

## Aiosyn Mitosis Breast Mitosis detection powered by Artificial Intelligence

An IVDR-certified solution to assist pathologists in detecting mitotic figures in whole slide images of breast biopsies and resections

Certified under IVDR



## Aiosyn Mitosis Breast improves the efficiency and consistency of breast cancer grading

**Over 90% of pathologists who tried Aiosyn Mitosis Breast would like to use the algorithm in their daily practice**

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. Our AI-powered solution addresses this challenge by standardizing and increasing the efficiency of this crucial process.

### Enhanced efficiency in mitosis counting



Up to 60%  
time savings

Aiosyn Mitosis Breast employs AI technology to automatically detect mitotic figures in whole slide images (WSI) before the case is opened for review. Our solution provides valuable insights to pathologists during mitosis counting. In a clinical performance study, 75% of participating pathologists were faster when supported by Aiosyn Mitosis Breast, achieving up to 60% time savings per slide. On average, pathologists showed a 15.5% increase in productivity when reviewing resections. Notably, this efficiency gain was achieved without compromising accuracy.

### Improved consistency of results



+32.6%  
consistency\*

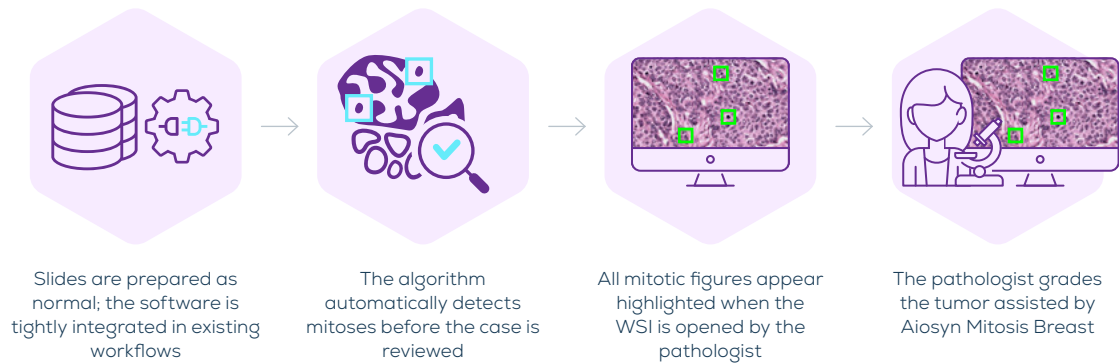
It is common to see inconsistency in mitosis counting across cases because of the use of different methods and high variability among observers. Aiosyn Mitosis Breast has been shown to reduce such variability, leading to a substantial 32.6% improvement in consistency between pathologists\*.

\*Pathologists supported by Aiosyn Mitosis Breast showed a 32.6% increase in the Intra-class Correlation Coefficient for mitosis counts when compared to pathologists unsupported by the device.

## Use of Aiosyn Mitosis Breast

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. Designed for clinical diagnostics, Aiosyn Mitosis Breast provides robust support to pathologists in breast cancer grading.

### Step-by-step



### Technical specifications

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

*Note: Results shown in this document are based on a multi-center clinical performance study performed by Radboud university medical center (Nijmegen, The Netherlands). This study involved 28 certified pathologists from 9 different countries, and it is being prepared for publication.*



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