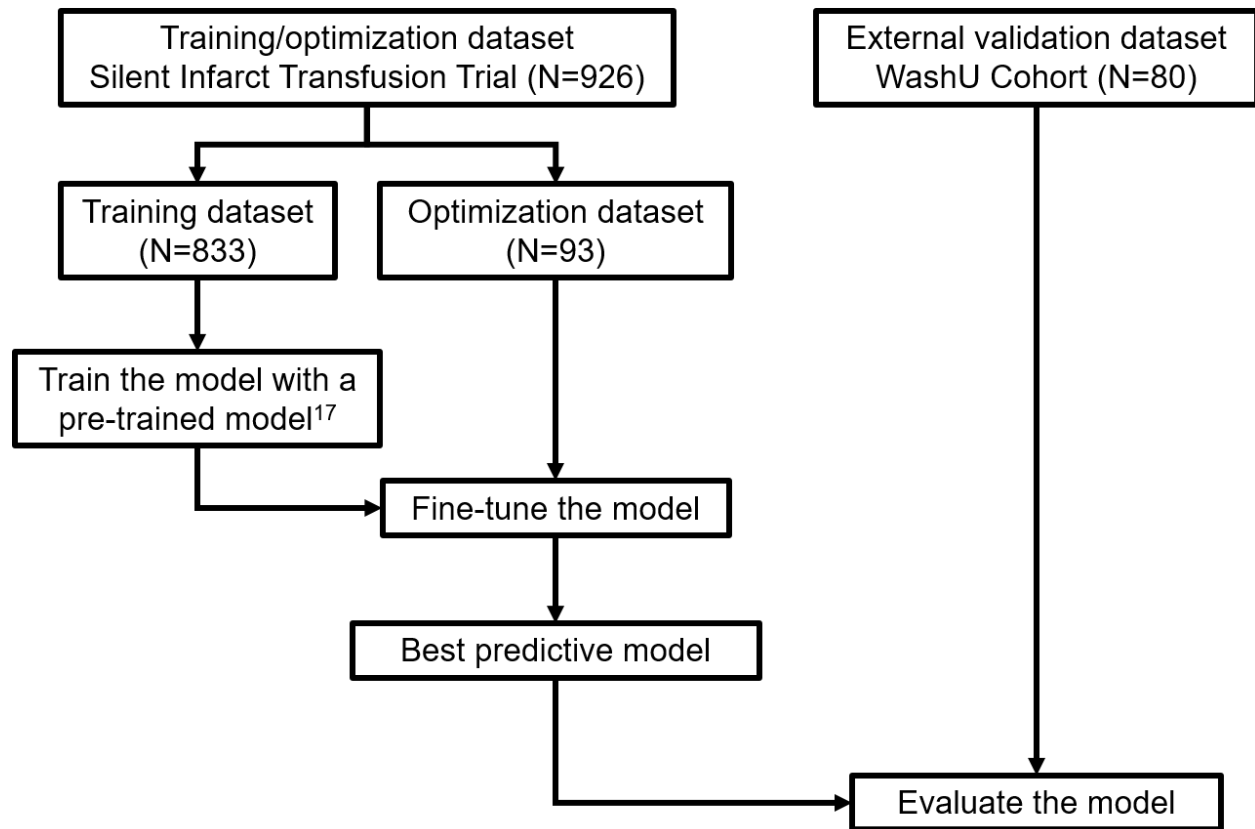


## SUPPLEMENTAL MATERIAL



**Figure S1 Flow diagram of UNet model training and evaluation.** Available screening MRIs from the Silent Infarct Transfusion Trial were randomly divided into 90% for model training (training dataset) and 10% for model optimization (optimization dataset). First, through the training dataset, we initiated model training using a pre-trained UNet model, previously optimized for detecting white matter hyperintensities in adults with cerebral small vessel disease.<sup>17</sup> Next, using the optimization dataset, we selected the best model that achieved the highest spatial overlap between UNet segmentation and manual delineation. Finally, we evaluated model performance and generalizability in our external validation cohort.