**Attempt 1**

1. Manual Delineation [Measure mCNV area by measuring pixels in contour]
   i) Selection using Polygon Selection Tool
   ii) Edit->Clear Outside
   iii) Image->Type->8-bit
2. Smooth Image (Gaussian Kernel)
   i) Process->Filter->Gaussian Blur (Radius =1)
3. Binary image (Frangi vesselness filter)
   i) Process->Filters->Frangi Vesselness (Apply Gaussian to all scales = True, Spacing = 1,1, Scale = 3,5)
   ii) Image->Type->8 bit
4. Binary Image (local adaptiveness thresholding) [Measure vessel area, fractal dimension, vessel lengths]
   - For "Before"

   i) Image->Adjust->Auto Threshold (Method = Mean)
   ii) Process->Binary->Close
   - For "After"

   i. Image->Adjust->Auto Local Threshold (Method = Mean, Radius = 15)
5. Tagged Skeleton Image [Calculate number of vessels]
   i) Process->Binary->Skeletonise
   ii) LUT->Invert LUT

**Attempt 2**