Applied Chest Imaging Laboratory
Boston, Massachusetts. USA

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WOMEN'S HOSPITAL

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PAA (Pulmonary Arterial / Aorta) ratio

Chest Imaging Platform

PAA Ratio - Intro

- Goal: Quickly measure the ratio between the pulmonary arterial and the aorta in a semi-automatic basis

- This ratio has been proved to be a biomarker of acute exacerbations prediction in COPD ([see publication](#))

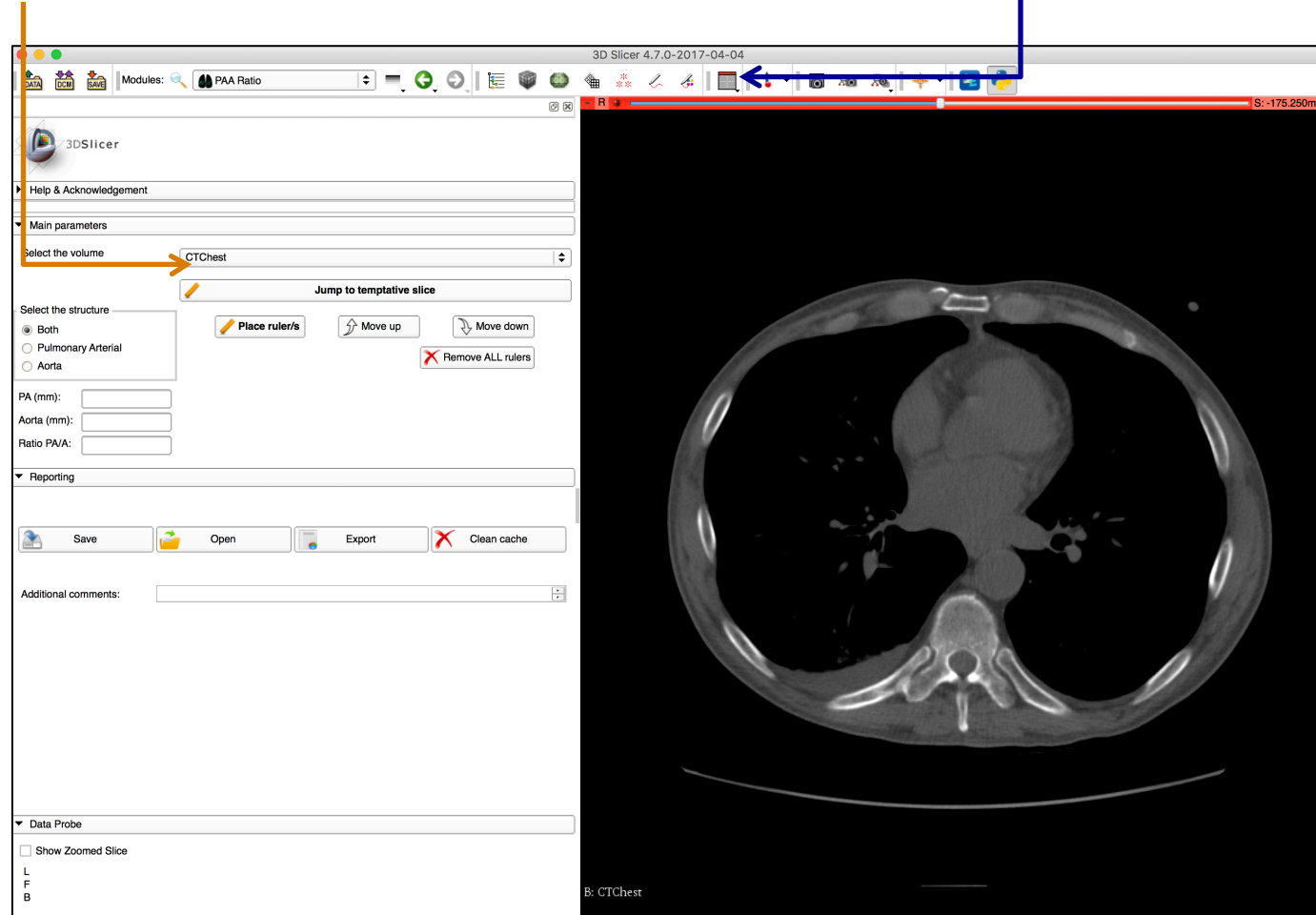- Export the results to a CSV file, easy to manage for your study

PAA Ratio

1- Launch PAA Ratio module
*Tip: Axial view is recommended (Red slice only layout)*

2- Select an input CT

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PAA Ratio

3- Click the "Jump to temptative slice" button.
Tip: when clicked, the image will jump to the best estimated slice and zoom level.

