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# Improvement of nerve imaging speed with coherent anti-Stokes Raman scattering rigid endoscope using deep-learning noise reduction

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Supplementary information

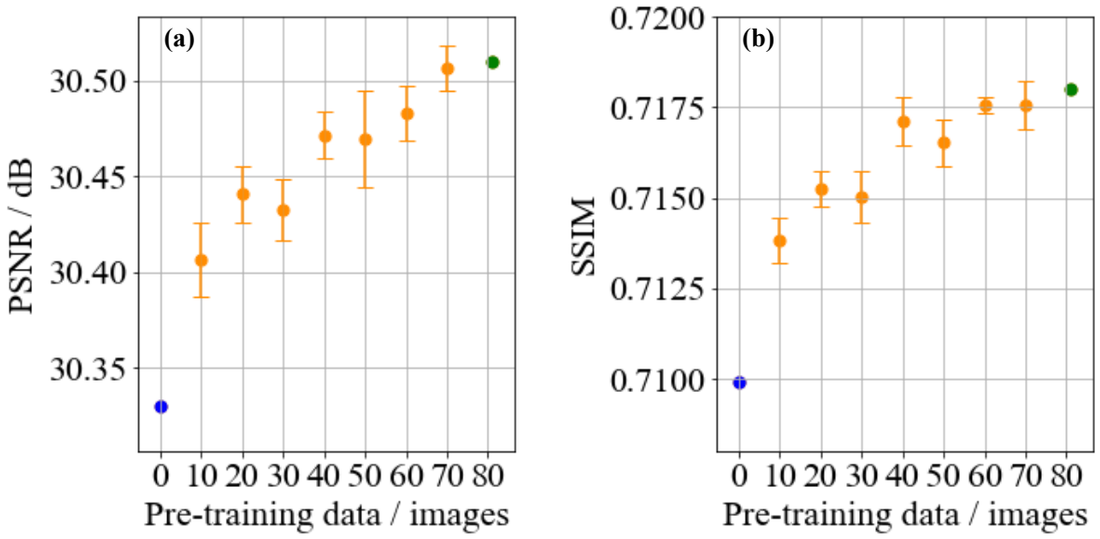


Figure S1 Results of N2N with fine-tuning for the amount of pre-training images of CARS microscopy. The metrics for test images of CARS endoscopy at 12.5 images/min (exposure time of 4.8 seconds) are shown. The blue plots are the results of N2N with endoscopy, the green plots are N2N with fine-tuning shown in Table 2. The amount of pre-training images of CARS microscopy was changed from 10 to 70 (step: 10). The pre-training images at each amount were randomly selected from 81 images 5 times. Each plot from 10 to 70 shows the average and standard deviation of 5 results. As the pre-training images increase, both evaluation metrics are improved.