



LIFEx v6.30

LIFEx application

— LIFEx —

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How to draw regions



LIFEx version 6.30

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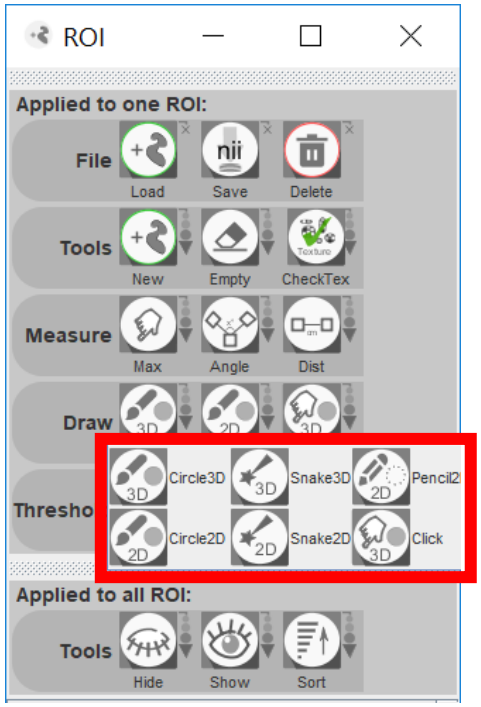
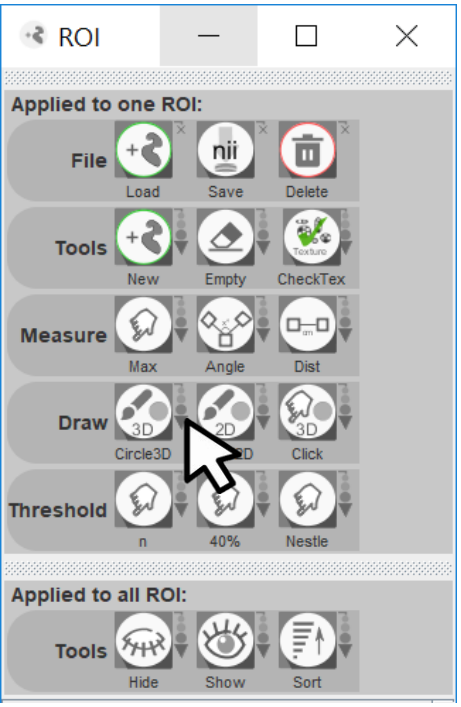
How to draw regions with LIFEx ?

Pre-requisites :

- Create an account on www.lifexsoft.org
- Install the LIFEx software
- Read the tutorial: [How to open and view Dicom images ?](#)



As a general rule, some tools are placed in hidden menus. To access these tools, click on the down arrow (for instance near Circle3D icon for "Draw" tools).





To create a new ROI, click on “New” icon ...

The screenshot displays a medical imaging interface with three main windows: 'Sag LIFEx - Sag', 'Cor LIFEx - Cor', and 'Ax LIFEx - Ax'. Each window shows a PET/MR scan with a vertical activity scale on the left and an alpha percentage control on the right. The 'Sag' window shows a sagittal view with a 'Head to Thighs 3D MAC' ROI. The 'Cor' window shows a coronal view with a 'Head to Thighs 3D MAC' ROI. The 'Ax' window shows an axial view with a 'Head to Thighs 3D MAC' ROI. A right-hand panel titled 'ROI' contains various tool icons. The 'New' icon, which is a brain with a plus sign, is highlighted with a red box. Below the 'New' icon are sections for 'Applied to one ROI', 'Applied to all ROI', and a 'Drop here' area for saving ROIs.

Applied to one ROI:

- File: + (New), nii (Save), Delete
- Tools: + (New), Empty, CheckTex
- Measure: Max, Angle, Dist
- Draw: 3D, 2D, Circle2D, Click
- Threshold: n, 40%, Nestle

Applied to all ROI:

- Tools: Hide, Show, Sort

Drop here:

- from files: - nii, - nii.gz, - RTSTRUCT



... and select the 2D or 3D brush.

The screenshot displays a medical imaging software interface with three main view windows and a right-hand panel for ROI management.

- Sagittal View (LIFEx - Sag):** Shows a PET/MR scan of a patient. The activity scale ranges from 0.00 to 29.80 SUV. A yellow brush is visible on the scan. Technical details include: Actual Frame Duration: 240000 ms, Radionuclide Total Dose: 258000 kBq, Radiopharmaceutical Start Time: 11:48:00, Radiopharmaceutical Half Life: 109.7 min, DFOV: 129.3 x 60.0 cm, W: 11.802 L: 5.901. The brush settings are: Head to Thighs 3D MAC, (96, 311, 29)=0.16 SUV.
- Axial View (LIFEx - Ax):** Shows a cross-sectional PET/MR scan. The activity scale ranges from 0.00 to 29.80 SUV. Technical details are identical to the sagittal view. The brush settings are: Head to Thighs 3D MAC, (192, 13, 207)=0.00 SUV.
- Coronal View (LIFEx - Cor):** Shows a coronal PET/MR scan. The activity scale ranges from 0.00 to 29.80 SUV. A yellow brush is visible. Technical details are identical to the other views. The brush settings are: Head to Thighs 3D MAC, (-64, 96, 272)=0.79 SUV.
- ROI Panel:** Contains sections for "Applied to one ROI:", "Applied to all ROI:", and "Tools". The "Tools" section includes "Circle3D" and "Circle2D", which are highlighted with a red box. Below the tools, there is a "Drop here" area with a list of files: "from files: - nil - nil.gz - RTSTRUCT".



... or the 2D pencil...

Sag LIFEx - Sag

SIGNA PET/MR
Ex:31
Head to Thighs 3D MAC
X: 98 pi,
HFS
Acc:
02/10/15
15:21:55 (SUV)
alpha(%)
29.80

LIFExPTMRDermo
LIFExPTMRDermo
M 54Y 66.0 Kg
LIFExPTMRDermo
Head to Thighs 3D MAC, (98, 106, 207)=0.80 SUV

Actual Frame Duration: 240000 ms
Radionuclide Total Dose:258000 kBq
Radiopharmaceutical Start Time:11:48:00
Radionuclide Half Life:109.7 min
W:11.802 L:5.901

Mag: x0.3
2.7 thk/0.0 sp
zip: 414 x 192 pi
DFOV: 129.3 x 60.0 cm
vx:3.1x3.1x2.7mm=27.0mm3

Ax LIFEx - Ax

SIGNA PET/MR
Ex:31
Head to Thighs 3D MAC
Z: 207 pi,
HFS
Acc:
02/10/15
15:21:55

LIFExPTMRDermo
LIFExPTMRDermo
M 54Y 66.0 Kg
LIFExPTMRDermo
Head to Thighs 3D MAC, (99, 118, 207)=0.35 SUV

Actual Frame Duration: 240000 ms
Radionuclide Total Dose:258000 kBq
Radiopharmaceutical Start Time:11:48:00
Radionuclide Half Life:109.7 min
W:11.802 L:5.901

Mag: x2.7
2.7 thk/0.0 sp
zip: 192 x 192 pi
DFOV: 60.0 x 60.0 cm
vx:3.1x3.1x2.7mm=27.0mm3

Cor LIFEx - Cor

SIGNA PET/MR
Ex:31
Head to Thighs 3D MAC
Y: 106 pi,
HFS
Acc:
02/10/15
15:21:55 (SUV)
alpha(%)
29.80

LIFExPTMRDermo
LIFExPTMRDermo
M 54Y 66.0 Kg
LIFExPTMRDermo
Head to Thighs 3D MAC, (98, 106, 207)=0.80 SUV

Actual Frame Duration: 240000 ms
Radionuclide Total Dose:258000 kBq
Radiopharmaceutical Start Time:11:48:00
Radionuclide Half Life:109.7 min
W:11.802 L:5.901

Mag: x0.4
2.7 thk/0.0 sp
zip: 414 x 192 pi
DFOV: 129.3 x 60.0 cm
vx:3.1x3.1x2.7mm=27.0mm3

ROI

Applied to one ROI:

- File: Load, Save, Delete
- Tools: New, Empty, CheckTex
- Measure: Max, Dist
- Draw: Circle3D, **2D Pencil**, Click
- Threshold: n, 40%, Nestle

Applied to all ROI:

- Tools: Hide, Show, Sort

C1
0.00000 cm3 (0vx ref)

Drag ROIs

Drop here

from files:
- nii
- nii.gz
- RTSTRUCT



... or other tools by clicking on the right arrow to access the hidden menu.

The screenshot displays a medical imaging software interface with three main view windows: Sagittal (Sag), Coronal (Cor), and Axial (Ax). Each window shows a PET/MR scan with associated patient and scan data. The right-hand side features a menu with various tools and options, including a red box highlighting a hidden menu.

View Data:

- Sag LIFEx - Sag:**
 - SIGNA PET/MR Ex:31
 - Head to Thighs 3D MAC
 - HFS: Head to Thighs 3D MAC, (96, 311, 29)=0.16 SUV
 - Acc: 02/10/15 15:21:55
 - Activity (SUV): 29.80
 - Actual Frame Duration: 240000 ms
 - Radiopharmaceutical Start Time: 11:48:00
 - Radiopharmaceutical Half Life: 109.7 min
 - W:11.802 L:5.901
- Cor LIFEx - Cor:**
 - SIGNA PET/MR Ex:31
 - Head to Thighs 3D MAC
 - HFS: Head to Thighs 3D MAC, (-64, 96, 272)=0.79 SUV
 - Acc: 02/10/15 15:21:55
 - Activity (SUV): 29.80
 - Actual Frame Duration: 240000 ms
 - Radiopharmaceutical Start Time: 11:48:00
 - Radiopharmaceutical Half Life: 109.7 min
 - W:11.802 L:5.901
- Ax LIFEx - Ax:**
 - SIGNA PET/MR Ex:31
 - Head to Thighs 3D MAC
 - HFS: Head to Thighs 3D MAC, (36, 207, 207)=0.00 SUV
 - Acc: 02/10/15 15:21:55
 - Activity (SUV): 29.80
 - Actual Frame Duration: 240000 ms
 - Radiopharmaceutical Start Time: 11:48:00
 - Radiopharmaceutical Half Life: 109.7 min
 - W:11.802 L:5.901

Right-Hand Menu:

- Applied to one ROI:
 - File: Load, Save, Delete
 - Tools: New, Empty, CheckTex
 - Measure: Max, Angle, Dist
 - Draw: 3D, 2D, 2D, 2D
 - Thresho: 3D, Circle3D, Snake3D, Snake2D, Snake2D, Click
- Applied to all ROI:
 - Tools: Hide, Show, Sort
- ROI: C1 (0.00000 cm3 (0vx ref))
- Drag ROIs: Drop here
- from files: .nii, .nii.gz, .RTS/TRACT