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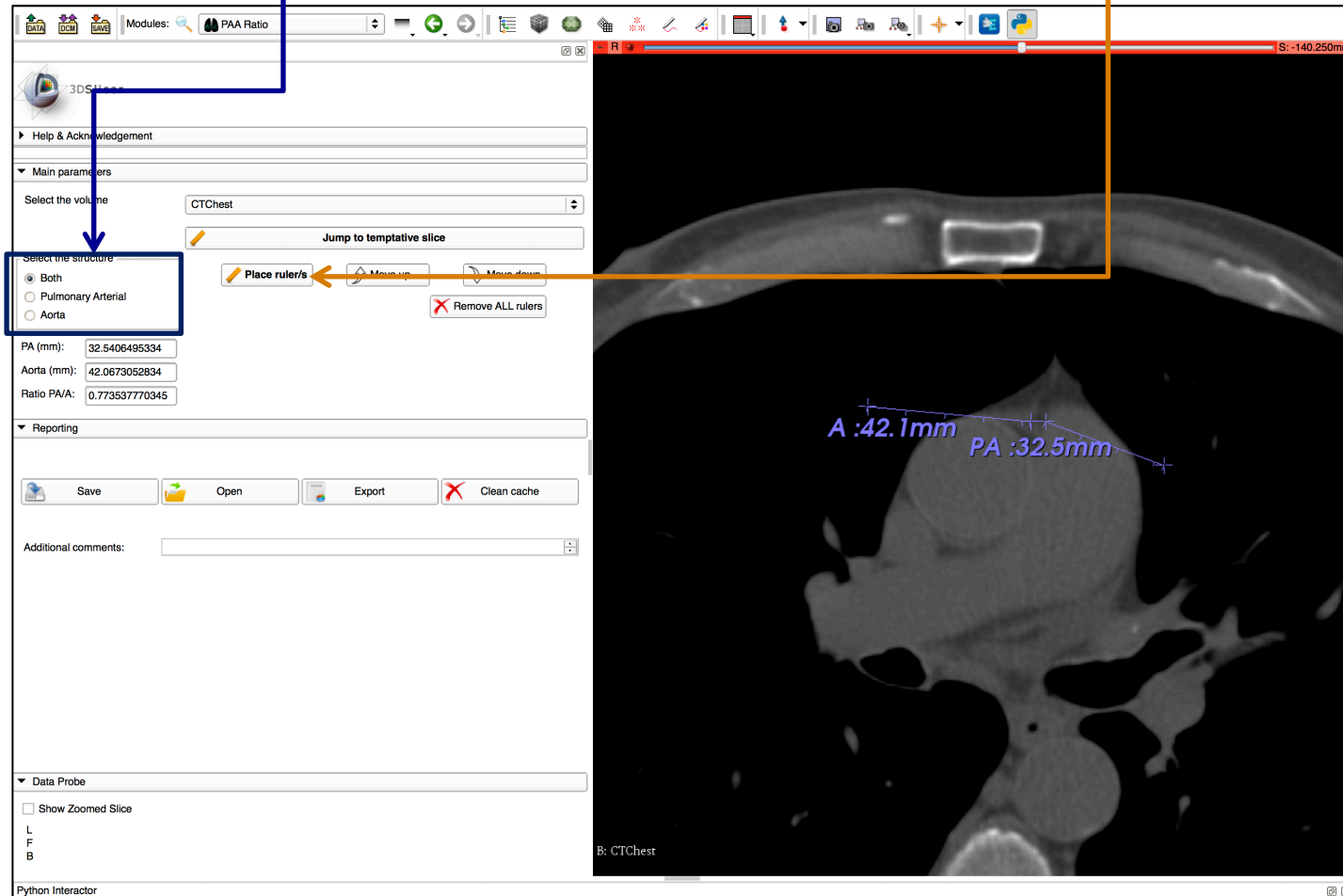
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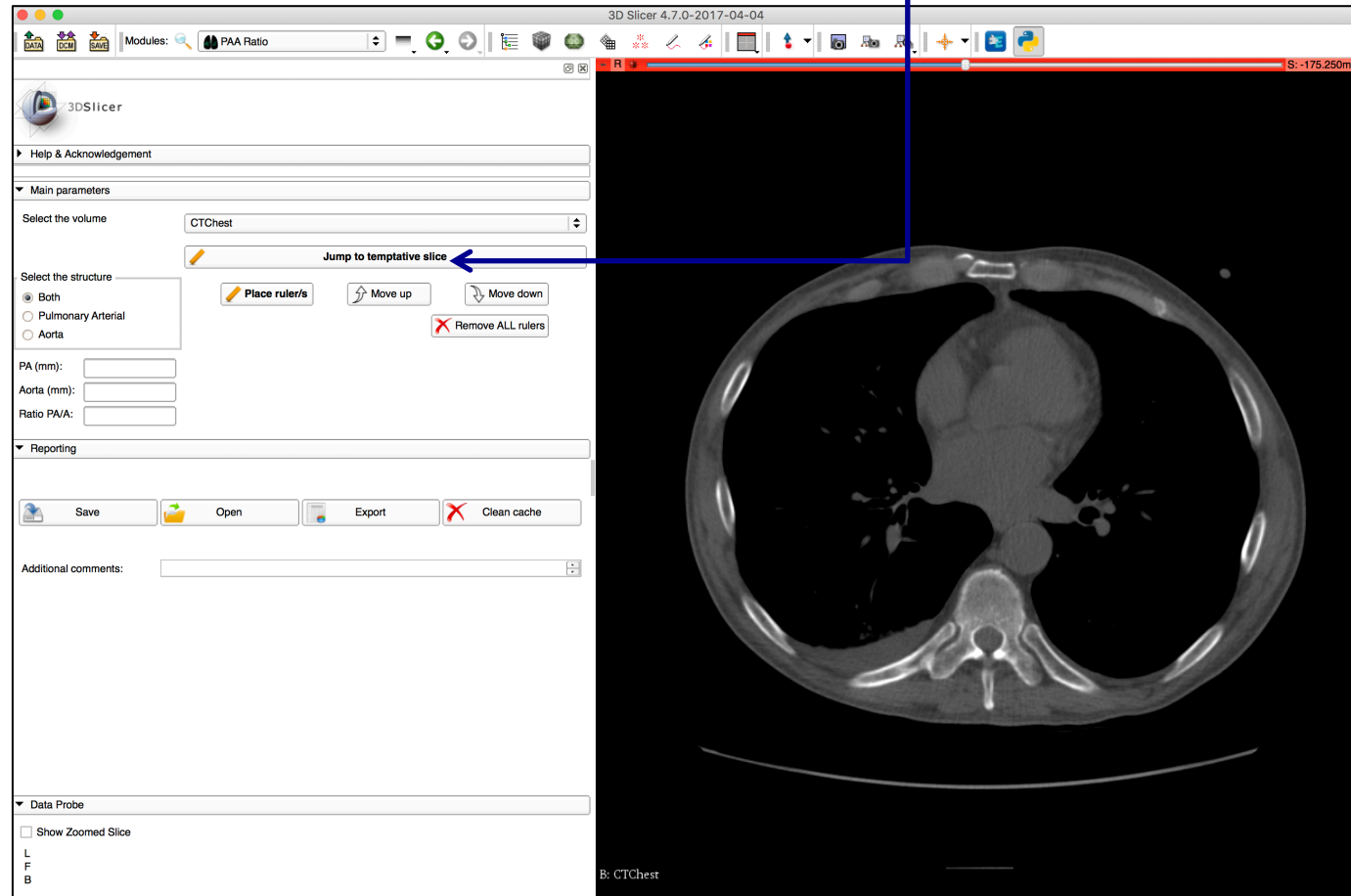
PAA Ratio

