



Fig. S1 Raman spectrograms (left) and average Raman spectra with inter-measurements variance (right) for all measurements acquired (no QF cut-off): (a) adenocarcinoma, (b) squamous cell carcinoma, (c) non-small cell cancer of unspecified origin, (d) small cell carcinoma, (e) necrosis, and (f) benign lung tissue. Spectra that were removed to train the models with QF > 0.4 are denoted with a red mark.