A selected ROI appears with a green header bar and is editable. An active ROI has the open eye icon on the left of the header bar, and is visible on display. An ROI can be selected and active, or active only

The screenshot displays a medical imaging software interface with three main view windows: Sagittal (Sag), Axial (Ax), and Coronal (Cor). Each window shows a PET/MR scan of a patient's torso. The ROI panel on the right lists various tools and actions for ROIs. A specific ROI, labeled 'C1', is highlighted with a green header bar and a red box. The ROI panel also shows a list of tools for the selected ROI, including 'File', 'Tools', 'Measure', 'Draw', and 'Threshold'. The 'Tools' section includes icons for 'New', 'Empty', 'CheckTex', 'Max', 'Angle', 'Dist', 'Circle3D', 'Pencil2D', and 'Click'. The 'Threshold' section includes icons for 'n', '40%', and 'Nestle'. The 'Applied to all ROI' section includes icons for 'Tools', 'Hide', 'Show', and 'Copy'. The ROI 'C1' is shown with a green header bar and a red box, indicating it is selected and active. The ROI panel also shows a list of tools for the selected ROI, including 'File', 'Tools', 'Measure', 'Draw', and 'Threshold'. The 'Tools' section includes icons for 'New', 'Empty', 'CheckTex', 'Max', 'Angle', 'Dist', 'Circle3D', 'Pencil2D', and 'Click'. The 'Threshold' section includes icons for 'n', '40%', and 'Nestle'. The 'Applied to all ROI' section includes icons for 'Tools', 'Hide', 'Show', and 'Copy'. The ROI 'C1' is shown with a green header bar and a red box, indicating it is selected and active. The ROI panel also shows a list of tools for the selected ROI, including 'File', 'Tools', 'Measure', 'Draw', and 'Threshold'. The 'Tools' section includes icons for 'New', 'Empty', 'CheckTex', 'Max', 'Angle', 'Dist', 'Circle3D', 'Pencil2D', and 'Click'. The 'Threshold' section includes icons for 'n', '40%', and 'Nestle'. The 'Applied to all ROI' section includes icons for 'Tools', 'Hide', 'Show', and 'Copy'. The ROI 'C1' is shown with a green header bar and a red box, indicating it is selected and active.



To draw a ROI, the instructions are given in the lower left-hand corner.

The screenshot displays a medical imaging software interface with three main panels: Sagittal (Sag), Axial (Ax), and Coronal (Cor) views of a PET/MR scan. Each panel shows a patient's body with a highlighted region of interest (ROI) and associated data. The Sagittal view shows a ROI with a value of 0.80 SUV. The Axial view shows a ROI with a value of 0.28 SUV. The Coronal view shows a ROI with a value of 0.79 SUV. The interface includes various toolbars for navigation, zooming, and drawing. A status bar at the bottom left contains a red-bordered box with the following text:

Status
0.433cm3:Circle3D
SHIFT + LBM -> add
SHIFT + RBM -> delete
SHIFT + wheel-> tool size

On the right side, there is a 'ROI' panel with a toolbar containing icons for File (Load, Save, Delete), Tools (New, Empty, CheckTex), Measure (Max, Angle, Dist), Draw (Circle3D, Pencil2D, Click), and Threshold (n, 40%, Nestle). Below the toolbar, there is a section for 'Applied to all ROI' with a 'Tools' icon and a 'Drop here' instruction. The 'Drop here' area contains a circular icon with a plus sign and the text 'Drag ROIs' and 'Drop here'. Below this, there is a list of supported file formats: 'from files: - nii - nii.gz - RTSTRUCT'.



The volume in red corresponds to the brush volume.

Sag LIFEx - Sag
SIGNAL PET/MR
Ex:31
Head to Thighs 3D MAC
X: 98 pi,
HFS
Head to Thighs 3D MAC, (98, 106, 207)=0.80 SUV
Acc:
02/10/15
15:21:55 (SUV)
alpha(%)
100
11.80
0.00
Actual Frame Duration: 240000 ms
Radionuclide Total Dose:258000 kBq
Radiopharmaceutical Start Time:11:48:00
Radionuclide Half Life:109.7 min
W:11.802 L:5.901
Mag: x0.3
2.7 thk/0.0 sp
zip: 414 x 192 pi
DFOV: 129.3 x 60.0 cm
vx:3.1x3.1x2.7mm=27.0mm3

Ax LIFEx - Ax
SIGNAL PET/MR
Ex:31
Head to Thighs 3D MAC
Z: 207 pi,
HFS
Head to Thighs 3D MAC, (133, 94, 207)=0.28 SUV
Acc:
02/10/15
15:21:55
alpha(%)
100
11.80
0.00
Actual Frame Duration: 240000 ms
Radionuclide Total Dose:258000 kBq
Radiopharmaceutical Start Time:11:48:00
Radionuclide Half Life:109.7 min
W:11.802 L:5.901
Mag: x2.7
2.7 thk/0.0 sp
zip: 192 x 192 pi
DFOV: 60.0 x 60.0 cm
vx:3.1x3.1x2.7mm=27.0mm3

Cor LIFEx - Cor
SIGNAL PET/MR
Ex:31
Head to Thighs 3D MAC
Y: 106 pi,
HFS
Head to Thighs 3D MAC, (289, 106, 292)=0.79 SUV
Acc:
02/10/15
15:21:55 (SUV)
alpha(%)
100
11.80
0.00
Actual Frame Duration: 240000 ms
Radionuclide Total Dose:258000 kBq
Radiopharmaceutical Start Time:11:48:00
Radionuclide Half Life:109.7 min
W:11.802 L:5.901
Mag: x0.4
2.7 thk/0.0 sp
zip: 414 x 192 pi
DFOV: 129.3 x 60.0 cm
vx:3.1x3.1x2.7mm=27.0mm3

ROI
Applied to one ROI:
File: Load, Save, Delete, nii, nii.gz, RTSTRUCT
Tools: New, Empty, CheckTex
Measure: Max, Angle, Dist
Draw: Circle3D, Pencil2D, Click
Threshold: n, 40%, Nestle
Applied to all ROI:
Tools: Hide, Show, Sort
C1: 0.00000 cm3 (0vx ref)
Drag ROIs
Drop here
from files:
- nii
- nii.gz
- RTSTRUCT

Status
0.433cm3:Circle3D
SHIFT + RBM -> delete
SHIFT + wheel-> tool size
Directory Preference Out



Shift + left click to draw.

Sag LIFEx - Sag

SIGNA PET/MR
Ex:31
Head to Thighs 3D MAC
X: 109 pi,
HFS
Acc:
02/10/15
15:21:55 (SUV)
alpha(%)
29.80
11.80
0.00

LIFExPTMRDermo
LIFExPTMRDermo
M 54Y 66.0 Kg
LIFExPTMRDermo
Head to Thighs 3D MAC, (109, 270, 50)=0.00 SUV

Actual Frame Duration: 240000 ms
Radionuclide Total Dose:258000 kBq
Radiopharmaceutical Start Time:11:48:00
Radionuclide Half Life:109.7 min
W:11.802 L:5.901

Cor LIFEx - Cor

SIGNA PET/MR
Ex:31
Head to Thighs 3D MAC
Y: 119 pi,
HFS
Acc:
02/10/15
15:21:55 (SUV)
alpha(%)
29.80
11.80
0.00

LIFExPTMRDermo
LIFExPTMRDermo
M 54Y 66.0 Kg
LIFExPTMRDermo
Head to Thighs 3D MAC, (206, 119, 419)=0.00 SUV

Actual Frame Duration: 240000 ms
Radionuclide Total Dose:258000 kBq
Radiopharmaceutical Start Time:11:48:00
Radionuclide Half Life:109.7 min
W:11.802 L:5.901

Ax LIFEx - Ax

SIGNA PET/MR
Ex:31
Head to Thighs 3D MAC
Z: 207 pi,
HFS
Acc:
02/10/15
15:21:55 (SUV)
alpha(%)
29.80
11.80
0.00

LIFExPTMRDermo
LIFExPTMRDermo
M 54Y 66.0 Kg
LIFExPTMRDermo
Head to Thighs 3D MAC, (140, 101, 207)=0.03 SUV

Actual Frame Duration: 240000 ms
Radionuclide Total Dose:258000 kBq
Radiopharmaceutical Start Time:11:48:00
Radionuclide Half Life:109.7 min
W:11.802 L:5.901

ROI

Applied to one ROI:

- File: Load, Save, Delete
- Tools: New, Empty, CheckTex
- Measure: Max, Angle, Dist
- Draw: Circle3D, Pencil2D, Click
- Threshold: n, 40%, Nestle

Applied to all ROI:

- Tools: Hide, Show, Sort

C1
111.3 cm3 (4111vx:reD)

Drag ROIs

Drop here

from files:
- nii
- nii.gz
- RTSTRUCT

Status

54.138cm3:Circle3D
SHIFT + LBM -> add
SHIFT + RBM -> delete
SHIFT + wheel-> tool size

Directory Preference Quit

↑ Shift



Shift + right click to erase.

Sag LIFEx - Sag

SIGNA PET/MR
Ex:31
Head to Thighs 3D MAC
X: 109 pi,
HFS Head to Thighs 3D MAC, (109, 119, 207)=1.24 SUV
Acc:
02/10/15
15:21:55 (SUV)
alpha(%) 100
29.80
11.80
0.00

LIFExPTMRDemo
LIFExPTMRDemo
M 54Y 66.0 Kg
LIFExPTMRDemo
HFS
Acc:
02/10/15
15:21:55

Actual Frame Duration: 240000 ms
Radiopharmaceutical Total Dose:258000 kBq
Radiopharmaceutical Start Time:11:48:00
Radiopharmaceutical Half Life:109.7 min
W:11.802 L:5.901

Mag: x0.3
2.7 thk/0.0 sp
zip: 414 x 192 pi
DFOV: 129.3 x 60.0 cm
vx:3.1x3.1x2.7mm=27.0mm3

Cor LIFEx - Cor

SIGNA PET/MR
Ex:31
Head to Thighs 3D MAC
Y: 119 pi,
HFS Head to Thighs 3D MAC, (109, 119, 207)=1.24 SUV
Acc:
02/10/15
15:21:55 (SUV)
alpha(%) 100
29.80
11.80
0.00

LIFExPTMRDemo
LIFExPTMRDemo
M 54Y 66.0 Kg
LIFExPTMRDemo
HFS
Acc:
02/10/15
15:21:55

Actual Frame Duration: 240000 ms
Radiopharmaceutical Total Dose:258000 kBq
Radiopharmaceutical Start Time:11:48:00
Radiopharmaceutical Half Life:109.7 min
W:11.802 L:5.901

Mag: x0.4
2.7 thk/0.0 sp
zip: 414 x 192 pi
DFOV: 129.3 x 60.0 cm
vx:3.1x3.1x2.7mm=27.0mm3

Ax LIFEx - Ax

SIGNA PET/MR
Ex:31
Head to Thighs 3D MAC
Z: 207 pi,
HFS
Acc:
02/10/15
15:21:55

LIFExPTMRDemo
LIFExPTMRDemo
M 54Y 66.0 Kg
LIFExPTMRDemo
HFS
Acc:
02/10/15
15:21:55

Head to Thighs 3D MAC, (57, 158, 207)=0.00 SUV

alpha(%) 100
29.80
11.80
0.00

Actual Frame Duration: 240000 ms
Radiopharmaceutical Total Dose:258000 kBq
Radiopharmaceutical Start Time:11:48:00
Radiopharmaceutical Half Life:109.7 min
W:11.802 L:5.901

Mag: x2.7
2.7 thk/0.0 sp
zip: 192 x 192 pi
DFOV: 60.0 x 60.0 cm
vx:3.1x3.1x2.7mm=27.0mm3

Status

18.578cm3:Circle3D
SHIFT + LBM -> add
SHIFT + RBM -> delete
SHIFT + wheel-> tool size

Directory Preference Out

ROI

Applied to one ROI:

File Load Save Delete
Tools New Empty CheckTex
Measure Max Angle Dist
Draw 3D Circle3D 2D Pencil2D 3D Click
Threshold n 40% Nestle

Applied to all ROI:

Tools Hide Show Sort

C1 32.75 cm3 (3425vx ref)

Drag ROIs

Drop here

from files:
- ni
- ni.gz
- RTSTRUCT



Shift + wheel upward to extend the brush size.
Shift + wheel downward to reduce the brush size.



