Electronic Supplementary Information

Wavenumber selection based analysis in Raman spectroscopy improves skin cancer diagnostic specificity

Jianhua Zhao, 1,2 Haishan Zeng, 1,2 Sunil Kalia¹ and Harvey Lui^{1,2}

¹Photomedicine Institute, Department of Dermatology and Skin Science, University of British

Columbia and Vancouver Coastal Health Research Institute, Vancouver, Canada

²Imaging Unit - Integrative Oncology Department, BC Cancer Agency Research Center,

Vancouver, Canada

Corresponding author

Haishan Zeng

Professor

Integrative Oncology Department – Imaging Unit

BC Cancer Agency Research Center

675 West 10th Ave

Vancouver, BC V5Z 1L3

Phone: (604)-675-8083

Email: hzeng@bccrc.ca

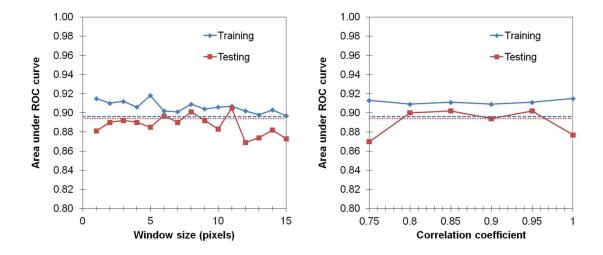


Figure S1. Diagnostic performance of wavenumber selection based on stepwise regression with fixed window sizes (a) and varying window sizes (b). The dashed lines and dotted lines are the results of the training dataset and test dataset without wavenumber selection. It could be seen that the diagnostic performance of the training dataset were all improved using either fixed window sizes or varying window sizes. However, the improvement for the test dataset varies heavily for fixed window sizes, and is more consistent for varying window sizes.