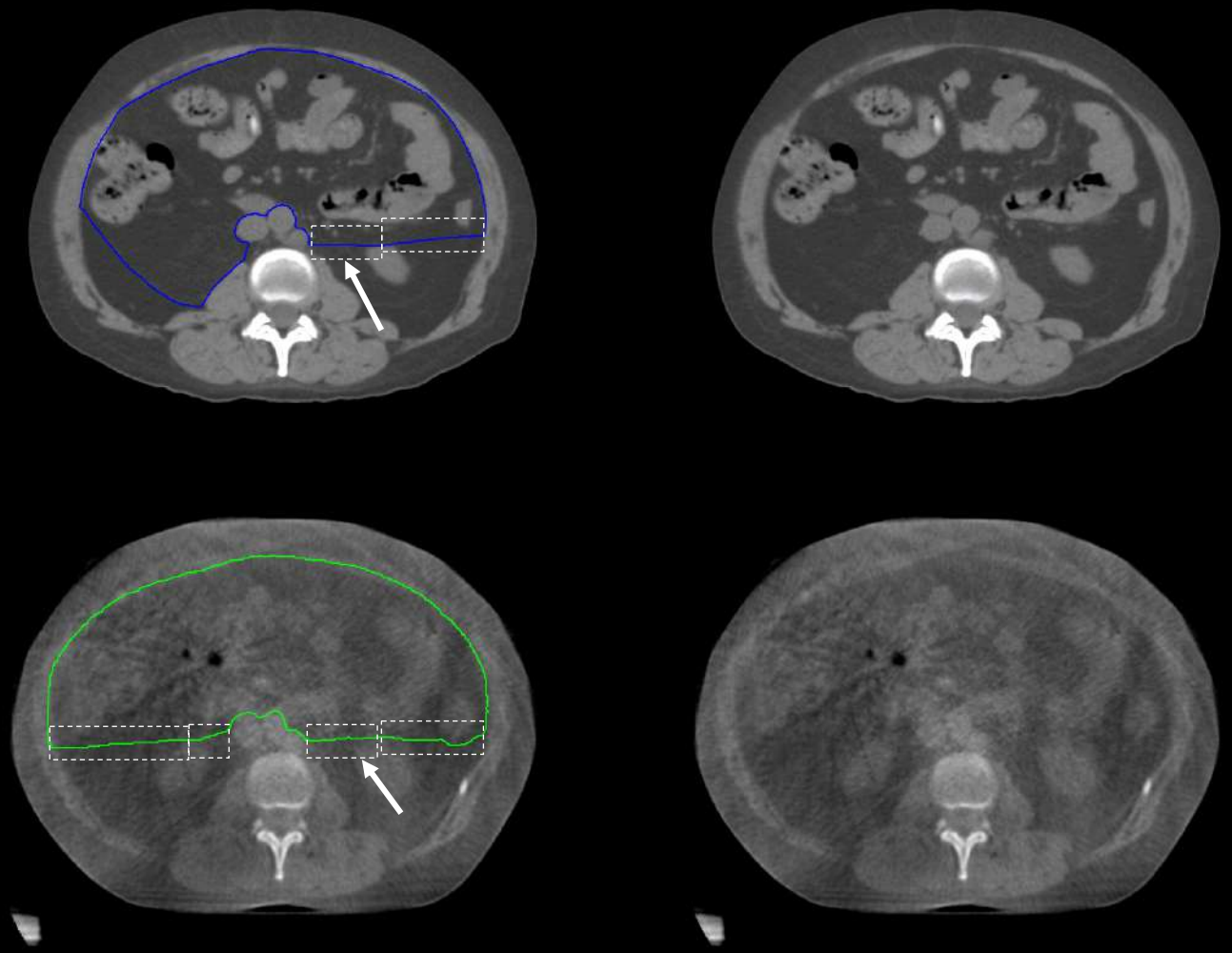
T(y)=14.40





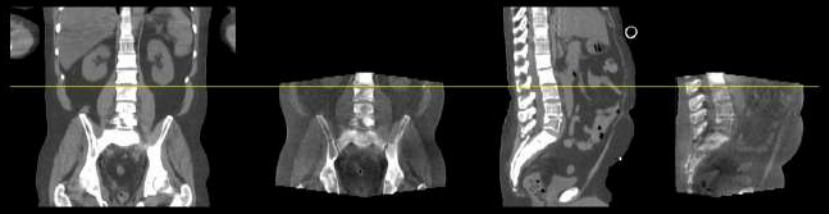
T(y)=15.30

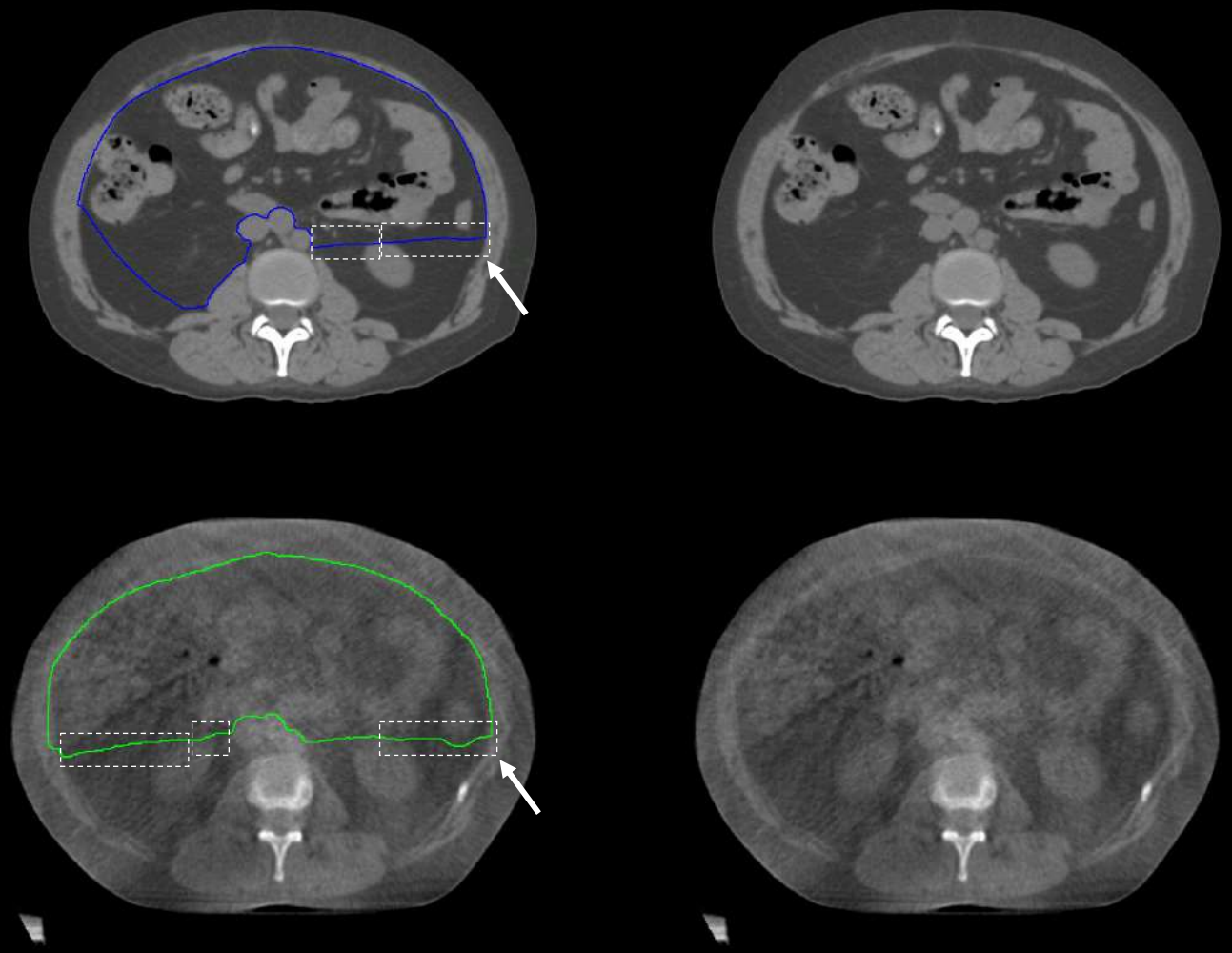




OD#3: straight line from the anterior-most aspect of the kidney
to the lateral-most aspect of the central vessel/aorta/IVC

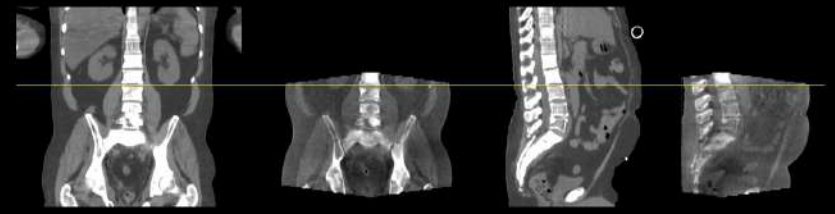
T(y)=15.60

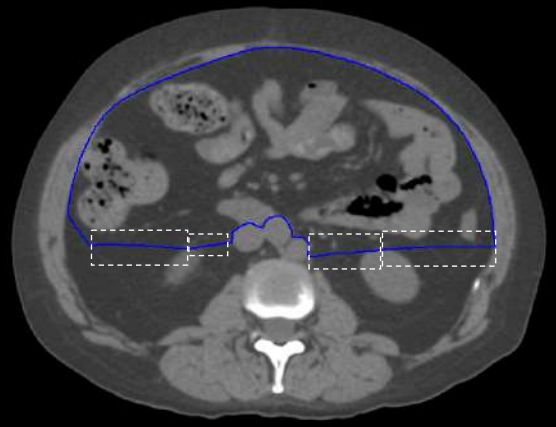


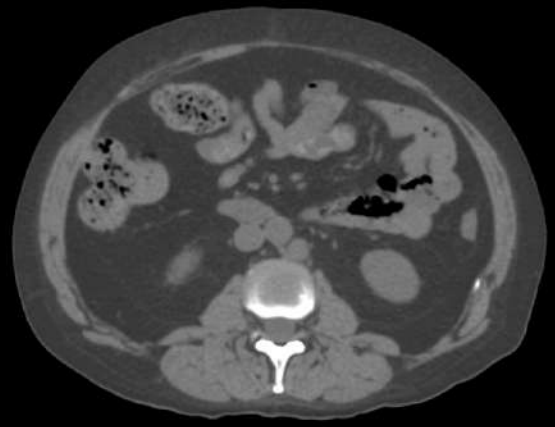


OD#2: straight line from the anterior-most aspect of the kidney to intersect the transverse abdominis

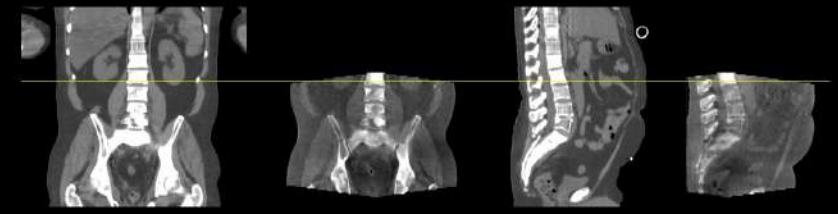
T(y)=15.90

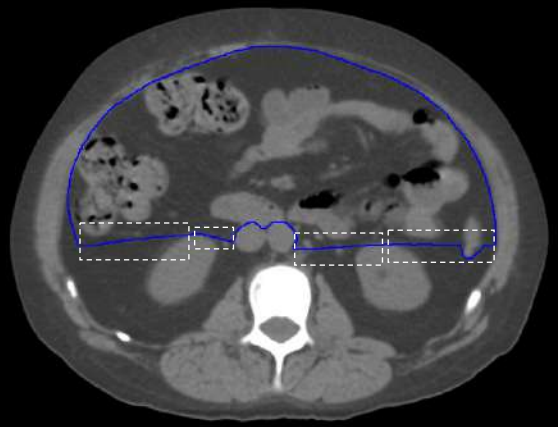


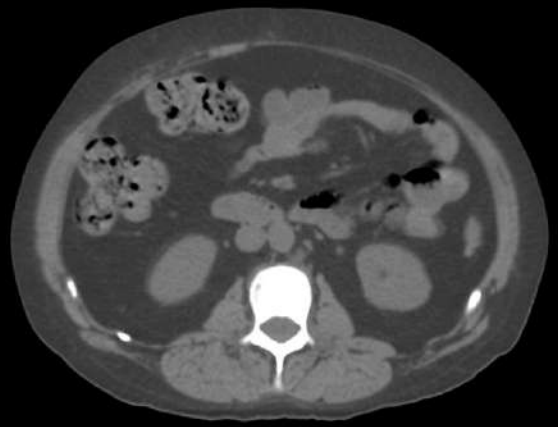




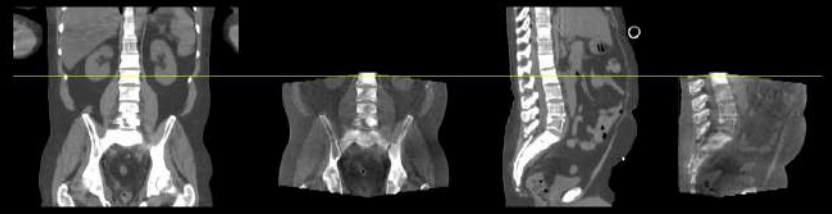
T(y)=16.80

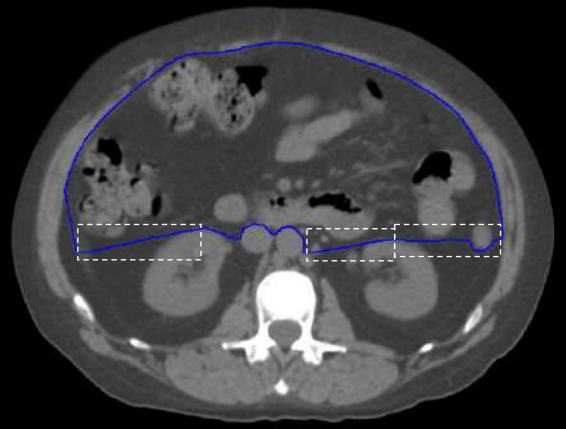


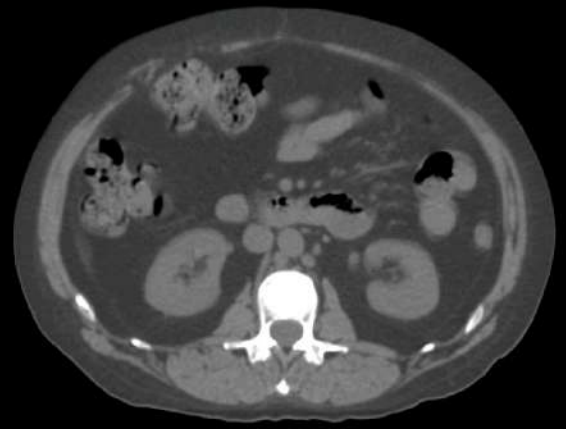




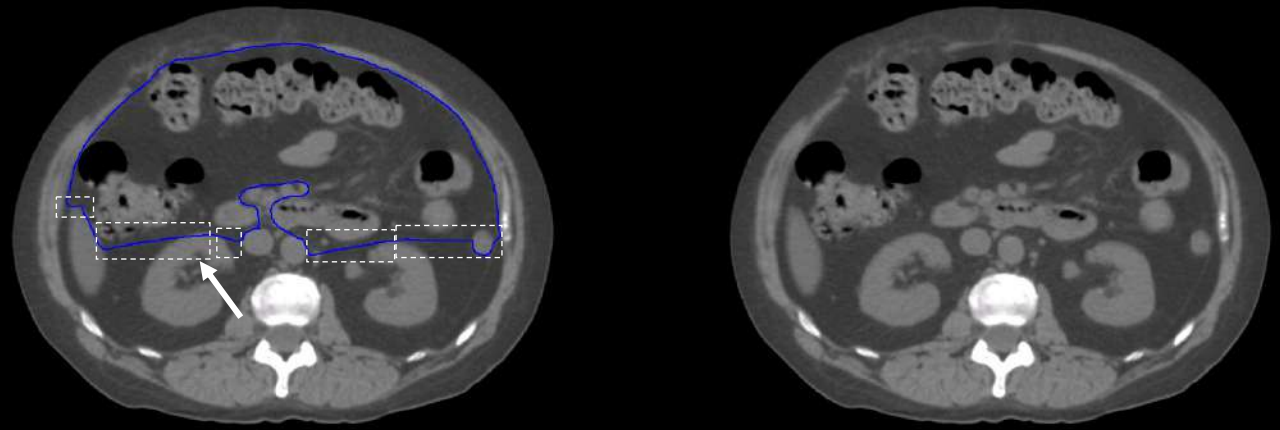
T(y)=17.70





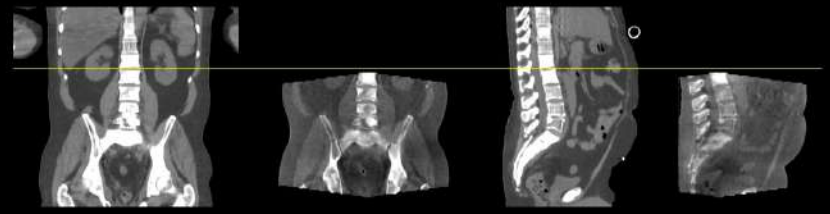


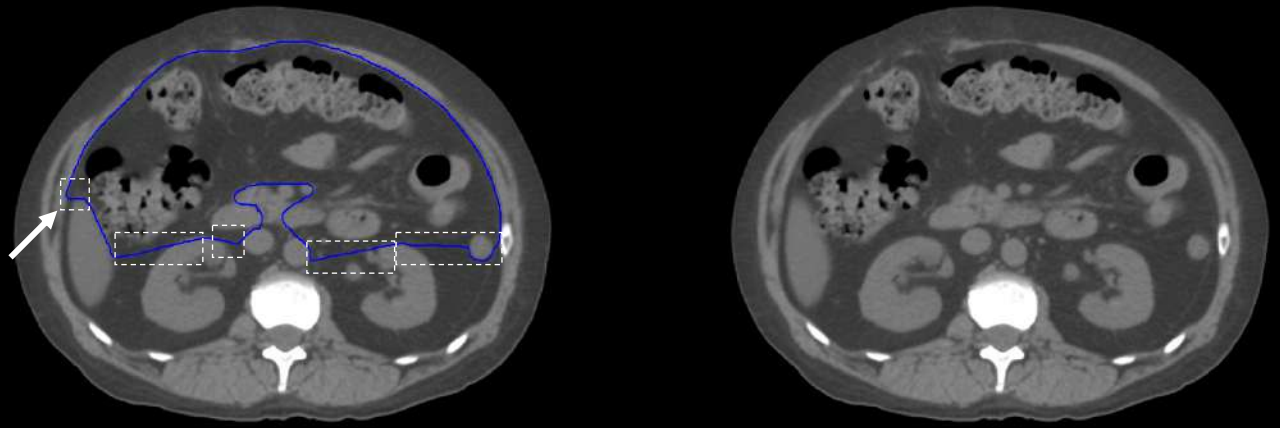
T(y)=18.60



OD#4: lateral (R) line from the anterior-most aspect of the kidney to the liver

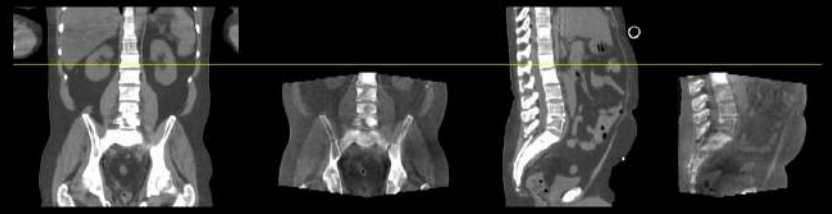
T(y)=19.50

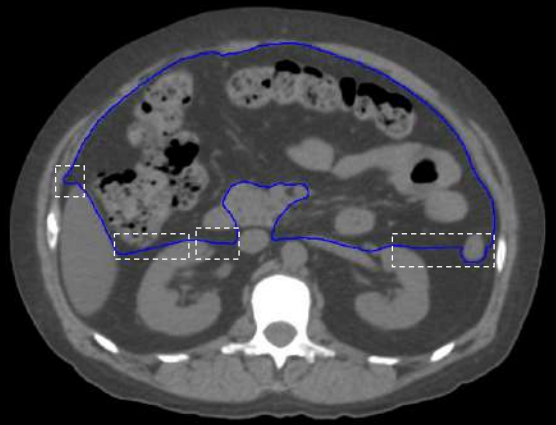




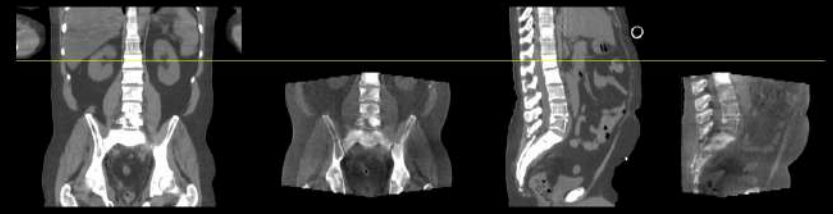
OD#9: lateral (R) line from the anterior-most aspect of the liver to intersect the transverse abdominis

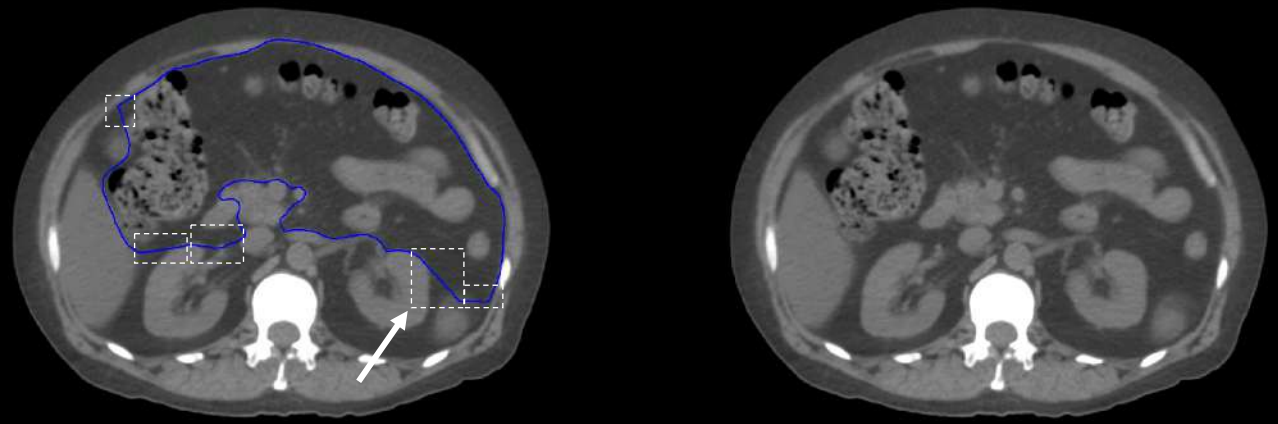
T(y)=20.40





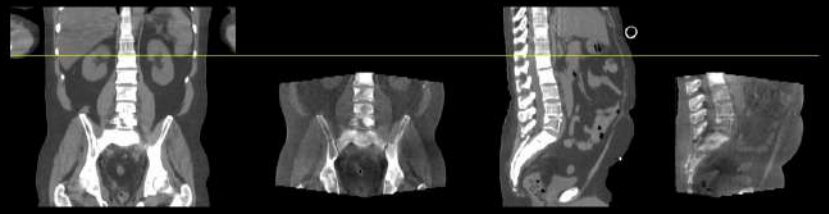
T(y)=21.30

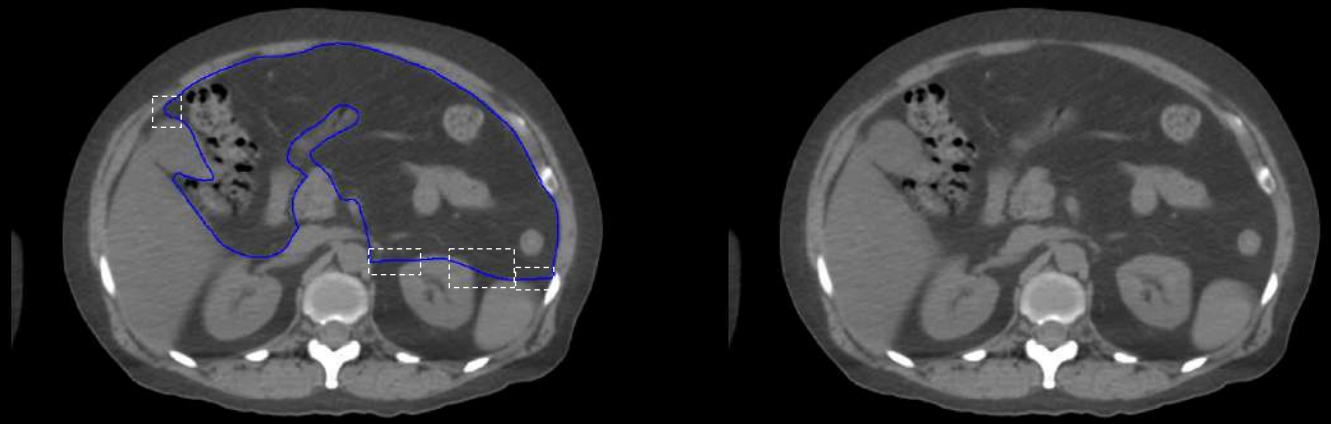




OD#5: straight line from the anterior-most aspect of the kidney (L) to the anterior-most aspect of the spleen

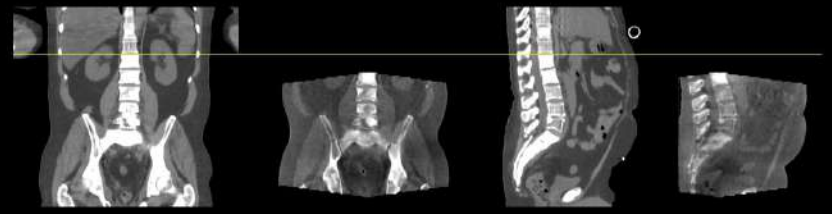
T(y)=22.20

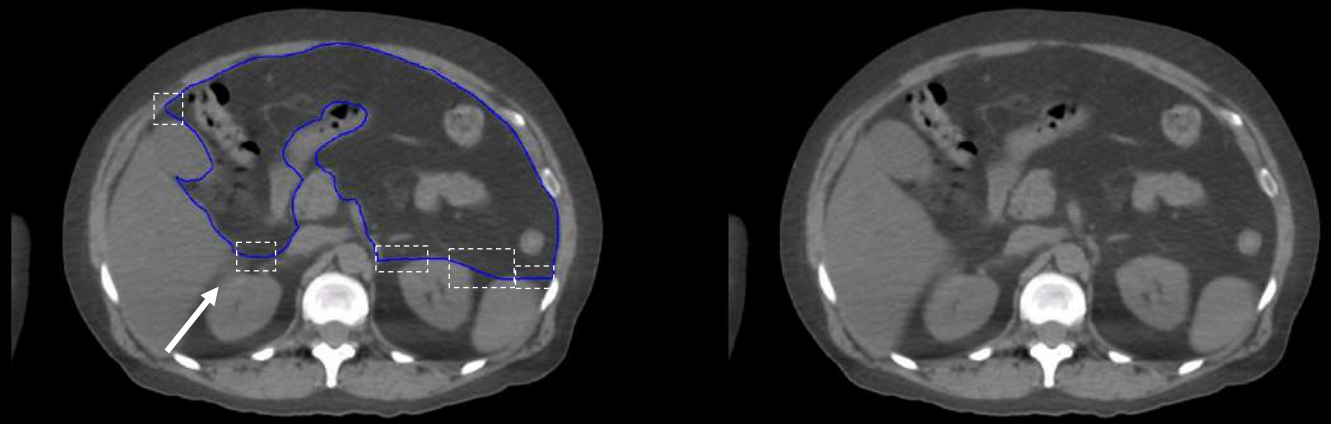




MM-p44

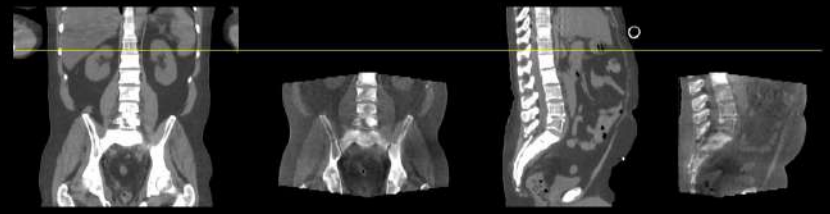
T(y)=22.50

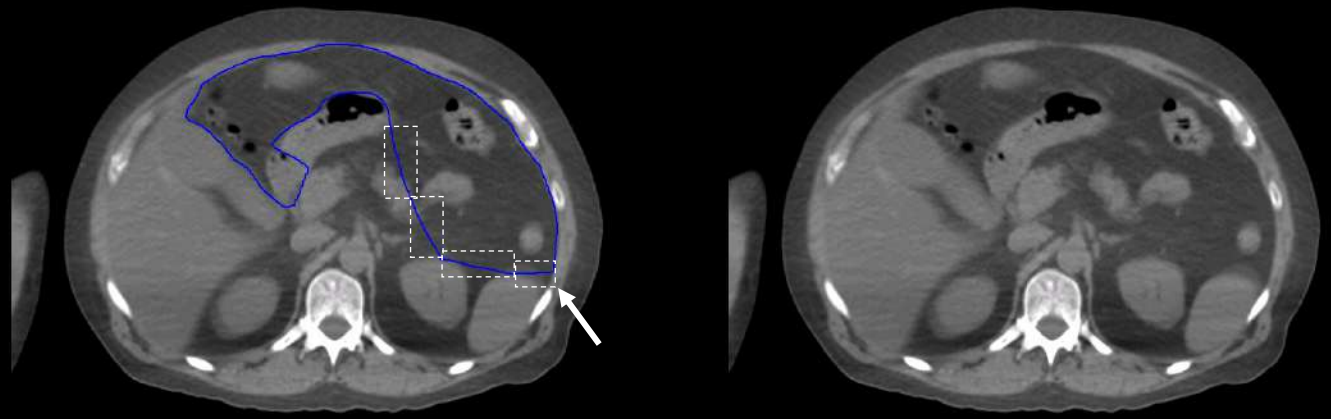




OD#8: straight line from the posterior medial-most aspect of the liver to the lateral-most aspect of the central vessels/IVC

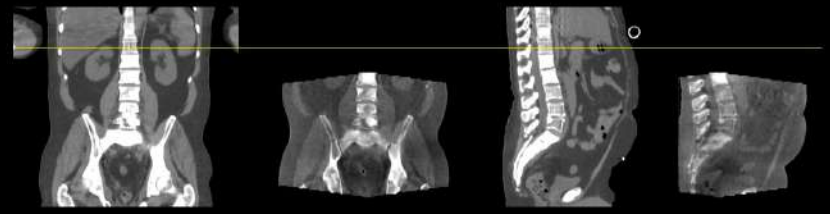
T(y)=23.40

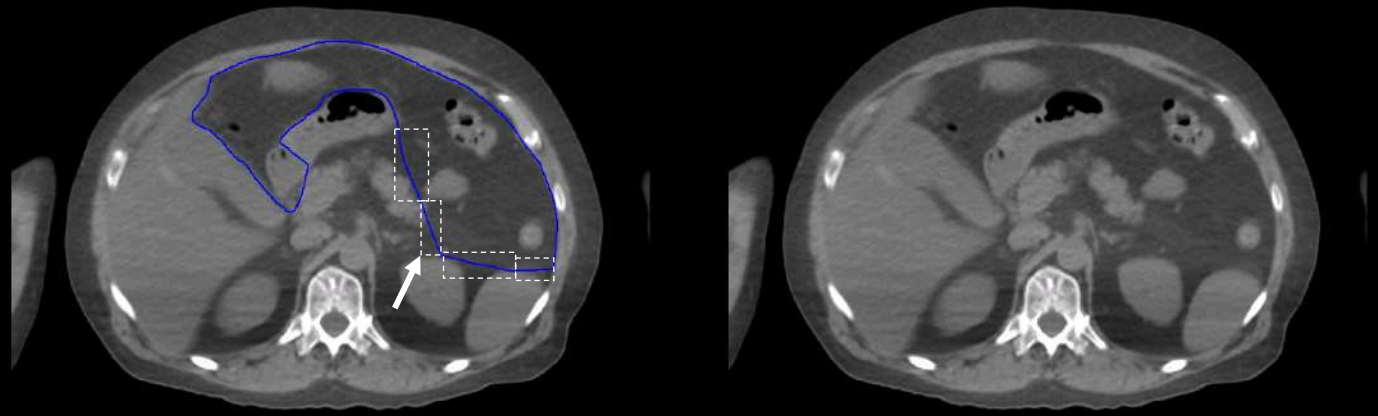




OD#11: lateral line from the anterior-most aspect of the spleen to intersect the transverse abdominis