4- Select the desired structures.
Tip: If "both" selected, the program will place 2 rulers.
Tip: if desired, scroll to change the slice.

5- Click "Place rulers to place the rulers on the slide.
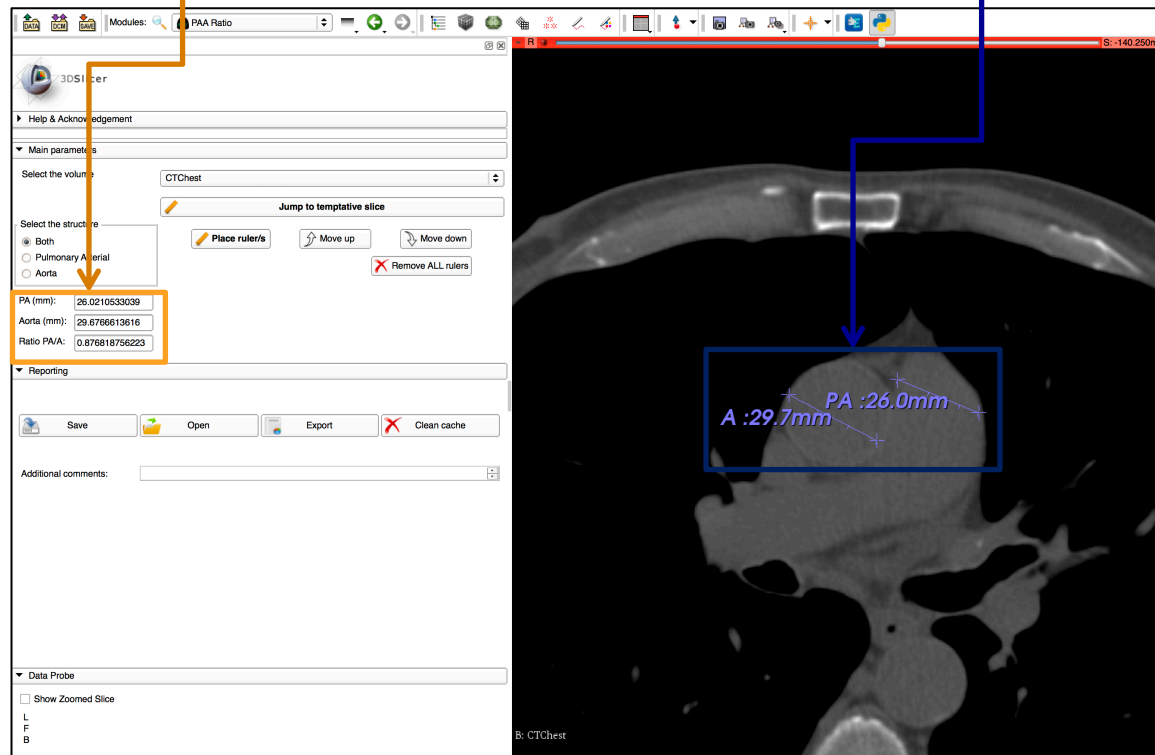*Tip: The ruler/s will appear on the CT image*

