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(57) Abstract :
AI BASED PROSTATE CANCER DETECTION IN MRI IMAGES Artificial intelligence (AI) is the recently advanced technology in machine learning which is increasingly used to help radiologists, especially when working in arduous conditions. Microsoft Corporation offered a free-trial service calling Custom Vision to develop AI for images. This study included 161 prostate cancer images with 189 lesions from 52 patients. The 160-tag iteration presented the best performance: precision 20.0%, recall 6.3%, mean average precision (M.A.P.) 13.1%, and prediction rate 31.58%. The performance of a 1-h training was better than quick training, but was not different from a 2-htraining. Health personnel can easily develop AI for the detection of prostate cancer lesions in MRI. However, the AI development is further required, and the result should be interpreted along with radiologist.

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