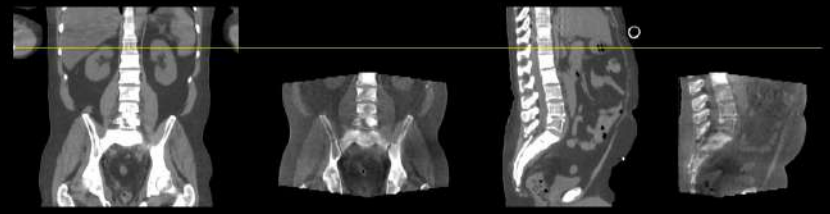
T(y)=23.70

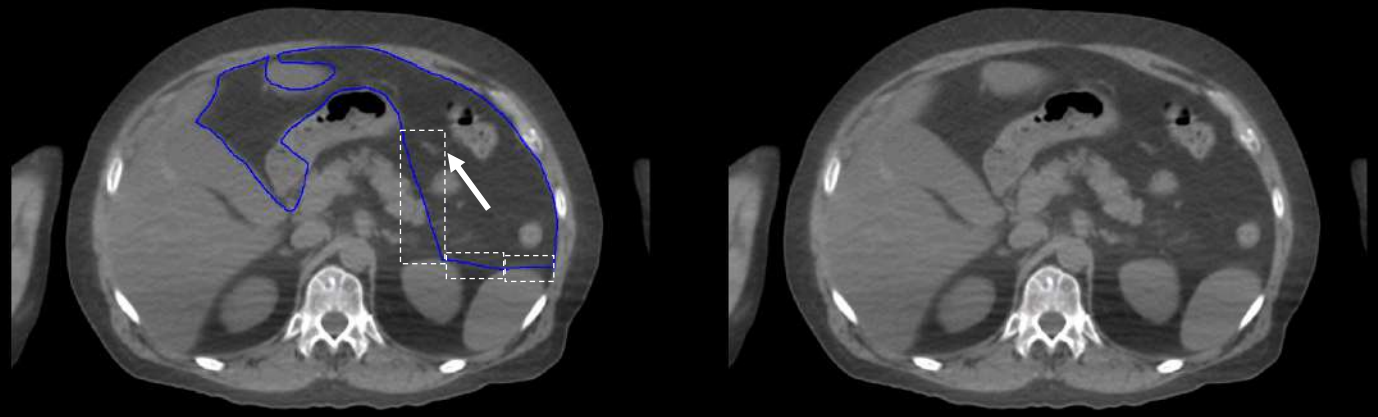




OD#6: straight line from the anterior-most aspect of the kidney (L) to the lateral-most aspect of the pancreas

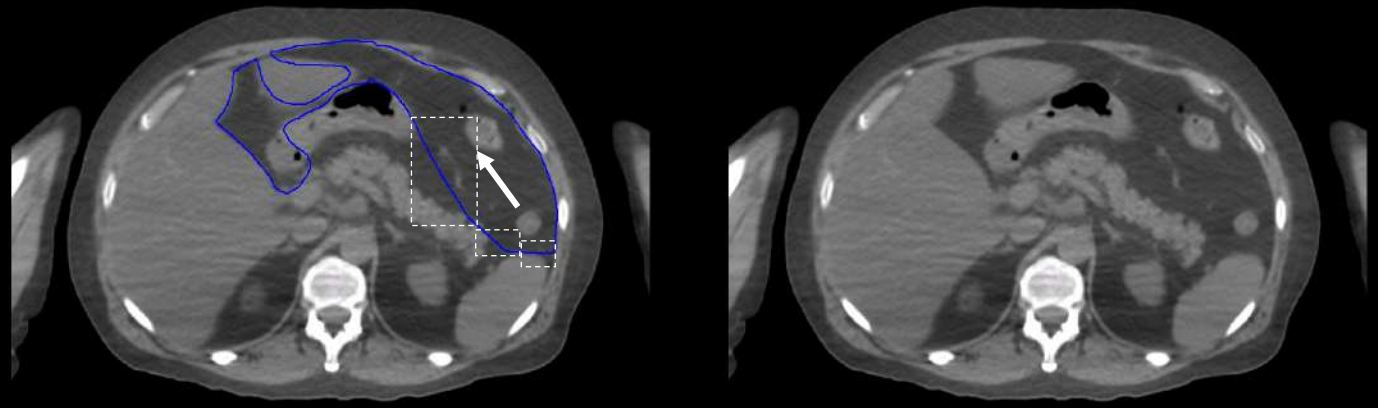
T(y)=24.00





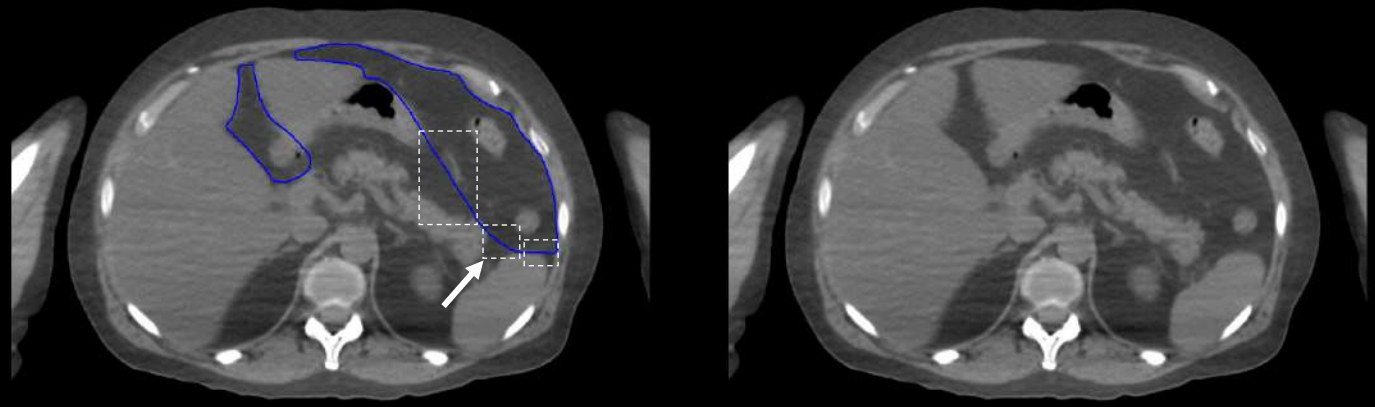
OD#7: straight line from the anterior-most aspect of the kidney (L) to the lateral-most aspect of the stomach

T(y)=24.90



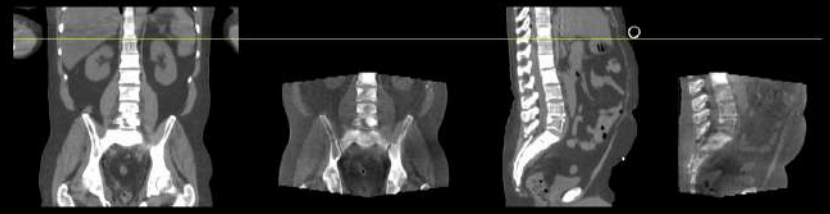
OD#15: straight line from the lateral-most (L) aspect of the stomach to the left lateral-most aspect of the pancreas

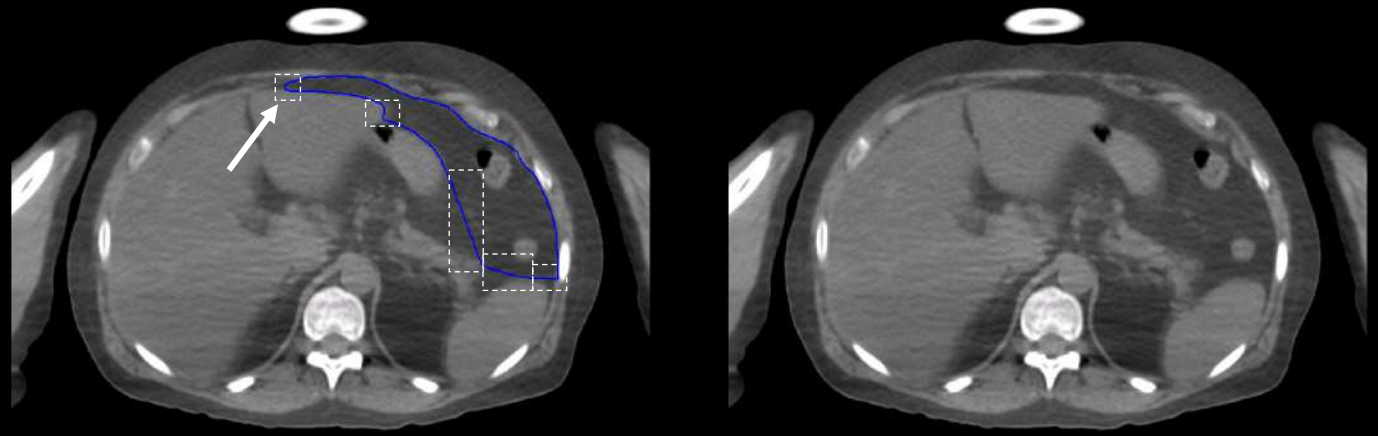
T(y)=25.20



OD#12: straight line from the anterior-most aspect of the spleen to the lateral-most aspect of the pancreas

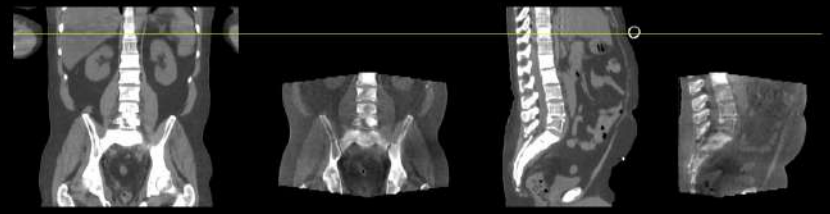
T(y)=25.80

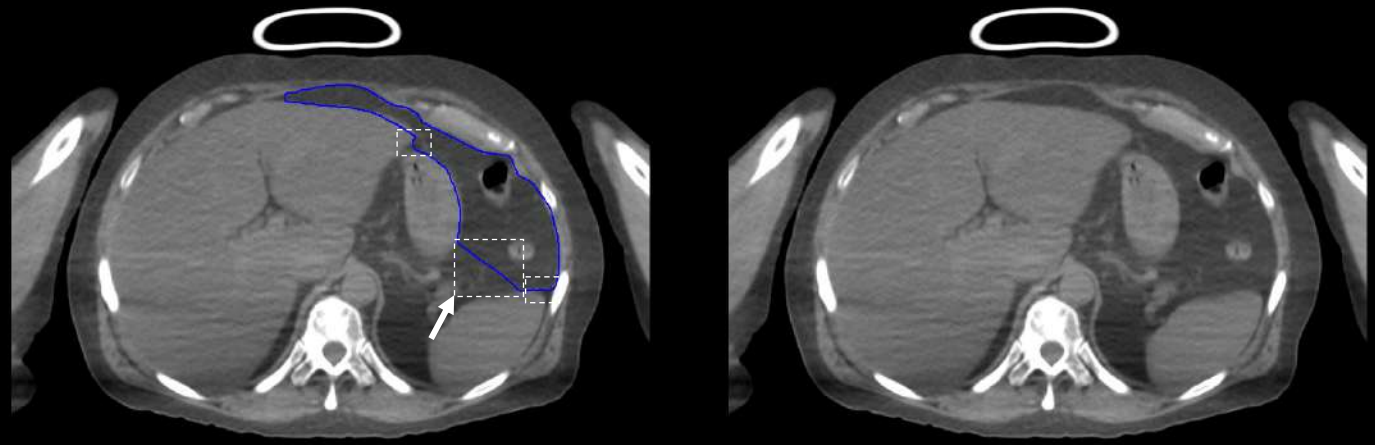




OD#10: minimum distance line from the anterior-most aspect of the liver to the rectus abdominis

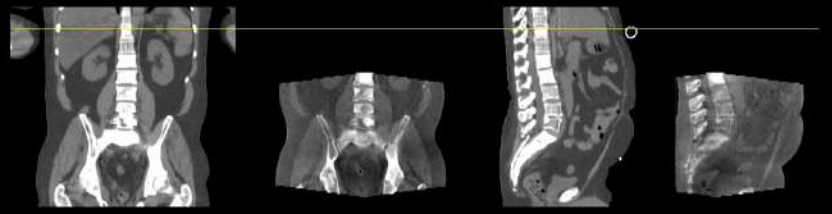
T(y)=27.00

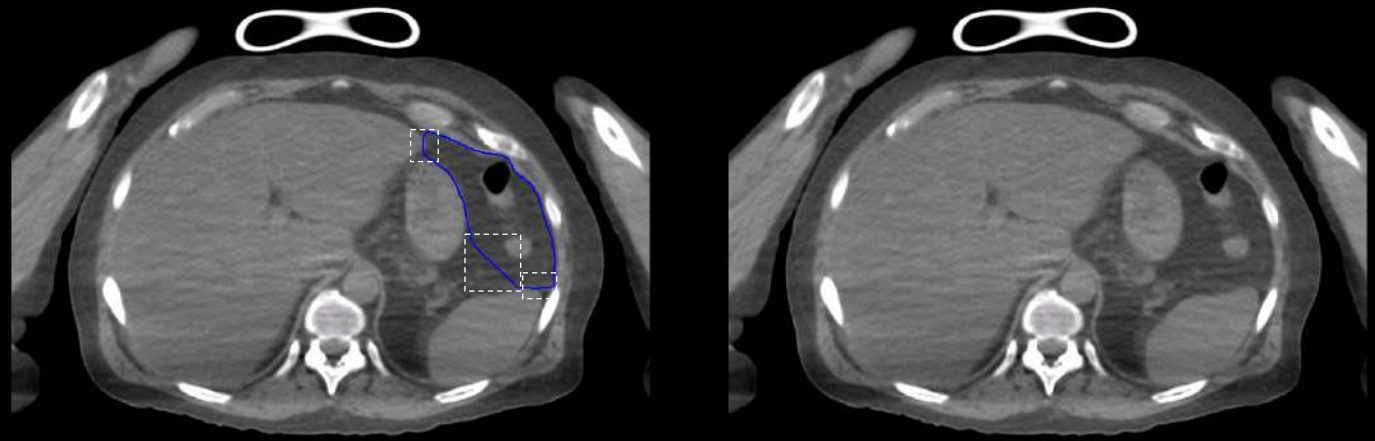




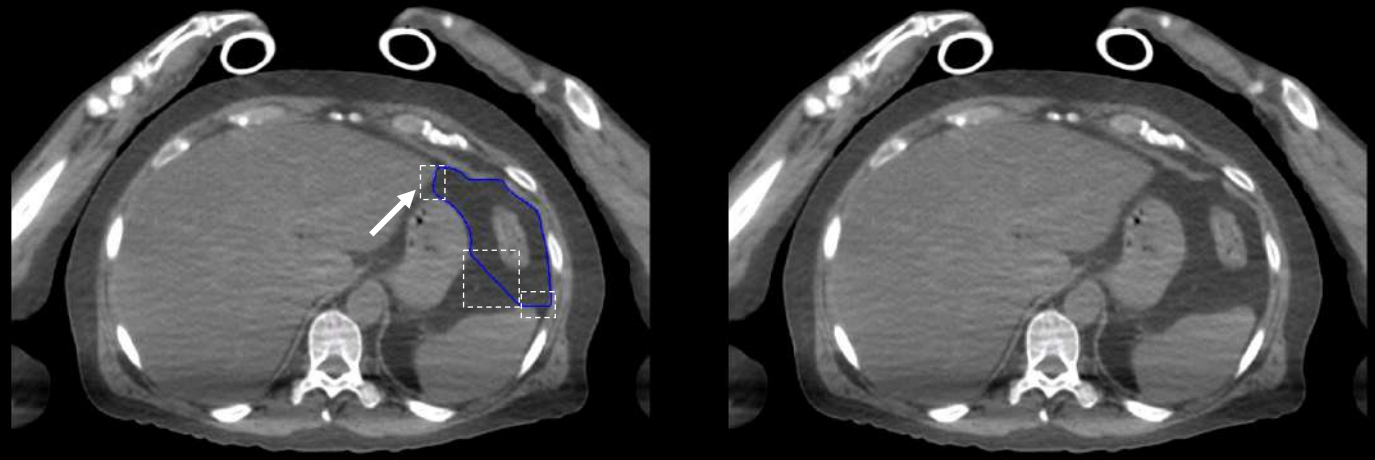
OD#13: straight line from the anterior-most aspect of the spleen to the lateral-most aspect of the stomach

T(y)=27.90



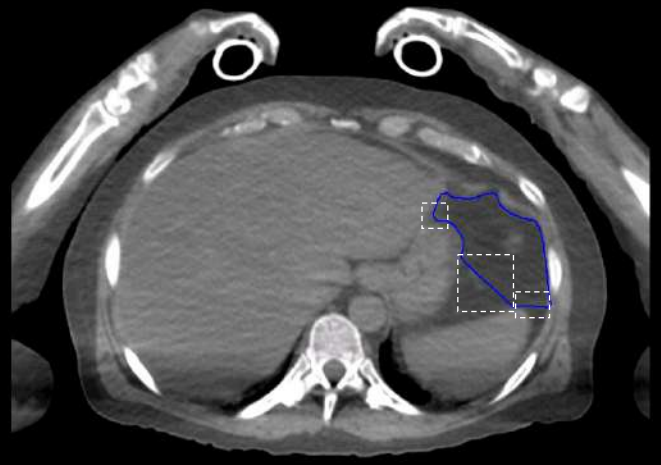


T(y)=29.10

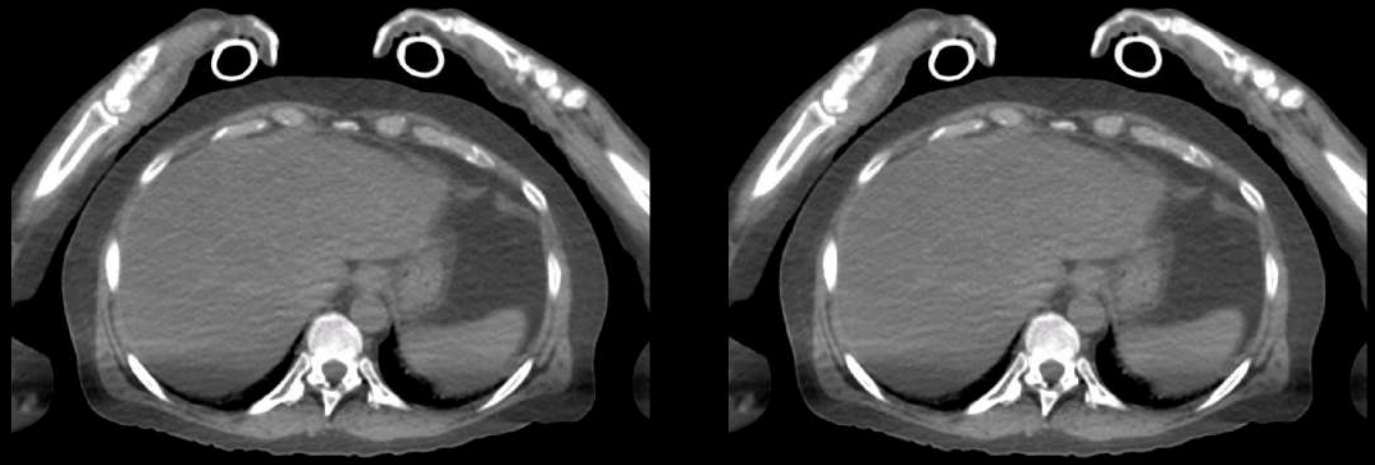


OD#14: straight line from the anterior-most aspect of the stomach to the left lateral-most aspect of the liver

