

Supplementary Information

In vivo detection of bile duct pre-cancer with endoscopic light scattering

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Supplementary Figure 1

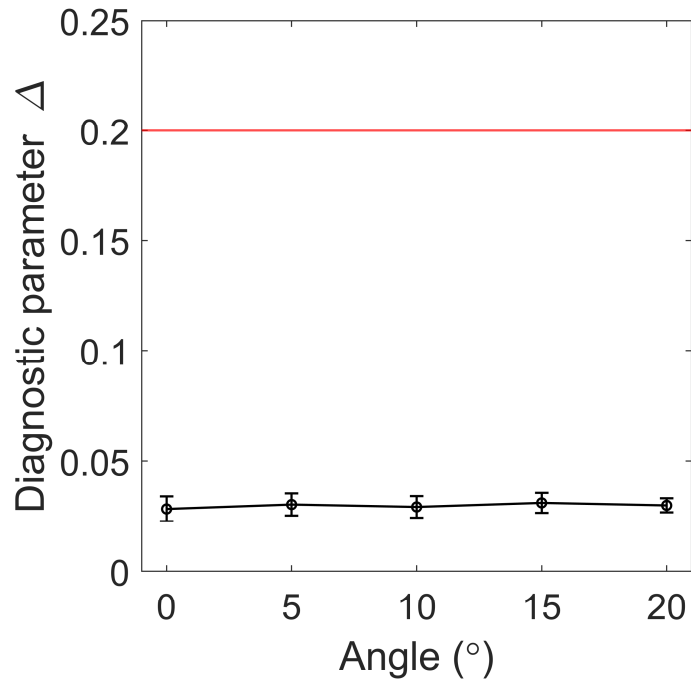


Fig. S1 Dependence of the diagnostic parameter on the orientation of the LSS-DRS fiber probe. Diagnostic parameter Δ obtained for a lip epithelium of a healthy volunteer (black circles) as a function of the angle of incidence. At each angle, data are presented as means \pm SD of 10 measurements. The red line at 0.2 represents the high-grade dysplasia and cancer diagnostic cutoff, and is provided as a reference. The variability of the data is less than 3% of that cutoff.

Supplementary Figure 2

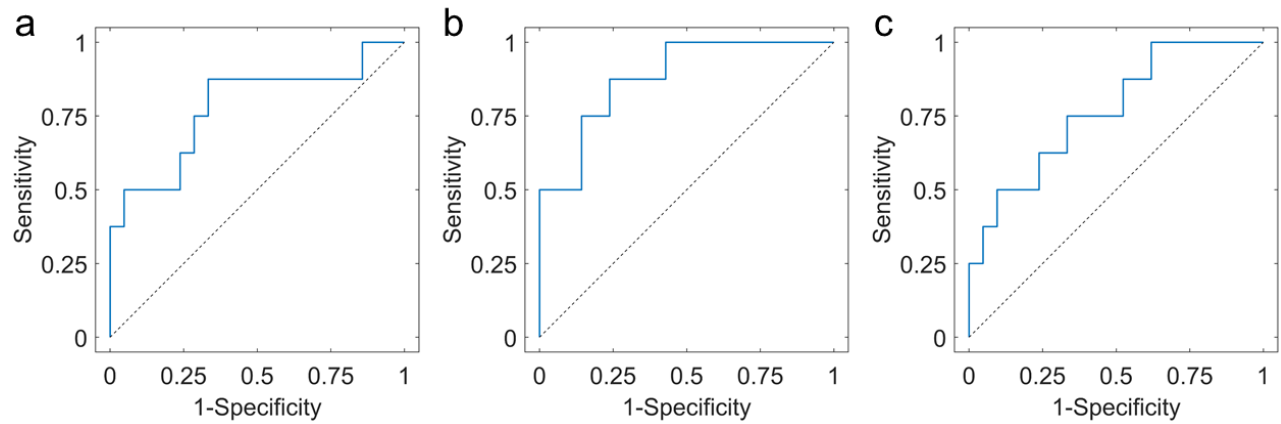


Fig. S2 Receiver operating characteristic (ROC) curves for *in vivo* DRS-based classification of malignancy in the bile duct. ROC curves of (a) hemoglobin concentration, (b) hemoglobin oxygen saturation, and (c) scattering power in the underlying connective tissue. The areas under the curves (AUCs) are 0.78, 0.88 and 0.77, respectively. The AUC for LSS-based diagnostic parameter (not shown) is 0.99.