The screenshot displays a medical software interface with three main panels: Sagittal (Sag), Coronal (Cor), and Axial (Ax) views of a PET/MR scan. The central Axial view shows a large purple circular brush over a lesion. The right sidebar contains a 'Tools' panel with various icons for file operations, measurement, drawing, and thresholding. A 'Status' window at the bottom left shows the brush tool's current state: '659.010cm3:Circle3D'. The bottom right corner features a red callout box with a mouse icon and a 'Shift' key icon, indicating the keyboard shortcuts for brush size adjustment.

Status

659.010cm3:Circle3D
SHIFT + LBM -> add
SHIFT + RBM -> delete
SHIFT + wheel-> tool size

Directory Preference Out





Click on the arrow to open an information box.

The screenshot displays a medical imaging software interface with three main view windows: Sagittal (Sag), Axial (Ax), and Coronal (Cor). Each window shows a PET/MR scan with a pink ROI (Region of Interest) highlighted. The software includes various toolbars for navigation and analysis, and a detailed information panel on the right side.

Applied to one ROI:

- File: Load, Save, Delete
- Tools: New, Empty, CheckTex
- Measure: Max, Angle, Dist
- Draw: 3D, 2D, Click
- Threshold: n, 40%, Nestle

Applied to all ROI:

- Tools: Hide, Show, Sort

ROI Information Panel (C1):

- 2D alpha: 31%
- Head to Thighs 3D MAC: 113.6 cm³ (4197vx ref)
- max: 3.56 SUV
- mean: 0.91±0.48 SUV
- min: 0.10 SUV
- sum: 3859.94 SUV
- nbVx on ref: 4197 vx
- size: 113.6 cm³
- coordMax: [z216.00, y128.00, ...]

Status Bar:

- 73.394cm3:Circle3D
- SHIFT + LBM -> add
- SHIFT + RBM -> delete
- SHIFT + wheel-> tool size



To change the name of the region, click on C1.

The screenshot displays a medical imaging software interface with four main panels and a right-hand tool panel.

- Top Left Panel (Sag LIFEx - Sag):** Shows a sagittal PET/MR scan. A pink circular ROI is visible. Text includes: "SIGNA PET/MR", "Ex:31", "Head to Thighs 3D MAC", "X: 109 pi", "HFS", "Head to Thighs 3D MAC, (109, 119, 207)=1.24 SUV", "Acc: 02/10/15 15:21:55 (SUV)", "alpha(%) 100", "Activity (SUV) 29.80", "Actual Frame Duration: 240000 ms", "Mag: x0.3", "Radiopharmaceutical Total Dose: 258000 kBq", "Radiopharmaceutical Start Time: 11:48:00", "Radiopharmaceutical Half Life: 109.7 min", "DFOV: 129.3 x 60.0 cm", "W: 11.802 L: 5.901", "vx: 3.1x3.1x2.7mm=27.0mm3", "M 54Y 66.0 Kg", "LIFE:PTMRDermo", "M 54Y 66.0 Kg", "LIFE:PTMRDermo", "Z: 207 pi", "HFS", "Acc: 02/10/15 15:21:55".
- Top Right Panel (Ax LIFEx - Ax):** Shows an axial PET/MR scan. A pink circular ROI is visible. Text includes: "SIGNA PET/MR", "Ex:31", "Head to Thighs 3D MAC", "Z: 207 pi", "HFS", "Acc: 02/10/15 15:21:55", "Head to Thighs 3D MAC, (134, 111, 207)=0.21 SUV", "alpha(%) 100", "Activity (SUV) 29.80", "Actual Frame Duration: 240000 ms", "Mag: x2.7", "Radiopharmaceutical Total Dose: 258000 kBq", "Radiopharmaceutical Start Time: 11:48:00", "Radiopharmaceutical Half Life: 109.7 min", "DFOV: 60.0 x 60.0 cm", "W: 11.802 L: 5.901", "vx: 3.1x3.1x2.7mm=27.0mm3", "M 54Y 66.0 Kg", "LIFE:PTMRDermo", "M 54Y 66.0 Kg", "LIFE:PTMRDermo", "Z: 207 pi", "HFS", "Acc: 02/10/15 15:21:55".
- Bottom Left Panel (Cor LIFEx - Cor):** Shows a coronal PET/MR scan. A pink circular ROI is visible. Text includes: "SIGNA PET/MR", "Ex:31", "Head to Thighs 3D MAC", "Y: 119 pi", "HFS", "Head to Thighs 3D MAC, (109, 119, 207)=1.24 SUV", "Acc: 02/10/15 15:21:55 (SUV)", "alpha(%) 100", "Activity (SUV) 29.80", "Actual Frame Duration: 240000 ms", "Mag: x0.4", "Radiopharmaceutical Total Dose: 258000 kBq", "Radiopharmaceutical Start Time: 11:48:00", "Radiopharmaceutical Half Life: 109.7 min", "DFOV: 129.3 x 60.0 cm", "W: 11.802 L: 5.901", "vx: 3.1x3.1x2.7mm=27.0mm3", "M 54Y 66.0 Kg", "LIFE:PTMRDermo", "M 54Y 66.0 Kg", "LIFE:PTMRDermo", "Z: 207 pi", "HFS", "Acc: 02/10/15 15:21:55".
- Bottom Right Panel (Ax LIFEx - Ax):** Shows an axial PET/MR scan. A pink circular ROI is visible. Text includes: "SIGNA PET/MR", "Ex:31", "Head to Thighs 3D MAC", "Z: 207 pi", "HFS", "Acc: 02/10/15 15:21:55", "Head to Thighs 3D MAC, (134, 111, 207)=0.21 SUV", "alpha(%) 100", "Activity (SUV) 29.80", "Actual Frame Duration: 240000 ms", "Mag: x2.7", "Radiopharmaceutical Total Dose: 258000 kBq", "Radiopharmaceutical Start Time: 11:48:00", "Radiopharmaceutical Half Life: 109.7 min", "DFOV: 60.0 x 60.0 cm", "W: 11.802 L: 5.901", "vx: 3.1x3.1x2.7mm=27.0mm3", "M 54Y 66.0 Kg", "LIFE:PTMRDermo", "M 54Y 66.0 Kg", "LIFE:PTMRDermo", "Z: 207 pi", "HFS", "Acc: 02/10/15 15:21:55".
- Right Panel (ROI):** Contains toolbars for "Applied to one ROI" (File, Tools, Measure, Draw, Threshold) and "Applied to all ROI" (Tools). A red box highlights the "C1" label in the ROI list. Below the list is a "Drag ROIs" section with a "Drop here" icon.
- Status Bar (Bottom Left):** Shows "73.394cm3:Circle3D" and keyboard shortcuts: "SHIFT + LBM -> add", "SHIFT + RBM -> delete", "SHIFT + wheel -> tool size".



In red, the ROI volume in cm^3 and in voxel.

Sag LIFEx - Sag
SIGNA PET/MR
Ex:31
Head to Thighs 3D MAC
X: 109 pi,
HFS Head to Thighs 3D MAC, (109, 119, 207)=1.24 SUV
Acc: 02/10/15 15:21:55 (SUV)
alpha(%) 100
Activity (SUV) 29.80
Actual Frame Duration: 240000 ms
Radiopharmaceutical Total Dose:258000 kBq
Radiopharmaceutical Start Time:11:48:00
Radiopharmaceutical Half Life:109.7 min
W:11.802 L:5.901
Mag: x0.3
2.7 thk/0.0 sp
zip: 414 x 192 pi
DFOV: 129.3 x 60.0 cm
vx:3.1x3.1x2.7mm=27.0mm3

Cor LIFEx - Cor
SIGNA PET/MR
Ex:31
Head to Thighs 3D MAC
Y: 119 pi,
HFS Head to Thighs 3D MAC, (109, 119, 207)=1.24 SUV
Acc: 02/10/15 15:21:55 (SUV)
alpha(%) 100
Activity (SUV) 29.80
Actual Frame Duration: 240000 ms
Radiopharmaceutical Total Dose:258000 kBq
Radiopharmaceutical Start Time:11:48:00
Radiopharmaceutical Half Life:109.7 min
W:11.802 L:5.901
Mag: x0.4
2.7 thk/0.0 sp
zip: 414 x 192 pi
DFOV: 129.3 x 60.0 cm
vx:3.1x3.1x2.7mm=27.0mm3

Ax LIFEx - Ax
SIGNA PET/MR
Ex:31
Head to Thighs 3D MAC
Z: 207 pi,
HFS Head to Thighs 3D MAC, (134, 111, 207)=0.21 SUV
Acc: 02/10/15 15:21:55
alpha(%) 100
Activity (SUV) 29.80
Actual Frame Duration: 240000 ms
Radiopharmaceutical Total Dose:258000 kBq
Radiopharmaceutical Start Time:11:48:00
Radiopharmaceutical Half Life:109.7 min
W:11.802 L:5.901
Mag: x2.7
2.7 thk/0.0 sp
zip: 192 x 192 pi
DFOV: 60.0 x 60.0 cm
vx:3.1x3.1x2.7mm=27.0mm3

Status
73.394cm3:Circle3D
SHIFT + LBM -> add
SHIFT + RBM -> delete
SHIFT + wheel-> tool size

ROI Panel
Applied to one ROI:
File: Load, Save, Delete
Tools: New, Empty, CheckTex
Measure: Max, Angle, Dist
Draw: 3D, 2D, Click
Threshold: n, 40%, Nestle
Applied to all ROI:
Tools: Hide, Show, Sort
C1: 113.6 cm3 (4197vx ref)
2D alpha: 51 %
Head to Thighs 3D MAC:
max: 3.56 SUV
mean: 0.91±0.48 SUV
min: 0.10 SUV
sum: 3859.94 SUV
nbVx on ref: 4197 vx
size: 113.6 cm3
coordMax: [z216.00, y128.00,
del csv nii xls
Drag ROIs
Drop here



To save the ROI, click to .nii (Nifti format).