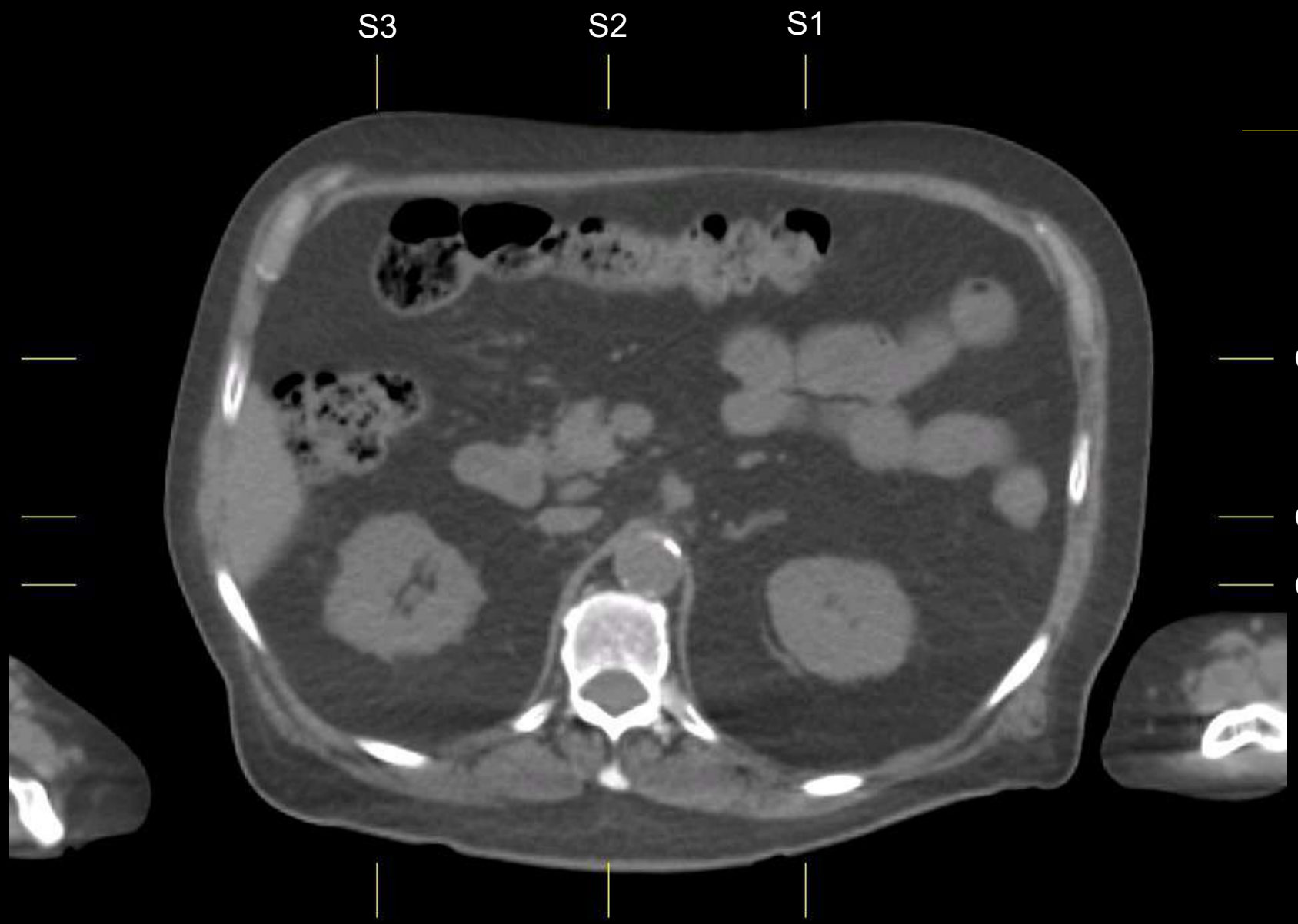
T(y)=30.00



T(y)=30.30



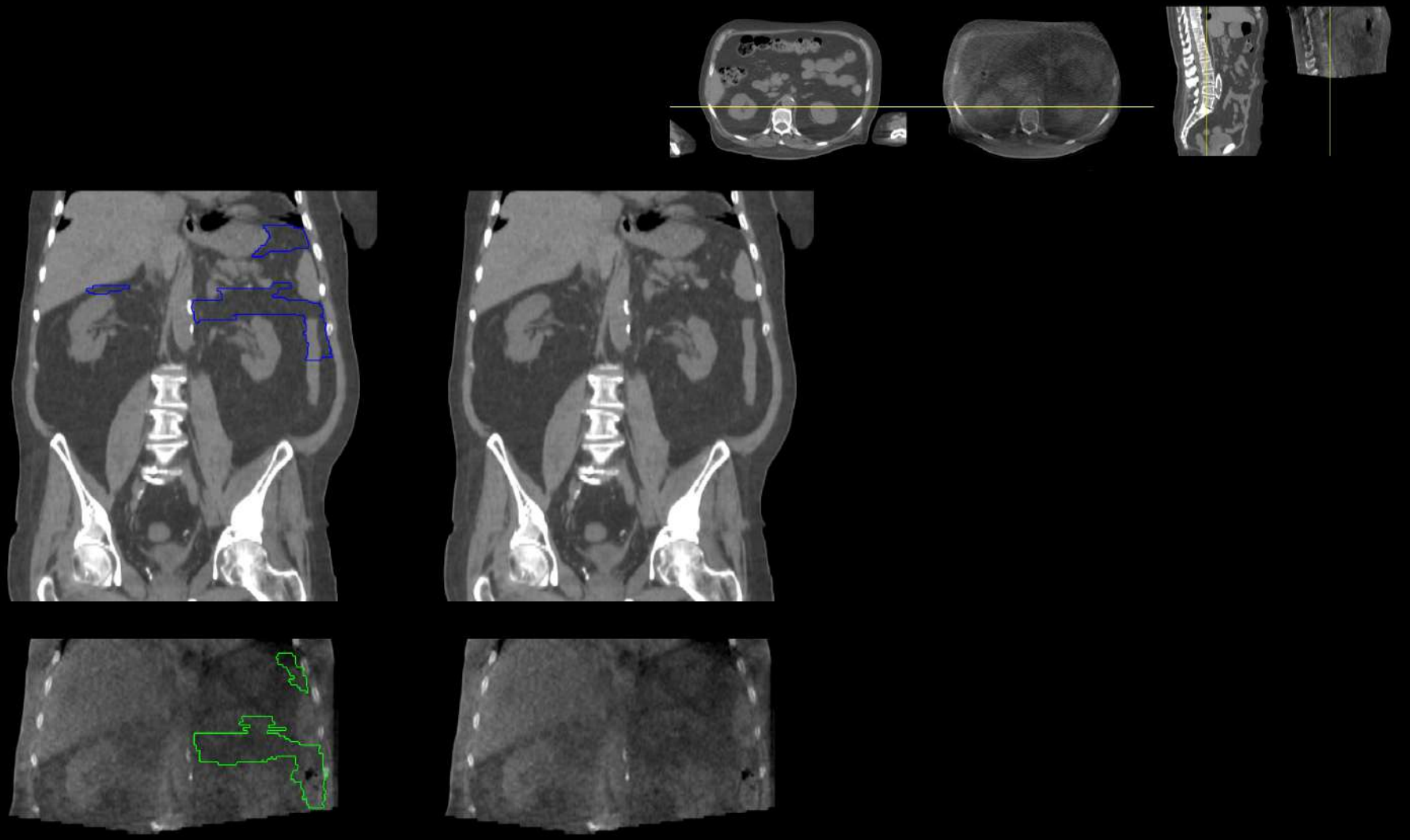
Upper Abdominal


S3
S2
S1
Slices included in the atlas
C3
C2
C1

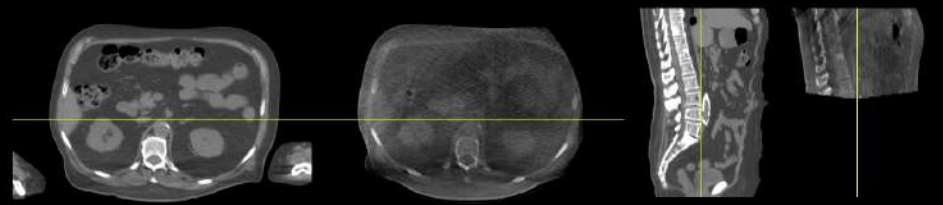
Slices included in the atlas

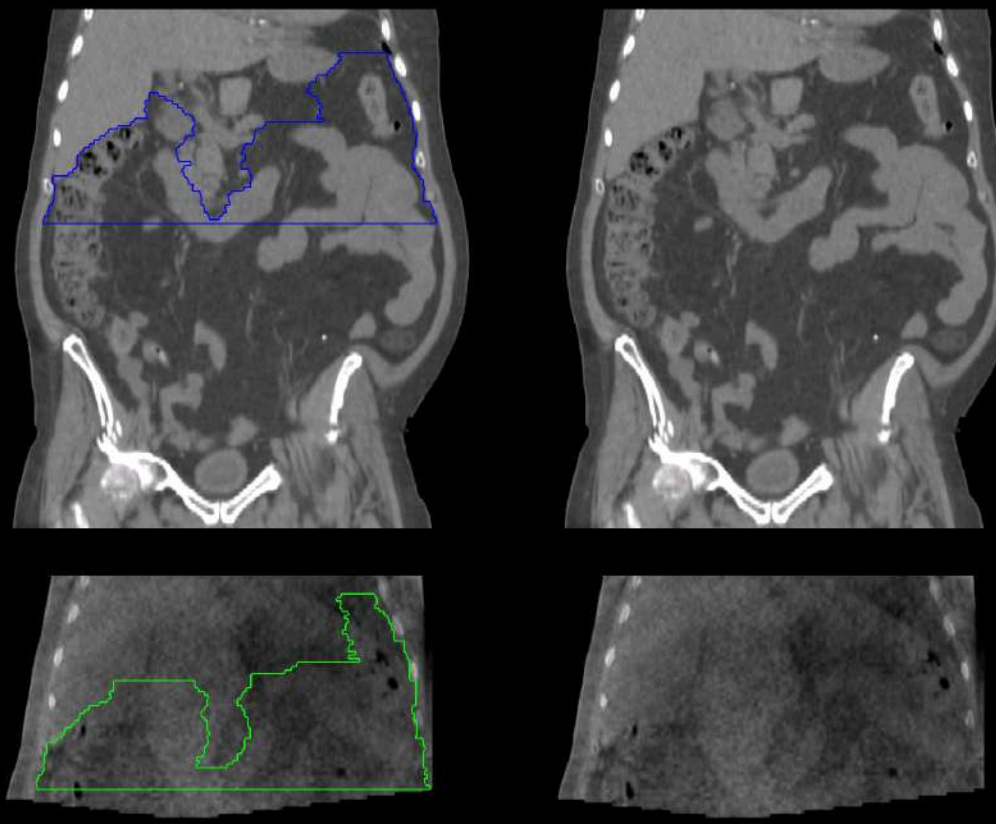
Slices included in the atlas

C1

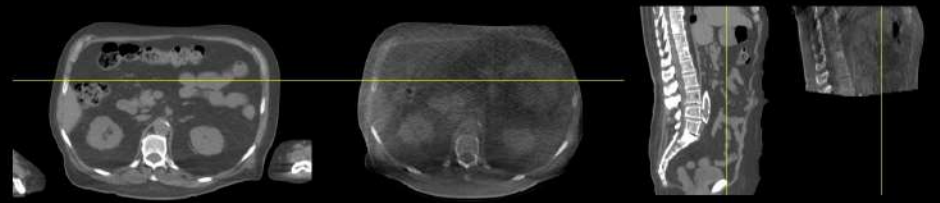


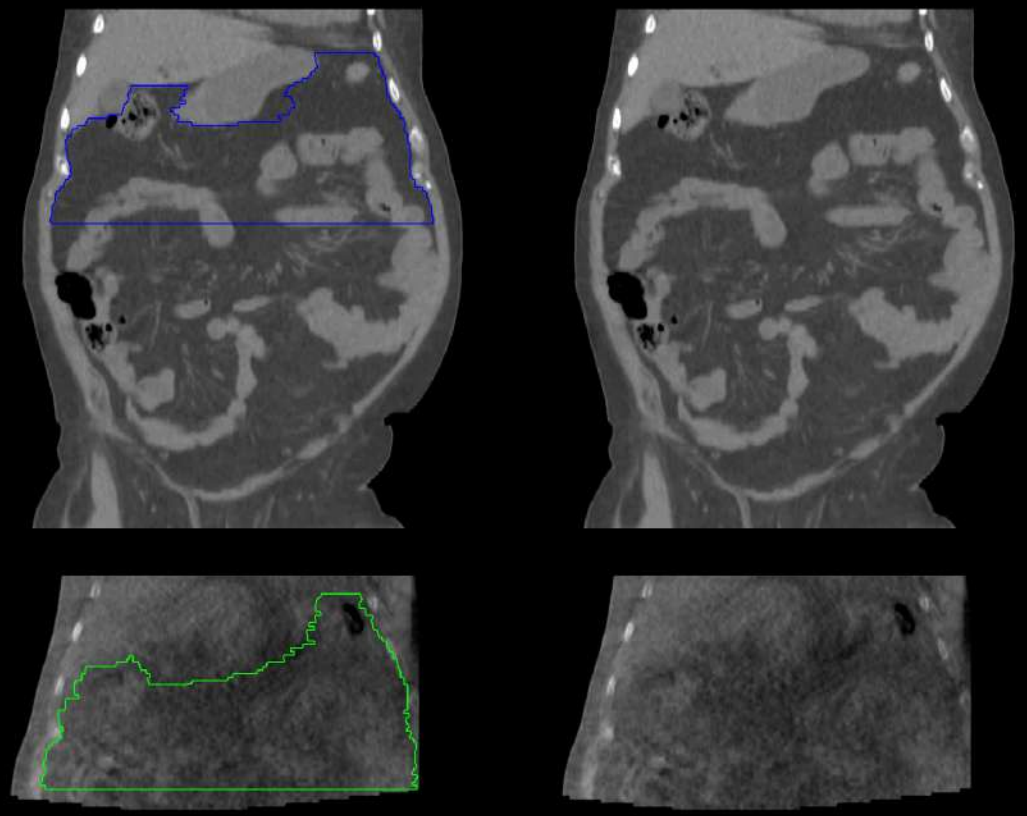
C2



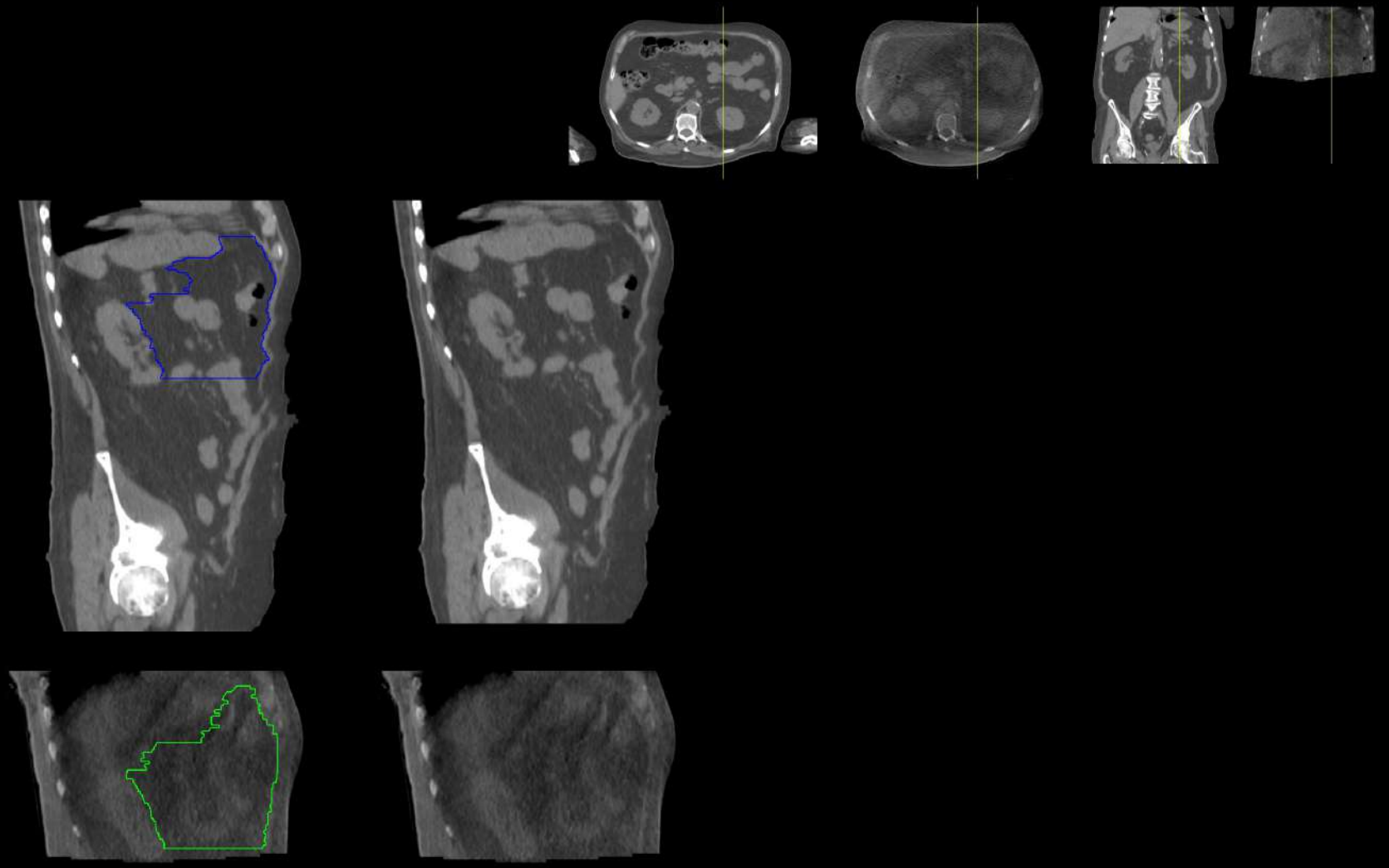


C3

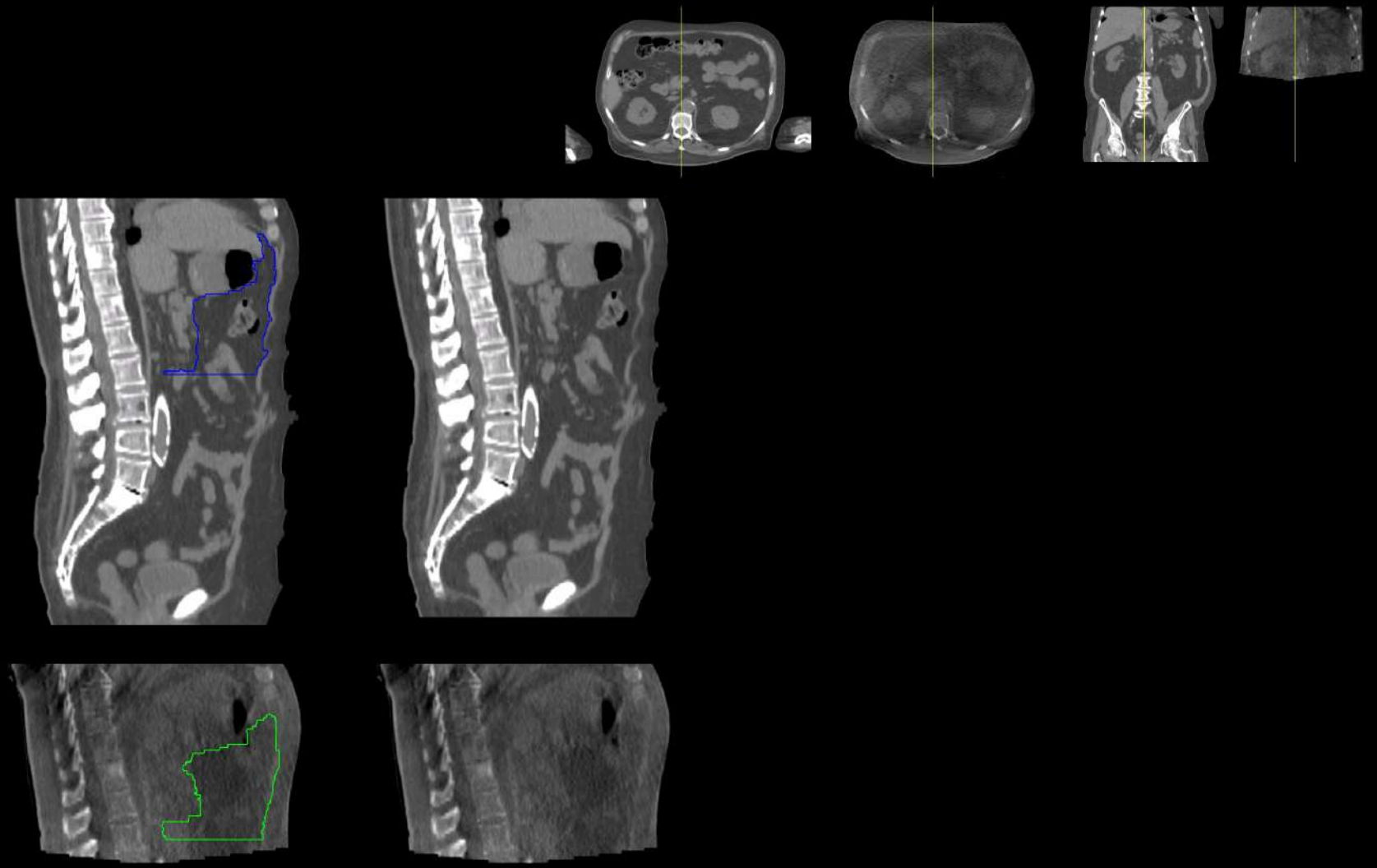




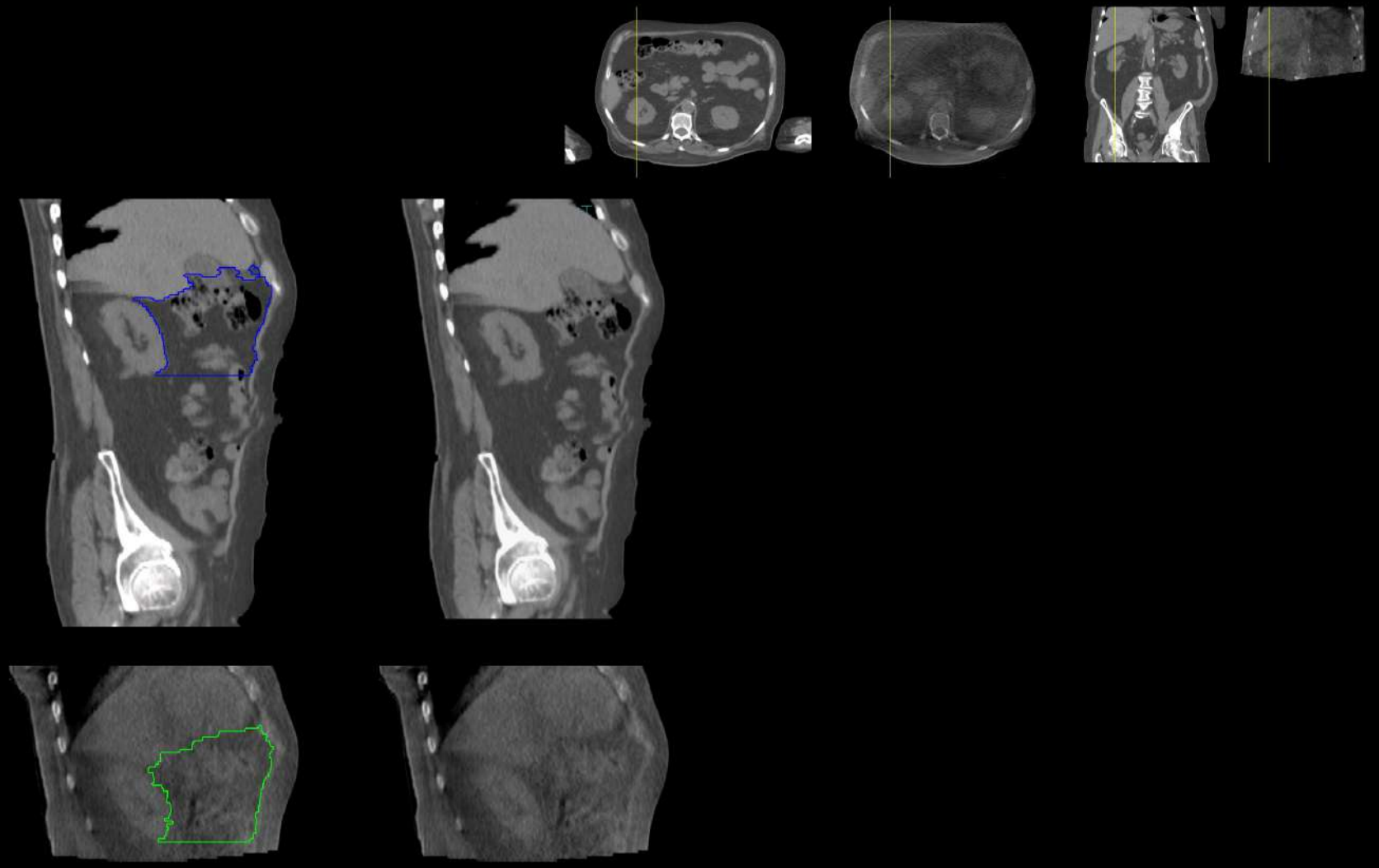
S1



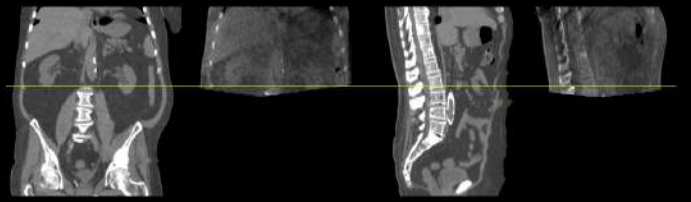
S2

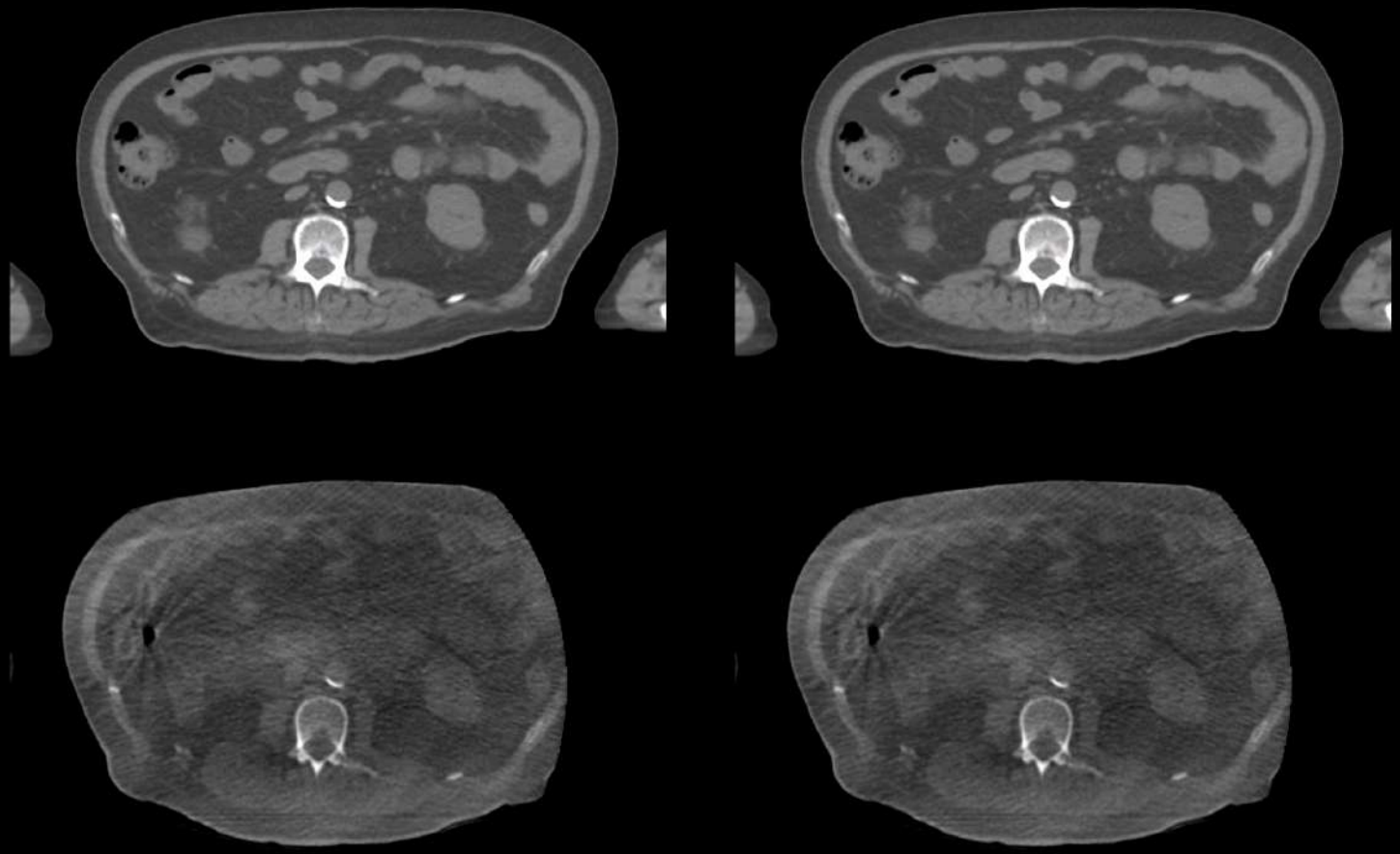


S3

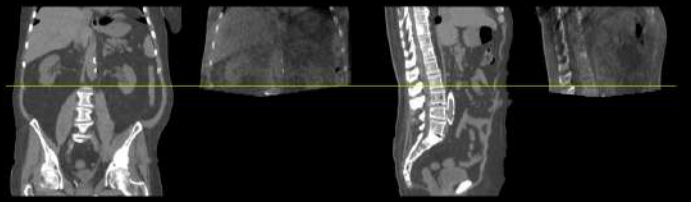


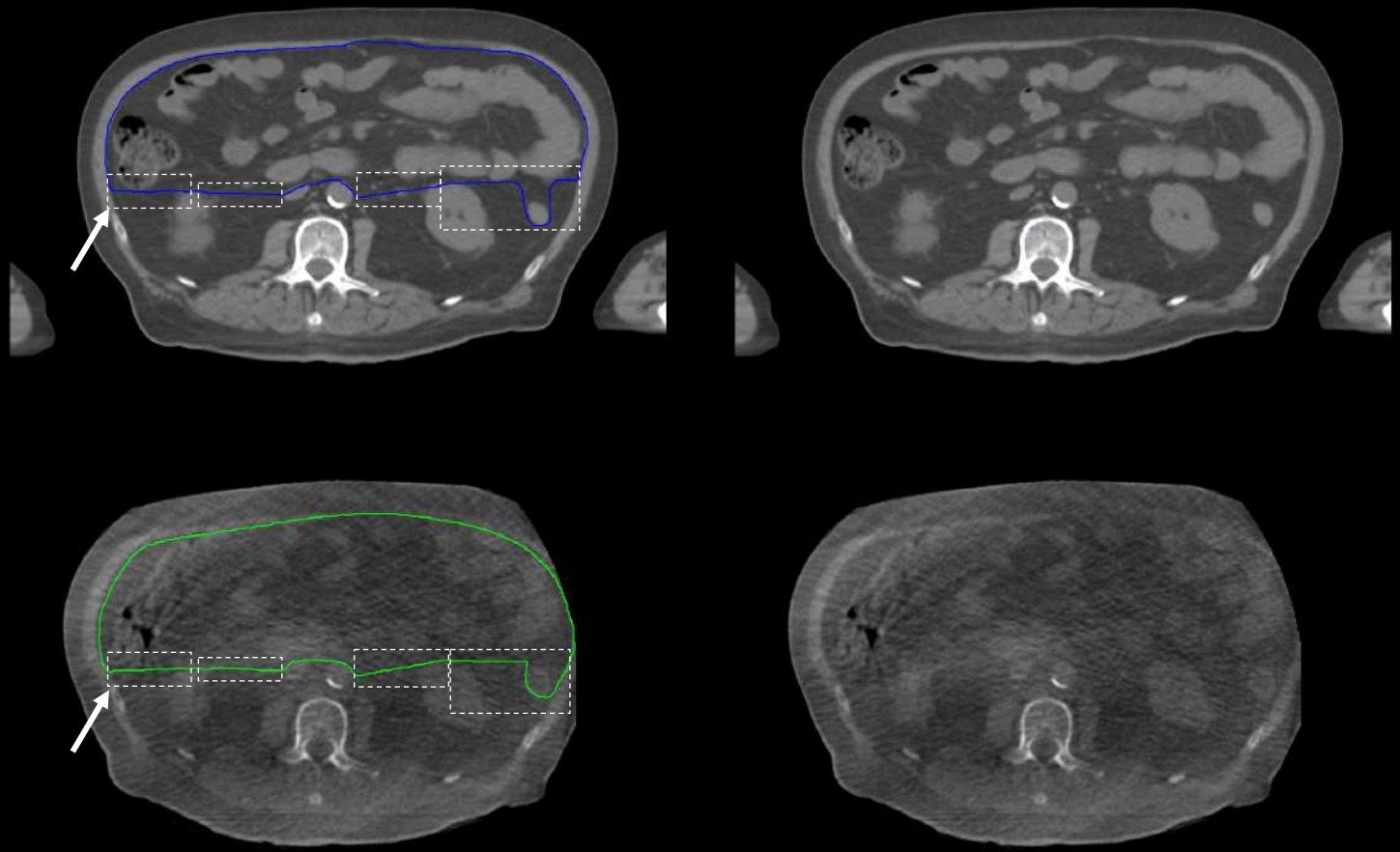
T(y)=-10.50





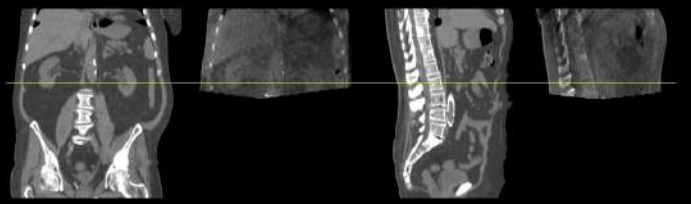
T(y)=-10.20

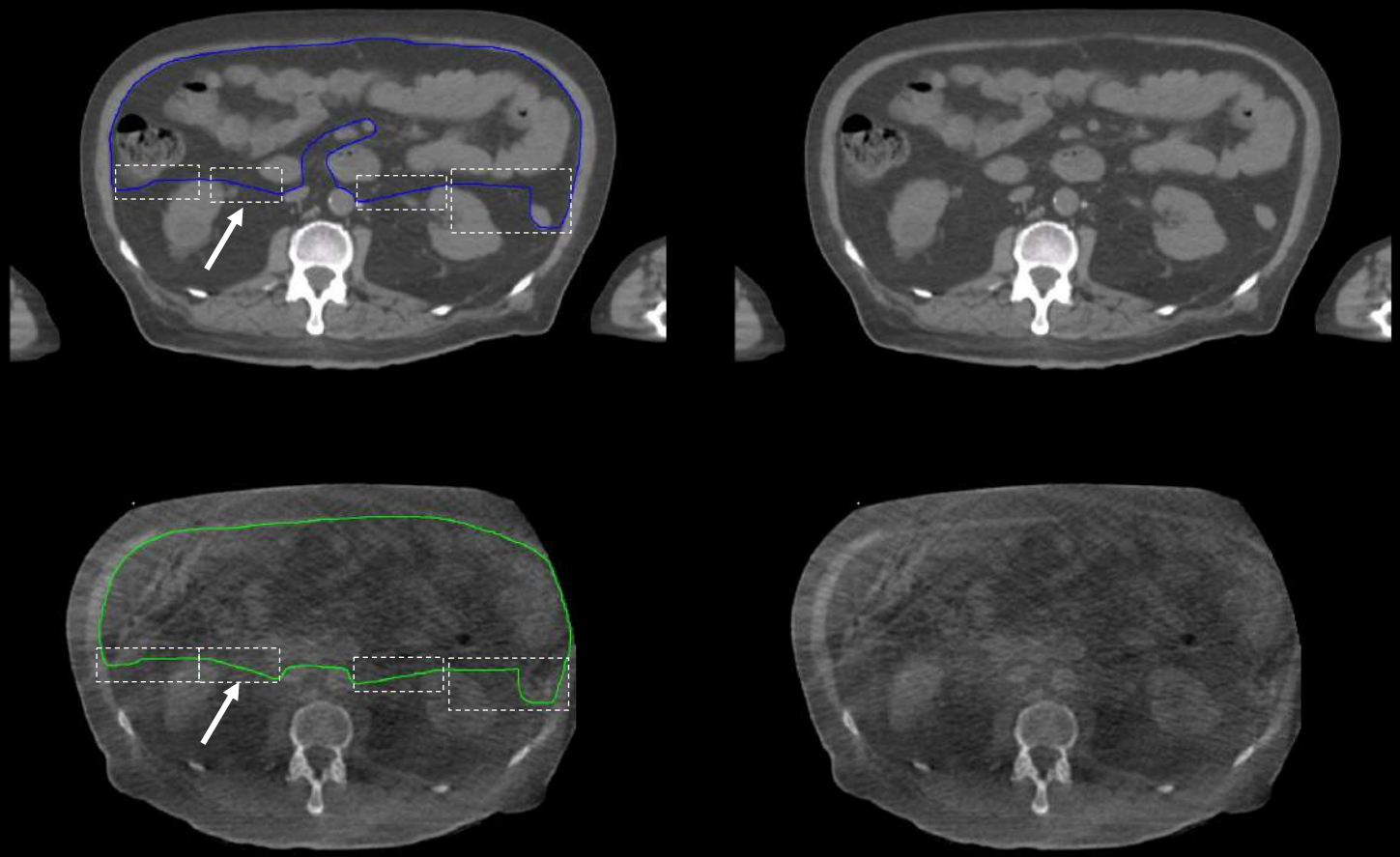




OD#2: straight line from the anterior-most aspect
of the kidney to intersect the transverse abdominis

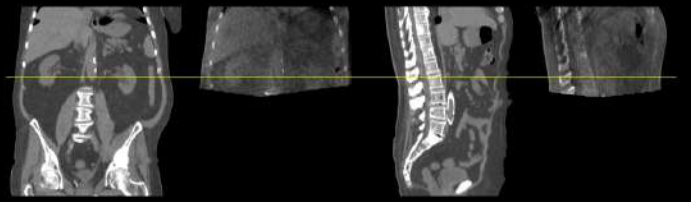
T(y)=-9.30

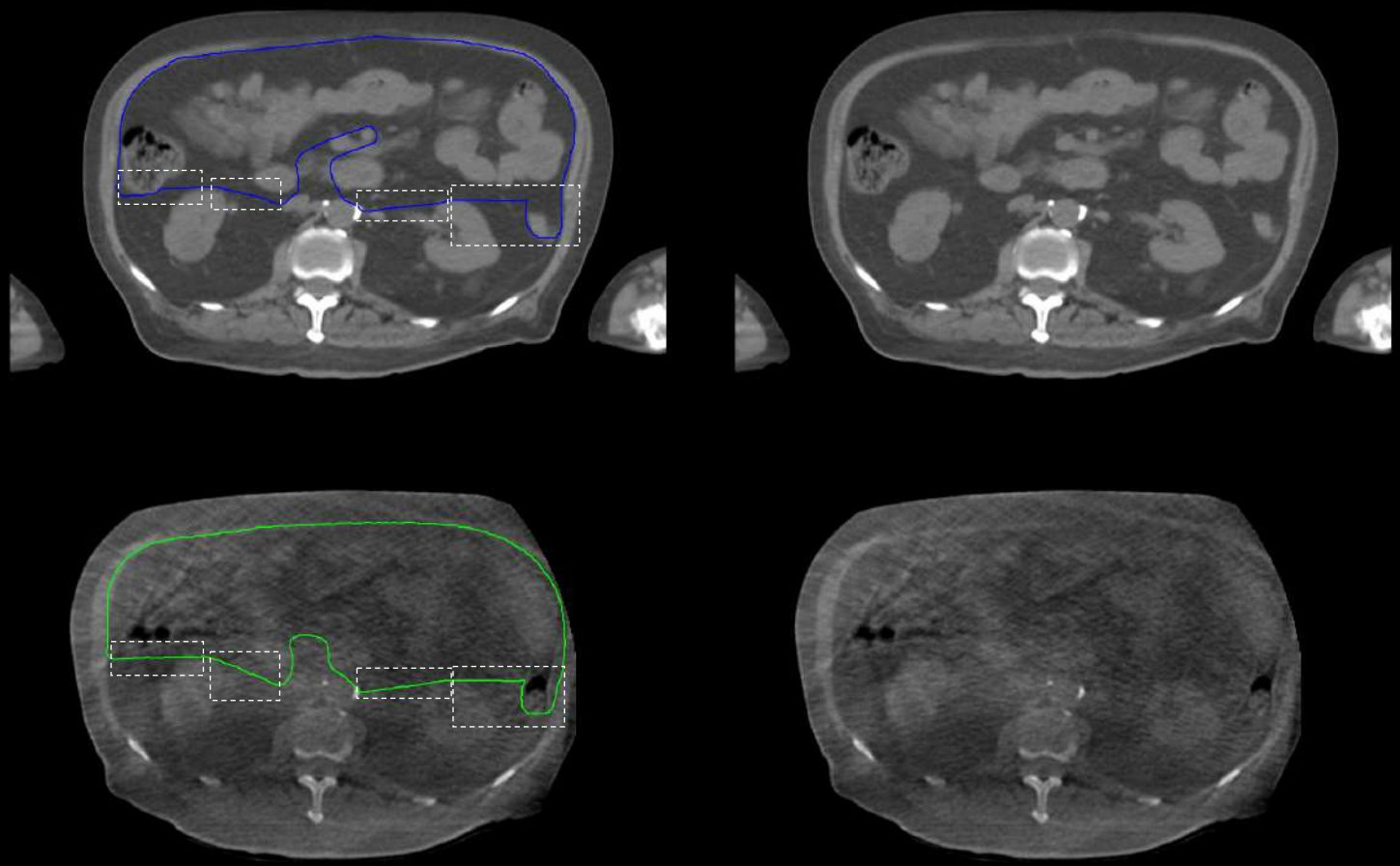




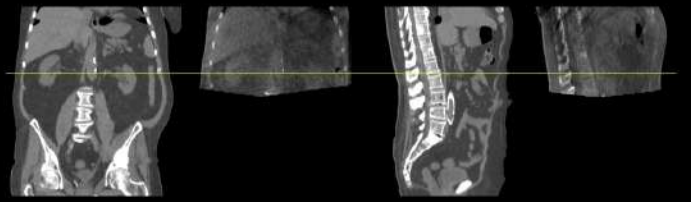
OD#3: straight line from the anterior-most aspect of the kidney
to the lateral-most aspect of the central vessel/aorta/IVC

