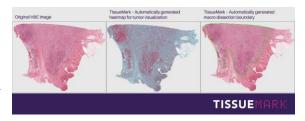


## PathXL Granted Patent for Automated Tumor Analysis on H&E Digital Slides

Patent granted for ground-breaking H&E tumor analysis software designed to drive improvements in standardisation and consistency for molecular cancer diagnostics

Belfast, Northern Ireland, March 3<sup>rd</sup>, 2016. UK Patent 2513916 was today granted to PathXL. The patent is one of several patents filed that underpin PathXL's ground-breaking TissueMark™ technology; powerful methods for the automated annotation of tumor boundaries in digital H&E tissue samples.



This adds to the patent landscape within the digital pathology industry and PathXL's growing patent portfolio. This patent describes how complex pattern recognition can be used to define tumor boundaries for macrodissection and improve pre-analytical annotation for molecular diagnostics and next generation sequencing in solid cancers. By recognising tumor patterns in stained tissue samples, heatmaps can be used to map the tissue and determine the most important regions for tumor cell enrichment. Using the heat-map, a tumor boundary is automatically generated which can be used as the guide for macrodissection and accurate tumor cell quantitation. This methodology is highly important to molecular pathology laboratories in driving quality and consistency in solid tumor molecular testing and precision medicine. This is vital in improving sample quality assessment prior to genomic profiling. Recent reports of high failure rates in the Obama precision medicine initiative (<a href="http://www.statnews.com/2016/01/22/precision-medicine-cancer-biopsies/">http://www.statnews.com/2016/01/22/precision-medicine-cancer-biopsies/</a>) and other trials highlight the need to improve tumor identification, annotation and analysis. This patent and the TissueMark platform can provide those important level of objectivity, reproducibility and consistency necessary to deliver high quality solid tumor genomics and molecular diagnostics.

PathXL are currently the leading company focussing on H&E imaging to support tissue-based research and future diagnostic support in pathology.

**Dr Peter Hamilton, VP for Research & Development** at PathXL said "We are delighted to be granted this patent on an important area of innovation. This is the first of a number of patents filed in the field of digital pathology and H&E analysis where PathXL are clearly leading the way. Integrating these new methods with PathXL's cool workflow software enables customers to effectively utilise powerful tissue recognition algorithms across an emerging range of important applications including improving the quality of molecular diagnostics and large scale genomics trials.

**Des Speed, CEO** added "PathXL exists to provide cutting-edge Digital Pathology software solutions that empower pathologists in cancer research. The granting of this patent confirms the novel nature of this element in our "Tissue Recognition Engine" platform, and further reinforces the important outcomes from our strong focus on research and development in this distinctive area."

## **About PathXL**

PathXL is a global pioneer in the use of web-based solutions for digital pathology, and provides innovative software for use in drug discovery research, biomarker analysis and education. Their product for the automated identification and annotation of tumor tissue, TissueMark, was awarded the Frost and Sullivan 2014 European New Product Innovation Award for Automated Image Analysis for Digital Pathology. PathXL has been named in the top 50 fastest growing companies in Ireland by Deloitte for the past 4 consecutive years.

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