Introducing vascuCAP® A.1.1

vascuCAP® is on the move at Elucid! Here are some highlights of our January 2018 release for clinical users in the US and EU market areas. There are also some advanced research edition functions introduced on the following page.

**Curved Planar Reformations (CPR) Views Added**

A ribbon image slice is created that follows the automatically generated vessel centerlines and this ribbon is stretched onto a flat surface for display. Optionally, this ribbon may also be straightened to remove the side-to-side undulations of the vessel centerline as seen at right.

After centerlines have been calculated, the user may toggle between axis-aligned views and CPR/oblique views depending on their preference.

**Improved and Extended Segmentation Editing**

The paintbrush tool, image fill, and segmentation fill tools are faster and smoother. The new cull tool (seen at right) allows the user to quickly swipe a contour in the 3D view that is then projected and removed from the segmentation. The edge adjustment tools allow the user to specify a localized region of the segmentation boundary to modify by smoothing, sharpening, attracting to image edges, or attracting to user-drawn edges. The user can now perform these edits with a partial open contour to save time.

The tools work in may be used in any view, including CPR. A tool palette (also at right) allows the user to quickly switch between tools with undo/redo functionality as well.

**Other client-side enhancements include:**

- Significantly reduced processing times, especially for Apple users,
- Work Item List can be set to display recently Imported DICOM images first.
- Improved management of marked lesions.
- Finer grained control of segmentation initialization
- Quick toggling on/off of the segmentation and path overlays
- Improved synchronization of 3D with other views.
Narrative Reporting

The reporting application is now able to compose a narrative view that provides user editable measurement summaries for specific arteries or user-designated lesions without losing the objective and quantitative basis of the vascuCAP® analyses.

Multi-user Installations Now Available for the Windows Server Environment

As of this release, CAPgraph® may now also be deployed into Unix and Windows server environments at your site, subject to institutional policies or preferences, and licensing terms. Of course, Elucid’s servers continue to be available, in upgraded form, for users that need multi-site collaboration or for users that are not interested in additional capital investment.

A.1.1 Research Edition Features

Confidence Intervals and Provenance

By clicking on measurement values, it is now possible to see both the numeric confidence interval (inclusive of bias and precision due to a variety of sources of error and variability), as well as the detailed audit trail of how the measurement was derived. This capability is aligned with the mantra that “no measurement is complete without a statement as to its uncertainty”, and allows easy inspection of the audit trail of the steps taken, including who took them and on what date, to derive the values.

Impressions and Reference Ranges

Pathologies and predictions from the current encounter are now used to create summary statements, based in quantitative data but expressed in natural language. These express the measurements, presented by a generator allowing as little or as much clinician editing of these data as desired, to present a uniquely efficient and powerful mix of capability.

Whether you are already a vascuCAP® user, or just getting on board now, we hope these capabilities add to your ability to move the field forward in vascular care!