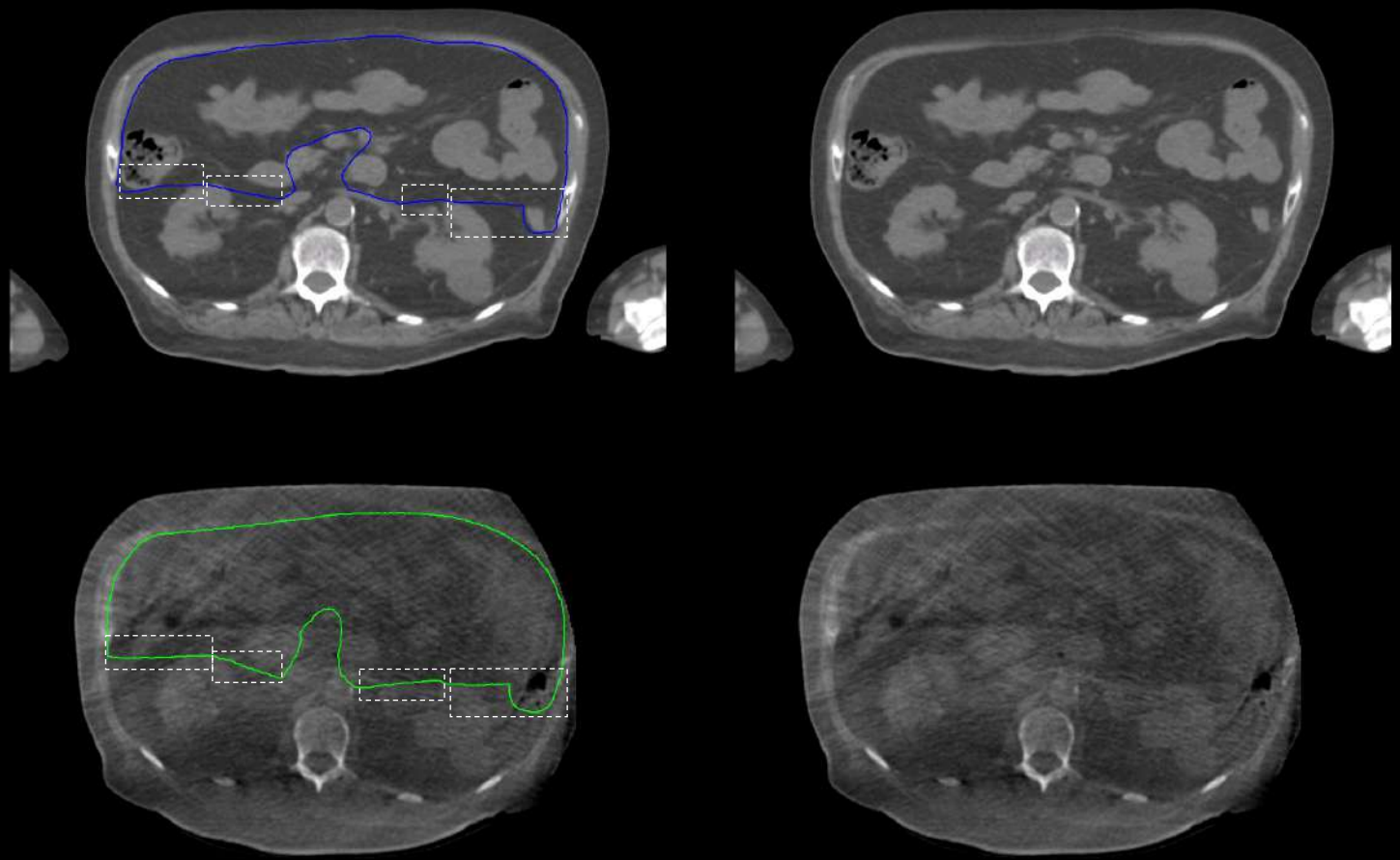
T(y)=-8.40



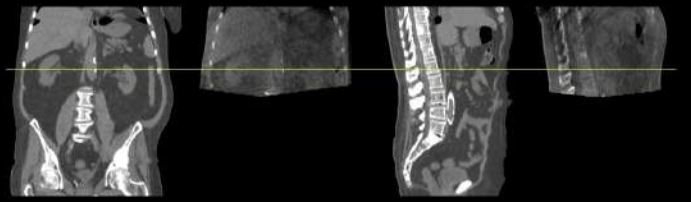


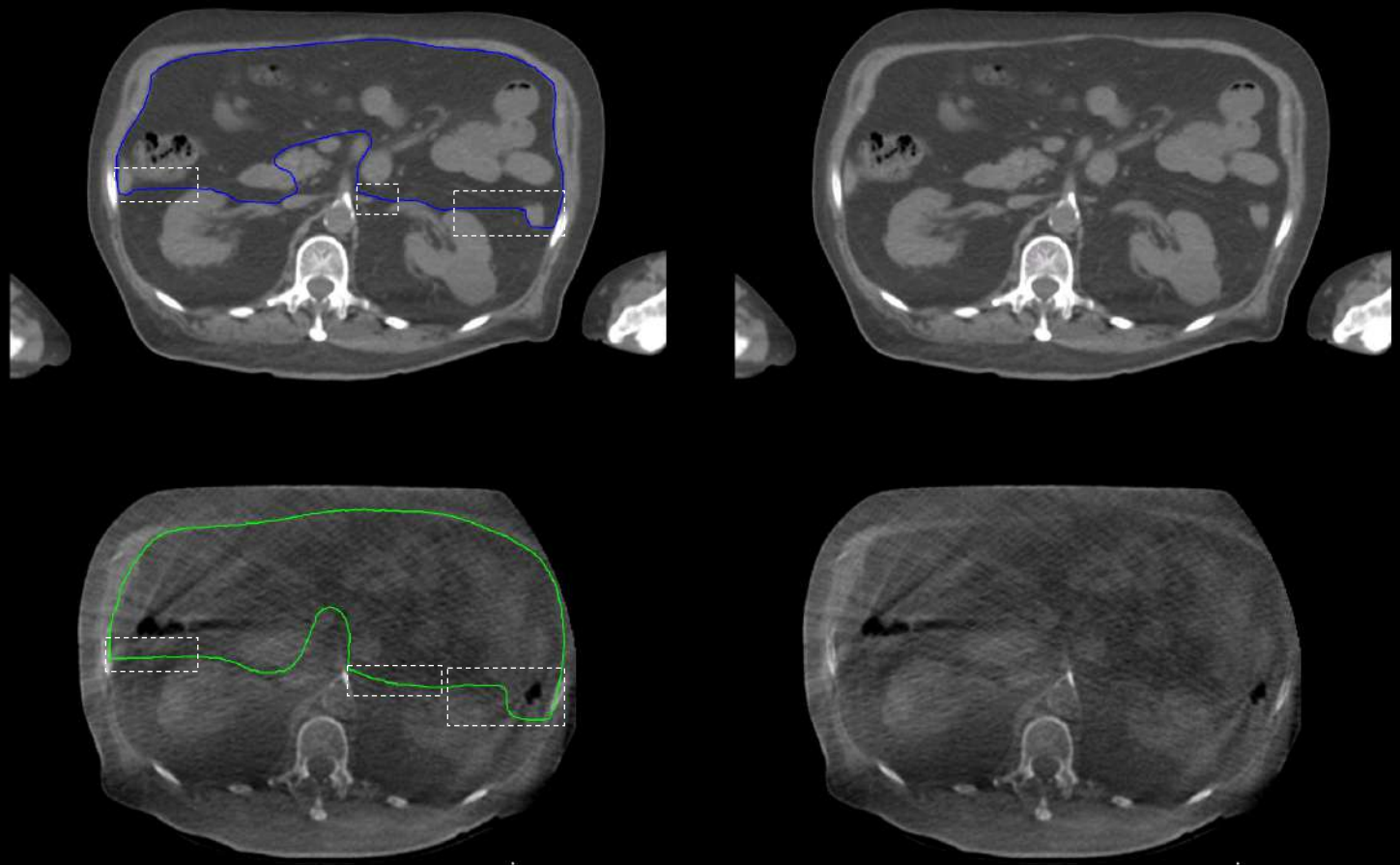
T(y)=-7.50



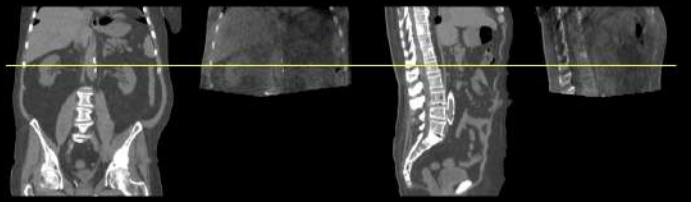


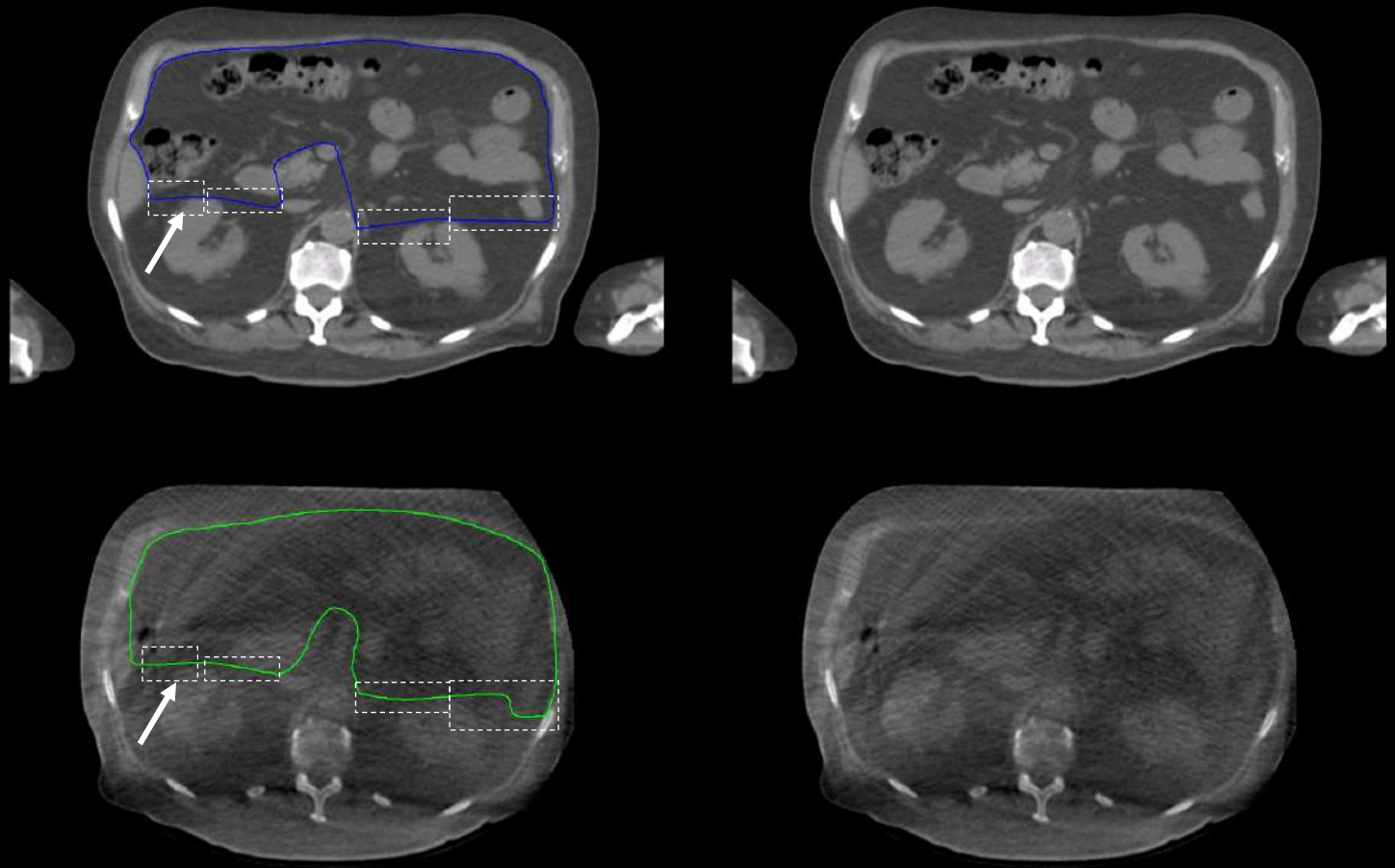
T(y)=-6.60





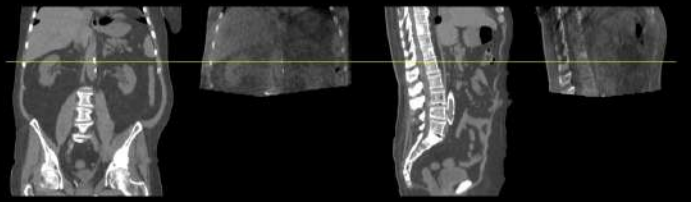
T(y)=-5.70

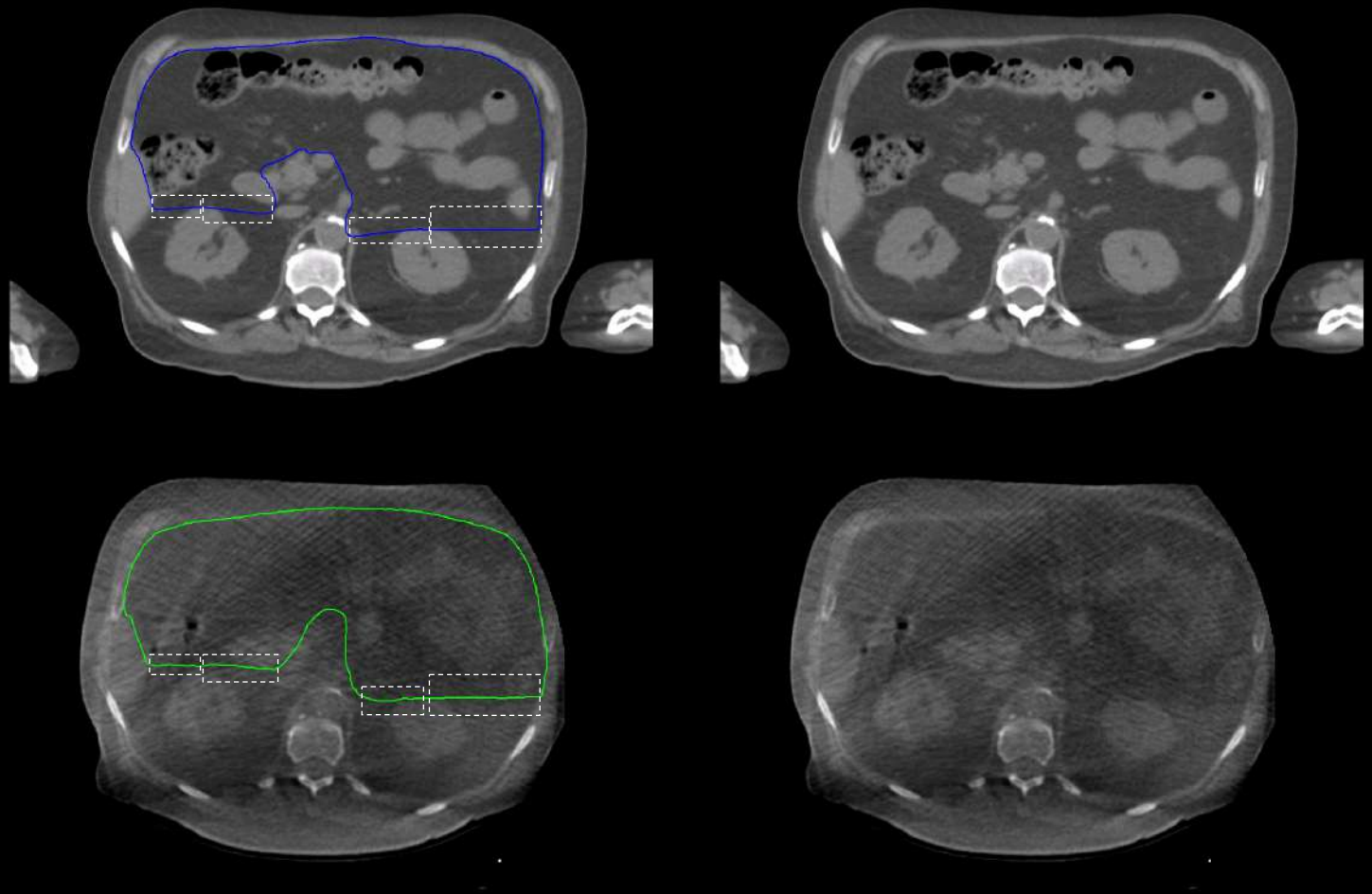




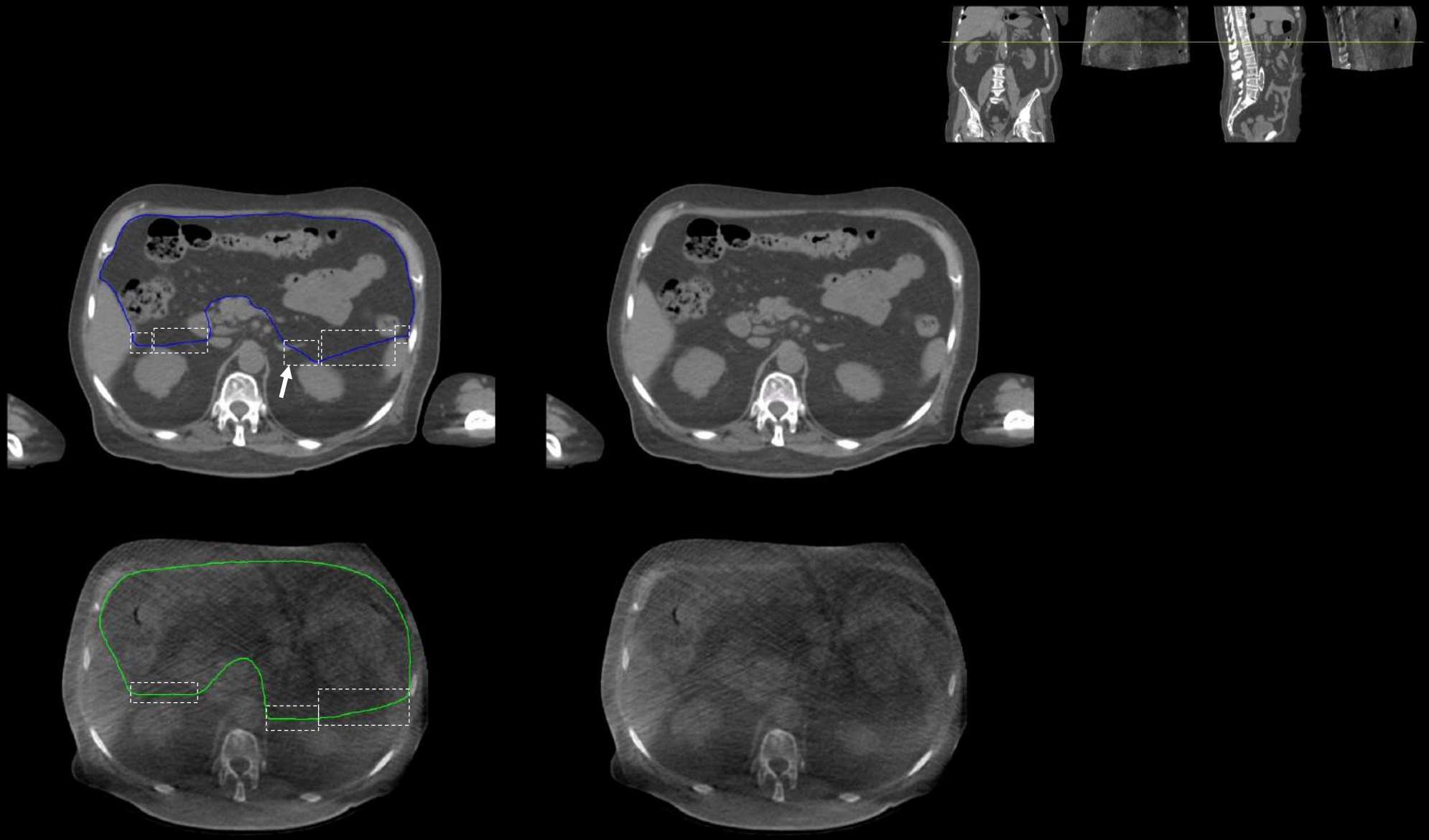
OD#4: lateral (R) line from the anterior-most aspect of the kidney to the liver

T(y)=-4.80



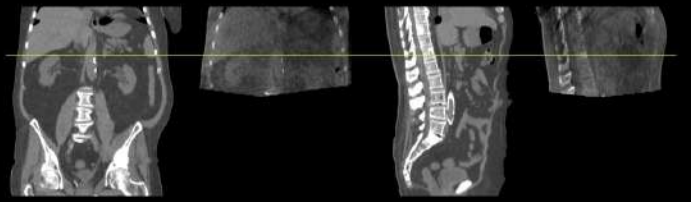


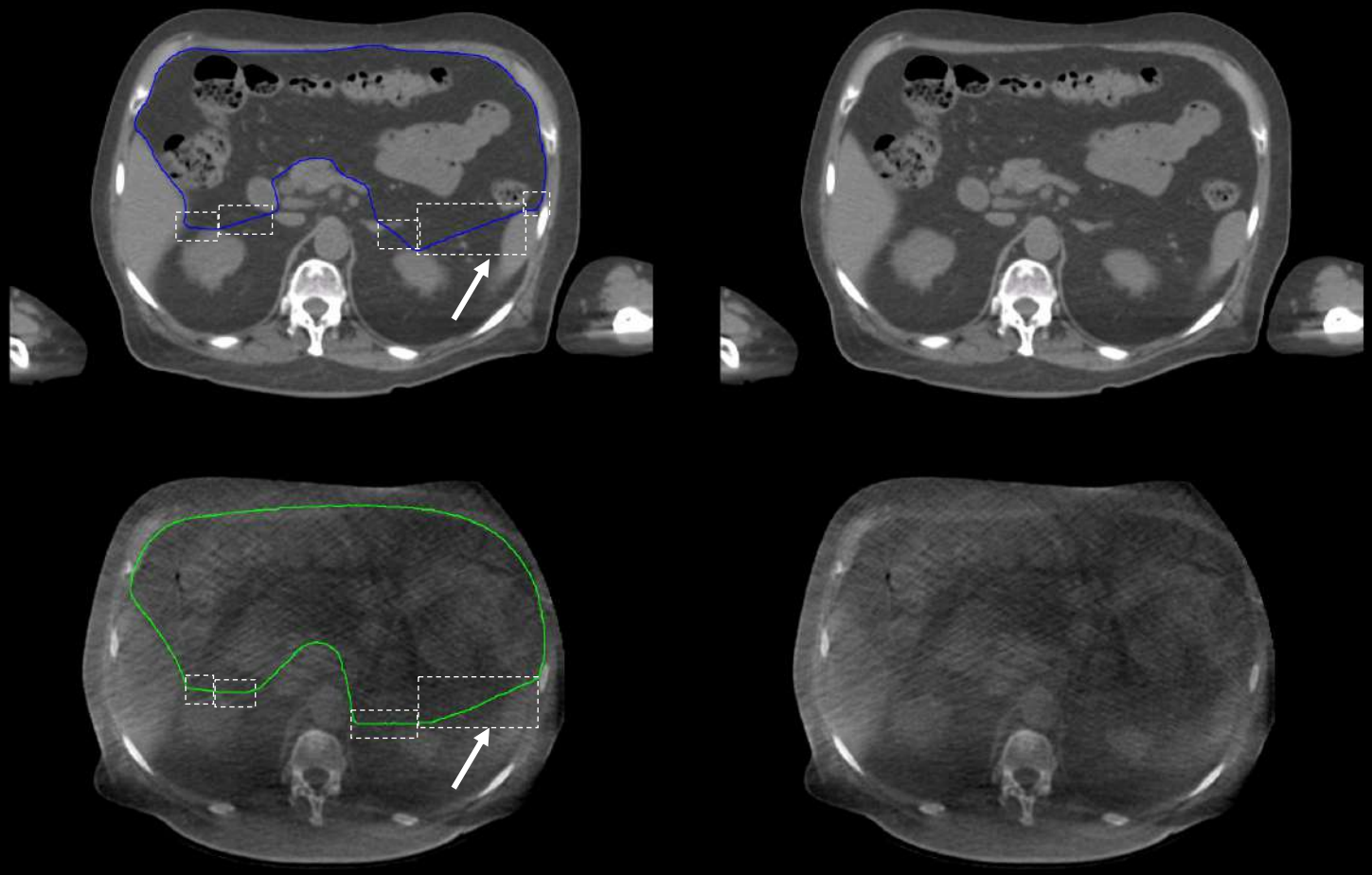
T(y)=-3.60



OD#6: straight line from the anterior-most aspect of the kidney (L) to the lateral-most aspect of the pancreas

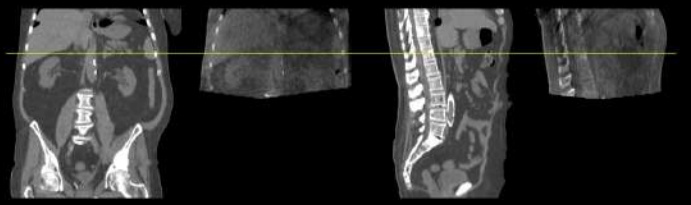
T(y)=-3.30

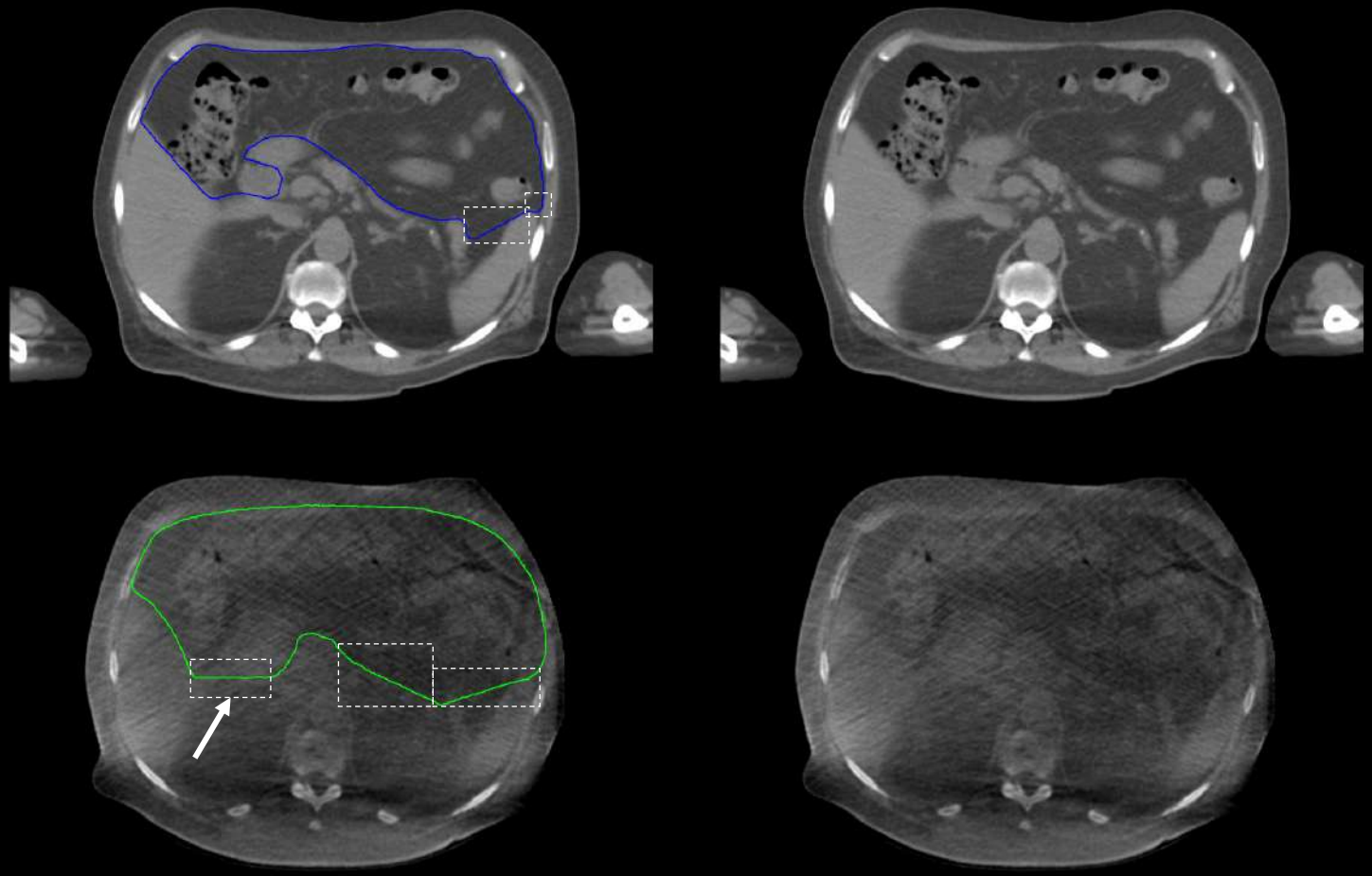




OD#5: straight line from the anterior-most aspect of the kidney (L) to the anterior-most aspect of the spleen

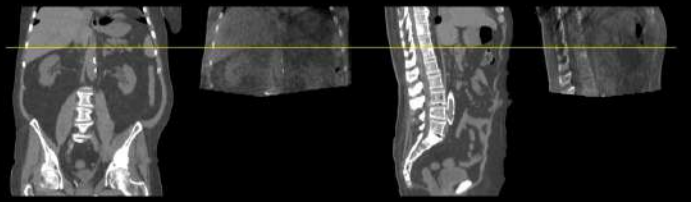
T(y)=-2.40

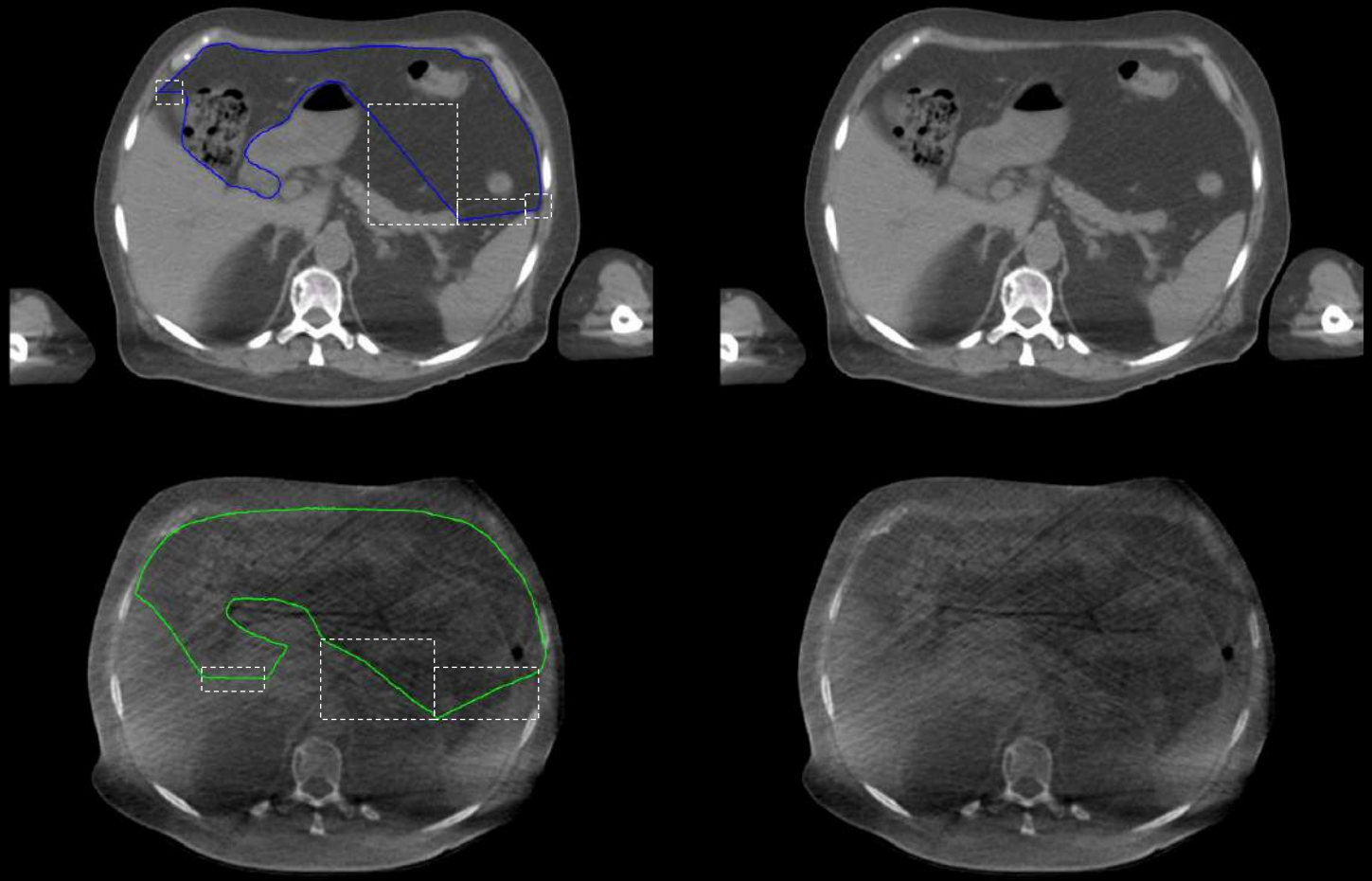




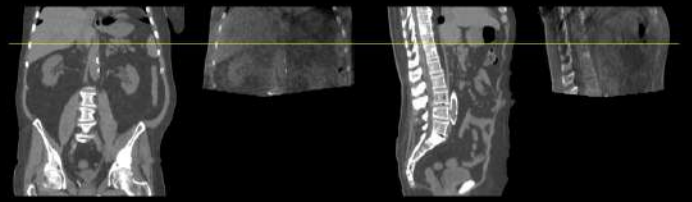
OD#8: straight line from the posterior medial-most aspect of the liver to the lateral-most aspect of the central vessels/IVC

