Windowing of the CT scans

Figure 1 shows the procedure that was followed to read the CT scans in DICOM format and then window and annotate them. The CT scan in DICOM format was processed using Syngo by Siemens Medical Solutions to window the scan and to anonymize the subject information. After reading a CT scan, each CT slice was resized to 650x650 by default in Syngo. Next, a brain window with level (L) of 40 and width (W) of 120 was used to linearly convert the HU values (L-W/2 to L+W/2) to the gray scale (0 to 255) using the following equation:

$$y = \left(x - (L + \frac{W}{2})\right)\frac{255}{W}$$

where x is the voxel value in Hounsfield units (HU) and y is the mapped value in the gray scale. HU values below (L-W/2) were set to zero, and HU values above (L+W/2) were set to 255. Also, the bone window (level=700, width=3200) was used.

Next, AVI video was created for each CT scan for each of the widows. During the creation of the videos, the 650x650 slices was padded with zeros and 1105x650 slices in AVI videos was created. Later, the padded areas were removed in Matlab during the annotation process and the CT slices was saved as JPG format with size 650x650.
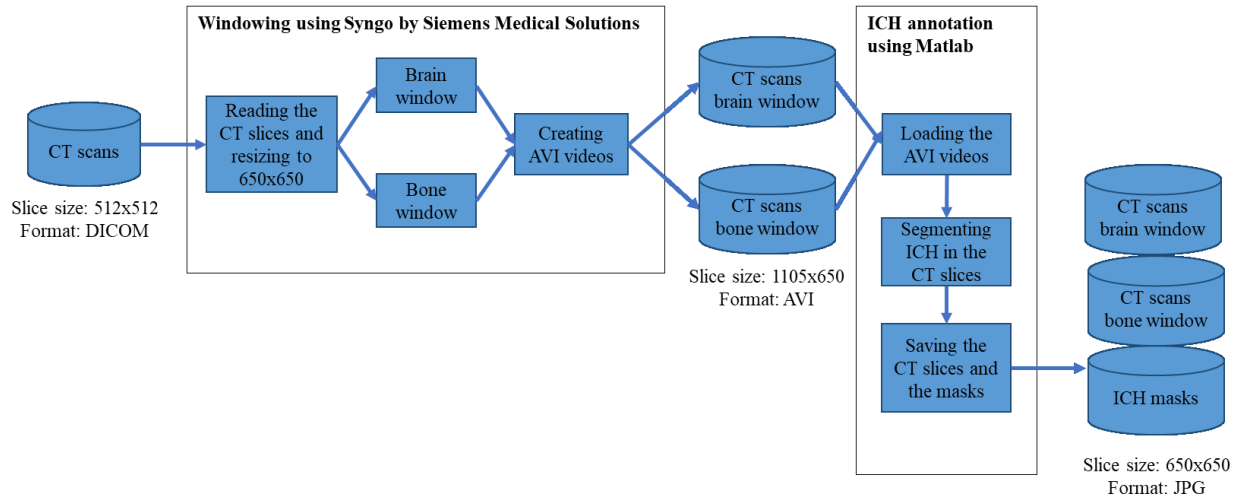

Figure S1. Windowing of the CT scans.