The screenshot displays a medical software interface with three main windows: Sagittal (Sag), Coronal (Cor), and Axial (Ax) views of a PET/CT scan. A pink ROI is visible in the axial view. The right-hand side features a 'ROI' tool panel with various options for saving and managing ROIs.

Applied to one ROI:

- File: Load, Save, Delete
- Tools: New, Empty, CheckTex
- Measure: Max, Angle, Dist
- Draw: 3D, 2D, Click
- Threshold: n, 40%, Nestle

Applied to all ROI:

- Tools: Hide, Show, Sort

ROI C1 (113.6 cm³ (4197vx.ref))

- 2D alpha: 31 %
- Head to Thighs 3D MAC: max: 3.56 SUV, mean: 0.91±0.48 SUV, min: 0.10 SUV, sum: 3859.94 SUV, nbVx on ref: 4197 vx, size: 113.6 cm³, center: [z216.00, y128.00, ...]

Save Options: del, cs, nii, is

Drag ROIs: Drop here

Status: 73.394cm³:Circle3D
SHIFT + LBM -> add
SHIFT + RBM -> delete
SHIFT + wheel-> tool size



To close an ROI, click on the X.

Sag LIFEx - Sag
SIGNA PET/MR
Ex:31
Head to Thighs 3D MAC
X: 109 pi,
HFS Head to Thighs 3D MAC, (109, 119, 207)=1.24 SUV
Acc: 02/10/15 15:21:55 (SUV)
alpha(%) 100
Activity (SUV) 29.80
Actual Frame Duration: 240000 ms
Radiopharmaceutical Total Dose:258000 kBq
Radiopharmaceutical Start Time:11:48:00
Radiopharmaceutical Half Life:109.7 min
W:11.802 L:5.901
Mag: x0.3
2.7 thk/0.0 sp
zip: 414 x 192 pi
DFOV: 129.3 x 60.0 cm
vx:3.1x3.1x2.7mm=27.0mm3

Ax LIFEx - Ax
SIGNA PET/MR
Ex:31
Head to Thighs 3D MAC
Z: 207 pi,
HFS Head to Thighs 3D MAC, (134, 111, 207)=0.21 SUV
Acc: 02/10/15 15:21:55
alpha(%) 100
Activity (SUV) 29.80
Actual Frame Duration: 240000 ms
Radiopharmaceutical Total Dose:258000 kBq
Radiopharmaceutical Start Time:11:48:00
Radiopharmaceutical Half Life:109.7 min
W:11.802 L:5.901
Mag: x2.7
2.7 thk/0.0 sp
zip: 192 x 192 pi
DFOV: 60.0 x 60.0 cm
vx:3.1x3.1x2.7mm=27.0mm3

Cor LIFEx - Cor
SIGNA PET/MR
Ex:31
Head to Thighs 3D MAC
Y: 119 pi,
HFS Head to Thighs 3D MAC, (109, 119, 207)=1.24 SUV
Acc: 02/10/15 15:21:55 (SUV)
alpha(%) 100
Activity (SUV) 29.80
Actual Frame Duration: 240000 ms
Radiopharmaceutical Total Dose:258000 kBq
Radiopharmaceutical Start Time:11:48:00
Radiopharmaceutical Half Life:109.7 min
W:11.802 L:5.901
Mag: x0.4
2.7 thk/0.0 sp
zip: 414 x 192 pi
DFOV: 129.3 x 60.0 cm
vx:3.1x3.1x2.7mm=27.0mm3

ROI Panel
Applied to one ROI:
File: Load, Save, Delete
Tools: New, Empty, CheckTex
Measure: Max, Angle, Dist
Draw: 3D, 2D, Click
Threshold: n, 40%, Nestle
Applied to all ROI:
Tools: Hide, Show, Sort
C1 113.6 cm3 (4197vx ref) [Close X]
2D alpha:31 %
Head to Thighs 3D MAC:
max: 3.56 SUV
mean: 0.91±0.48 SUV
min: 0.10 SUV
sum: 3859.94 SUV
nbVx on ref: 4197 vx
size: 113.6 cm3
coordMax: [z216.00, y128.00,
del csv nii xls
Drag ROIs
Drop here

Status
73.394cm3:Circle3D
SHIFT + LBM -> add
SHIFT + RBM -> delete
SHIFT + wheel-> tool size
Directory Preference Quit



To hide the ROI, click on the eye icon.

The screenshot displays a medical imaging software interface with three main view windows: Sagittal (Sag), Axial (Ax), and Coronal (Cor). Each window shows a PET/MR scan of a patient's head and neck region. The interface includes various toolbars and panels for image manipulation and ROI management.

ROI Panel (Right): This panel contains several sections for managing Regions of Interest (ROIs). The "Applied to one ROI:" section includes icons for File (Load, Save, Delete), Tools (New, Empty, CheckTex), Measure (Max, Angle, Dist), Draw (3D, 2D, 3D), and Threshold (n, 40%, Nestle). The "Applied to all ROI:" section includes a Tools icon with a red box around the eye icon, and icons for Hide, Show, and Sort. Below these is a list of ROIs, with one ROI highlighted in green and its details expanded:

- ROI Name: C1
- Volume: 113.6 cm³ (4197vx ref)
- Alpha: 0%
- Head to Thighs 3D MAC: max: 3.56 SUV, mean: 0.91±0.48 SUV, min: 0.10 SUV, sum: 3859.94 SUV, nbVx on ref: 4197 vx, size: 113.6 cm³, coordMax: [z216.00, y128.00]

At the bottom of the ROI panel, there is a "Drag ROIs" section with a "Drop here" instruction and a list of supported file formats: .nii, .nii.gz, and .RTSTRUCT.

Status Bar (Bottom Left): Shows the current ROI volume as 73.394cm³:Circle3D and provides keyboard shortcuts: SHIFT + LBM -> add, SHIFT + RBM -> delete, and SHIFT + wheel-> tool size.



To create a new ROI, click on New.

The screenshot displays a medical imaging software interface with three main panels: Sagittal (Sag), Coronal (Cor), and Axial (Ax) views of a PET/MR scan. A pink ROI is visible in the axial view. The right-hand side features a 'ROI' tool panel with various functions. The 'Applied to one ROI:' section includes a 'New' button highlighted with a red box. Below it are sections for 'Measure', 'Draw', 'Threshold', and 'Applied to all ROI:'. A status bar at the bottom left shows '73.394cm3:Circle3D' and keyboard shortcuts. A 'Drop here' area is at the bottom right of the ROI panel.

Applied to one ROI:

- File: + (New), nii (Save), Delete
- Tools: + (New), Empty, CheckTex
- Measure: Max, Angle, Dist
- Draw: Circle3D, 2D, 3D
- Threshold: n, 40%, Nestle

Applied to all ROI:

- Tools: Hide, Show, Sort

ROI List:

- C1: 113.6 cm3 (4197vx ref)
Head to Thighs 3D MAC:
max: 3.56 SUV
mean: 0.91±0.48 SUV
min: 0.10 SUV
sum: 3859.94 SUV
nbVx on ref: 4197 vx
size: 113.6 cm3
coordMax: [z216.00, y128.00]
- C2: 0.00000 cm3 (0vx ref)

Status:

73.394cm3:Circle3D
SHIFT + LBM -> add
SHIFT + RBM -> delete
SHIFT + wheel -> tool size

Directory Preference | Quit



To change the ROI color, click between the eye icon and the ROI name (on the colour rectangle) and select the new ROI color.

The screenshot displays a medical software interface with three main panels: Sagittal (Sag), Coronal (Cor), and Axial (Ax) views of a PET/CT scan. A central dialog box titled "ROI color chooser" is open, showing a color palette and a preview area with several colored squares. The interface includes various toolbars and a status bar at the bottom left. The status bar shows "73.394cm3:Circle3D" and keyboard shortcuts: "SHIFT + LBM -> add", "SHIFT + RBM -> delete", and "SHIFT + wheel-> tool size". The right side of the interface features a "ROI" panel with sections for "Applied to one ROI:" and "Applied to all ROI:", each containing tool icons and a list of ROIs. The "Applied to one ROI:" section lists "C1" (113.6 cm3) and "C2" (0.00000 cm3). The "Applied to all ROI:" section shows a "Drop ROIs" instruction with a diagram of a hand dropping a file icon into a box labeled "Drop here".



To move an ROI, click on the Move icon (it may be in the hidden menu).
Shift + left click to change the ROI position.

The screenshot displays the software interface with three main windows: 'Sag LIFEx - Sag', 'Ax LIFEx - Ax', and 'ROI'. The 'Sag' and 'Ax' windows show PET/MR scans with a pink ROI on a lesion. The 'ROI' window shows a toolbar with a 'Move' icon highlighted in a red box. Below the toolbar, there are sections for 'Applied to one ROI' and 'Applied to all ROI'. A status bar at the bottom left indicates 'move of ROI C1 with SHIFT + LB mouse'. A red box at the bottom center contains a 'Shift' key icon and a mouse icon.

Applied to one ROI:

- File: Load, Save, Delete
- Tools: New, FlipRL, Move, KeepOne, Erode, Dispose, FlipIS, Copy, Split, Dilate, Undo, FlipAP, Fill3D, CheckTex, Close, Empty, Union

Applied to all ROI:

- Tools: Hide, Show, Sort

Status:

move of ROI
C1
with SHIFT + LB mouse

Directory Preference Out



Be careful to un-select the Move icon at the end of the operation.

The screenshot displays a medical imaging software interface with three main panels: Sagittal (Sag), Axial (Ax), and Coronal (Cor) views of a PET/CT scan. A pink ROI is visible in the Axial view. The ROI tool panel on the right contains various icons for file management, tool selection, and measurement. The 'Move' icon is highlighted with a red box. Below the tool panel, a diagram shows a 'Drop ROIs' icon and a list of file types: '- nii', '- nii.gz', and '- RTSTRUCT'. The interface also shows patient information, acquisition parameters, and activity levels.