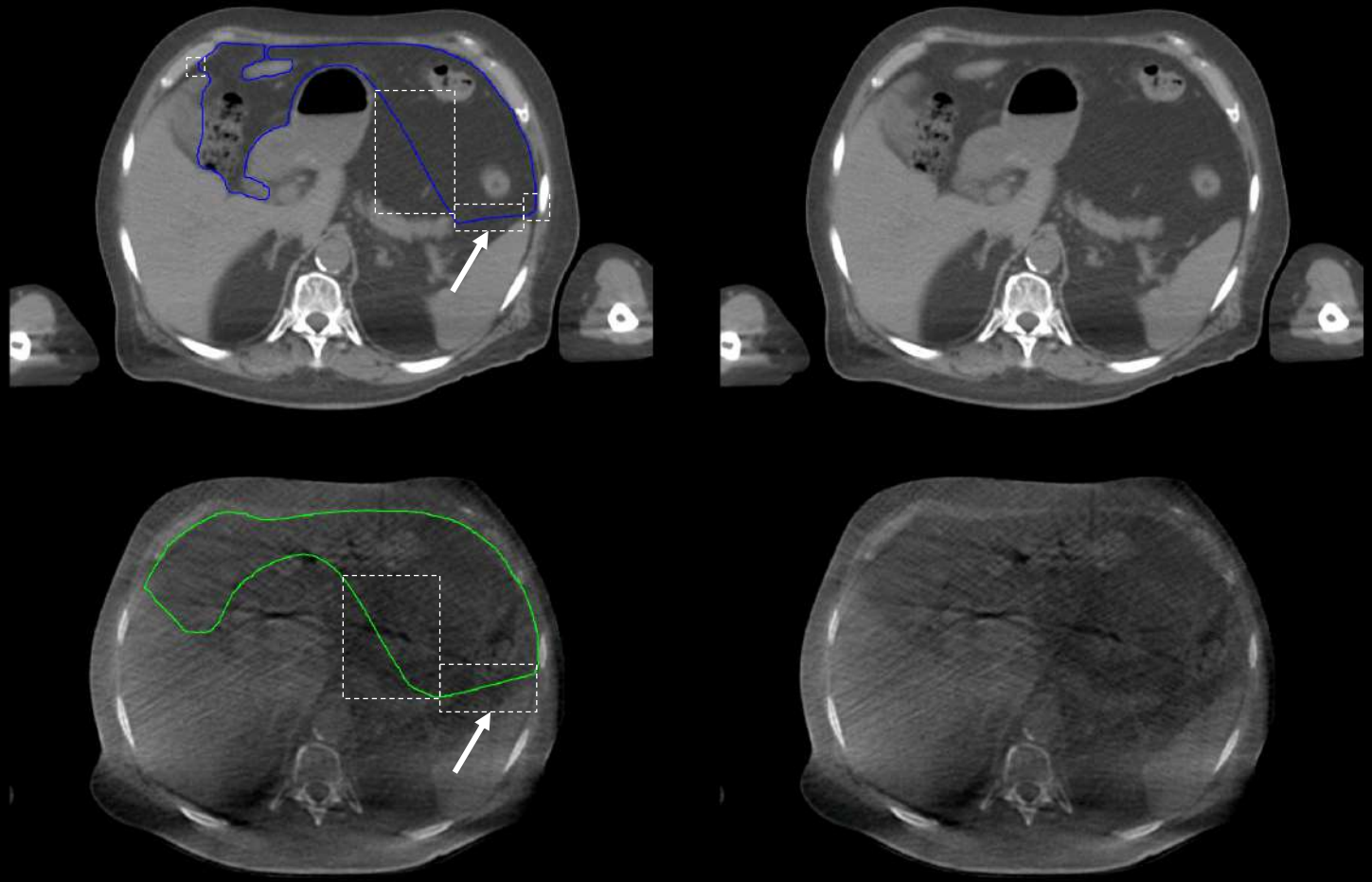
T(y)=-1.50





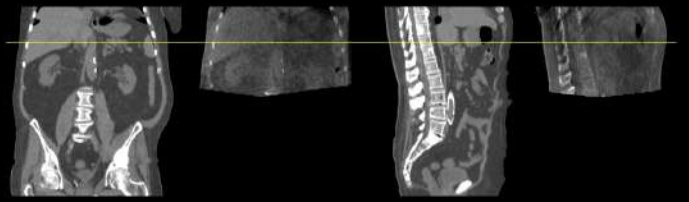
T(y)=-0.60

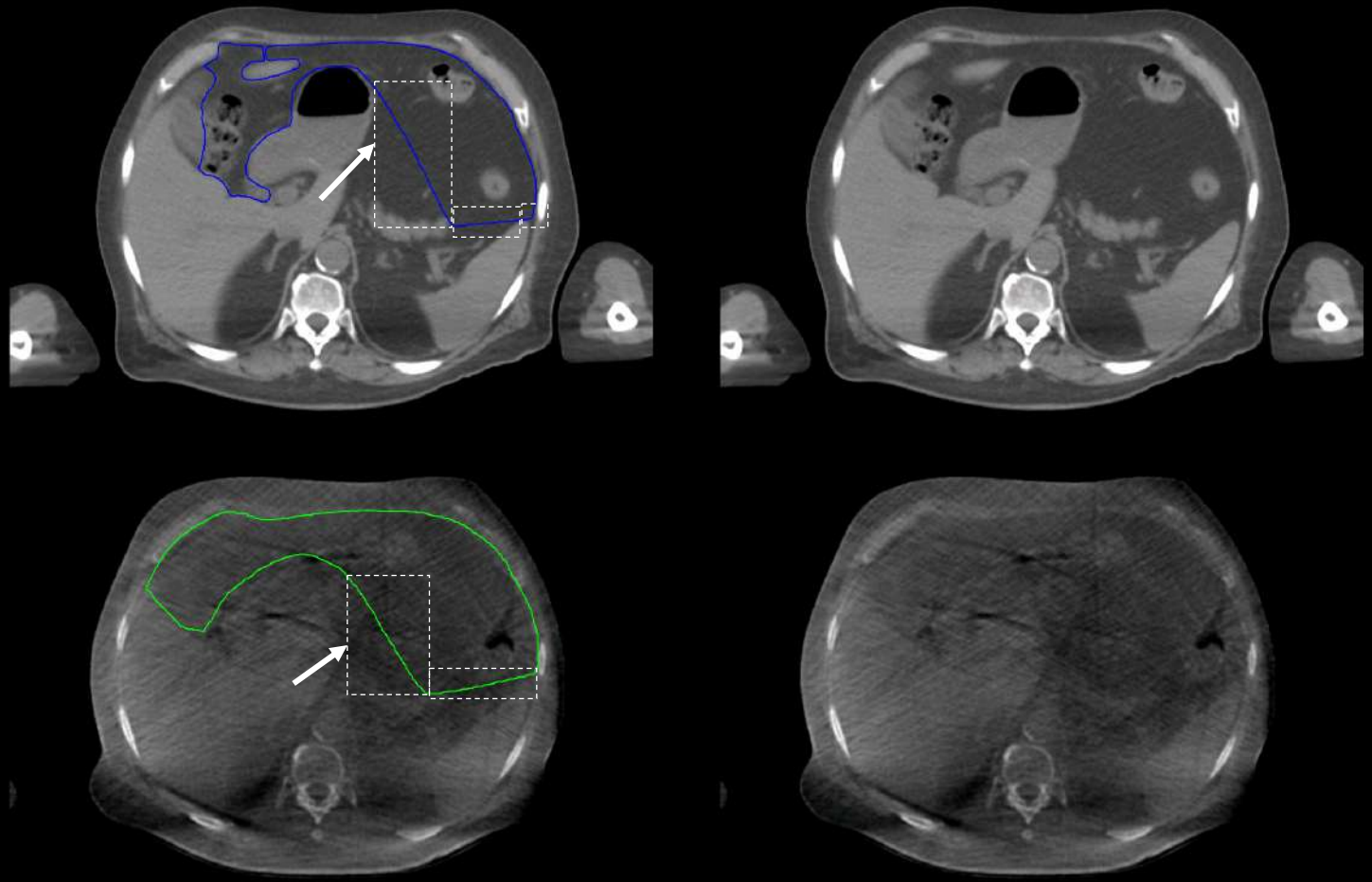




OD#12: straight line from the anterior-most aspect of the spleen to the lateral-most aspect of the pancreas

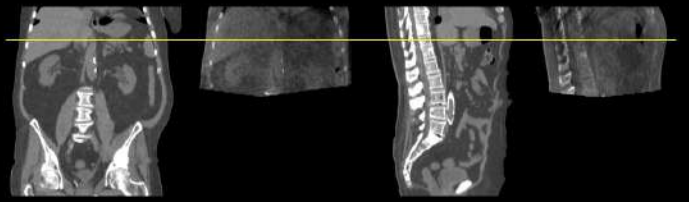
T(y)=-0.30

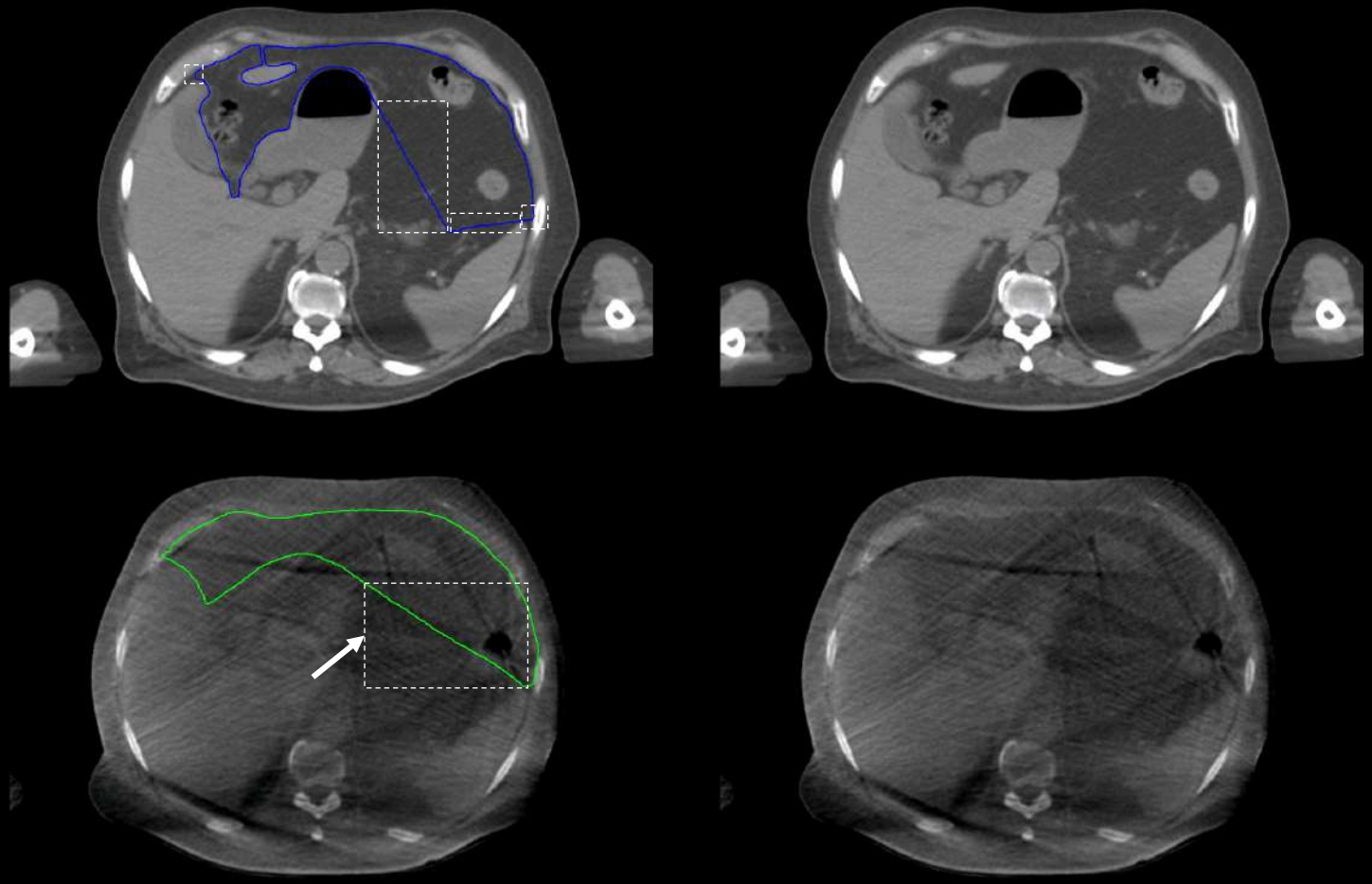




OD#15: straight line from the lateral-most (L) aspect of the stomach to the left lateral-most aspect of the pancreas

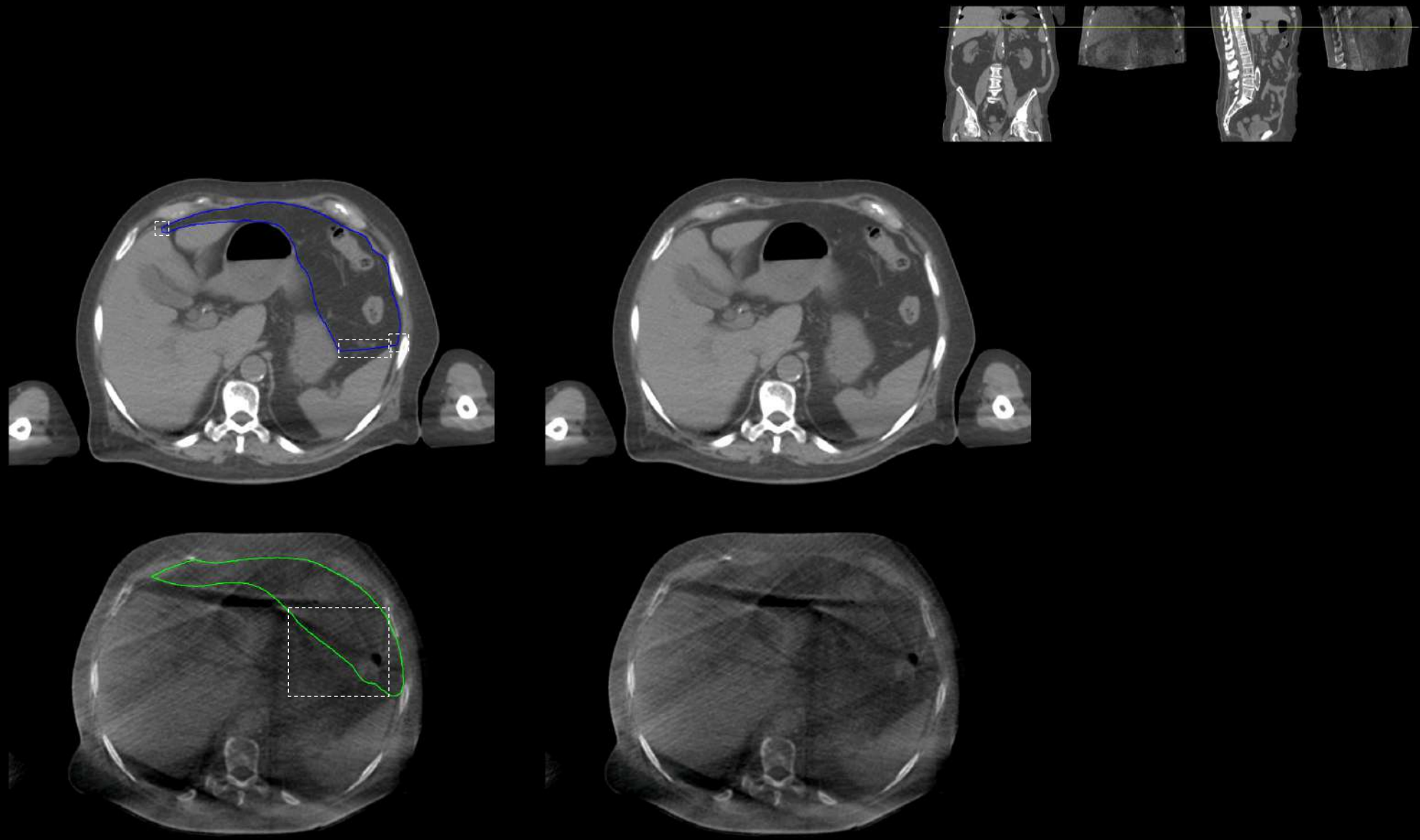
T(y)=0.30



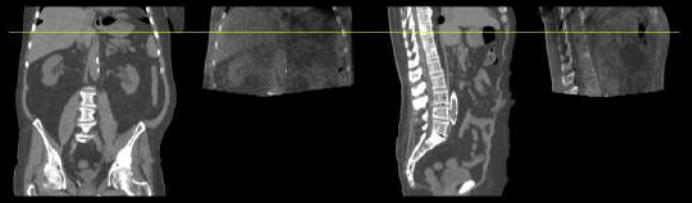


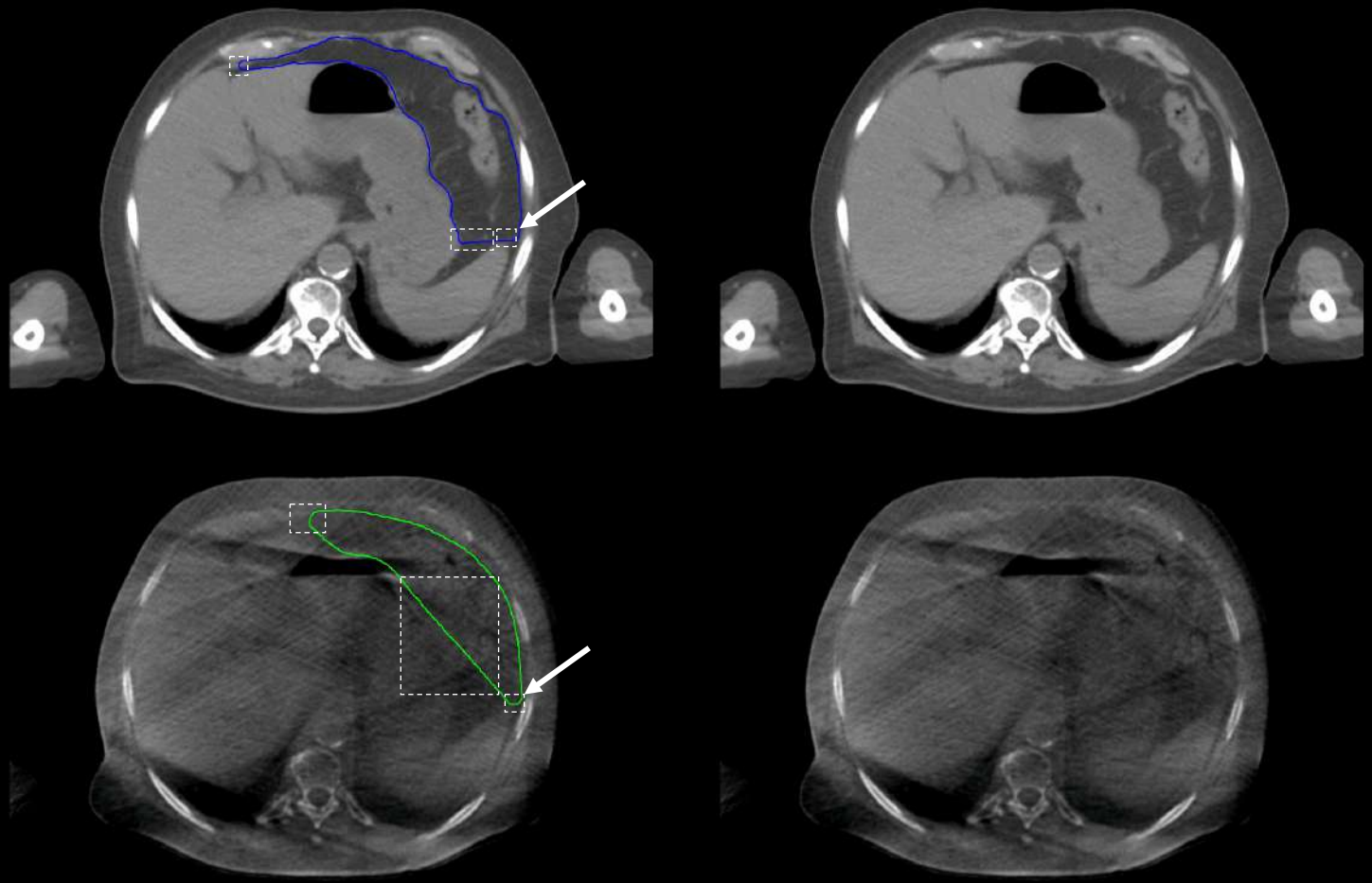
OD#13: straight line from the anterior-most aspect of the spleen to the lateral-most aspect of the stomach

T(y)=1.20



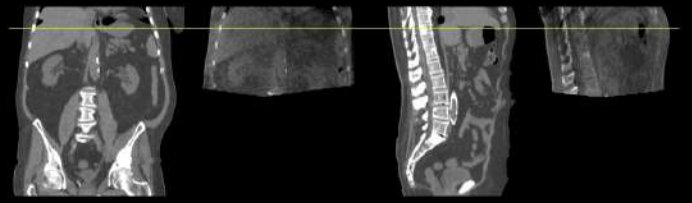
T(y)=2.10

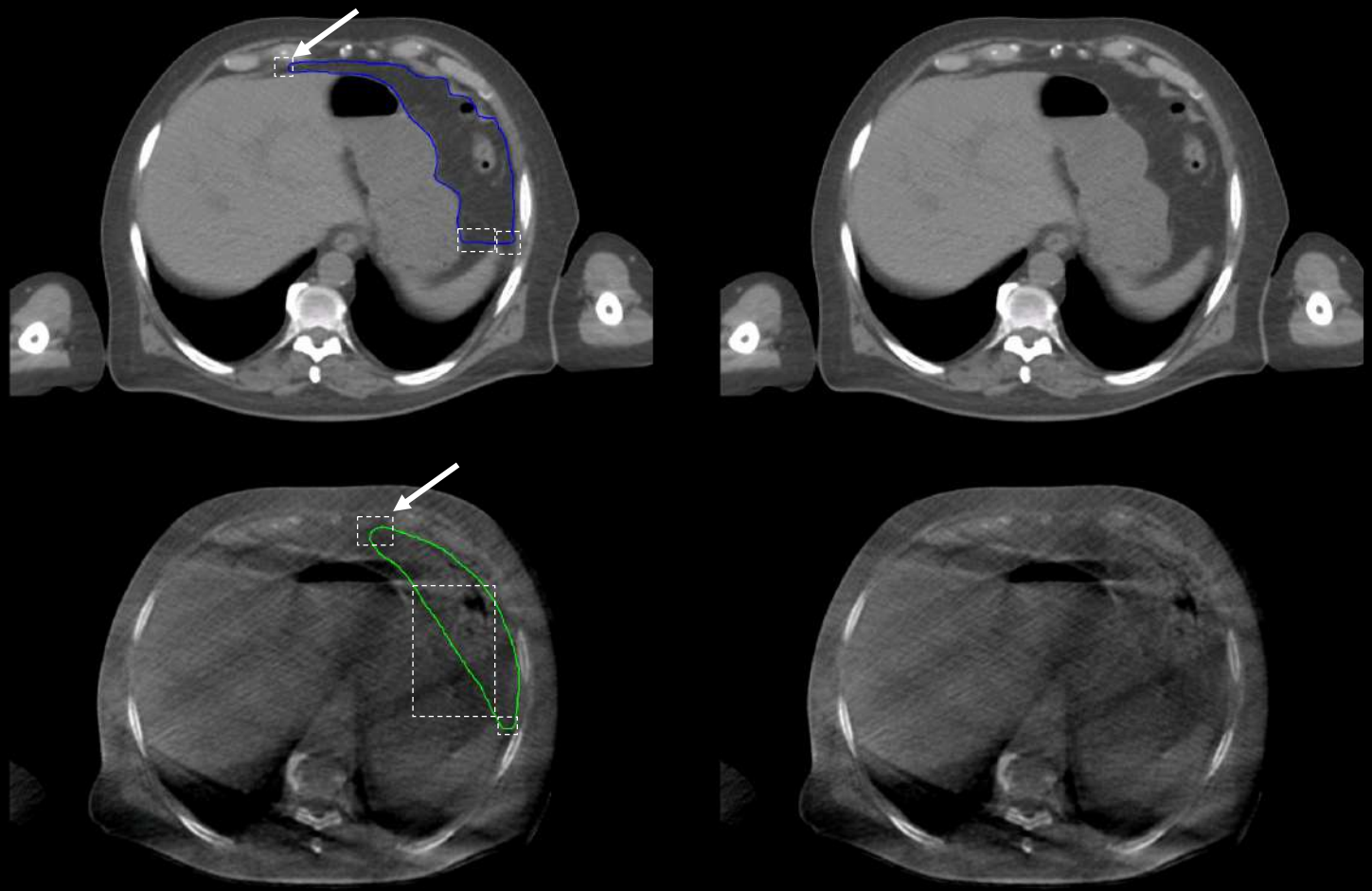




OD#11: lateral line from the anterior-most aspect of the spleen to intersect the transverse abdominis

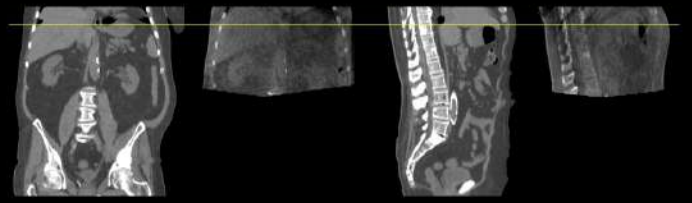
T(y)=3.00

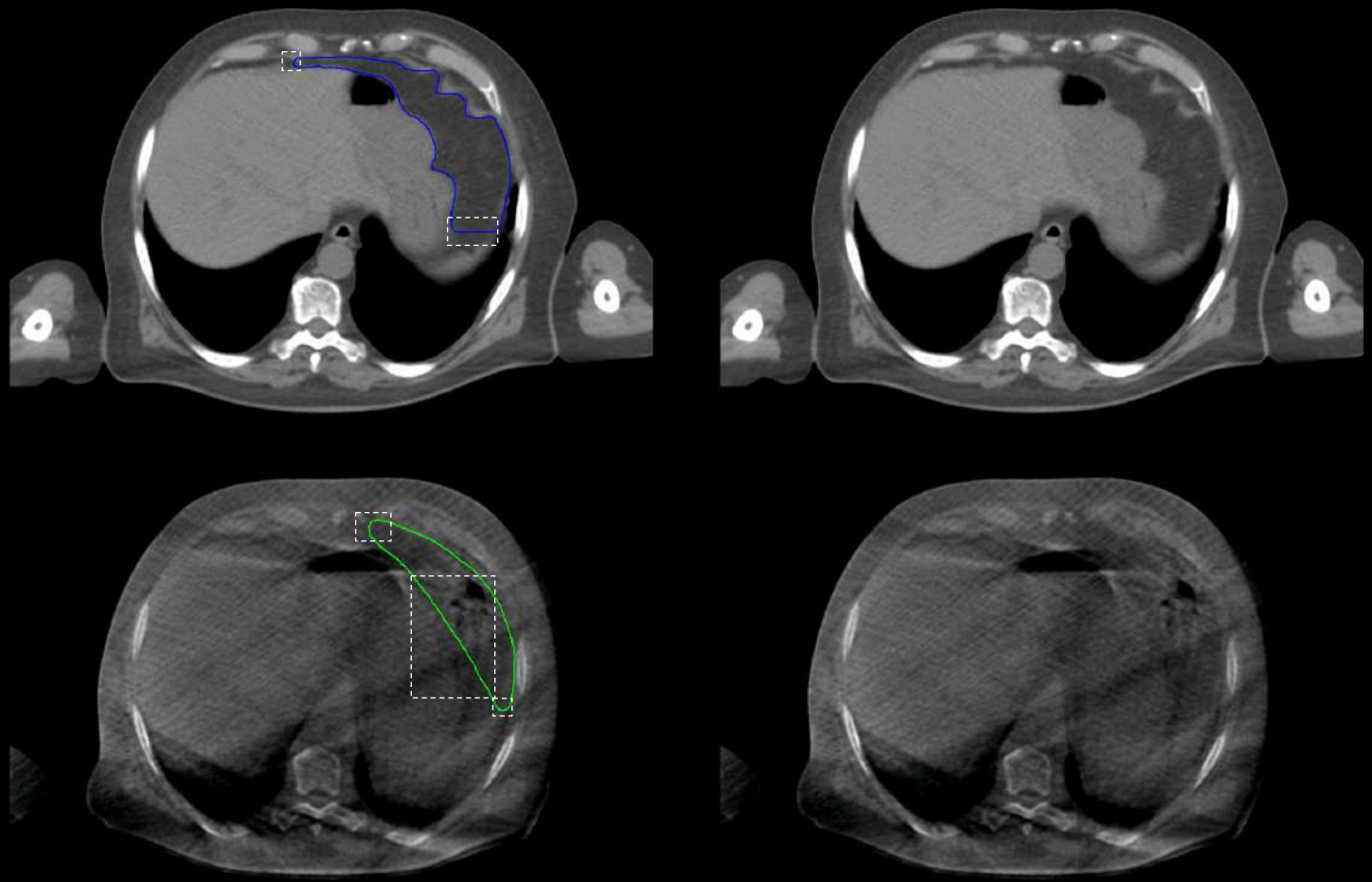




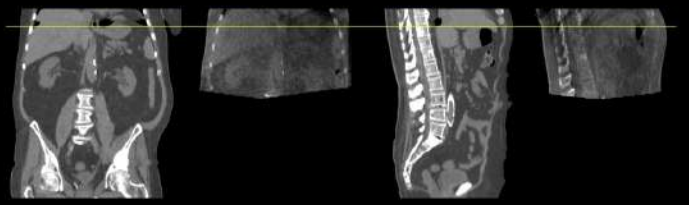
OD#10: minimum distance line from the anterior-most aspect of the liver to intersect the rectus abdominis