PAA Ratio

5- Current measurements are displayed.

6- Drag the extremes of each ruler and place them in the right position.

Tip: all the measurements change to red color when the PAA Ratio > 1 (exacerbation biomarker)

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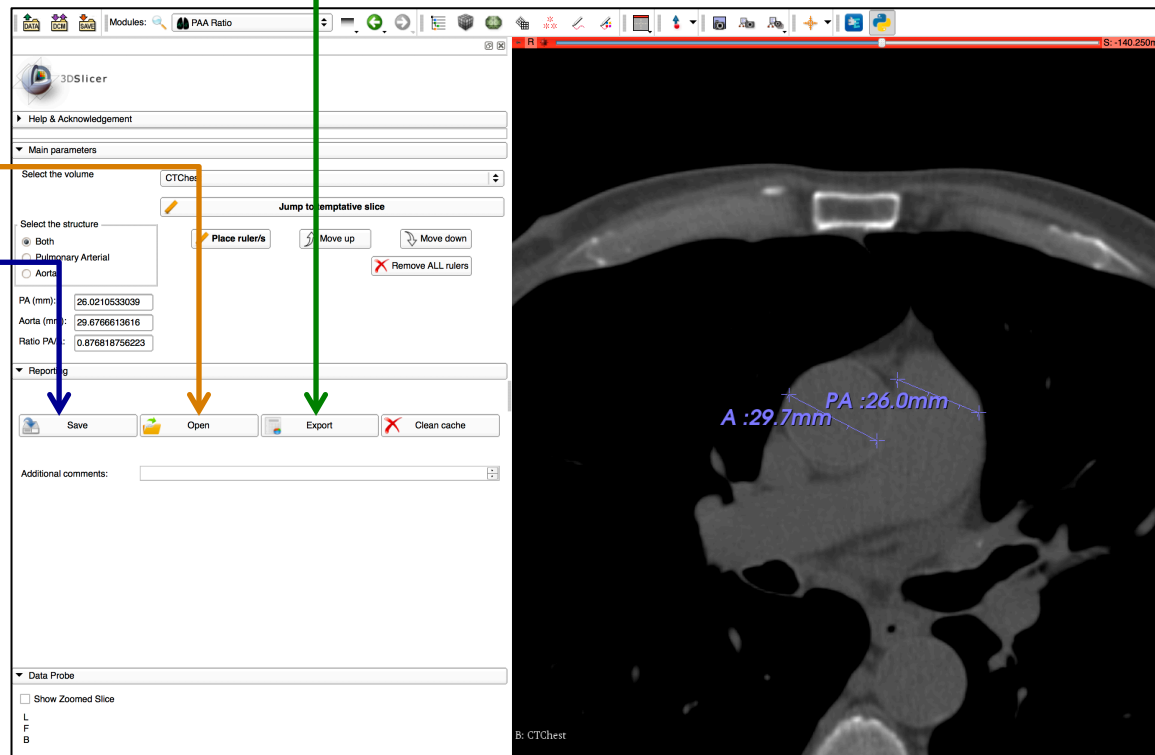
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PAA Ratio

Save the results of the current measurements

PAA Ratio module keeps a table of every case whose measurements have been saved

Tip: Click "open" to open the results
Tip: click "Clear caché" to delete previous measurements.

Click "Export" to export the data into a .csv file

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PAA Ratio

- The PAA Ratio module is part of the Chest Imaging Platform extension for 3D Slicer (www.chestimagingplatform.org)

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