Sag LIFEx - Sag
SIGNAL PET/MR
Ex:31
Head to Thighs 3D MAC
X: 105 pi,
HFS Head to Thighs 3D MAC, (105, 115, 207)=0.88 SUV
Acc:
02/10/15
15:21:55 (SUV)
alpha(%)
29.80
11.80
0.00
Actual Frame Duration: 240000 ms
Radiopharmaceutical Total Dose:258000 kBq
Radiopharmaceutical Start Time:11:48:00
Radiopharmaceutical Half Life:109.7 min
W:11.802 L:5.901
Mag: x0.3
2.7 thk/0.0 sp
zip: 414 x 192 pi
DFOV: 129.3 x 60.0 cm
vx:3.1x3.1x2.7mm=27.0mm3

Ax LIFEx - Ax
SIGNAL PET/MR
Ex:31
Head to Thighs 3D MAC
Z: 207 pi,
HFS
Acc:
02/10/15
15:21:55
Head to Thighs 3D MAC, (75, 166, 207)=0.00 SUV
alpha(%)
29.80
11.80
0.00
Actual Frame Duration: 240000 ms
Radiopharmaceutical Total Dose:258000 kBq
Radiopharmaceutical Start Time:11:48:00
Radiopharmaceutical Half Life:109.7 min
W:11.802 L:5.901
Mag: x2.7
2.7 thk/0.0 sp
zip: 192 x 192 pi
DFOV: 60.0 x 60.0 cm
vx:3.1x3.1x2.7mm=27.0mm3

Cor LIFEx - Cor
SIGNAL PET/MR
Ex:31
Head to Thighs 3D MAC
Y: 115 pi,
HFS Head to Thighs 3D MAC, (105, 115, 207)=0.88 SUV
Acc:
02/10/15
15:21:55 (SUV)
alpha(%)
29.80
11.80
0.00
Actual Frame Duration: 240000 ms
Radiopharmaceutical Total Dose:258000 kBq
Radiopharmaceutical Start Time:11:48:00
Radiopharmaceutical Half Life:109.7 min
W:11.802 L:5.901
Mag: x0.4
2.7 thk/0.0 sp
zip: 414 x 192 pi
DFOV: 129.3 x 60.0 cm
vx:3.1x3.1x2.7mm=27.0mm3

ROI Panel:
Applied to one ROI:
File: +, nii, Save, Delete
Tool: Move (highlighted), Empty, CheckTex
Measure: Max, Angle, Dist
Draw: 3D, 2D, 3D, Click
Threshold: n, 40%, Nestle
Applied to all ROI:
Tools: Hide, Show, Sort
Drop ROIs: Drop here, from files: - nii, - nii.gz, - RTSTRUCT



In PET, click on the Peak icon (it may be in the hidden menu) to calculate the SUVpeak and automatically get the corresponding VOI (here in yellow).

The screenshot displays the PET software interface with three main view windows: Sagittal (Sag), Axial (Ax), and Coronal (Cor). Each window shows a PET scan of a human torso with a purple peak highlighted in the abdominal region. The peak is annotated with a yellow VOI. The software interface includes various toolbars and a right-hand panel with a 'Tools' menu. A red box highlights the 'Peak' icon in the 'Tools' menu. Below the 'Tools' menu, a 'Peak' analysis window is open, displaying the following data:

Parameter	Value
2D alpha	31%
Head to Thighs 3D MAC	
max	17.57 SUV
mean	14.98 ± 1.41 SUV
min	12.35 SUV
sum	554.54 SUV
nbVx on ref.	37 vx
size	1.002 cm3
coordMax	[z208.00, y109.00]

At the bottom of the interface, there is a 'Drop here' area for file import.



Click on the Max icon to move the 3D pointer on the voxel containing the maximum ROI value.

The screenshot displays a medical imaging software interface with three main view windows and a right-hand tool panel.

- Sagittal View (Sag):** Shows a full-body PET/MR scan. A purple ROI is visible in the abdominal region. The activity is 29.80 SUV. Technical details include: Actual Frame Duration: 240000 ms, Mag: x0.3, Radionuclide Total Dose: 258000 kBq, Radiopharmaceutical Start Time: 11:48:00, Radiopharmaceutical Half Life: 109.7 min, DFOV: 129.3 x 60.0 cm, W: 11.802 L: 5.901 vx: 3.1x3.1x2.7mm=27.0mm3.
- Axial View (Ax):** Shows a cross-section of the abdomen. The purple ROI is centered. The activity is 29.80 SUV. Technical details include: Actual Frame Duration: 240000 ms, Mag: x2.7, Radionuclide Total Dose: 258000 kBq, Radiopharmaceutical Start Time: 11:48:00, Radiopharmaceutical Half Life: 109.7 min, DFOV: 60.0 x 60.0 cm, W: 11.802 L: 5.901 vx: 3.1x3.1x2.7mm=27.0mm3.
- Coronal View (Cor):** Shows a front-view PET/MR scan. The purple ROI is visible. The activity is 29.80 SUV. Technical details include: Actual Frame Duration: 240000 ms, Mag: x0.4, Radionuclide Total Dose: 258000 kBq, Radiopharmaceutical Start Time: 11:48:00, Radiopharmaceutical Half Life: 109.7 min, DFOV: 129.3 x 60.0 cm, W: 11.802 L: 5.901 vx: 3.1x3.1x2.7mm=27.0mm3.

The right-hand panel is titled "ROI" and contains several tool sections:

- Applied to one ROI:** Includes File (Load, Save, Delete), Tools (Empty, CheckTex), Measur (Max, Angle, Dist), Draw (3D, 2D, Pencil2D, Click), and Threshold (Peak1cc, 40%, Nestle).
- Applied to all ROI:** Includes Tools (Hide, Show, Sort).
- ROI Information Panel:** Shows details for ROI "C1" (118.4 cm3 (4372vx ref)).
 - 2D alpha: 31%
 - Head to Thighs 3D MAC: max: 17.57 SUV, mean: 5.79±3.49 SUV, min: 0.40 SUV, sum: 25327.77 SUV
 - nbVx on ref: 4372
 - ROI Informations: size: 118.4 cm3, coordMax: [z222.00, y121.00, ...]
- Drag ROIs:** A section for importing ROIs from files (- nii, - nii.gz, - RTSTRUCT) with a "Drop here" instruction.



Click on the Copy icon to create a copy (in green) of the selected ROI. The two ROI initially overlap, you can use the Move option to separate them.

The screenshot displays a medical imaging software interface with several panels and a central image area. The interface is divided into four main quadrants, each showing a different view of a patient's body (Sagittal, Axial, Coronal, and another Sagittal view). Each quadrant includes technical data such as 'SIGNA PET/MR', 'LIFE:PTMRDemo', 'Ex:31', 'Head to Thighs 3D MAC', 'M 54Y 66.0 Kg', 'LIFE:PTMRDemo', 'Z: 206 pi', 'HFS', 'Acc:', '02/10/15', '15:21:55 (SUV)', and 'alpha(%) 100'. Technical parameters like 'Actual Frame Duration: 240000 ms', 'Radiopharmaceutical Total Dose: 258000 kBq', 'Radiopharmaceutical Start Time: 11:48:00', 'Radiopharmaceutical Half Life: 109.7 min', 'DFOV: 129.3 x 60.0 cm', and 'W: 11.802 L: 5.901' are also present. The central image area shows a PET scan with a purple ROI and a green ROI. A toolbar on the right side of the interface contains various tools, with the 'Copy' icon highlighted in a red box. Below the toolbar, there are two panels: 'Applied to one ROI:' and 'Applied to all ROI:'. The 'Applied to one ROI:' panel includes options like 'File', 'Tools', 'New', 'Dispose', 'Undo', 'Empty', 'R-L FlipRL', 'I+S FlipIS', 'A+P FlipAP', 'Move', 'KeepOne', 'Split', 'CheckTex', 'Erode', 'Dilate', 'Close', 'Union', 'PeakLoc', '40%', and 'Nestle'. The 'Applied to all ROI:' panel includes 'Tools', 'Hide', 'Show', and 'Sort'. A red box highlights a new ROI entry 'C1_Copy1' in the 'Applied to all ROI:' panel. At the bottom right, there is a 'Drag ROIs' section with a 'Drop here' area and a list of file types: '- nii', '- nii.gz', and '- RTSTRUCT'.



Click on the Union icon to create a new ROI defined as the union of the active ROIs.

The screenshot displays a medical imaging software interface with three main windows and a floating ROI tool panel.

- Sag LIFEx - Sag:** Shows a sagittal PET/CT scan. The PET image has a purple ROI. Metadata includes: SIGNA PET/MR, Ex:31, Head to Thighs 3D MAC, X: 73 pi, HFS, Head to Thighs 3D MAC, (73, 106, 205)=13.85 SUV, Acc: 02/10/15 15:21:55 (SUV), alpha(%) 100.
- Cor LIFEx - Cor:** Shows a coronal PET/CT scan. The PET image has a purple ROI. Metadata includes: SIGNA PET/MR, Ex:31, Head to Thighs 3D MAC, Y: 109 pi, HFS, Head to Thighs 3D MAC, (73, 106, 205)=13.85 SUV, Acc: 02/10/15 15:21:55 (SUV), alpha(%) 100.
- Ax LIFEx - Ax:** Shows an axial PET/CT scan. The PET image has a purple ROI. Metadata includes: SIGNA PET/MR, Ex:31, Head to Thighs 3D MAC, Z: 206 pi, HFS, Head to Thighs 3D MAC, (133, 126, 206)=0.35 SUV, Acc: 02/10/15 15:21:55.

The **ROI** tool panel is open, showing various operations. The **Union** icon is highlighted with a red box. Below the tools, the **Applied to all ROI:** list shows a new **Union** ROI with a value of 185.9 cm3 (6866vx ref), also highlighted with a red box. A **Drag ROIs** section at the bottom shows a 'Drop here' area and a list of files to be imported.



Click on the Flip icon to create a new mirror ROI based on the selected ROI.

The screenshot displays a medical imaging software interface with four main panels and a right-hand tool panel. The top-left panel shows a sagittal PET/CT scan with a purple ROI on the head. The top-right panel shows an axial PET/CT scan with two purple ROIs. The bottom-left panel shows a coronal PET/CT scan with two purple ROIs. The bottom-right panel shows a zoomed-in view of the axial scan with two purple ROIs. The right-hand panel contains various tools for ROI manipulation, with the 'Flip' tools (FlipRL, FlipIS, FlipAP) highlighted in a red box. Below the tools, there are sections for 'Applied to one ROI' and 'Applied to all ROI'. The 'Applied to all ROI' section shows a list of ROIs, with 'C1_LR_Copy1' highlighted in a red box. A 'Drag ROIs' section at the bottom right shows a diagram of a ROI being dragged to a 'Drop here' area.

Applied to one ROI:

- File: Load, Save, Delete
- Tools: R-L, R-L, Move, KeepOne, Erode, I+S, FlipIS, Copy, Split, Dilate, A+P, FlipAP, Fill3D, CheckTex, Close, Union

Applied to all ROI:

- Tools: Hide, Show, Sort
- ROI List: C1, C1_LR_Copy1 (118.4 cm³ (4372vx ref))

Drag ROIs:

- Drop here
- from files: - .ni, - .ni.gz, - RTSTRUCT



To erase an ROI, click on the Empty icon.