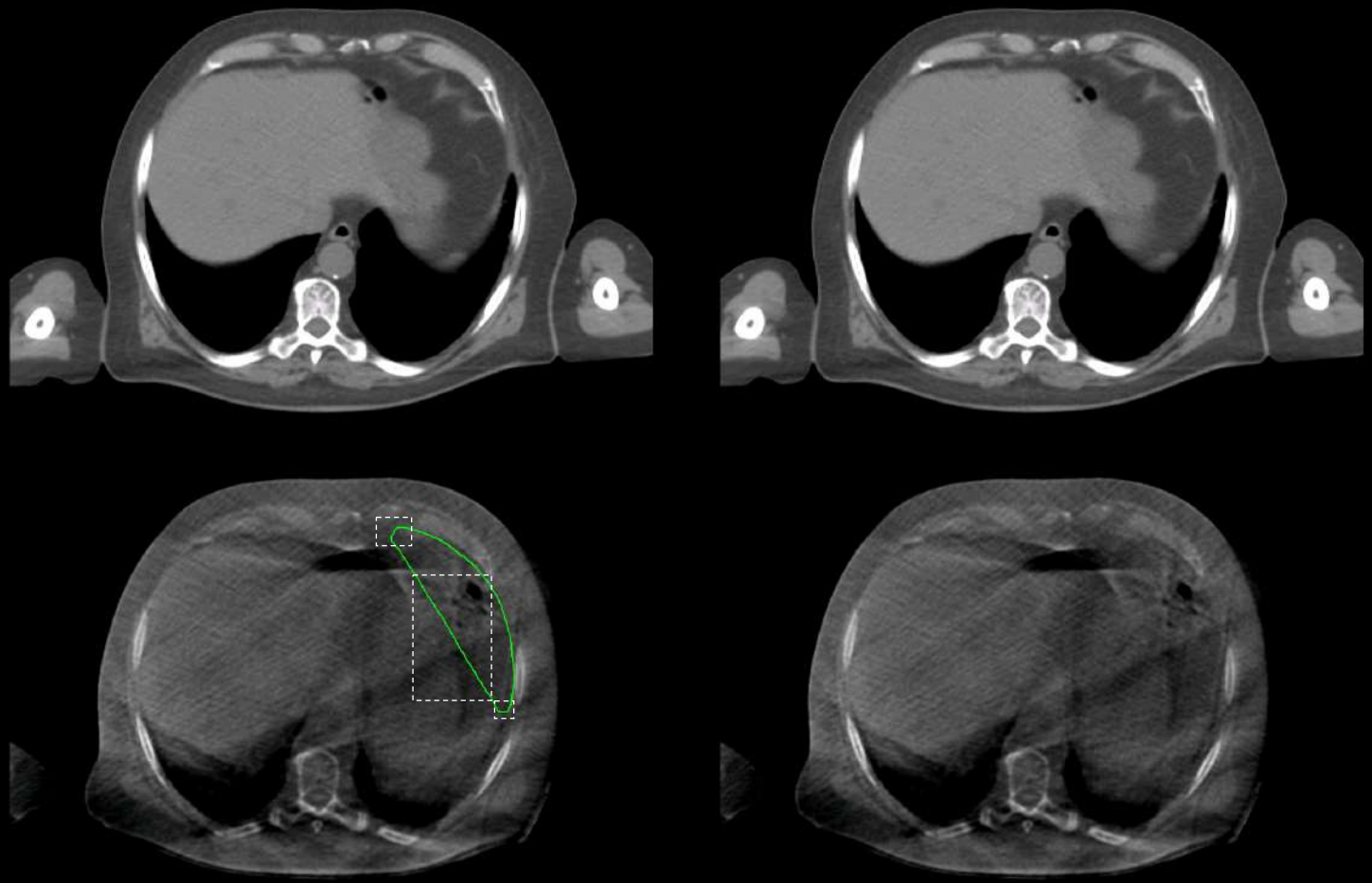
T(y)=3.60



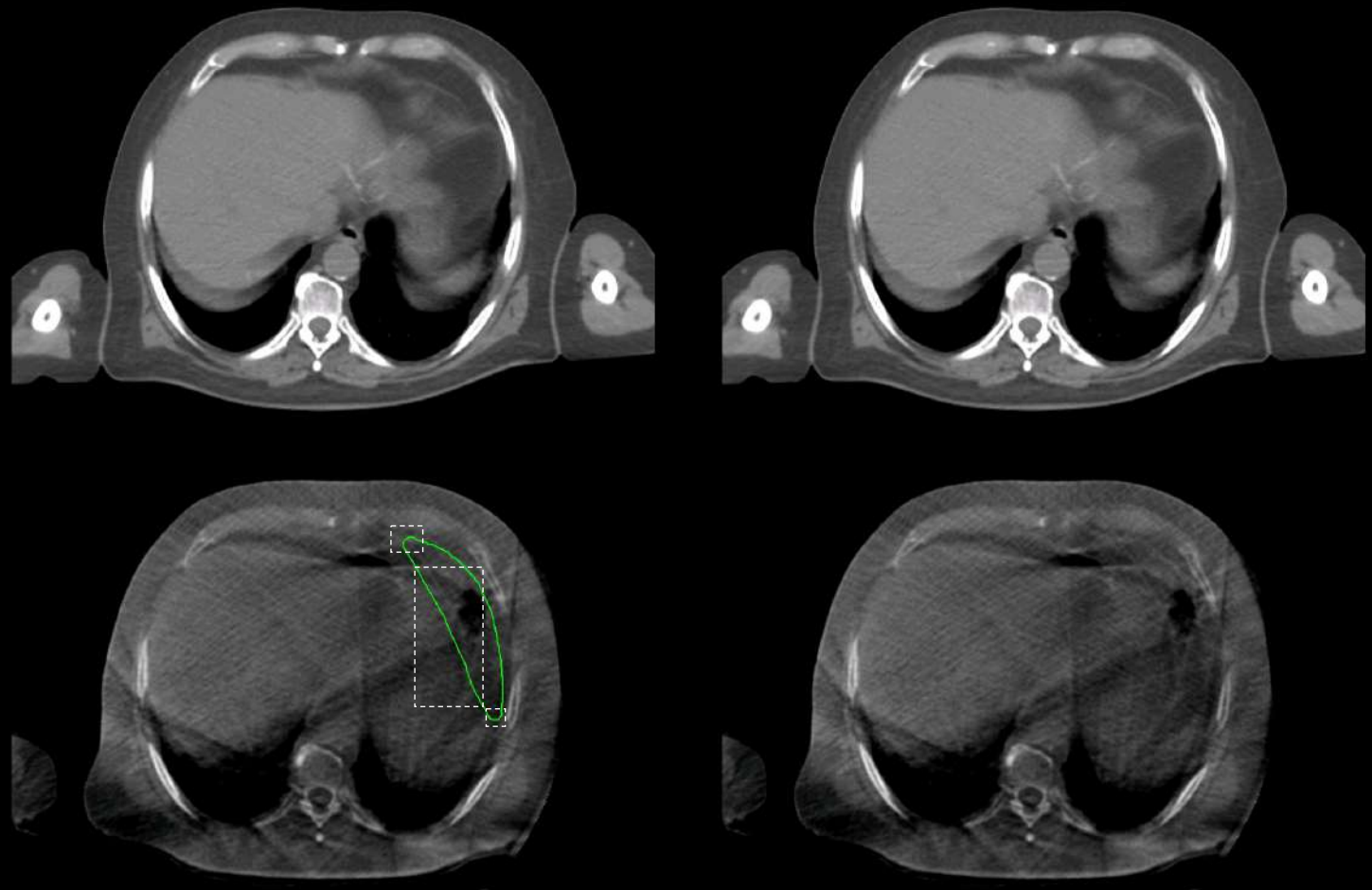


T(y)=3.90

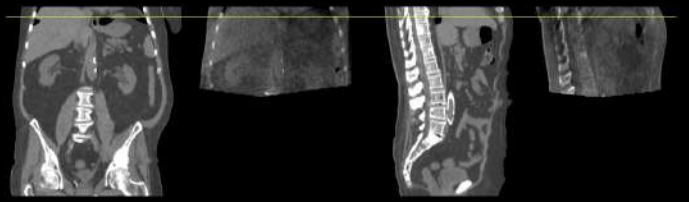


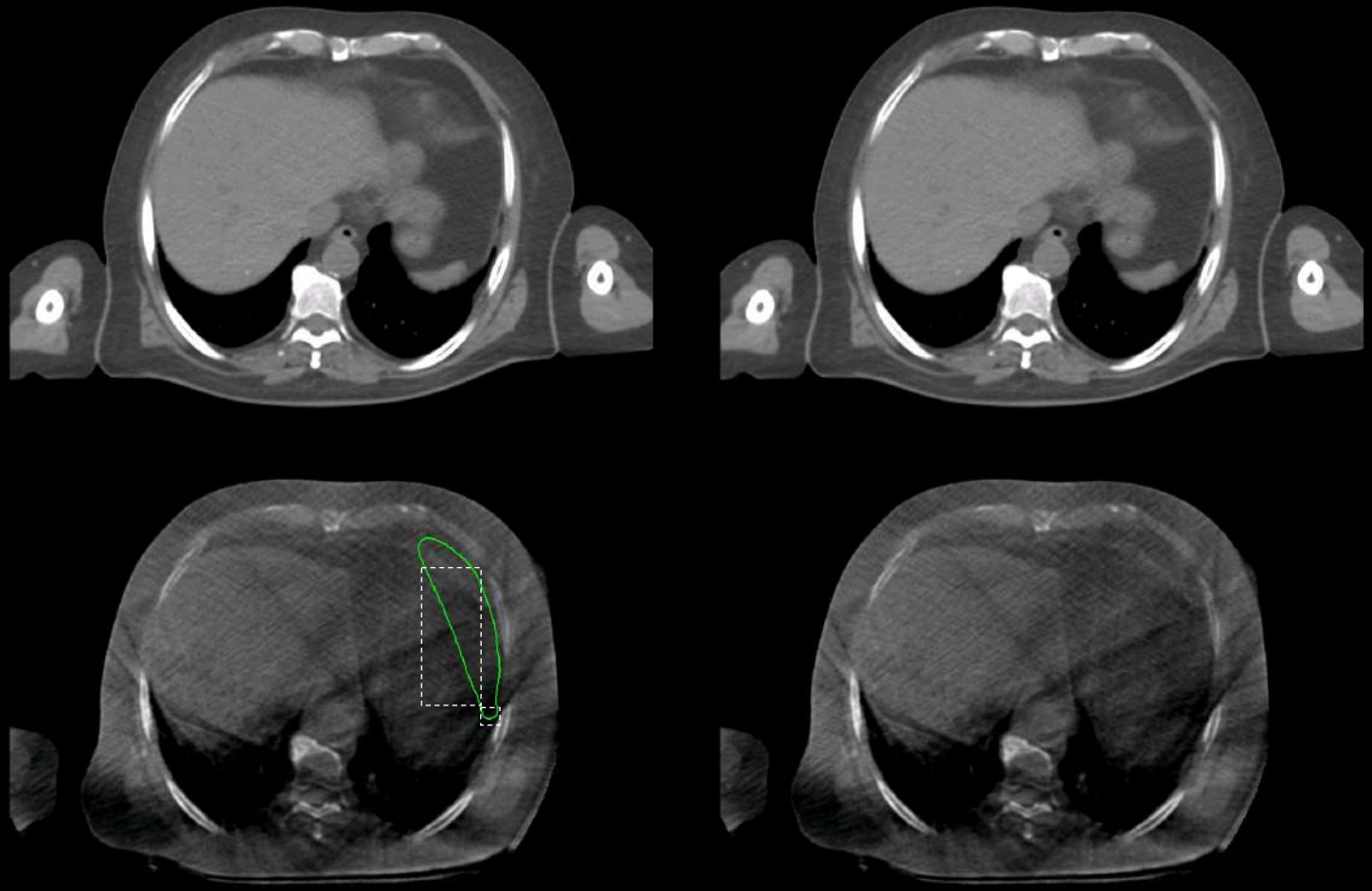


T(y)=4.80

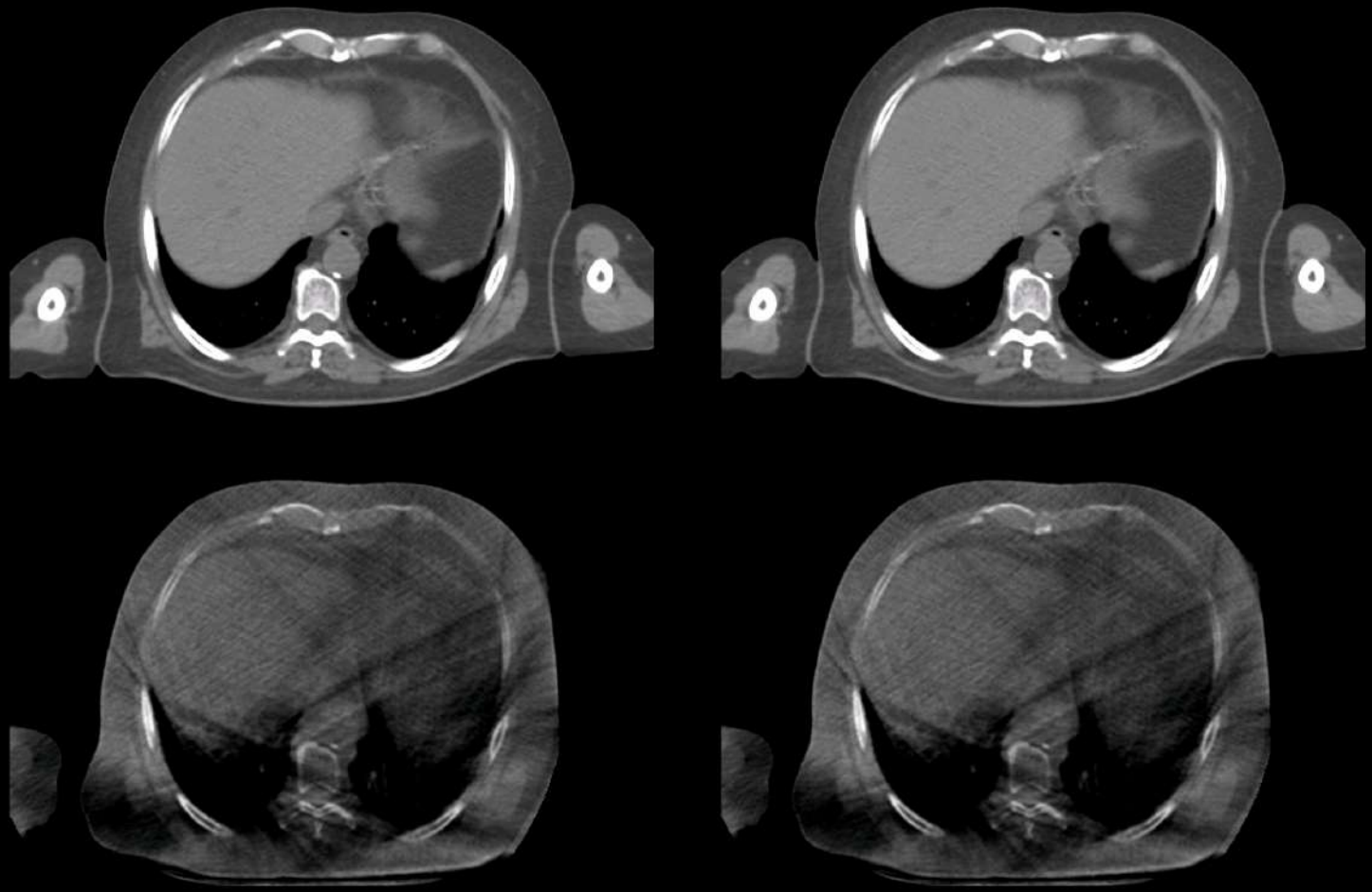


T(y)=5.70





T(y)=6.00



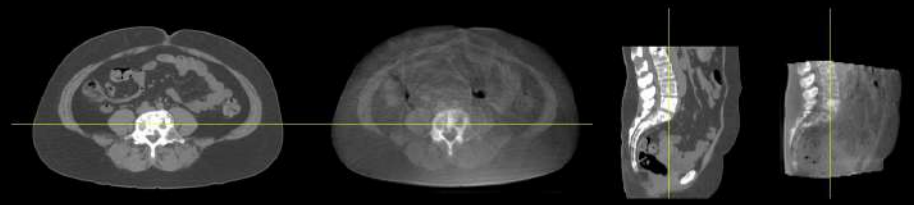
Pelvic Female


S3
S2
S1
Slices included in the atlas
C3
C2
C1

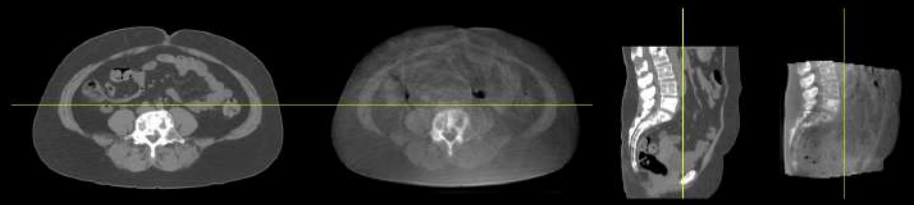

C1
C2
C3
Slices included in the atlas

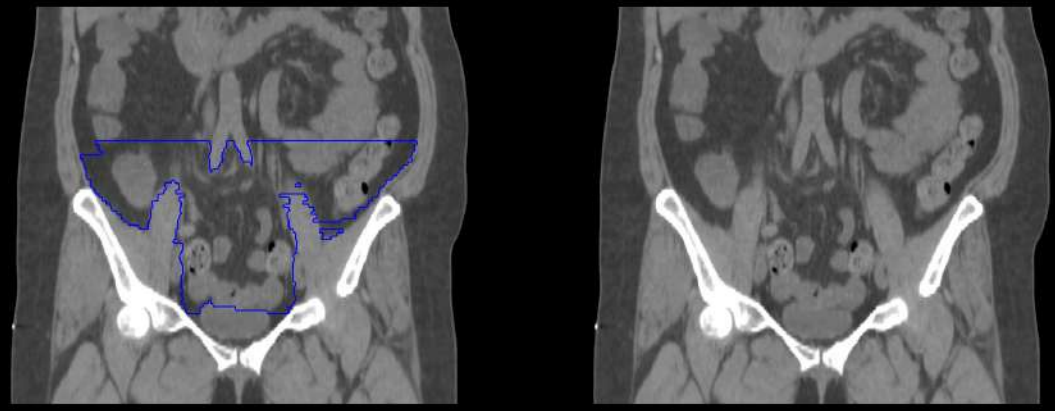

S3
S2
S1
Slices included in the atlas

C1

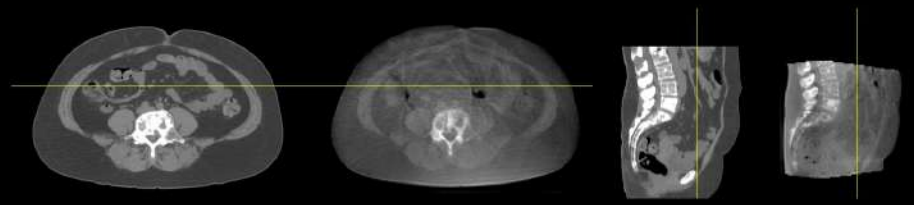


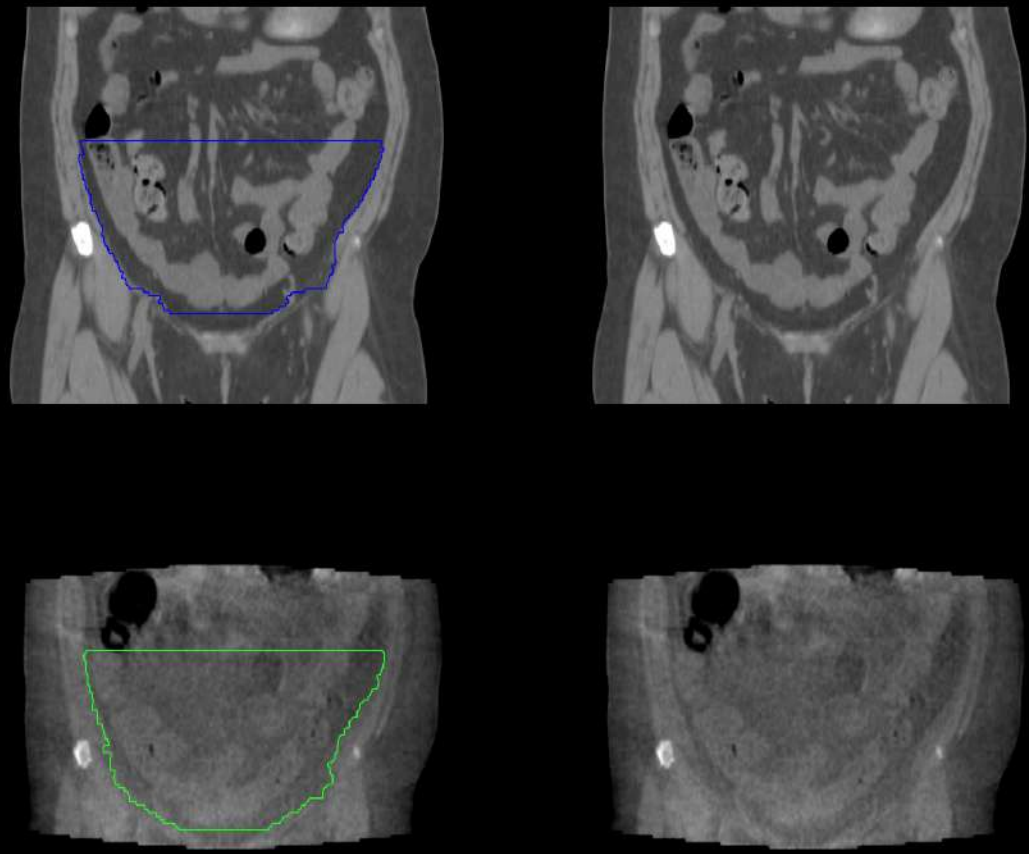
C2



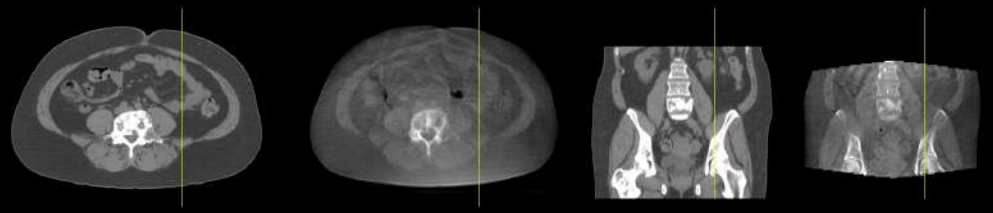


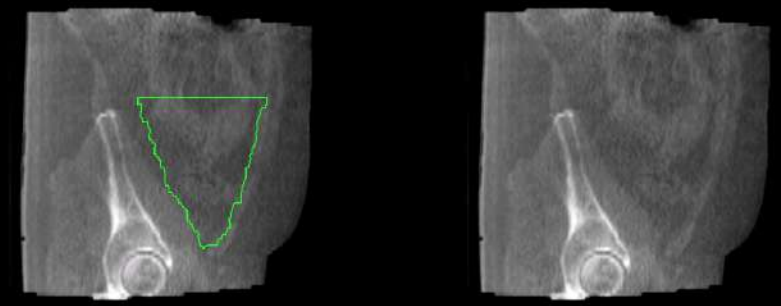
C3



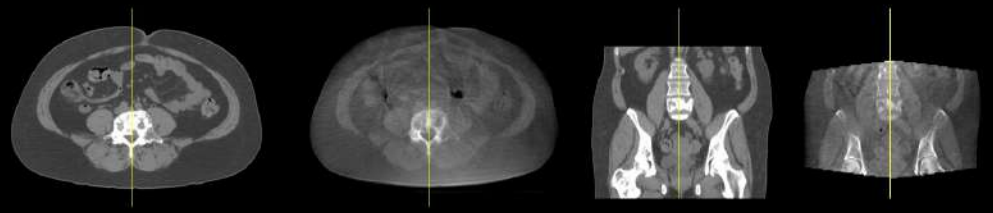


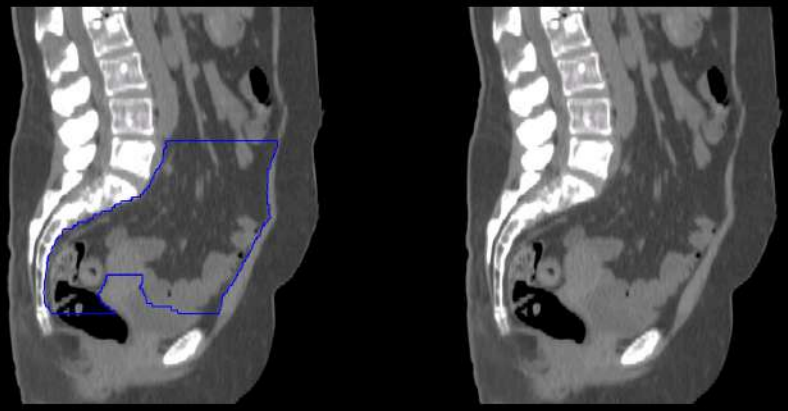
S1

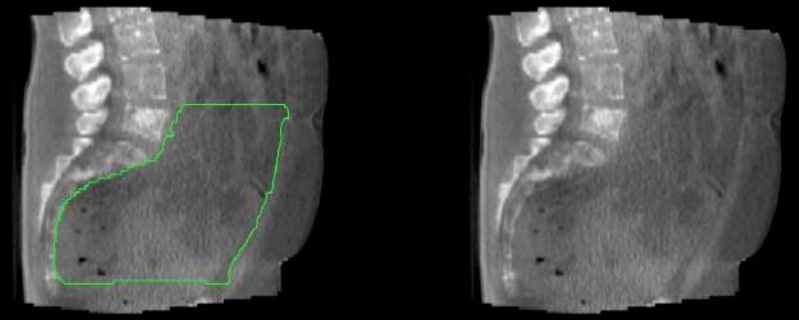




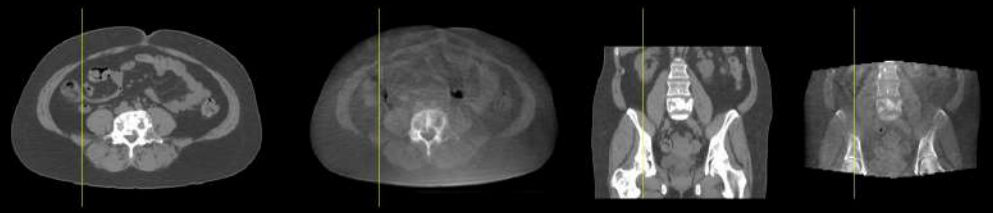
S2

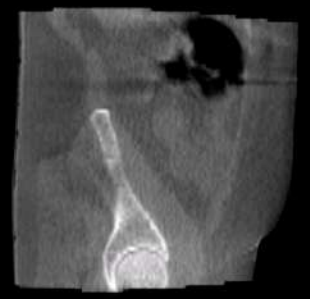




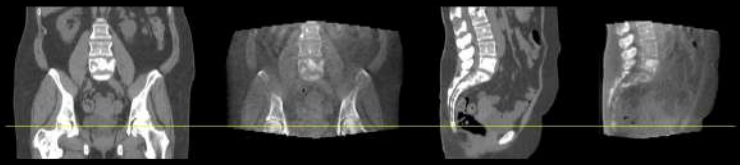


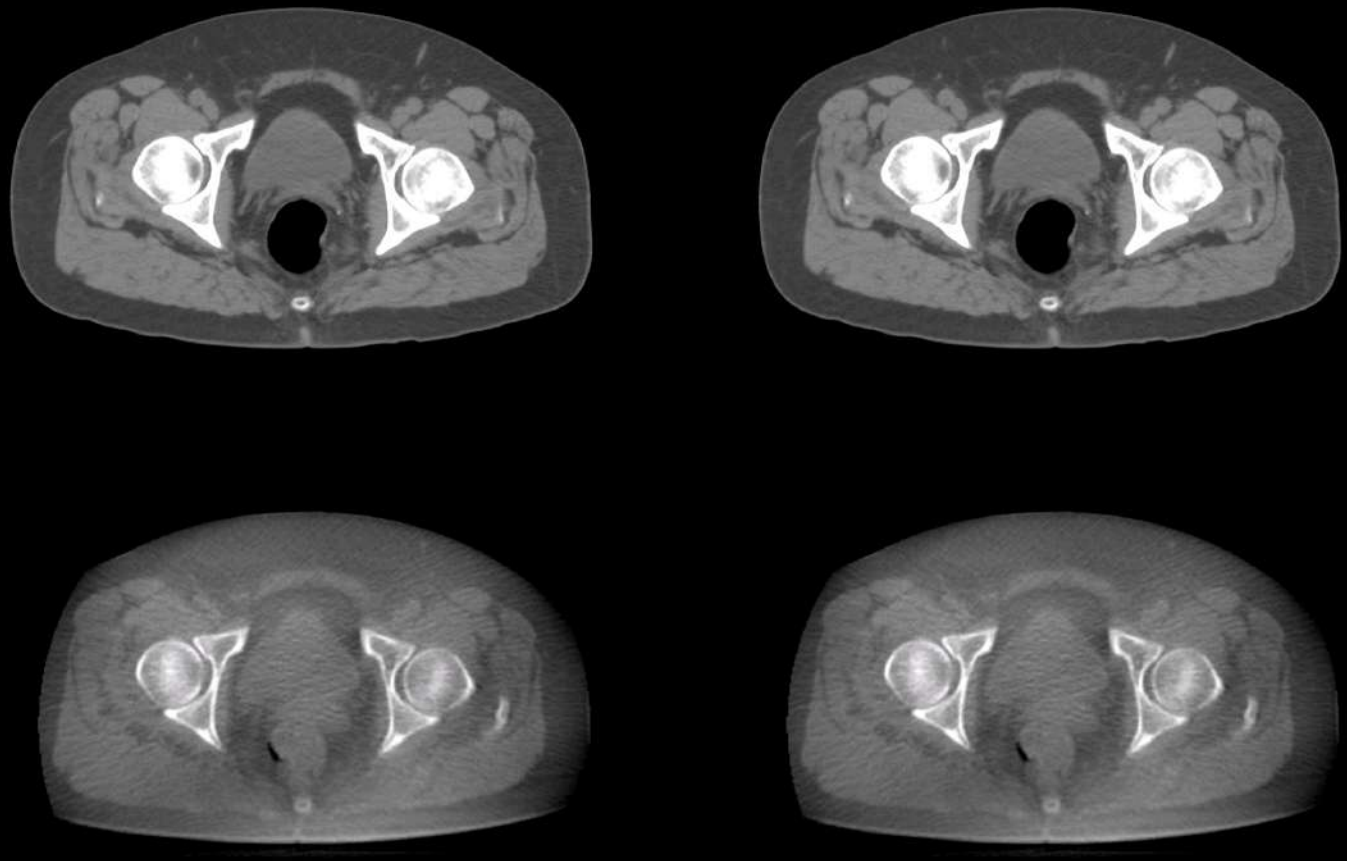
S3



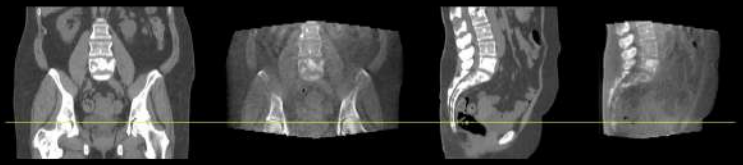


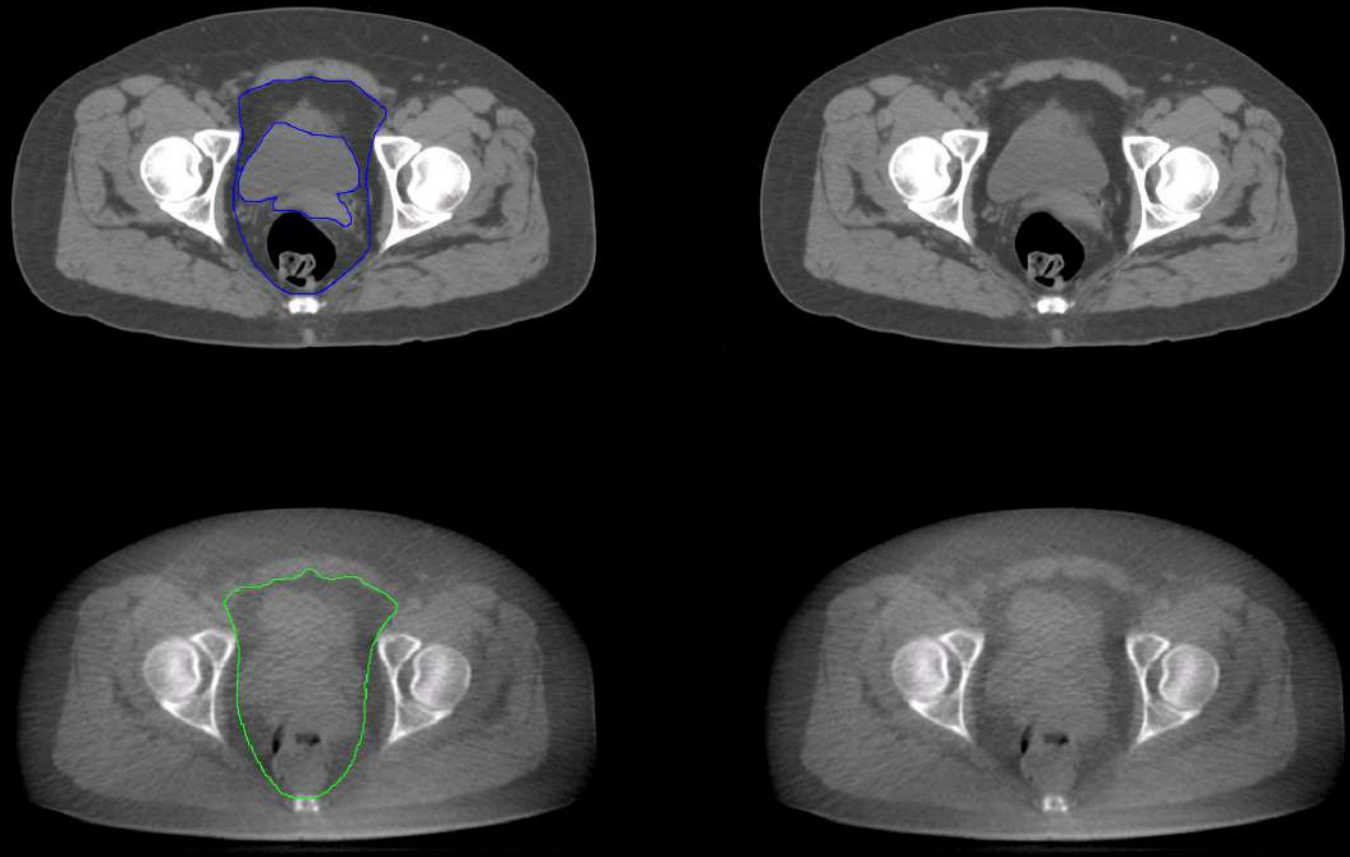
T(y)=0.30



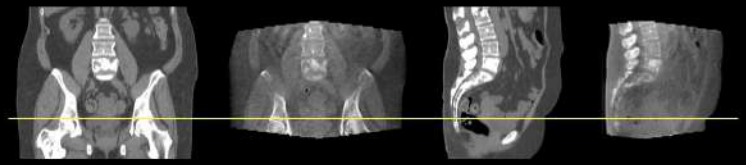


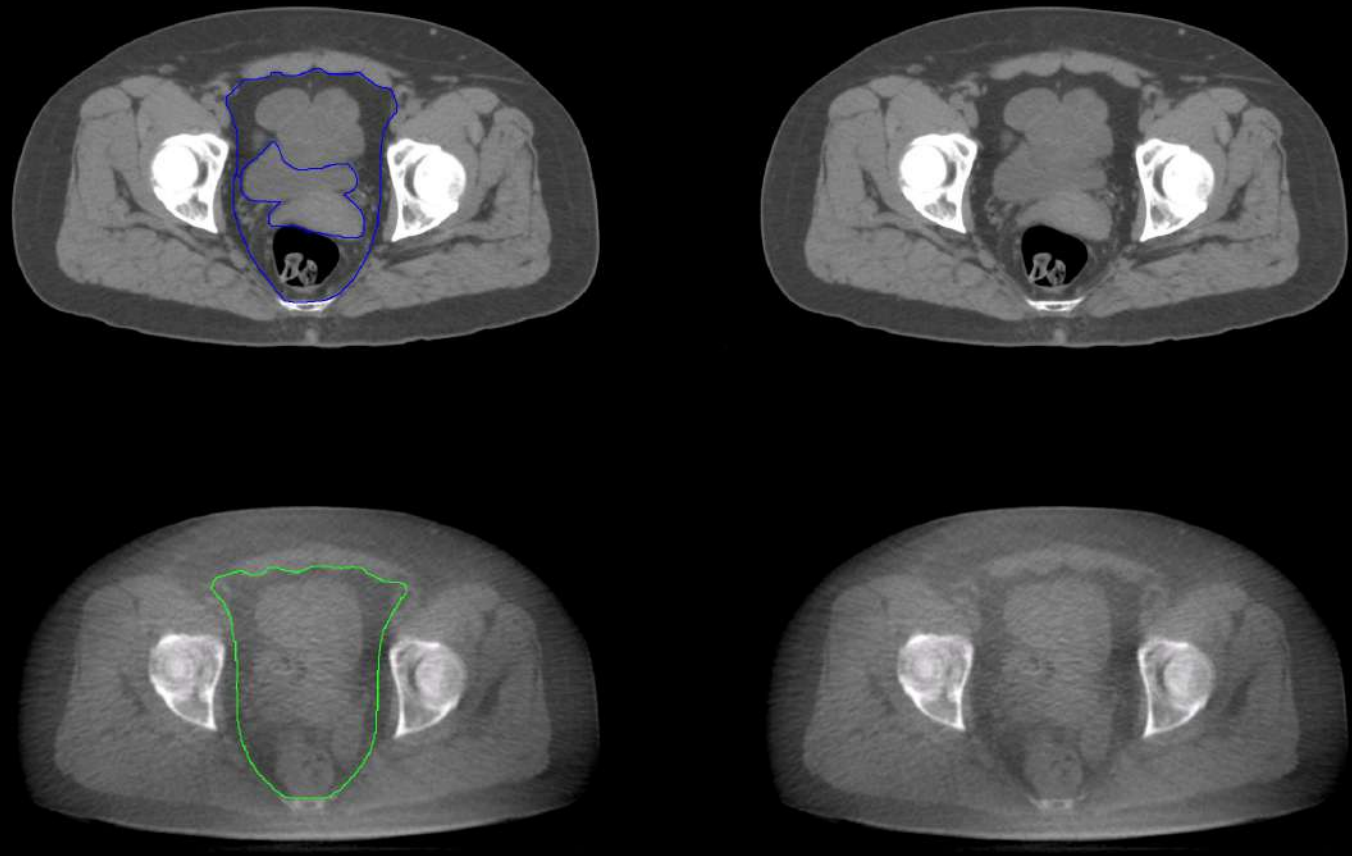
T(y)=1.20





T(y)=2.10





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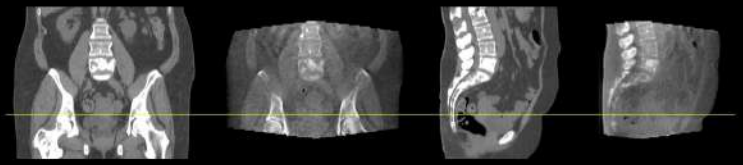
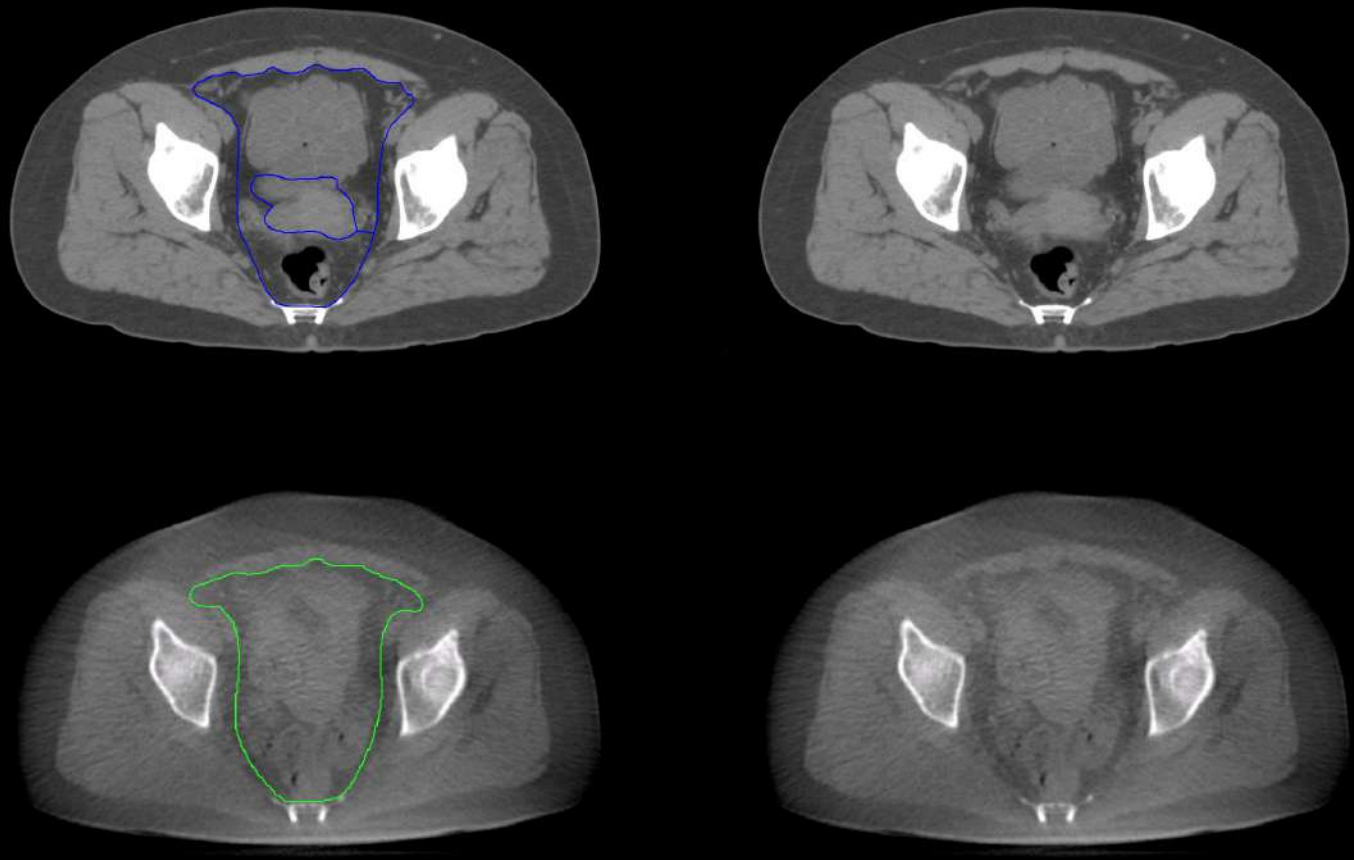
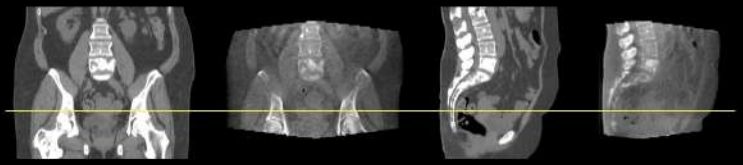
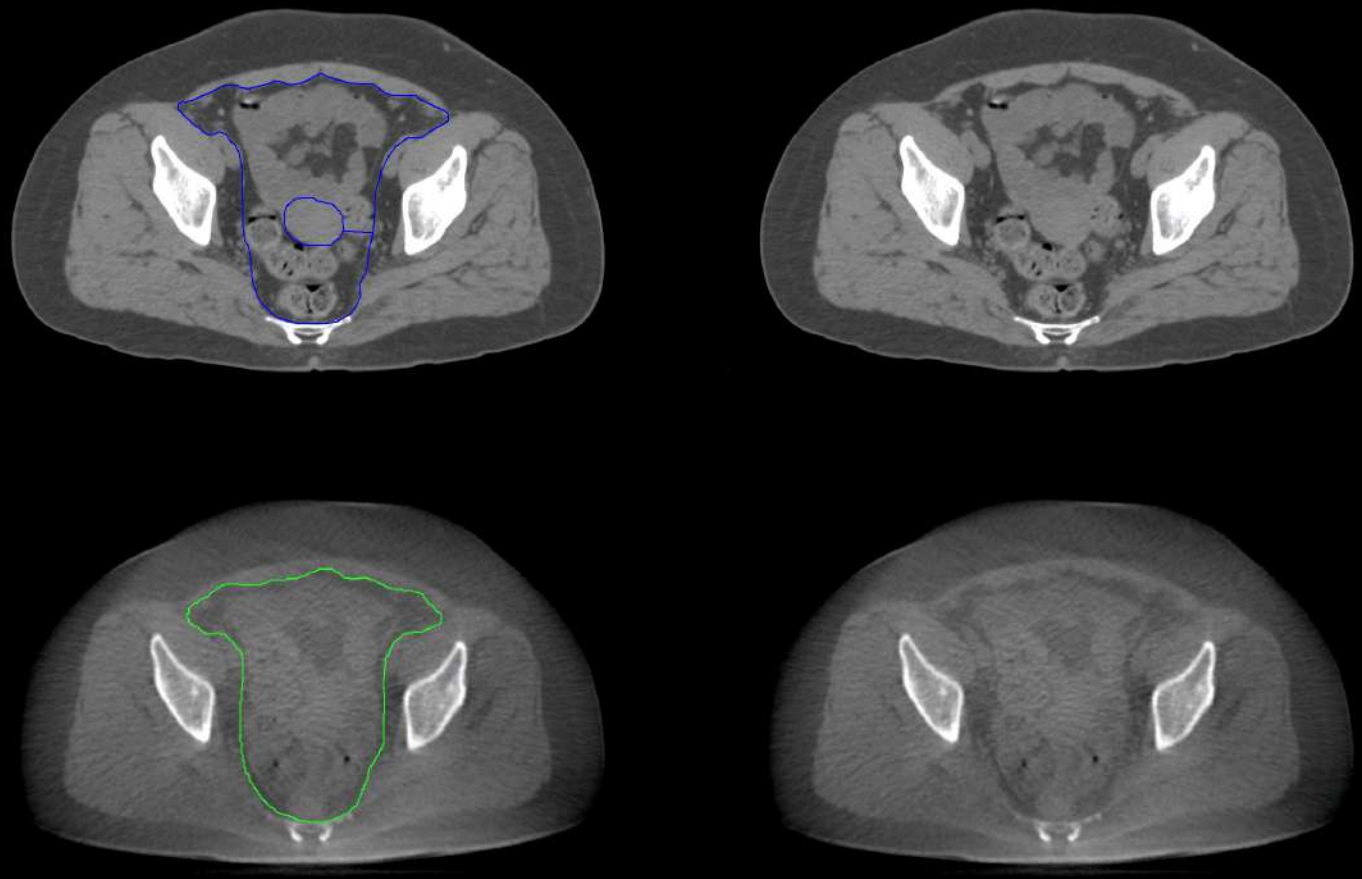


