BROCHURE

Aiforia®
Create

The most versatile tool for developing deep learning AI models for image analysis in digital pathology.

aiforia®

AI for image analysis

The power of AI in your hands

Aiforia® Create is **the most versatile tool** for developing, customizing, and validating deep learning AI models for histological features and patterns in image analysis.

Its cloud-based, collaborative working environment allows multiple users to work together in real time, anywhere in the world. Praised for its intuitive user interface, it allows users a fast start, even without any prior AI experience.

Visual data enriched with numerical verification and validation metrics enable effortless performance evaluation of AI models, ensuring top quality.

Perfect fit for:
- Pharmaceutical companies
- Contract research organizations
- Medical research laboratories
- Academic institutes
- Clinical organizations
- Anyone who wants to develop their own AI models
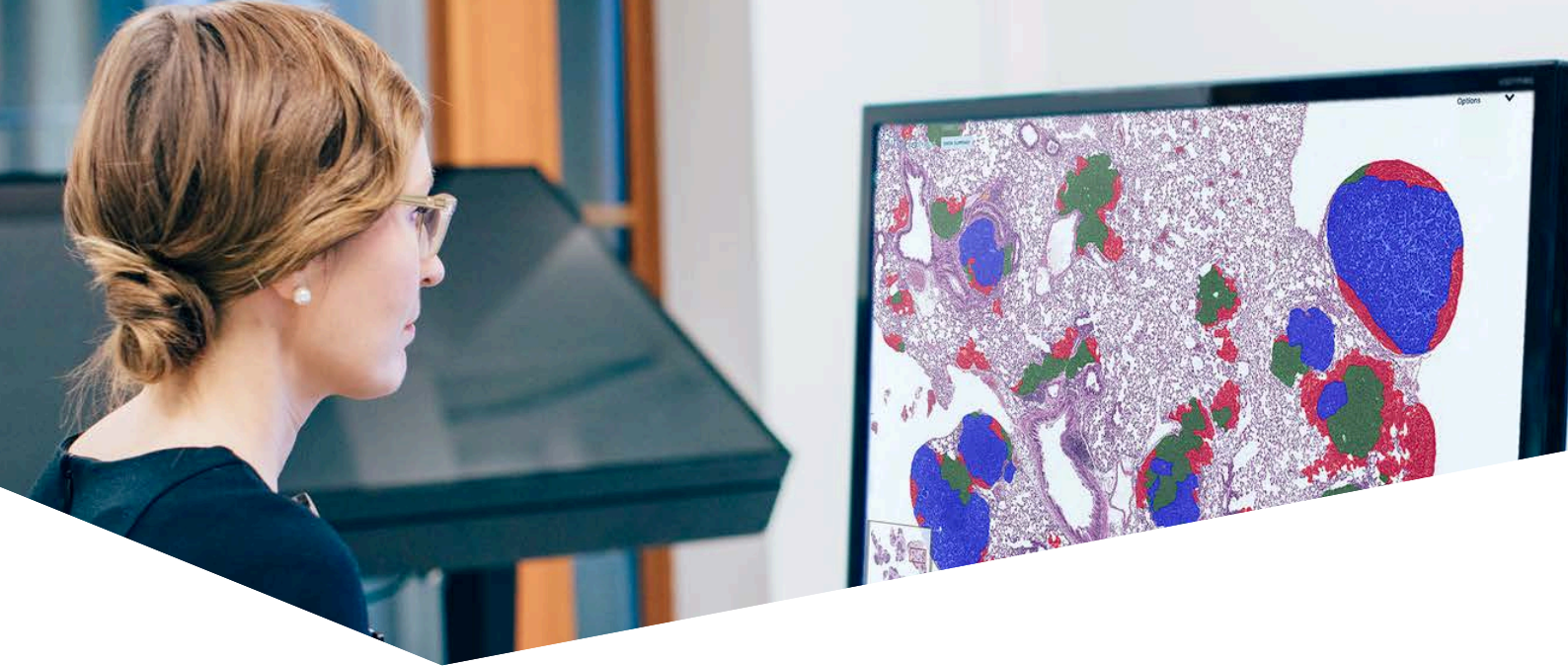
Benefits of Aiforia® Create

Ease of use

Using Aiforia® Create requires no data science or software programming expertise. Its cloud-based nature makes it scalable and extremely fast to implement; no installation is needed.

