mindpeak

Mindpeak Breast ER/PR

Clinical Performance Evaluation Summary

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Mindpeak Breast ER/PR supports pathologists in scoring of digital images of formalin-fixed, paraffin-embedded primary breast tissue lesions from human breast cancer patients, which underwent immunohistochemistry (IHC) staining of the estrogen receptor (ER) or progesterone receptor (PR).

The clinical performance of Mindpeak Breast ER/PR was evaluated with a heterogenous set of clinical routine cases. Participating pathologists from different institutions assessed samples with real-life image variability introduced by multiple whole-slide image scanners, staining systems, staining protocols and staining reagents as well as samples of different carcinoma types and scoring groups.

The statistical evaluation shows that the output of Mindpeak Breast ER/PR is clinically relevant ($p < 0.05$): agreement rates when scoring with the assistance of Mindpeak Breast ER/PR are larger than when scoring conventionally (Fig. 1). Additional results show that this result is agnostic to individual sample preparation parameters such as stainers, scanners and reagents.

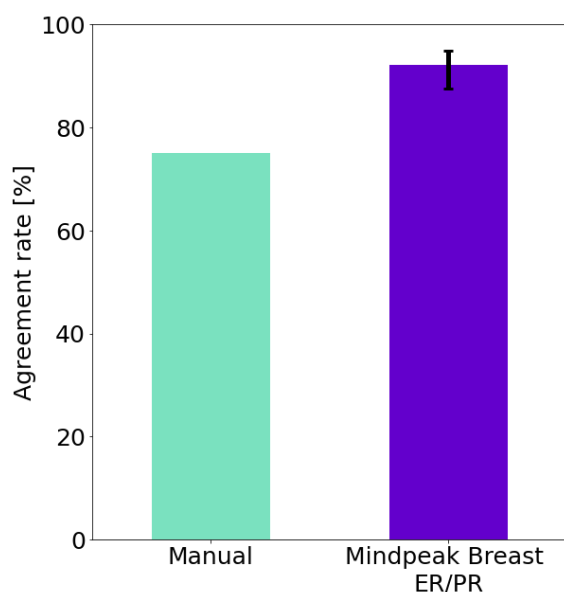More detailed information is available upon request via e-mail to info@mindpeak.ai.

Figure 1. *Agreement rates for conventional manual assessment and assessment with the support of Mindpeak Breast ER/PR. Error bar indicates the 95% confidence interval.*