The screenshot displays a medical imaging software interface with four main panels:

- Top Left (Sag):** Sagittal PET/CT scan. Text: "SAG LIFEx - Sag", "SIGNA PET/MR", "Ex:31", "Head to Thighs 3D MAC", "X: 73 pi", "HFS", "Head to Thighs 3D MAC, (73, 106, 205)=13.85 SUV", "Acc: 02/10/15 15:21:55 (SUV)", "alpha(%) 100", "Activity (SUV) 29.80".
- Top Right (Ax):** Axial PET/CT scan. Text: "AX LIFEx - Ax", "SIGNA PET/MR", "Ex:31", "Head to Thighs 3D MAC", "Z: 206 pi", "HFS", "Head to Thighs 3D MAC, (135, 102, 206)=0.21 SUV", "Acc: 02/10/15 15:21:55".
- Bottom Left (Cor):** Coronal PET/CT scan. Text: "COR LIFEx - Cor", "SIGNA PET/MR", "Ex:31", "Head to Thighs 3D MAC", "Y: 109 pi", "HFS", "Head to Thighs 3D MAC, (73, 106, 205)=13.85 SUV", "Acc: 02/10/15 15:21:55 (SUV)", "alpha(%) 100", "Activity (SUV) 29.80".
- Bottom Right:** A zoomed-in view of a purple ROI on the axial scan. Text: "Actual Frame Duration: 240000 ms", "Mag: x0.3", "Radionuclide Total Dose:258000 kBq", "2.7 thk/0.0 sp", "Radiopharmaceutical Start Time:11:48:00", "zip: 414 x 192 pi", "Radionuclide Half Life:109.7 min", "DFOV: 129.3 x 60.0 cm", "W:11.802 L:5.901", "vx:3.1x3.1x2.7mm=27.0mm3".

On the right side, there is an "ROI" tool panel with the following sections:

- Applied to one ROI:** File (Load, Save, Delete), Tools (New, Dispose, Undo, Empty, FlipRL, FlipIS, FlipAP, Move, Copy, Fill3D, Union, Erode, Dilate, Split, CheckTex, Close).
- Applied to all ROI:** Tools (Hide, Show, Sort).
- ROI List:** A list showing "C1" with a volume of "118.4 cm3 (4372vx ref)".
- Drag ROIs:** A diagram showing a drag-and-drop action from a file icon to a "Drop here" area. Source files listed: ".nii", ".nii.gz", ".RTSTRUCT".

The "Empty" icon in the "Applied to one ROI" section is highlighted with a red box.



To display or hide all ROI, click on the eye icon.

The screenshot displays a medical imaging software interface with three main view windows and a right-hand panel for ROI management.

- Sagittal View (LIFEx - Sag):** Shows a PET/MR scan of a patient. Metadata includes: SIGNA PET/MR, Ex:31, Head to Thighs 3D MAC, HFS, Acc: 02/10/15 15:21:55, M 54Y 66.0 Kg, Z: 206 pi, Head to Thighs 3D MAC, (73, 106, 205)=13.85 SUV. Technical details: Actual Frame Duration: 240000 ms, Radionuclide Total Dose: 258000 kBq, Radiopharmaceutical Start Time: 11:48:00, Radionuclide Half Life: 109.7 min, DFOV: 129.3 x 60.0 cm, W: 11.802 L: 5.901. Magnification: x0.3, 2.7 thk/0.0 sp. A vertical scale on the left shows activity levels at 29.80, 11.80, and 0.00. An alpha(%) slider is set to 100.
- Axial View (LIFEx - Ax):** Shows a PET/MR scan. Metadata includes: SIGNA PET/MR, Ex:31, Head to Thighs 3D MAC, HFS, Acc: 02/10/15 15:21:55, M 54Y 66.0 Kg, Z: 206 pi, Head to Thighs 3D MAC, (69, 166, 206)=0.00 SUV. Technical details: Actual Frame Duration: 240000 ms, Radionuclide Total Dose: 258000 kBq, Radiopharmaceutical Start Time: 11:48:00, Radionuclide Half Life: 109.7 min, DFOV: 60.0 x 60.0 cm, W: 11.802 L: 5.901. Magnification: x2.7, 2.7 thk/0.0 sp. A vertical scale on the left shows activity levels at 29.80, 11.80, and 0.00. An alpha(%) slider is set to 100.
- Coronal View (LIFEx - Cor):** Shows a PET/MR scan. Metadata includes: SIGNA PET/MR, Ex:31, Head to Thighs 3D MAC, HFS, Acc: 02/10/15 15:21:55, M 54Y 66.0 Kg, Z: 206 pi, Head to Thighs 3D MAC, (73, 106, 205)=13.85 SUV. Technical details: Actual Frame Duration: 240000 ms, Radionuclide Total Dose: 258000 kBq, Radiopharmaceutical Start Time: 11:48:00, Radionuclide Half Life: 109.7 min, DFOV: 129.3 x 60.0 cm, W: 11.802 L: 5.901. Magnification: x0.4, 2.7 thk/0.0 sp. A vertical scale on the left shows activity levels at 29.80, 11.80, and 0.00. An alpha(%) slider is set to 100.
- ROI Panel:** Titled "ROI", it contains a toolbar with icons for File (Load, Save, Delete), Tools (Move, Empty, CheckTex), Measure (Max, Angle, Dist), Draw (Circle3D, Pencil2D, Click), and Threshold (PeakLoc, 40%, Nestle). A red box highlights the "Tools" section, specifically the "Hide" and "Show" icons. Below the toolbar, a list of ROIs is shown, with one ROI selected: "C1" with a volume of 118.4 cm³ (4372vx ref). A "Drop here" instruction is visible at the bottom of the panel.



Based on a ROI, here C1 (in orange), click on 40% icon to create a new ROI using a threshold equal to 40% of the maximum intensity in C1 (in green).

(same principle with 70% icon)

The screenshot displays a medical imaging software interface with several panels:

- Left Panel (Sagittal View):** Shows a PET/MR scan of a patient. A red ROI (C1) is visible on the right side of the torso. The activity scale on the left ranges from 0.00 to 29.80. Technical details include: Actual Frame Duration: 240000 ms, Mag: x0.3, Radionuclide Total Dose: 258000 kBq, Radiopharmaceutical Start Time: 11:48:00, and Radiopharmaceutical Half Life: 109.7 min.
- Right Panel (Axial View):** Shows a corresponding axial PET/MR scan. A red ROI (C1) is visible in the center. The activity scale on the right ranges from 0.00 to 29.80. Technical details include: Actual Frame Duration: 240000 ms, Mag: x0.4, Radionuclide Total Dose: 258000 kBq, Radiopharmaceutical Start Time: 11:48:00, and Radiopharmaceutical Half Life: 109.7 min.
- ROI Panel (Right):** A sidebar containing various tools and options. The 'Threshold' section is highlighted with a red box, showing a '40%' icon selected. Below it, a window titled 'C1_Rel_thres40[0]' is open, displaying the following statistics:
 - Head to Thighs 3D MAC: max: 17.57 SUV, mean: 9.65±1.87 SUV, min: 7.03 SUV, sum: 15985.79 SUV, nbVx on ref: 1656 vx, size: 44.84 cm3, coordMax: [z2219.00, y120.00]



Based on a ROI, here C1, click on n% icon to create a new ROI using a threshold set by the user (if you set it to 40%, you get the same as with the 40% icon).

The screenshot displays a medical imaging software interface with three main windows and a right-hand panel.

- Sag LIFEx - Sag:** Shows a sagittal PET/MR scan. The ROI is labeled "Head to Thighs 3D MAC, (73, 106, 212)=11.63 SUV". The activity scale ranges from 0.00 to 29.80. Technical details include: Actual Frame Duration: 240000 ms, Radionuclide Total Dose: 258000 kBq, Radiopharmaceutical Start Time: 11:48:00, and Radiopharmaceutical Half Life: 109.7 min.
- Cor LIFEx - Cor:** Shows a coronal PET/MR scan. The ROI is labeled "Head to Thighs 3D MAC, (73, 106, 212)=11.63 SUV". The activity scale ranges from 0.00 to 29.80. Technical details are identical to the sagittal view.
- AX LIFEx - Ax:** Shows an axial PET/MR scan. The ROI is labeled "Head to Thighs 3D MAC, (133, 84, 212)=0.31 SUV". The activity scale ranges from 0.00 to 29.80. Technical details are identical to the other views.
- ROI Panel:** A vertical panel on the right titled "Applied to one ROI:". It contains several tool categories: File (Load, Save, Delete), Tools (Move, Empty, CheckTex), Measure (Max, Angle, Dist), Draw (3D, 2D, Circle2D, Click), and Threshold (n, Peak.Scc, ROI Win, Peak.Lcc, Nestle). The "n%" icon is highlighted with a red box. Below the panel, a "Drop ROIs" section shows a "Drop here" area and a list of file types: ".nii", ".nii.gz", and ".RTSTRUCT".



Click on n icon to activate an absolute or relative threshold based on the selected ROI or to create a new ROI.

The screenshot displays a medical imaging software interface with three main panels: Sagittal (Sag), Axial (Ax), and Coronal (Cor) views of a PET/MR scan. The central panel shows a zoomed-in view of a lesion with a red ROI. The right panel is the 'ROI' tool menu, which includes options for file management, tools, measurement, drawing, and thresholding. The 'Threshold' section is highlighted with a red box, and the 'n' icon is selected. Below the 'Threshold' section, there is a 'Drop ROIs' section with a 'Drop here' label and a list of file types: .nii, .nii.gz, and .RTSTRUCT.

Sag LIFEx - Sag
SIGNAL PET/MR
Ex:31
Head to Thighs 3D MAC
X: 73 pi, Head to Thighs 3D MAC, (73, 106, 212)=11.63 SUV
HFS
Acc: 02/10/15 15:21:55 (SUV)
alpha(%) 100
Activity (SUV) 29.80
Actual Frame Duration: 240000 ms Mag: x0.3
Radionuclide Total Dose: 258000 kBq 2.7 thk/0.0 sp
Radiopharmaceutical Start Time: 11:48:00 zip: 414 x 192 pi
Radionuclide Half Life: 109.7 min DFOV: 129.3 x 60.0 cm
W: 11.802 L: 5.901 vx: 3.1x3.1x2.7mm=27.0mm3

Cor LIFEx - Cor
SIGNAL PET/MR
Ex:31
Head to Thighs 3D MAC
Y: 109 pi, Head to Thighs 3D MAC, (73, 106, 212)=11.63 SUV
HFS
Acc: 02/10/15 15:21:55 (SUV)
alpha(%) 100
Activity (SUV) 29.80
Actual Frame Duration: 240000 ms Mag: x0.4
Radionuclide Total Dose: 258000 kBq 2.7 thk/0.0 sp
Radiopharmaceutical Start Time: 11:48:00 zip: 414 x 192 pi
Radionuclide Half Life: 109.7 min DFOV: 129.3 x 60.0 cm
W: 11.802 L: 5.901 vx: 3.1x3.1x2.7mm=27.0mm3

ROI
Applied to one ROI:
File Load Save Delete
Tools Move Empty CheckTex
Measure Max Angle Dist
Draw 3D 2D 3D
Threshold n Peak.Scc ROI Win
Applied n% Peak.Lcc Nestle
Tool 40% 70%

Drop ROIs
Drop here
from files:
- .nii
- .nii.gz
- .RTSTRUCT



In PET, based on a ROI, here C1, click on Nestle to create a new ROI using the adaptive thresholding Nestle method (see Nestle et al. *Eur J Nucl Med Mol Imaging*. 2007;34:453-462).

