

proves diagnostic specificity especially when discriminating the three types of hyperplasia. Indeed, combining information from a number of points located at variable distances from the excitation optical fiber will probe the tissue at several depths resulting in a potentially better discrimination between the different histological classes.

In the future, we intend to use another strategy for data fusion based on the principle of sensor fusion (decision-level fusion). Obtaining best performance with a pre-clinical system such as ours (application on the mouse skin) allows to promote performance of the dedicated clinical system. Our previous and present works provide the foundation for the primary focus of future work, which is the optimization of the experimental protocol by minimizing the exposure of skin tissue to light radiation and by reducing the time of the measure step before moving to clinics.

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