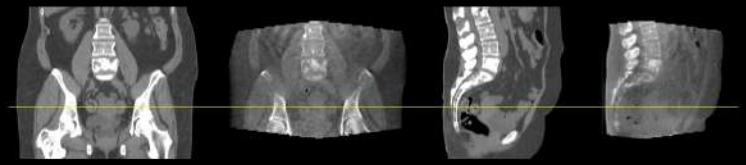


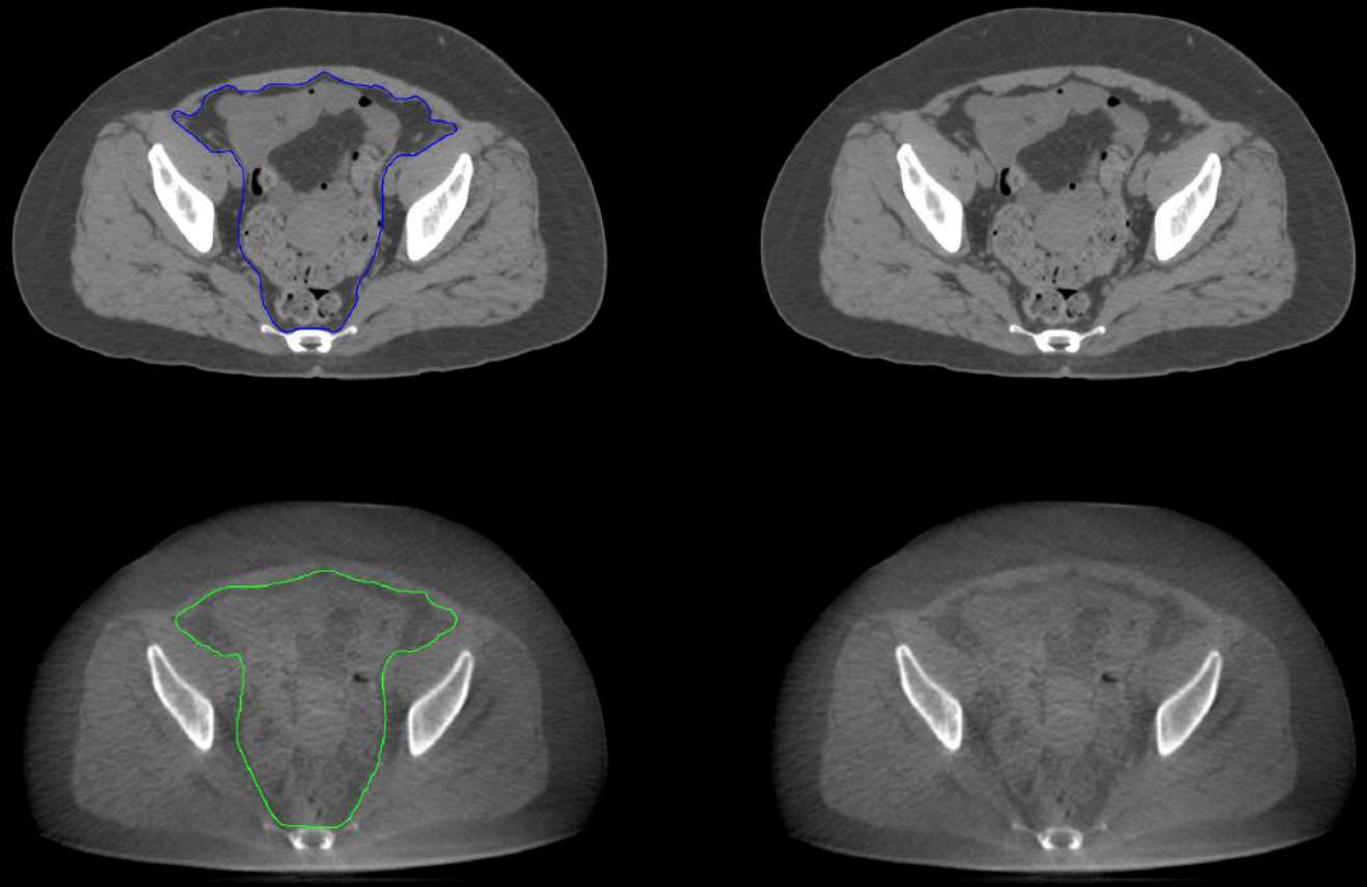
T(y)=3.90



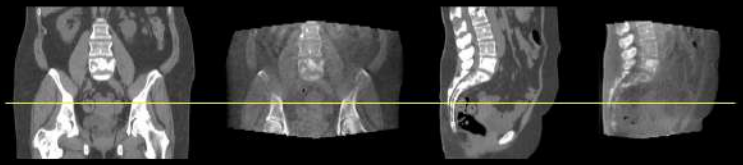


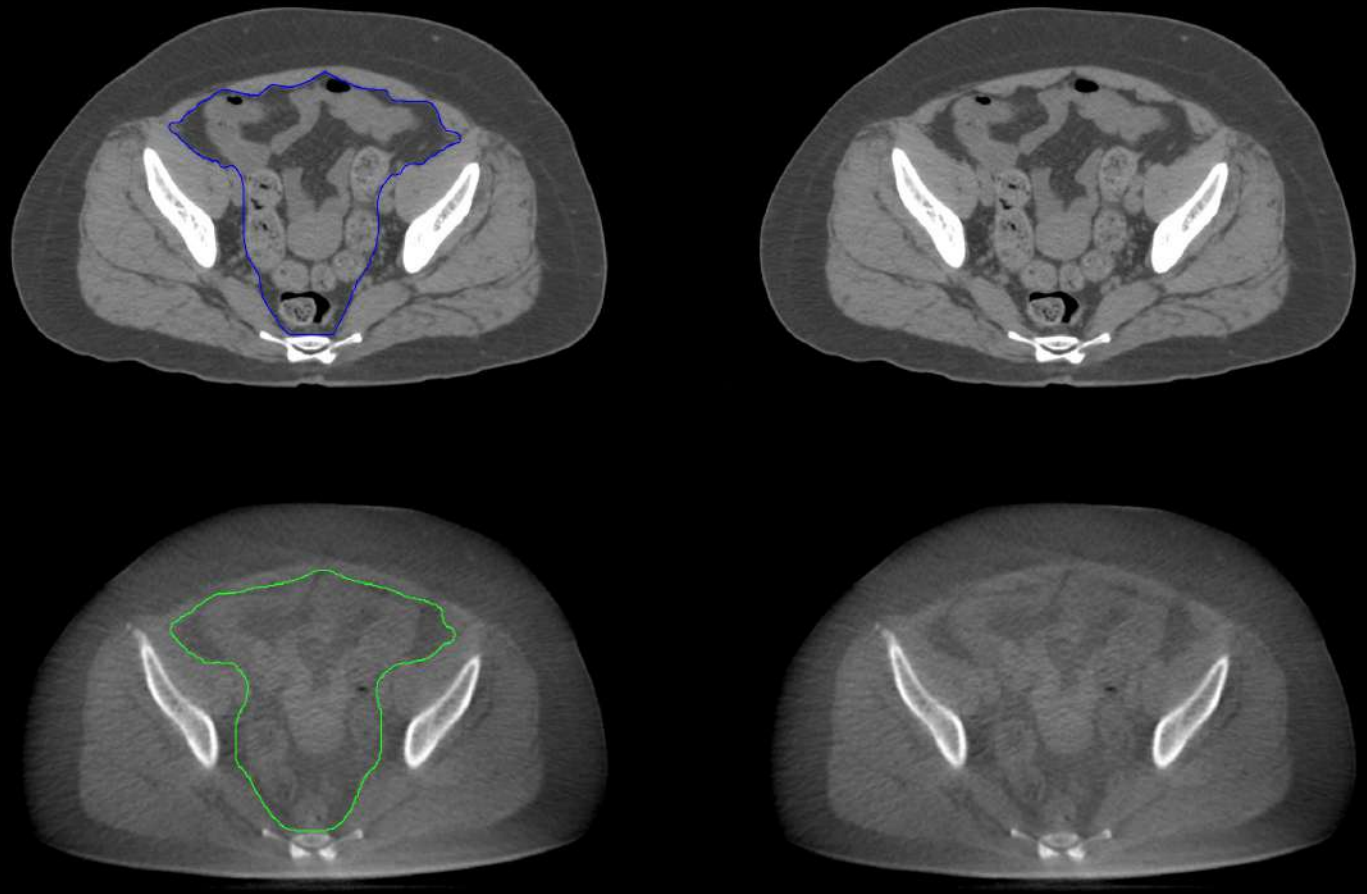
T(y)=4.80



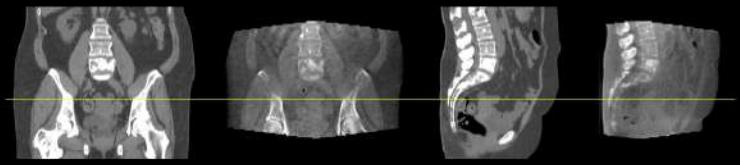


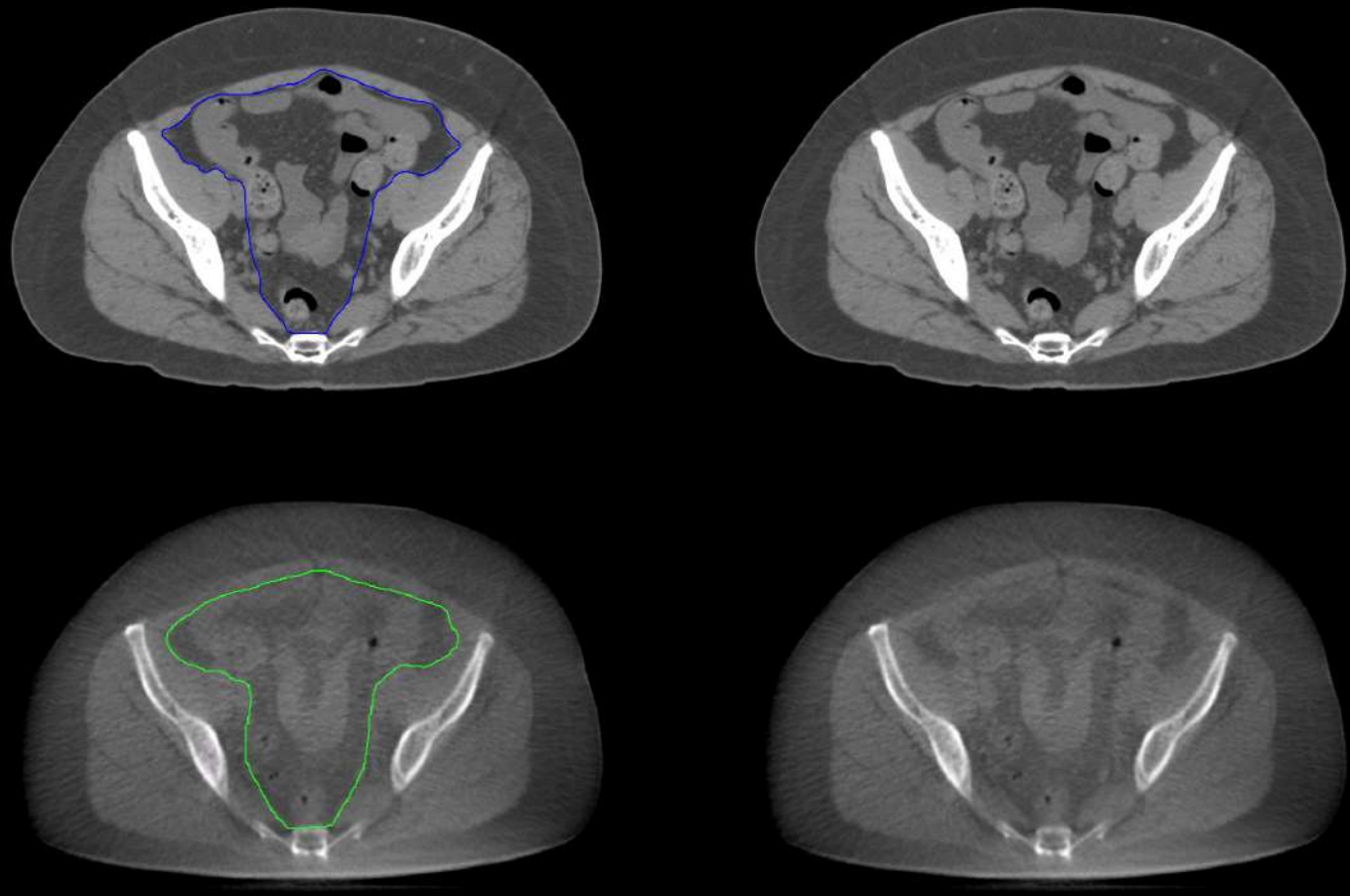
T(y)=5.70



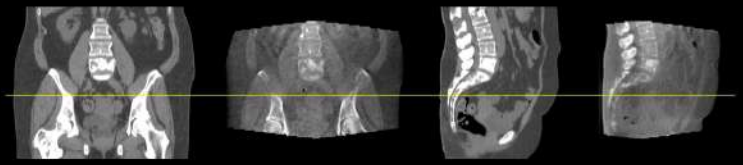


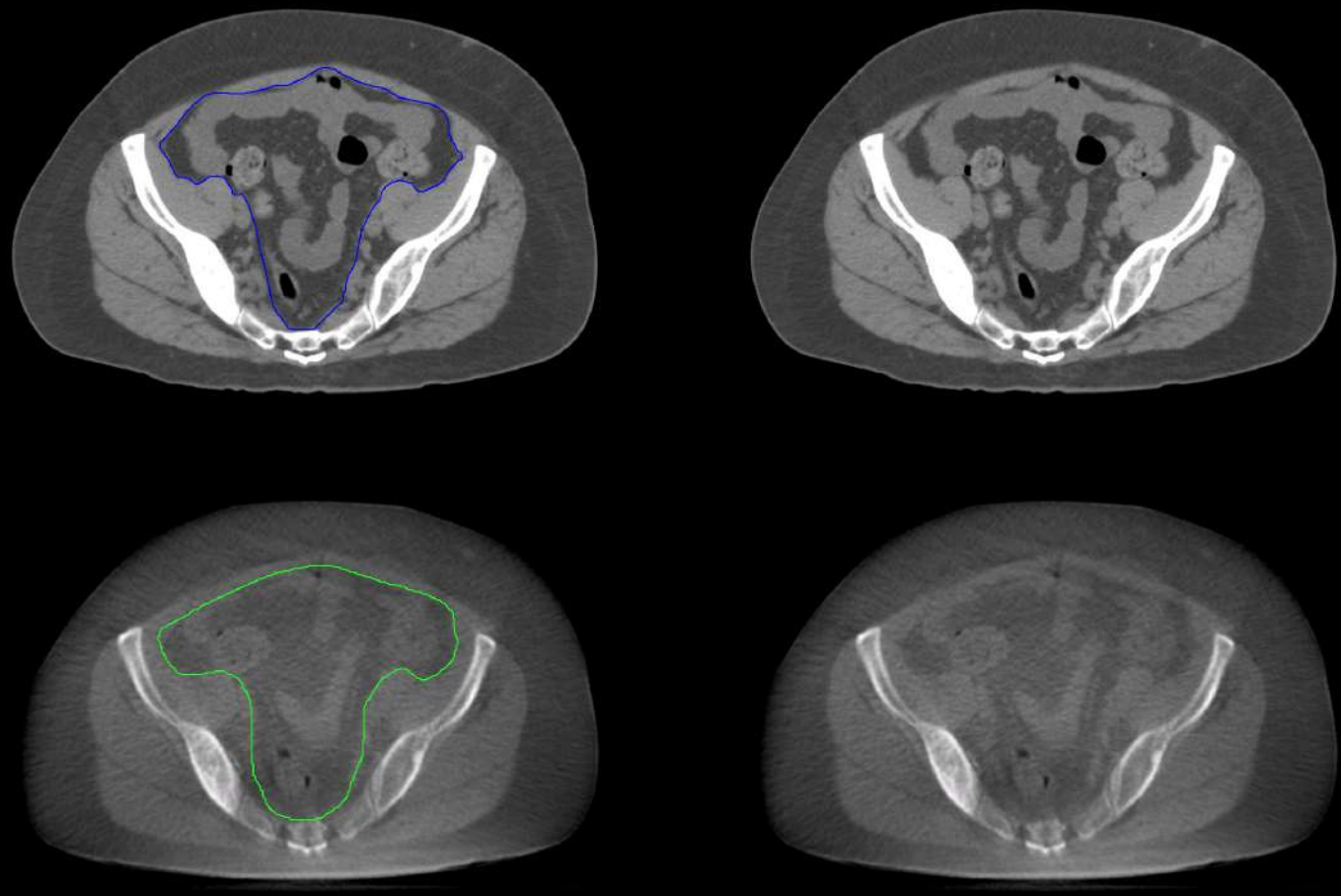
T(y)=6.60



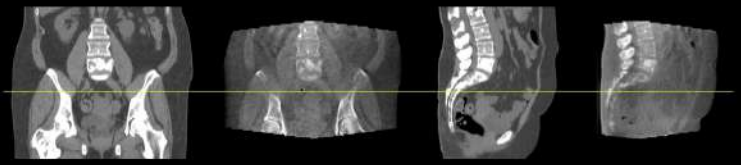


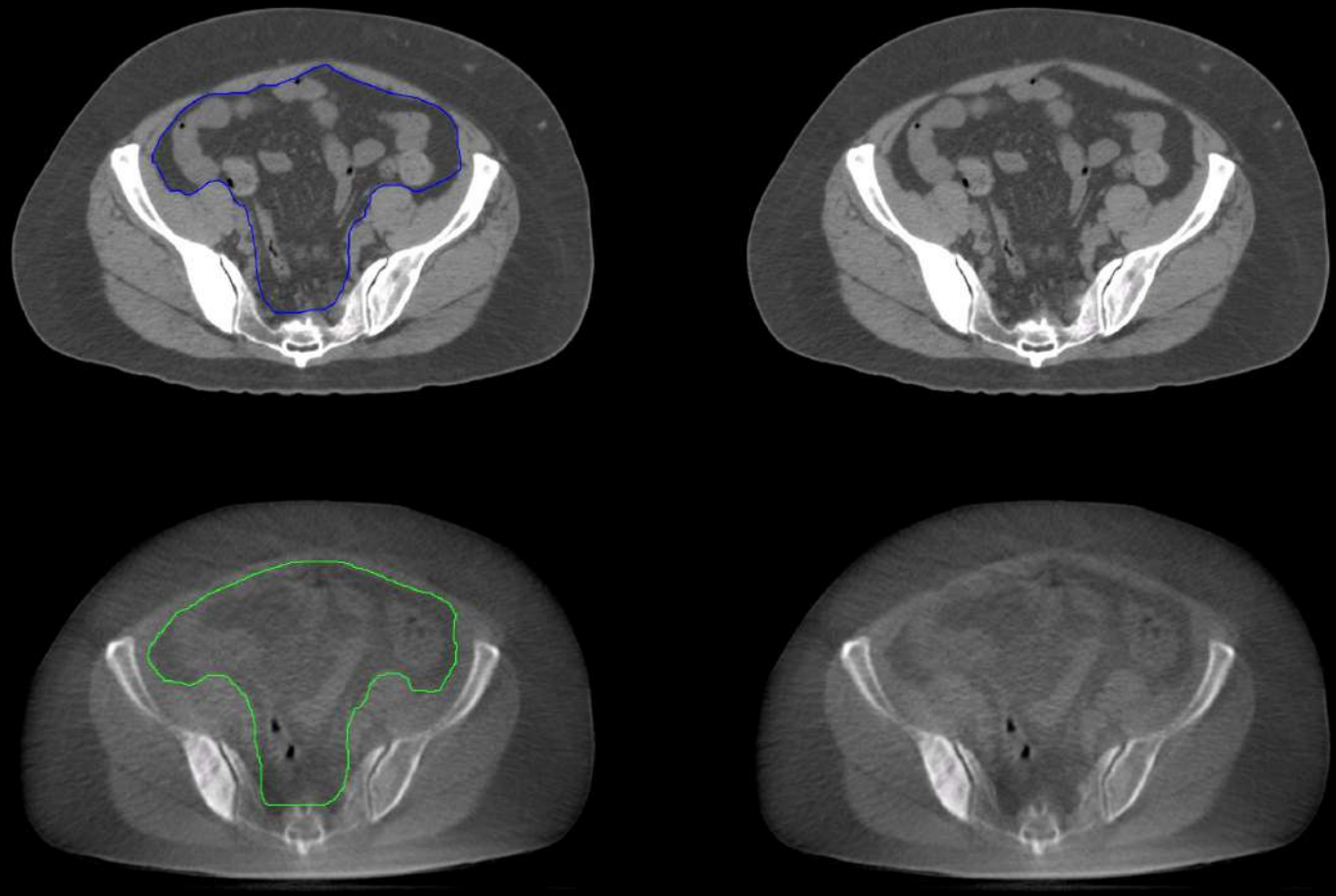
T(y)=7.50



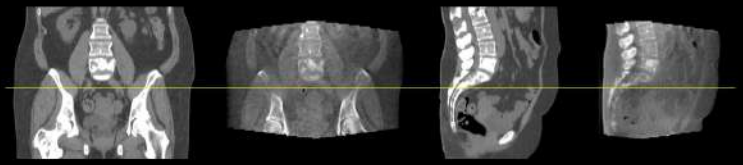


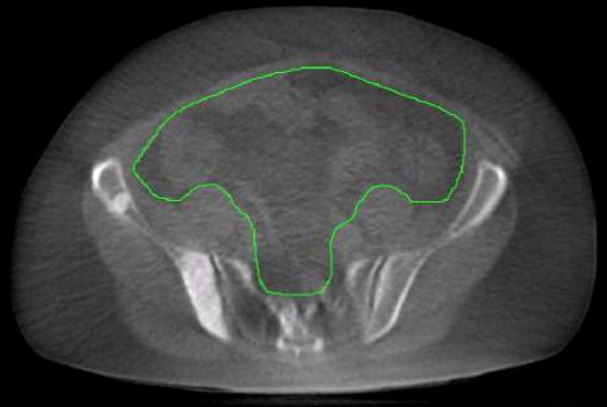
T(y)=8.40

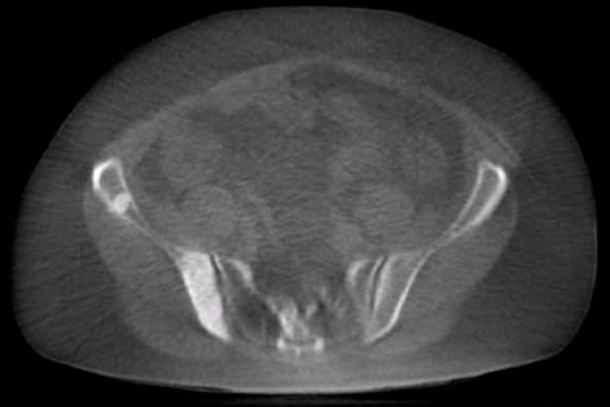




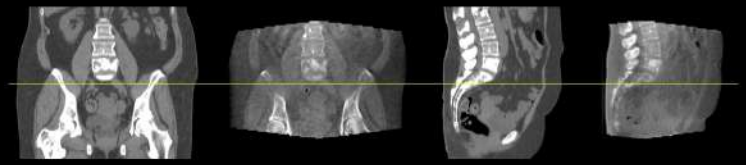
T(y)=9.30

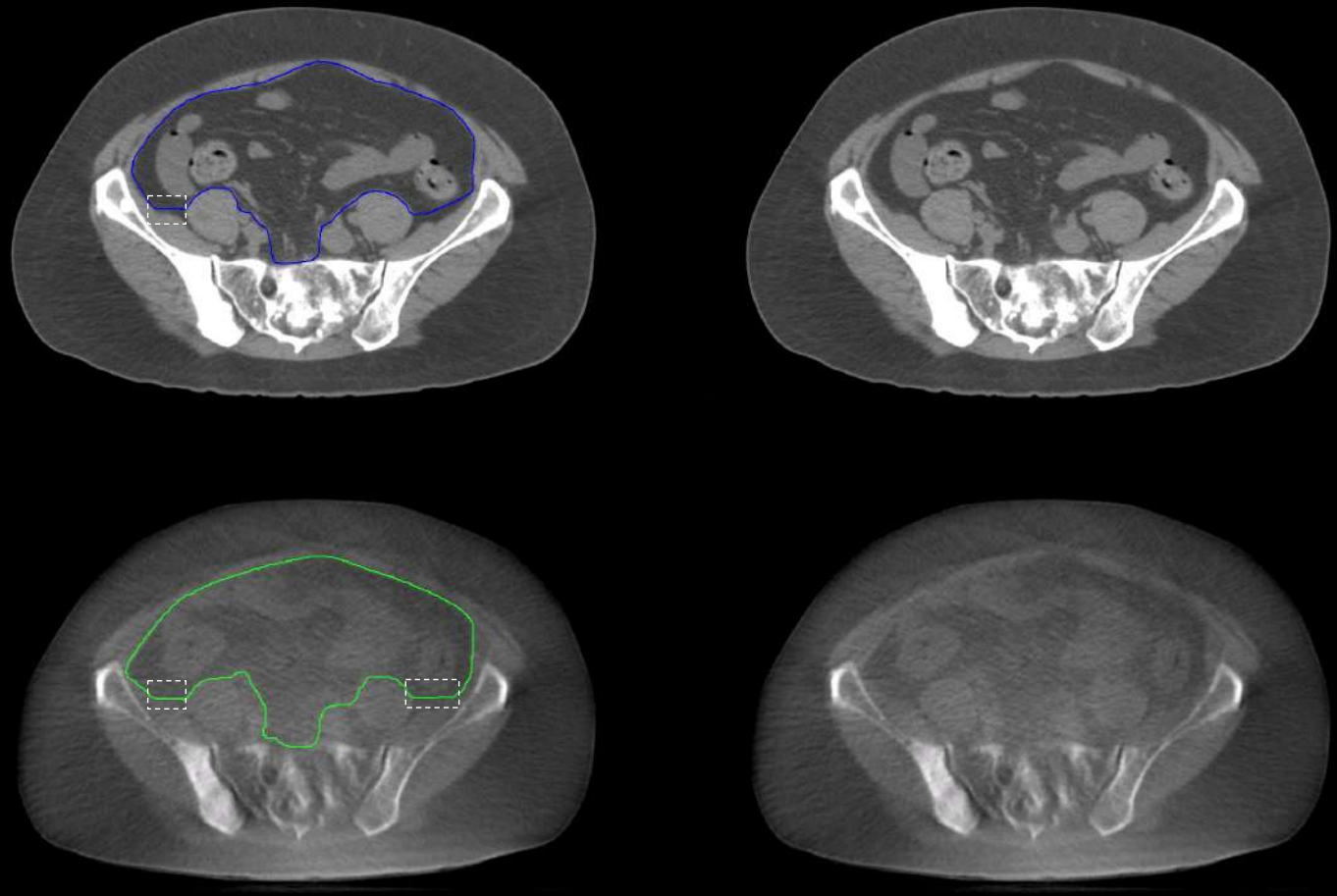




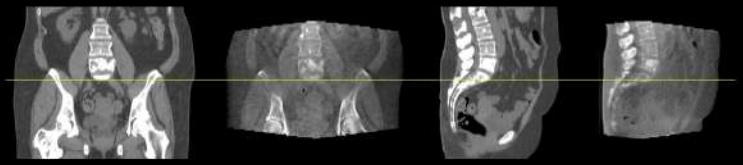


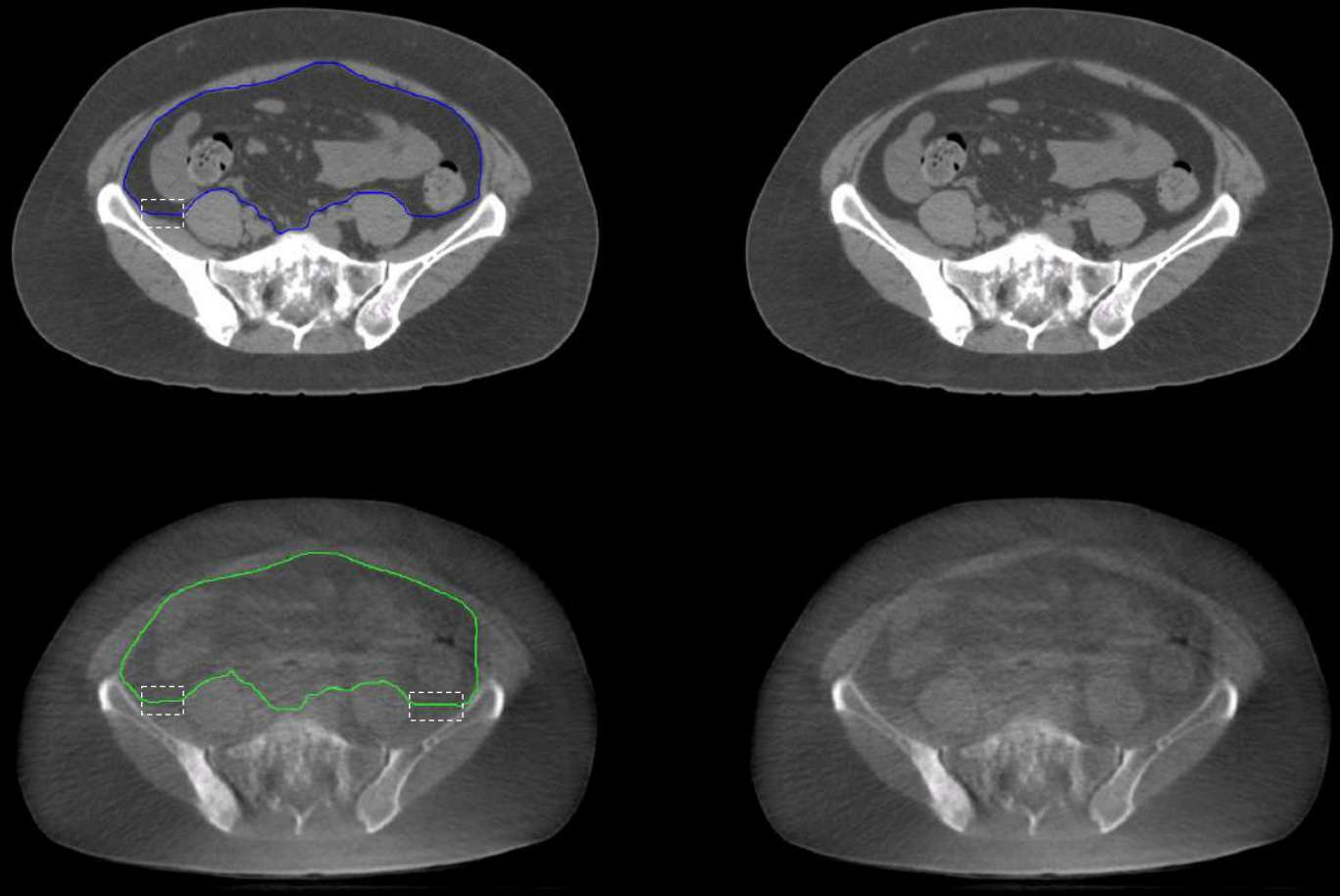