The screenshot displays a PET software interface with three main windows: 'Sag LIFEx - Sag', 'Ax LIFEx - Ax', and 'Cor LIFEx - Cor'. Each window shows a PET scan of a human torso with a red ROI on the abdomen. Technical parameters for each view include: 'Ex:31', 'Head to Thighs 3D MAC', 'HFS', 'Acc: 02/10/15 15:21:55', 'alpha(%) 100', 'Actual Frame Duration: 240000 ms', 'Mag: x0.3', 'Radionuclide Total Dose: 258000 kBq', 'Radiochemical Start Time: 11:48:00', 'Radiochemical Half Life: 109.7 min', 'DFOV: 129.3 x 60.0 cm', and 'W: 11.802 L: 5.901'. A central dialog box titled 'Adaptive threshold (Nestle)' is open, showing a 'beta parameter' of 0.3 and a 'Next' button. The right-hand toolbar contains various tools, with the 'Nestle' button (a green circle with a white hand icon) highlighted in a red box. Below the toolbar, an 'ROI' panel shows 'C1' with a value of '206.6 cm3 (10955vx ref)'. At the bottom right, there is a 'Drop ROIs' section with a 'Drop here' label and a list of file types: '- nii', '- nii.gz', and '- RTSTRUCT'.



Click on the Close icon to close an ROI in 3D using a dilation followed by an erosion of 10 voxels.

The screenshot displays a medical imaging software interface with three main windows and a tool panel:

- Sag LIFEx - Sag:** Shows a sagittal PET/MR scan with a blue ROI. Parameters include: Ex:31, Head to Thighs 3D MAC, X: 73 pi, HFS, Acc: 02/10/15, 15:21:55 (SUV), alpha(%) 100. Technical details: Actual Frame Duration: 240000 ms, Radionuclide Total Dose: 258000 kBq, Radiopharmaceutical Start Time: 11:48:00, etc.
- Cor LIFEx - Cor:** Shows a coronal PET/MR scan with a blue ROI. Parameters include: Ex:31, Head to Thighs 3D MAC, Y: 109 pi, HFS, Acc: 02/10/15, 15:21:55 (SUV), alpha(%) 100. Technical details: Actual Frame Duration: 240000 ms, Radionuclide Total Dose: 258000 kBq, Radiopharmaceutical Start Time: 11:48:00, etc.
- Ax LIFEx - Ax:** Shows an axial PET/MR scan with a blue ROI. Parameters include: Ex:31, Head to Thighs 3D MAC, Z: 212 pi, HFS, Acc: 02/10/15, 15:21:55 (SUV), alpha(%) 100. Technical details: Actual Frame Duration: 240000 ms, Radionuclide Total Dose: 258000 kBq, Radiopharmaceutical Start Time: 11:48:00, etc.
- ROI Panel:** A floating window titled "ROI" containing:
 - Applied to one ROI:** File (Load, Save, Delete), Tools (New, Dispose, Undo, Empty, R-L FlipRL, I-S FlipIS, A-P FlipAP, Move, Copy, Fil3D, Union, KeepOne, Split, Check, Erode, Dilate, Close).
 - Applied to all ROI:** Tools (Hide, Show, Sort).
 - Drop ROIs:** A diagram showing a ROI being moved to a "Drop here" area, with a list of supported file formats: .ni, .nii.gz, and .RTSTRUCT.



In the case of an ROI that is not connex (ie includes several clusters), click on the KeepOne icon to keep only the biggest connex component (=biggest cluster)...

The screenshot displays the software interface with four main panels: Sagittal (Sag), Axial (Ax), Coronal (Cor), and a central ROI tool panel.

- Sag Panel:** Shows a sagittal PET/CT scan. The ROI is labeled "Head to Thighs 3D MAC" with a value of 11.63 SUV. Technical details include: Ex:31, M 54Y 66.0 Kg, Z: 212 pi, HFS, Acc: 02/10/15 15:21:55, alpha(%) 100, Activity (SUV) 29.80. Technical parameters: Actual Frame Duration: 240000 ms, Radionuclide Total Dose: 258000 kBq, Radiopharmaceutical Start Time: 11:48:00, Radionuclide Half Life: 109.7 min, W: 11.802 L: 5.901, vx: 3.1x3.1x2.7mm=27.0mm3.
- Ax Panel:** Shows an axial PET/CT scan. The ROI is labeled "Head to Thighs 3D MAC" with a value of 0.21 SUV. Technical details include: Ex:31, M 54Y 66.0 Kg, Z: 212 pi, HFS, Acc: 02/10/15 15:21:55, alpha(%) 100, Activity (SUV) 29.80. Technical parameters: Actual Frame Duration: 240000 ms, Radionuclide Total Dose: 258000 kBq, Radiopharmaceutical Start Time: 11:48:00, Radionuclide Half Life: 109.7 min, W: 11.802 L: 5.901, vx: 3.1x3.1x2.7mm=27.0mm3.
- Cor Panel:** Shows a coronal PET/CT scan. The ROI is labeled "Head to Thighs 3D MAC" with a value of 0.44 SUV. Technical details include: Ex:31, M 54Y 66.0 Kg, Z: 212 pi, HFS, Acc: 02/10/15 15:21:55, alpha(%) 100, Activity (SUV) 29.80. Technical parameters: Actual Frame Duration: 240000 ms, Radionuclide Total Dose: 258000 kBq, Radiopharmaceutical Start Time: 11:48:00, Radionuclide Half Life: 109.7 min, W: 11.802 L: 5.901, vx: 3.1x3.1x2.7mm=27.0mm3.
- ROI Panel:** Shows the ROI tool interface. The "Applied to one ROI:" section includes icons for File (Load, Save, Delete), Tools (New, Dispose, Undo, Empty, R-L FlipRL, I-S FlipIS, A-P FlipAP, Move, Copy, Flip3D, Union, KeepOne, Erode, Dilate, CheckTex, Close), and "Applied to all ROI:" (Hide, Show, Sort). A diagram at the bottom shows "Drag ROIs" and "Drop here" with a plus sign icon.



... or on the Split icon to split ROI into multiple connex ROIs.

The screenshot displays a medical imaging software interface with three main panels and a floating ROI tool panel.

- Top Left Panel (Sag):** Shows a sagittal PET/CT scan. Text includes: "SAG LIFEx - Sag", "SIGNA PET/MR", "Ex:31", "Head to Thighs 3D MAC", "X: 73 pi", "HFS", "Head to Thighs 3D MAC, (73, 106, 212)=11.63 SUV", "Acc: 02/10/15 15:21:55 (SUV)", "alpha(%) 100", "Activity (SUV) 29.80", "Actual Frame Duration: 240000 ms", "Mag: x0.3", "Radiionuclide Total Dose:258000 kBq", "Radiopharmaceutical Start Time:11:48:00", "Radiionuclide Half Life:109.7 min", "W:11.802 L:5.901".
- Top Right Panel (Ax):** Shows an axial PET/CT scan. Text includes: "Ax LIFEx - Ax", "SIGNA PET/MR", "Ex:31", "Head to Thighs 3D MAC", "Z: 212 pi", "HFS", "Head to Thighs 3D MAC, (134, 97, 212)=0.21 SUV", "Acc: 02/10/15 15:21:55".
- Bottom Left Panel (Cor):** Shows a coronal PET/CT scan. Text includes: "Cor LIFEx - Cor", "SIGNA PET/MR", "Ex:31", "Head to Thighs 3D MAC", "Y: 109 pi", "HFS", "Head to Thighs 3D MAC, (73, 106, 212)=0.44 SUV", "Acc: 02/10/15 15:21:55 (SUV)", "alpha(%) 100", "Activity (SUV) 29.80", "Actual Frame Duration: 240000 ms", "Mag: x0.4", "Radiionuclide Total Dose:258000 kBq", "Radiopharmaceutical Start Time:11:48:00", "Radiionuclide Half Life:109.7 min", "W:11.802 L:5.901".
- Bottom Right Panel (Ax):** Shows an axial PET/CT scan. Text includes: "Actual Frame Duration: 240000 ms", "Mag: x2.7", "Radiionuclide Total Dose:258000 kBq", "Radiopharmaceutical Start Time:11:48:00", "Radiionuclide Half Life:109.7 min", "W:11.802 L:5.901", "Actual Frame Duration: 240000 ms", "Mag: x2.7", "Radiionuclide Total Dose:258000 kBq", "Radiopharmaceutical Start Time:11:48:00", "Radiionuclide Half Life:109.7 min", "DFOV: 60.0 x 60.0 cm", "vx:3.1x3.1x2.7mm=27.0mm3".

The floating ROI tool panel on the right contains the following elements:

- Applied to one ROI:** File (Load, Save, Delete), Tools (New, Dispose, Undo, Empty, R-L FlipRL, I-S FlipIS, A-P FlipAP, Move, Copy, Paste, KeepOne, Split, Dilate, Erode, Dilate, Close, Union).
- Applied to all ROI:** Tools (Hide, Show, Sort).
- ROI List:** C1 310.4 cm3 (11463vx ref).
- Drop ROIs:** A diagram showing a ROI being moved to a plus sign icon, with text "Drop here" and "from files: - nii, - nii.gz, - RTSTRUCT".



To load an ROI, click on Load ROI icon and select the file...

The screenshot displays the software interface with three main windows: 'Sag LIFEx - Sag', 'Ax LIFEx - Ax', and 'Cor LIFEx - Cor'. Each window shows a PET/CT scan with a blue ROI on a tumor. The 'Sag' and 'Cor' windows show a full-body scan, while the 'Ax' window shows a cross-section. Technical details for each scan are listed on the left side of each window.

