

## ROSEAId Telepathology Platform

# **Transforming Pathology with** Al into the Digital Future

The ROSEAId cloud-based, AI centric platform empowers pathologists with advanced telepathology capabilities, enabling better, faster and more informed decisions on any device, anytime, anywhere ...in real-time!

#### Your Gateway to Advanced Telepathology

Our next-generation, Al-powered platform, is a suite of modular solutions catering to diverse needs across medical, educational, pharmaceutical research, laboratory workflows, and clinical practice. Our flexibility, customization and scalability ensure our solution aligns perfectly with your unique requirements, driving efficiency and innovation in pathology.

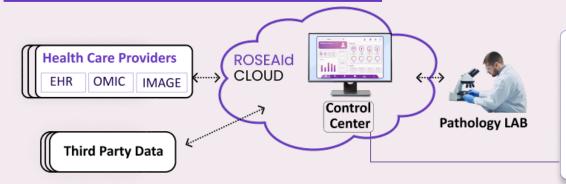
#### Mission

ROSEAId fulfils the specialized requirements of pathologists through the integration of advanced data analytics, streamlined workflow and diagnostics, providing real-time results for improved outcomes.

#### Holistic Approach to Various Challenges

Pathologists face critical challenges that impact their patient care and operational efficiencies from navigating complex regional regulations to managing costly operations. Practitioners struggle with limited access to essential pathology tools and slow second opinions leading to delayed diagnoses. The logistics of handling glass slides poses additional hurdles, affecting both the security and affordability of work. Simultaneously, data management coupled with high expenses for storage, review and retrieval further complicate the situation. Our solutions address these pressing issues providing streamlined and cost-effective solutions, empowering healthcare professionals to enhance patient outcomes, speed the process and optimize the standards of care.

#### Research Platform Components



#### **Control Center**

- · Data Manager
- · Report Manager
- · Collaboration Manager
- Workflow Manager
- · Ecosystem Integration **Partners**

#### **Control Center**

A centralized location to manage, access, research, retrieve and document any case at any time.

#### **Report Manger**

Generates Comprehensive and coherent medical reports of a given medical images.

- Annotations
- Scheduled
- Ad Hoc

### **Workflow Manager**

- Minimizes lost time, increases efficiency, and revenues
- Significantly increases diagnostic capacity
- Streamlines and optimizes the physicians diagnosis

### **Data Manager**

- Continual Enrichment of Data
- Images, videos
- Proprietary Systems

#### **Ecosystem integration Partners**

- Agnostic
- Microscopes
- API's



## Telepathology Platform

#### Health Care Providers Partner Network

- Hospital Management Systems- Patient's charts
- Hospital Data / Images Feeds Cytology, microbiology, urinalysis, pap smears, etc
- Provider Proprietary Systems

#### **Use Cases**

ROSEAId, Inc. and the University of Texas Health Sciences Center (UTHealth), Houston, Texas, combine their expertise in a collaborative effort to optimize the precision and scope of pathology research, overcoming challenges posed by intricate data sets and diverse structural complexities. Details on a few mentioned use cases are provided below.

- ROSEAId explored Pancreatic Solid Lesions (PSL), training ML models with 1,200 images, refining image acquisition and ML processes. Followed by initiation in subsequent stages of single-cell identification, amended labelling, development of list of cell types and multi cell scenario capturing diverse combinations in pancreatic lesions. The model demonstrated its capabilities achieving high-rate accuracy in a blind test.
- **Preliminary Study Draft and Unified Model** drafts titled 'Al-based ROSEAId vs. Physician Interpretation in EUS-FNA' showed 92.5% accuracy. A unified model approach improved analysis accuracy, extracting insights from sparse images.
- Subepithelial Lesions (GI) and Lung Lesions (CT-Guided EBUS) comprehensive study was completed affirming the effectiveness of the unified model with 93.25% accuracy.

#### Why Choose ROSEAId

Our use cases address today's key pathological challenges, improving productivity, improving quality issues and mitigating the shortage of pathologists. Designed to address both adequacy determination and facilitating specimen triaging, the platform streamlines workflows by eliminating sample transfers, minimizes repeats and speeds up diagnostic timelines providing high-definition Imaging ensuring precision and comprehensive data for a variety of pathology services. ROSEAId goes beyond clinical use supporting quality assurance, education, and research initiatives to optimize pathology practices with access to patient retrieval history records for retrospective review and critical examination for future references.

#### Summary

ROSEAId, Inc. is positioned to lead the way, leveraging technology, innovation, and strategic collaboration to revolutionize pathology services. We have successfully developed AI-ROSE, a cloud-based platform for rapid onsite evaluation of EUS-FNA specimens. Ensuring high accuracy and global accessibility to ROSE services anytime, anywhere. Our vision is to automate the entire ROSE process covering smear preparation, staining, image capture, adequacy determination and potential diagnostic advice globally.

#### **Image Previews**