T(y)=10.20



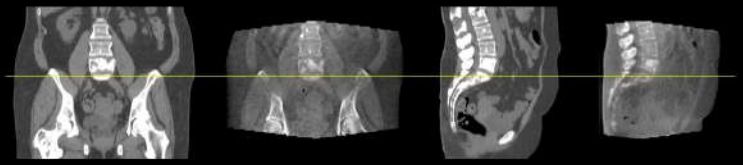


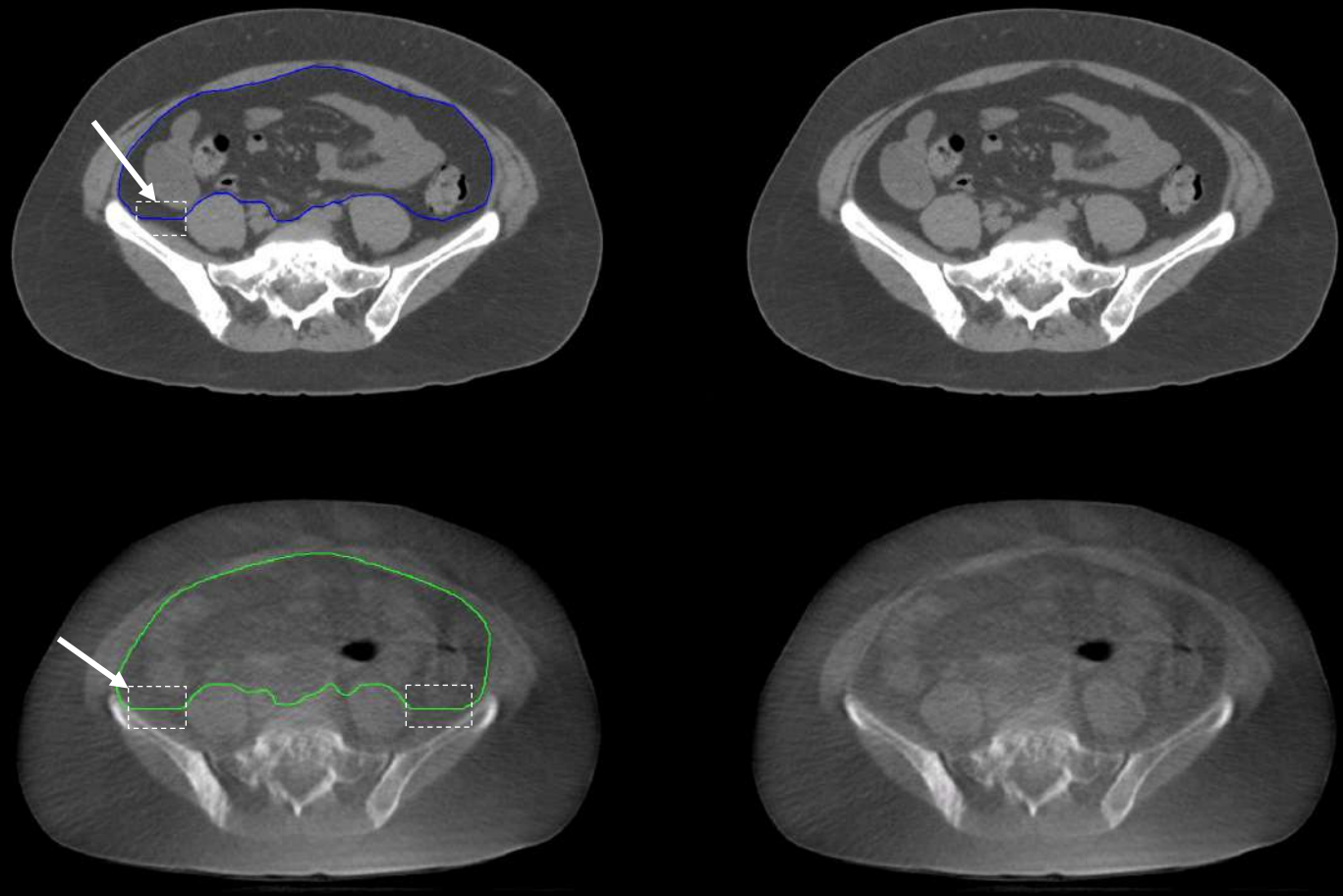
T(y)=11.10





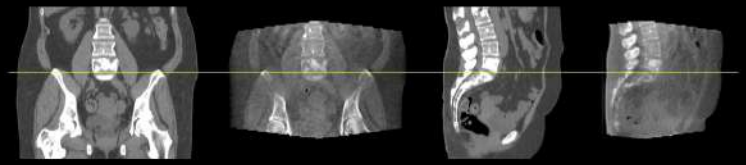
T(y)=12.00

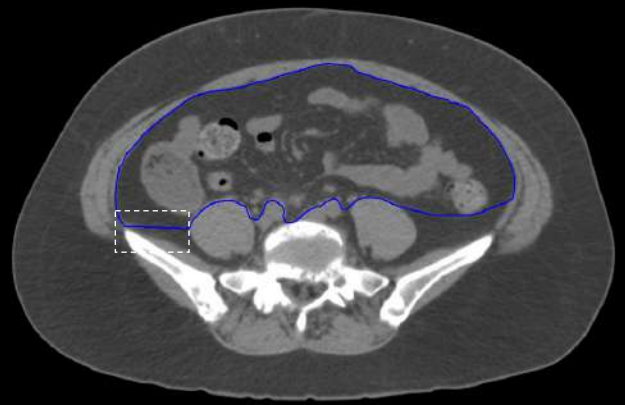


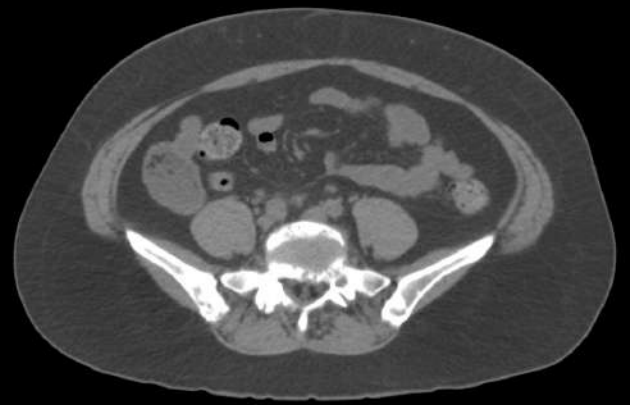


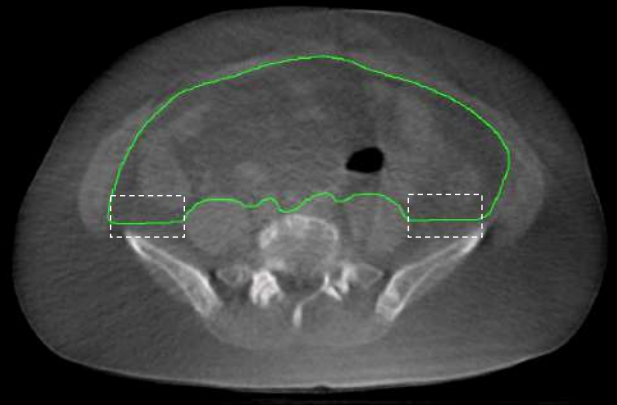
OD#1: lateral line from the lateral-most aspect of the psoas major to intersect the iliacus

T(y)=12.90

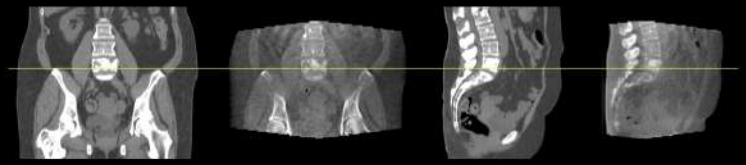


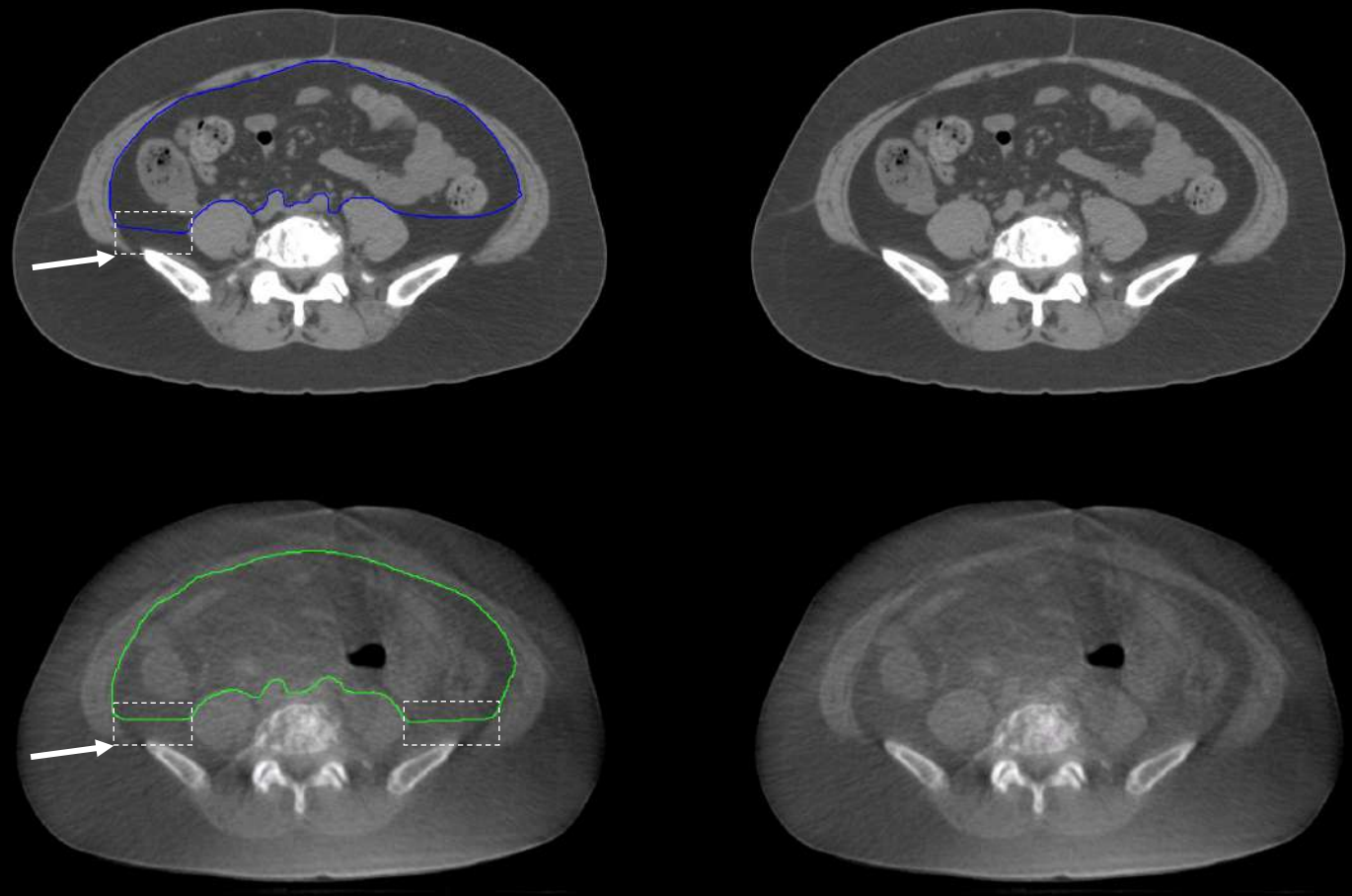






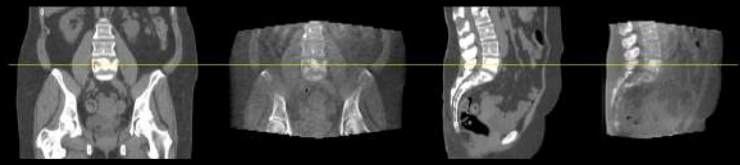
T(y)=13.80

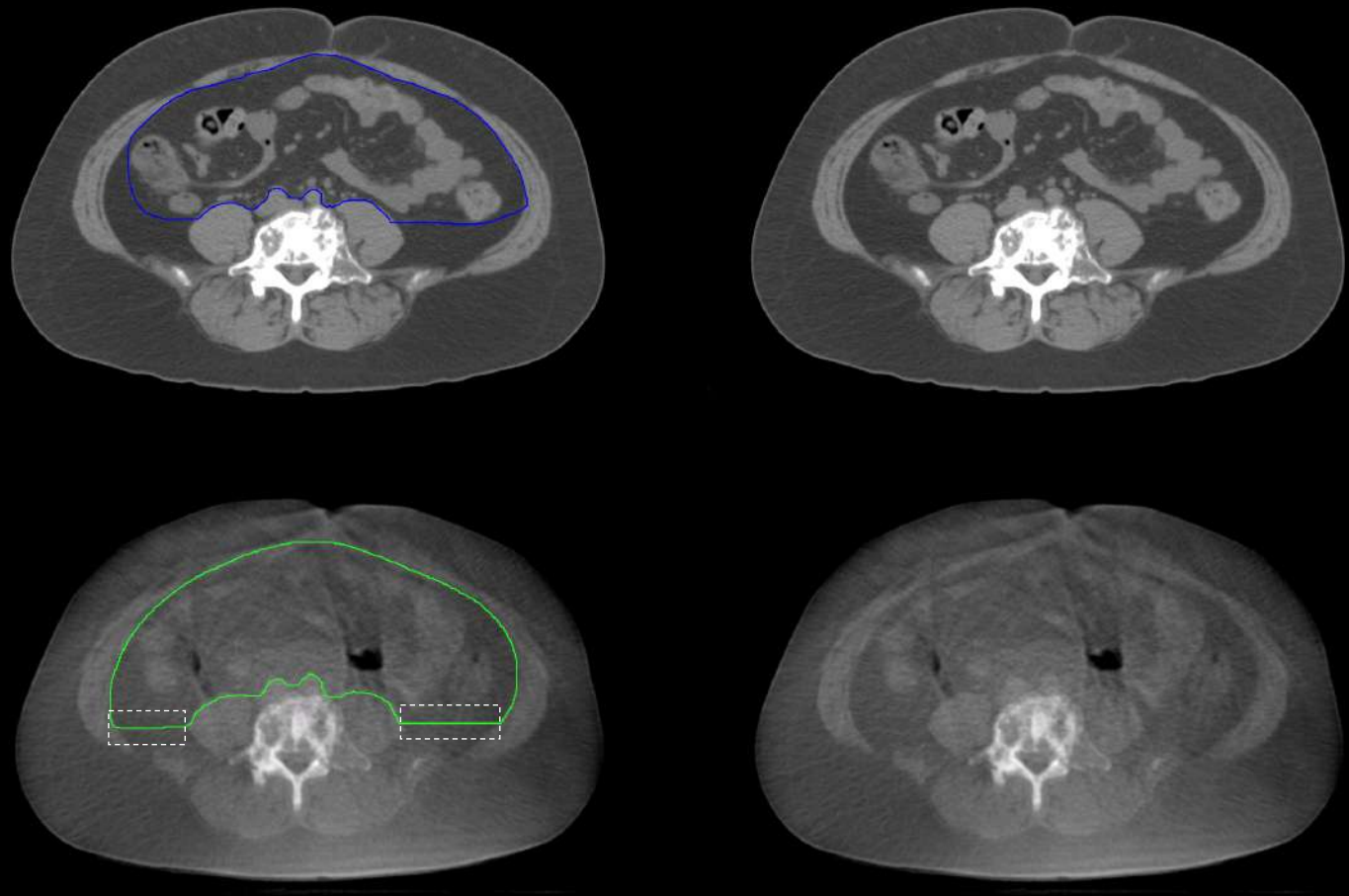




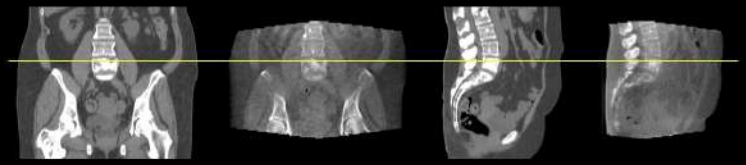
OD#1: lateral line from the lateral-most aspect of the psoas major to intersect the transverse abdominis

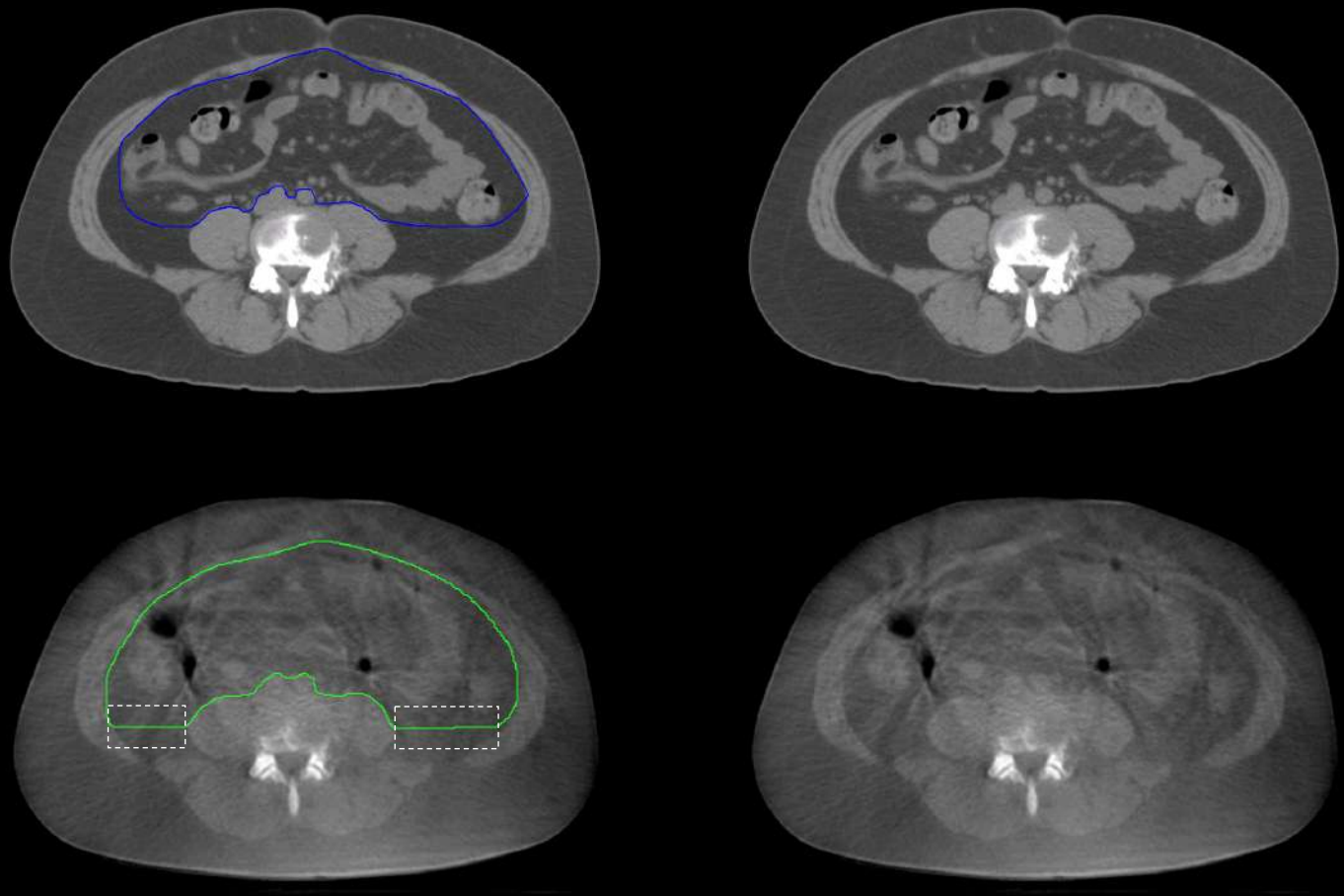
T(y)=14.70





T(y)=15.60





T(y)=15.90