The 'Loading the ROI file' dialog box is open in the center, showing the following fields:

- Path: RoiVolume
- File list: Healthy.nii.gz, Tumor.nii.gz
- File name: Tumor.nii.gz
- File type: All files
- Buttons: Loading the ROI file, Cancel

On the right side, there is a 'ROI' panel with a toolbar. The 'Load' icon (a green circle with a white plus sign) is highlighted with a red box. Below the toolbar, there is a list of applied ROIs, including 'C1' with a value of '296.9 cm3 (10964vx ref)'. At the bottom of the ROI panel, there is a 'Drop ROIs' section with a diagram showing a green circle with a plus sign being dragged to a 'Drop here' area.



... or drag & drop the file in the right panel.

The screenshot displays a medical imaging software interface with several panels:

- Left Panel (Sagittal View):** Shows a PET/CT scan of a patient. Text includes: "SAG LIFEx - Sag", "SIGNA PET/MR", "Ex:31", "Head to Thighs 3D MAC", "X: 73 pi", "HFS", "Head to Thighs 3D MAC, (73, 106, 212)=11.63 SUV", "Acc: 02/10/15", "15:21:55 (SUV)", "alpha(%) 100", "Activity (SUV) 29.80", "Actual Frame Duration: 240000 ms", "Mag: x0.3", "Radionuclide Total Dose: 258000 kBq", "2.7 thk/0.0 sp", "Radiopharmaceutical Start Time: 11:48:00", "zip: 414 x 192 pi", "Radiopharmaceutical Half Life: 109.7 min", "DFOV: 129.3 x 60.0 cm", "W: 11.802 L: 5.901 vx: 3.1x3.1x2.7mm=27.0mm3".
- Bottom Left Panel (Coronal View):** Shows a coronal PET/CT scan. Text includes: "Cor LIFEx - Cor", "SIGNA PET/MR", "Ex:31", "Head to Thighs 3D MAC", "Y: 109 pi", "HFS", "Head to Thighs 3D MAC, (270, 106, 282)=0.44 SUV", "Acc: 02/10/15", "15:21:55 (SUV)", "alpha(%) 100", "Activity (SUV) 29.80", "Actual Frame Duration: 240000 ms", "Mag: x0.4", "Radionuclide Total Dose: 258000 kBq", "2.7 thk/0.0 sp", "Radiopharmaceutical Start Time: 11:48:00", "zip: 414 x 192 pi", "Radiopharmaceutical Half Life: 109.7 min", "DFOV: 129.3 x 60.0 cm", "W: 11.802 L: 5.901 vx: 3.1x3.1x2.7mm=27.0mm3".
- Center Panel (File Explorer):** Shows a file explorer window titled "RoiVolume" with a pink "Ou..." button. It contains two files: "Healthy.nii.gz" (28/06/20) and "Tumor.nii.gz" (28/06/20). A red arrow points from this panel towards the ROI panel.
- Right Panel (ROI Panel):** Titled "ROI", it contains various toolbars and a list of ROIs. The "Applied to one ROI:" section includes "File" (Load, Save, Delete), "Tools" (Move, Close, CheckTex), "Measure" (Max, Angle, Dist), "Draw" (Circle3D, Pencil2D, Click), and "Threshold" (n, 40%, Nestle). The "Applied to all ROI:" section includes "Tools" (Hide, Show, Sort). At the bottom, there is a "Drop ROIs" section with a "Drop here" instruction and a list of file types: ".nii", ".nii.gz", and ".RTSTRUCT".



To measure the distance between two points, click on Dist icon.

The screenshot displays a medical imaging software interface with three main panels: a sagittal view (Sag), an axial view (Ax), and a coronal view (Cor). Each panel shows a PET/CT scan of a patient's torso. The sagittal view shows a blue region of interest (ROI) with a distance of 11.80 mm. The axial view shows a blue ROI with a distance of 107.5 mm. The coronal view shows a blue ROI with a distance of 163.6 mm. The interface includes a toolbar with various tools, including a 'Dist' icon highlighted in a red box. The 'Dist' icon is located in the 'Measure' section of the toolbar. The 'ROI' panel on the right shows the applied ROI with a volume of 296.9 cm³ (10964vx ref). The 'Applied to one ROI' section includes icons for File (Load, Save, Delete), Tools (Move, CheckTex), Measure (Max, Dist), Draw (3D, 2D, Circle3D, Pencil2D, Click), and Threshold (n, 40%, Nestle). The 'Applied to all ROI' section includes icons for Tools (Hide, Show, Sort). The 'Drop ROIs' section shows a 'Drop here' icon and a list of file types: .nii, .nii.gz, and .RTSTRUCT.

Sag LIFEx - Sag
SIGNAL PET/MR
Ex:31
Head to Thighs 3D MAC
X: 73 pi, Head to Thighs 3D MAC, (73, 106, 212)=11.63 SUV
HFS
Acc: 02/10/15 15:21:55 (SUV)
alpha(%) 100
Activity (SUV) 29.80
Actual Frame Duration: 240000 ms Mag: x0.3
Radiopharmaceutical Total Dose: 258000 kBq 2.7 thk/0.0 sp
Radiopharmaceutical Start Time: 11:48:00 zip: 414 x 192 pi
Radiopharmaceutical Half Life: 109.7 min DFOV: 129.3 x 60.0 cm
W: 11.802 L: 5.901 vx: 3.1x3.1x2.7mm=27.0mm³

Cor LIFEx - Cor
SIGNAL PET/MR
Ex:31
Head to Thighs 3D MAC
Y: 109 pi, Head to Thighs 3D MAC, (270, 106, 282)=0.44 SUV
HFS
Acc: 02/10/15 15:21:55 (SUV)
alpha(%) 100
Activity (SUV) 29.80
Actual Frame Duration: 240000 ms Mag: x0.4
Radiopharmaceutical Total Dose: 258000 kBq 2.7 thk/0.0 sp
Radiopharmaceutical Start Time: 11:48:00 zip: 414 x 192 pi
Radiopharmaceutical Half Life: 109.7 min DFOV: 129.3 x 60.0 cm
W: 11.802 L: 5.901 vx: 3.1x3.1x2.7mm=27.0mm³

Ax LIFEx - Ax
SIGNAL PET/MR
Ex:31
Head to Thighs 3D MAC
Z: 212 pi, Head to Thighs 3D MAC, (121, 109, 212)=1.93 SUV
HFS
Acc: 02/10/15 15:21:55 (SUV)
alpha(%) 100
Activity (SUV) 29.80
Actual Frame Duration: 240000 ms Mag: x2.7
Radiopharmaceutical Total Dose: 258000 kBq 2.7 thk/0.0 sp
Radiopharmaceutical Start Time: 11:48:00 zip: 192 x 192 pi
Radiopharmaceutical Half Life: 109.7 min DFOV: 60.0 x 60.0 cm
W: 11.802 L: 5.901 vx: 3.1x3.1x2.7mm=27.0mm³

ROI
Applied to one ROI:
File: Load, Save, Delete
Tools: Move, CheckTex
Measure: Max, Dist
Draw: 3D, 2D, Circle3D, Pencil2D, Click
Threshold: n, 40%, Nestle
Applied to all ROI:
Tools: Hide, Show, Sort
Drop ROIs: Drop here, from files: .nii, .nii.gz, .RTSTRUCT



To measure an angle, click on Angle icon.

The screenshot displays a medical software interface with three main windows: 'Sag LIFEx - Sag', 'Ax LIFEx - Ax', and 'Cor LIFEx - Cor'. Each window shows a PET/CT scan with a region of interest (ROI) highlighted in blue. The 'Sag' and 'Cor' windows show a full-body scan with a zoomed-in view of the ROI, while the 'Ax' window shows a cross-sectional view. The ROI is labeled with an angle 'a' and a value in parentheses, such as 'a=90.0° (360-a=270)'. The 'Ax' window shows 'a=296.1° (360-a=63.8°)'. The 'Sag' and 'Cor' windows also show 'alpha(%)' and 'Activity (SUV)' values. The 'ROI' window on the right contains a toolbar with various tools, including 'File', 'Tools', 'Measure', 'Draw', 'Threshold', and 'Applied to one ROI'. The 'Angle' icon in the 'Measure' section is highlighted with a red box. Below the toolbar, there is a 'Drop here' area for dragging ROIs from files.

Sag LIFEx - Sag
SIGNA PET/MR
Ex:31
Head to Thighs 3D MAC
X: 73 pi, HFS
Head to Thighs 3D MAC, (73, 106, 212)=11.63 SUV
Acc: 02/10/15 15:21:55 (SUV)
alpha(%) 100
a=90.0° (360-a=270)
Activity (SUV) 29.80
Actual Frame Duration: 240000 ms Mag: x0.3
Radionuclide Total Dose:258000 kBq 2.7 thk/0.0 sp
Radiopharmaceutical Start Time:11:48:00 zip: 414 x 192 pi
Radionuclide Half Life:109.7 min DFOV: 129.3 x 60.0 cm
W:11.802 L:5.901 vx:3.1x3.1x2.7mm=27.0mm3

Ax LIFEx - Ax
SIGNA PET/MR
Ex:31
Head to Thighs 3D MAC
Z: 212 pi, HFS
Head to Thighs 3D MAC, (133, 103, 212)=0.32 SUV
Acc: 02/10/15 15:21:55
alpha(%) 100
a=296.1° (360-a=63.8°)
Activity (SUV) 29.80
Actual Frame Duration: 240000 ms Mag: x2.7
Radionuclide Total Dose:258000 kBq 2.7 thk/0.0 sp
Radiopharmaceutical Start Time:11:48:00 zip: 192 x 192 pi
Radionuclide Half Life:109.7 min DFOV: 60.0 x 60.0 cm
W:11.802 L:5.901 vx:3.1x3.1x2.7mm=27.0mm3

Cor LIFEx - Cor
SIGNA PET/MR
Ex:31
Head to Thighs 3D MAC
Y: 109 pi, HFS
Head to Thighs 3D MAC, (270, 106, 282)=0.44 SUV
Acc: 02/10/15 15:21:55 (SUV)
alpha(%) 100
a=90.0° (360-a=270)
Activity (SUV) 29.80
Actual Frame Duration: 240000 ms Mag: x0.4
Radionuclide Total Dose:258000 kBq 2.7 thk/0.0 sp
Radiopharmaceutical Start Time:11:48:00 zip: 414 x 192 pi
Radionuclide Half Life:109.7 min DFOV: 129.3 x 60.0 cm
W:11.802 L:5.901 vx:3.1x3.1x2.7mm=27.0mm3

ROI
Applied to one ROI:
File Load Save Delete
Tools Move Close Angle
Measure Max Dist Angle
Draw Circle3D Pencil2D Click
Threshold n 40% Nestle
Applied to all ROI:
Tools Hide Show Sort
C1 296.9 cm3 (10964vx ref)
Drop here
from files:
- nii
- nii.gz
- RTSTRUCT



If you have questions, please read the online documentation:
www.lifexsoft.org/index.php/resources/documentation

or contact us: contact@lifexsoft.org