Broad compatibility

Aiforia® Create is compatible with any 2D image and a broad range of image file formats, including brightfield and fluorescence. It can be integrated with any existing laboratory infrastructure to enjoy the full benefits of a digitized workflow.

Versatility

Thousands of AI models have been developed with Aiforia® Create for research and clinical use cases; applications ranging from cancer research to neuroscience and even outside the medical field.

Increased efficiency and accuracy

Aiforia® Create supports the user by automating manual steps in AI development with features such as the patented Annotation Assistant.

Unique **functionalities**
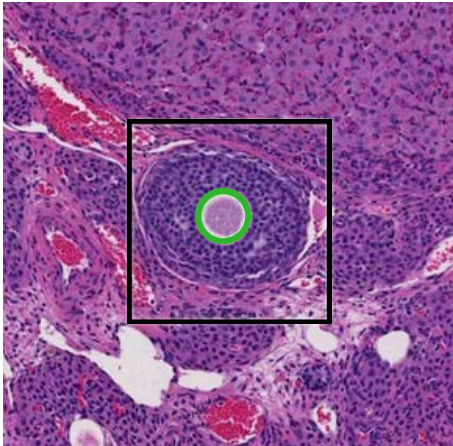

Annotation Assistant

Annotate more images in less time

The patented Annotation Assistant utilizes active learning, a highly sought-after technique in artificial intelligence. It offers premade annotations on the most useful areas of training data, allowing the user to accept, modify, or reject the suggestions.

### Object detection

Identify and count any feature

Aiforia's object detection technology can detect thousands of different objects in complex images. It enables multi-class identification and the detection of rare objects and can be combined with segmentation and spatial metrics for enhanced analysis.
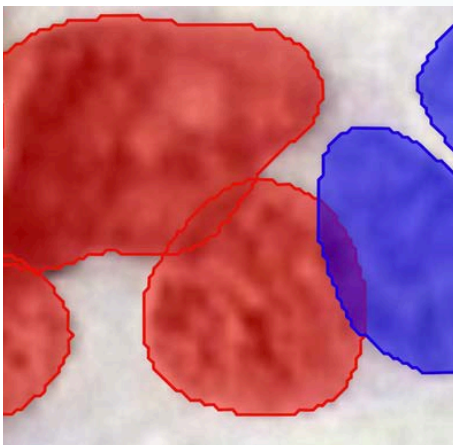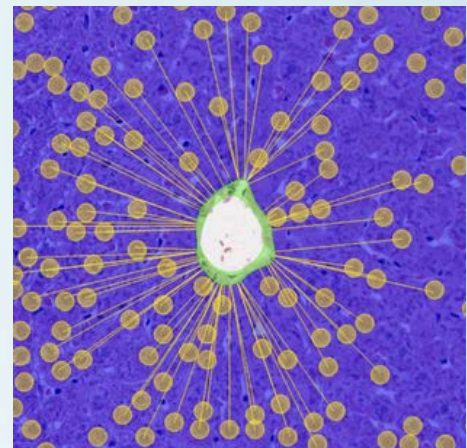
Semantic and instance segmentation

Quantify areas and dimensions with precision

Segmentation features enable precise quantification of areas and shapes, even individually when areas merge or overlap. Analysis can be further boosted when combined with object detection and spatial metrics.
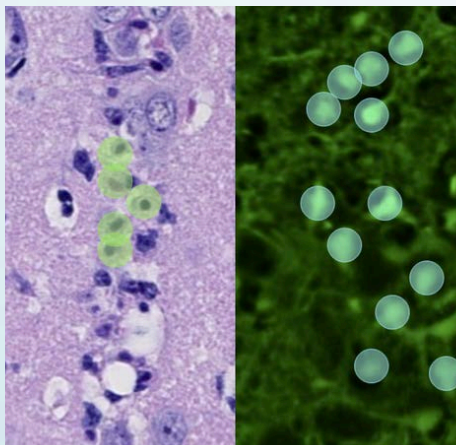
Transfer learning

Adjust your AI model with speed and ease

Transfer learning reduces the number of annotations and training cycles needed in AI development by allowing the use of existing models as a basis for AI model development and fine-tuning.

