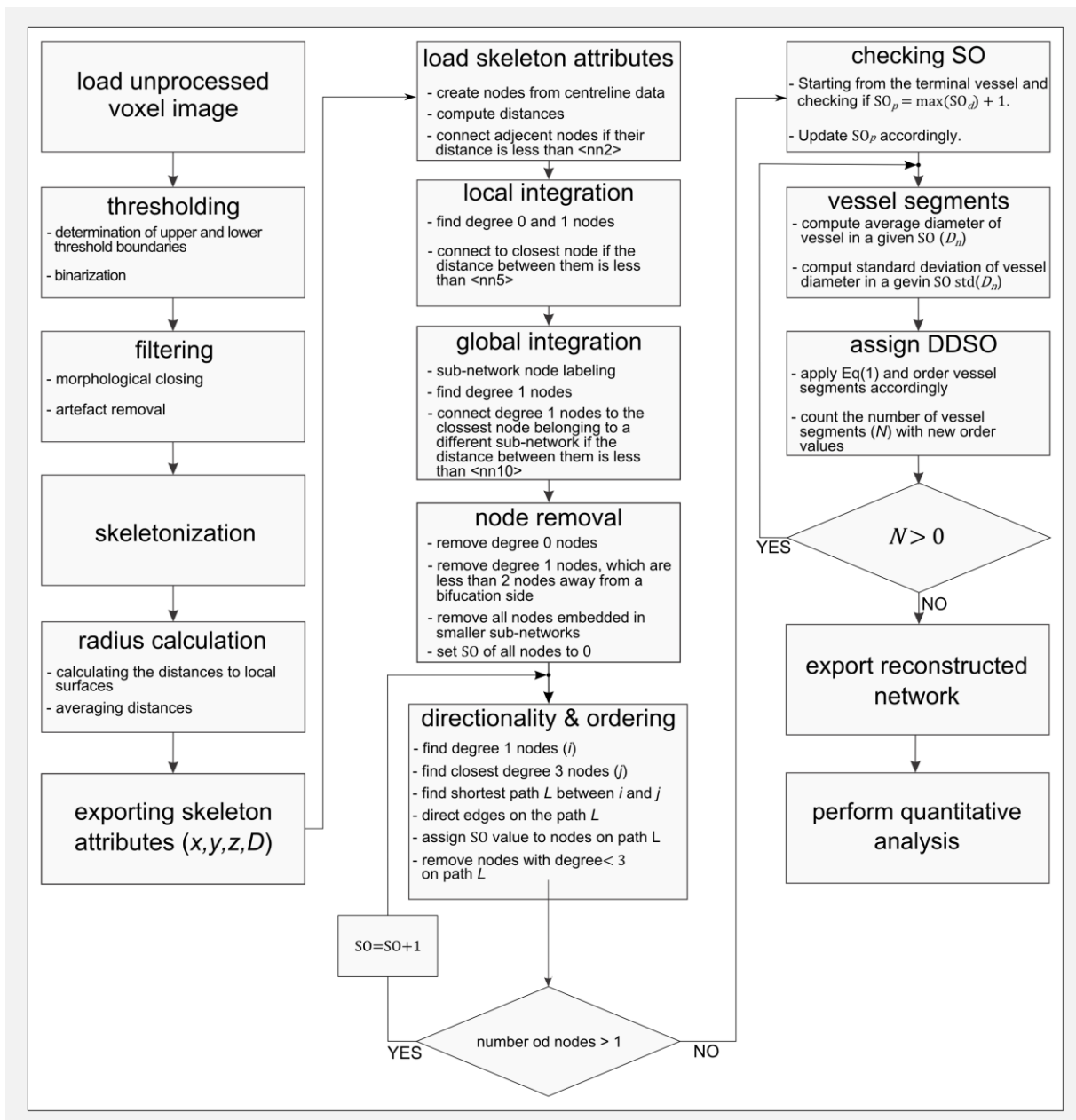


S1 appendix: Vasculature segmentation and reconstruction workflow.



The flowchart shows the sequential order in which individual subroutines are arranged in our computational protocol in order to segment out the vascular structure and to reconstruct it. Used abbreviations are SO for the Strahler Order, SO_p for the parent vessel Strahler Order, SO_d for the daughter vessel Strahler Order, D_n for the mean vessel segment diameter belonging to the n -th order, $\langle nn2 \rangle$ for the average physical distance from each node to its second nearest neighbor, $\langle nn5 \rangle$ for the average physical distance from each node to its fifth nearest neighbor and $\langle nn10 \rangle$ for the average physical distance from each node to its tenth nearest neighbor.