

Aiosyn Mitosis Research Mitosis detection powered by Artificial Intelligence

An AI-Powered solution to assist researchers and pathologists in detecting mitotic figures in whole slide images

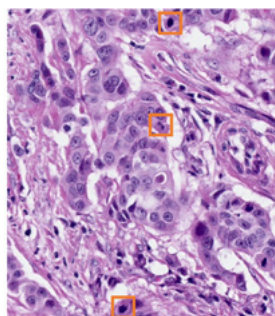
Aiosyn Mitosis Research improves the efficiency and consistency of research results

Efficiency of mitosis counting

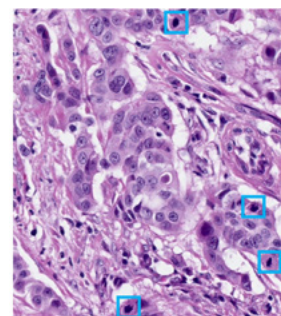
Counting mitotic figures in histological slide preparations is an important part of cancer grading. Although this is a common assessment of tumor proliferation speed, it is a tedious and subjective task with poor reproducibility. Therefore, there is a need for tools that help standardize this process and increase its efficiency. Aiosyn Mitosis Research automatically detects mitotic figures in whole slide images (WSI) before opening the case, providing research laboratories with unified criteria and speed gains in the counting process.

Consistency of results

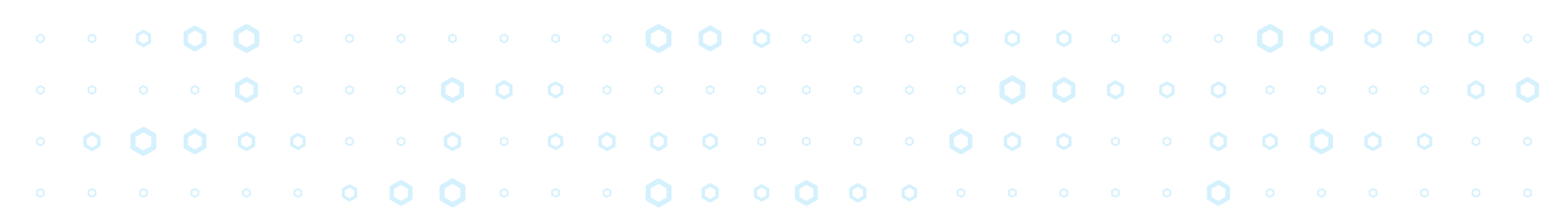
Low consistency in mitosis counting across cases is often observed due to the use of different methodologies and high observer variability. Aiosyn Mitosis Research has been trained with annotations on a large number of images to reduce such variability and improve the consistency of research data.



Pathologist A



Pathologist B





For research and discovery

Aiosyn Mitosis Research aids research labs with the identification of mitotic figures in H&E sections. With improved and reproducible detection, new biomarkers can be discovered and researched more accurately. Automated whole-slide level assessment enables the processing of caseloads that would not be possible with human annotators. By streamlining the process, Aiosyn Mitosis Research can assist laboratories in adopting a more consistent and efficient protocol for the identification of novel pathology-based biomarkers, resulting in improved and standardized results.

Step-by-step



Slides are prepared as normal; the software is tightly integrated in existing workflows



The algorithm automatically detects mitoses before the case is reviewed



All mitotic figures appear highlighted when the WSI is opened by the pathologist



The pathologist evaluates the case assisted by Aiosyn Mitosis Research

Technical specifications

For a seamless experience, we provide Aiosyn Mitosis Research as a service. Our AI solution runs in the cloud within the European Union and the United Kingdom. We can deliver AI-powered mitosis detection anywhere, anytime. Aiosyn Mitosis Research can be integrated with major workflow providers such as Sectra, and it can be installed on-premise as well. Please get in touch with us to know more about the algorithm integration in existing workflows.

For clinical diagnostics

Aiosyn Mitosis Research is intended for Research Use Only and should not be used for diagnostic procedures. Aiosyn is currently in the process of validating an additional product within the Mitosis product family, Aiosyn Mitosis Breast, for clinical diagnostics. It is undergoing CE-mark certification under the EU IVDR. Mitoses are detected and highlighted by the algorithm before the pathologist opens the WSI, thereby indicating areas with mitotic activity and assisting in the quantification. Aiosyn Mitosis Breast, aims to improve consistency and increase efficiency of the clinical workflow. The software does not replace the evaluation performed by the pathologist, who is responsible for the mitotic count and for ensuring the quality of the image is sufficient to perform the analysis.



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