Validation

Collaborate remotely through the cloud

Validation features provide an easy interface for defining validation sets and collecting validation annotations remotely. They also provide a convenient way to invite colleagues or consultants to give blinded scoring or diagnosis according to intended use criteria.
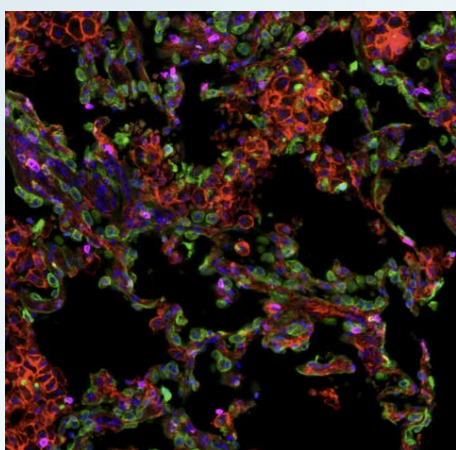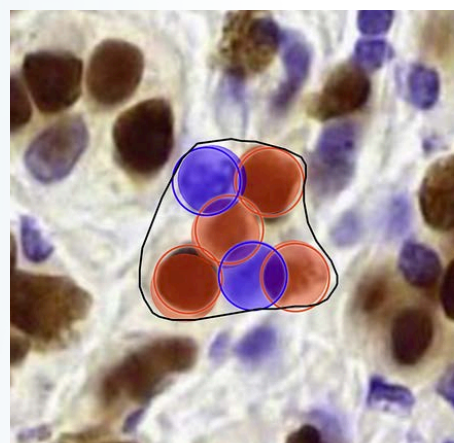

Multichannel images and analysis

Apply AI to multichannel immunofluorescence images

All AI development features are applicable to multichannel images. This enables the viewing and analysis of complex immunofluorescence images.

Use cases

Aiforia® Create enables pathologists and other domain experts to build and evaluate deep learning AI models for a wide range of image analysis tasks. The intuitive user interface ensures fast annotation of training data, and requires no technical expertise to produce impactful applications.
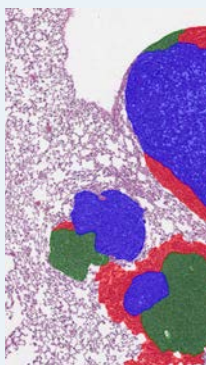
MIT case study: advancing lung cancer research with AI

Creating AI models to automate tumor grading as part of lung cancer research studies.

Read more
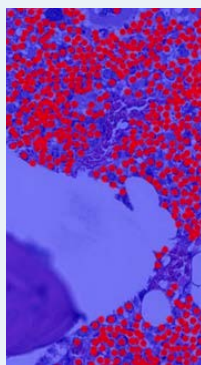
CRL case study: AI-assisted screening of bone marrow cellularity changes

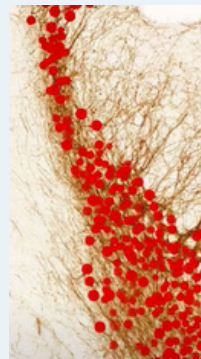Using AI models to screen for bone marrow cellularity changes.

Read more

Mayo Clinic case study: developing an AI model to determine invasion in pulmonary adenocarcinoma

Creating an AI model to determine the invasion in non-small cell lung cancer (NSCLC).
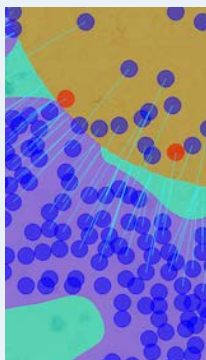
Read more

Sanofi case study: Parkinson's disease research with AI

Creating an AI model to automate Th+ neuron quantification as part of Parkinson's disease studies.

Read more

Faron Pharmaceuticals case study: using AI to perform spatial analysis in cancer drug development

Building an AI model to quantify and localize Clever-1 in the tumor microenvironment.

Read more

University of Helsinki case study: using AI-based image analysis to predict ovarian tumor outcome

Using AI to accurately classify high-grade serous carcinoma into outcome groups using tumor morphology alone.

Read more

Explore more use cases of the Aiforia® Platform

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"The Aiforia software was very easy to use by pathologists with only limited experience in deep learning. The web-based nature of Aiforia also facilitated collaborations among an international group of pathologists."

Dr. Rish K. Pai, MD, PhD, Pathologist, Mayo Clinic

"If we had not had access to Aiforia, this analysis would have been much more time-consuming. It would be a lot harder; you could even say it would have been impossible to count these individual cells."

Miika Vuorimaa, Research Scientist, Orion Pharma

Translate images into
discoveries, decisions, and diagnoses

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