

Image analysis for kidney tissue

Accelerate kidney disease research and drug development using computational pathology algorithms

Aiosyn's AI-assisted image analysis services - whole kidney quantification & biomarker discovery

Aiosyn is specialized in kidney disease and leverages advanced AI solutions for quantification of kidney histopathology specimens by highlighting visual parameters and quantifying morphological features. Through our NephroPath platform, we take slide data and produce a data-rich analysis, including per slide tissue quantifications and dataset characterization. With our technology, we empower pharmaceutical, biotech, and contract research organizations with new and improved quantitative insights to strengthen preclinical studies.

NephroPath's AI-powered quantification delivers reproducible, consistent, and rapid scoring of renal pathology biomarkers in preclinical and clinical specimens, offering a level of detail that surpasses traditional human interpretation.

Standard whole kidney analysis

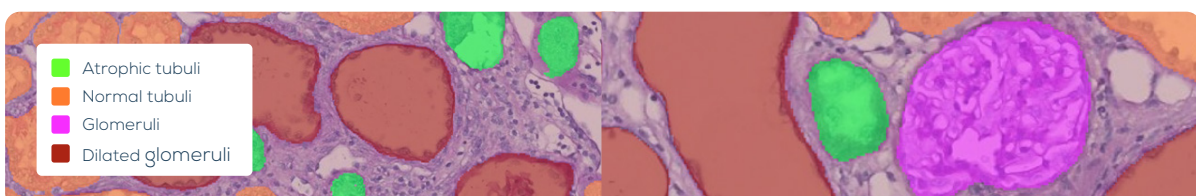
Enrich your study with AI-powered whole kidney tissue quantification. We offer insights into your data through our extensive kidney image analysis.

- **Accurate segmentation and delineation of relevant kidney structures***
- **Extent of glomerulosclerosis and fibrosis**
- **(Immune) cell quantification, including spatial relation to tissue**
- **Online/offline access to all results**

Custom kidney analysis

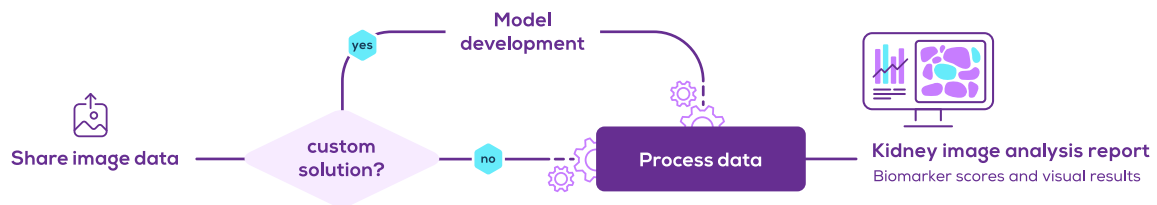
Leverage Aiosyn's expertise in AI and the latest tech to create a tailored analysis for kidney tissue. We offer development and prototyping of robust and performant models with a quick turn-around time.

- **IHC/Biomarker quantification in specific animal models**
- **Treatment response grouping**
- **Tissue microenvironment analysis**



Aiosyn's method

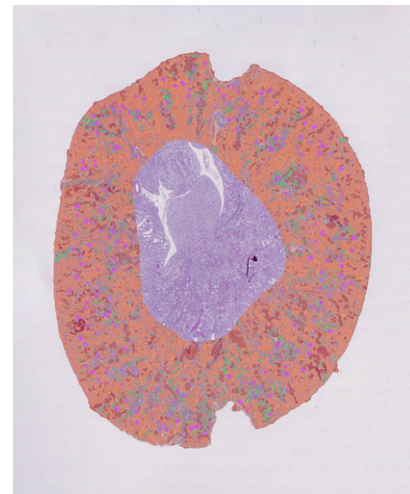
Begin your project by sharing data, and quickly receive a preview analysis to guide the next steps. Benefit from our models, available to you for a predetermined period. Access your results online, where they are readily available for download, offering convenience and efficiency in your data-driven endeavors. All data is returned when the project ends.



Standard whole kidney analysis

We provide an automated multi-class prediction and quantification on entire kidneys. Our technology identifies and quantifies key structures such as normal tubuli, atrophic/dilated tubuli, normal glomeruli, abnormal/sclerotic glomeruli, arteries, and interstitium. Additionally, our analysis includes a detailed quantification of interstitial fibrosis, providing a complete picture of kidney health.

Cortical kidney quantification			
Atrophic tubuli (N)	Dilated tubuli (N)	Sclerotized glomeruli (N)	Fibrosis (%)
1654	698	60	27%



Custom kidney analysis to fit all your needs

Besides the standard whole kidney analysis, we offer a custom approach for identifying new and existing biomarkers in the kidney, complementing precision medicine initiatives to discern disease drivers and stratify significant subgroups. Leveraging cutting-edge deep learning capabilities, our algorithms undergo tailored training to recognize key elements aligned with your project specifications. This custom approach allows you to tailor the algorithm to your preferences, enabling the selection of precise information for your biomarker strategies and avoiding unnecessary data overload.



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Product Disclosure: Aiosyn's image analysis services through the NephroPath platform are for Research Use Only and should not be used for diagnostic procedures.