上海市肺科医院
SHANGHAI PULMONARY HOSPITAL
上海市肺科医院互联网医院
上海市职业病防治院
同济大学附属上海市肺科医院
上海市红十字肺科医院

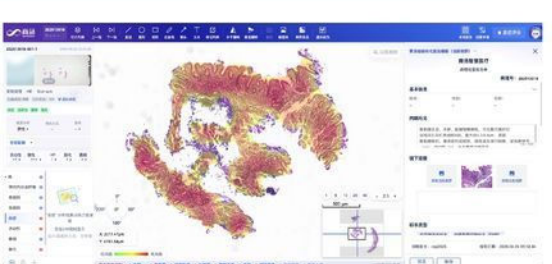
Intelligent Pathology Comprehensive Solution

SenseCare Intelligent Pathology Solution

Powered by SenseTime's proprietary pathology large model, SenseCare integrates multimodal and digital slide technologies to deliver a comprehensive AI-driven platform for the entire pathology workflow. It enhances diagnostic efficiency through AI-optimized review, quality control, diagnosis, and case management, while its integrated training platform continuously improves model accuracy and generalization. By enabling more precise diagnoses and expanding access to pathology resources, SenseCare is ushering pathology into a new era of digital intelligence.

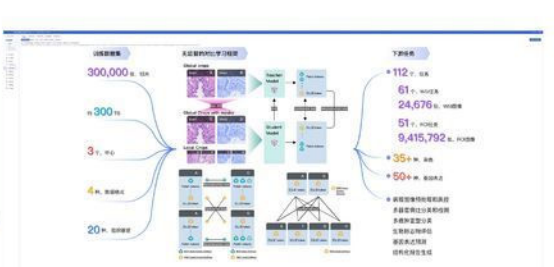
Intelligent Pathology AI-Assisted Diagnosis Platform

- Intelligent Analysis of Liquid-Based Cervical Cytology
- Intelligent Analysis of Pleural and Ascitic Fluid Cytology
- Intelligent Analysis of Digestive Tract Pathology
- Intelligent Analysis of Pulmonary Histopathology
- Intelligent Quantitative Analysis of Immunohistochemistry
- Digital Pathology AI Quality Control Analysis



Pathology Foundation Model AI Application Production Platform

- Multi-Disease Pathology Model Training & Evaluation
- Rapid Training for Over 100 Types of Immunohistochemistry
- Multimodal Pathology Reading Assistant
- Diverse Library of Intelligent Pathology Tools



Digital Pathology Slide Management Platform

- High-Performance Tiered Lossless Compression
- Visual Pathology Image Management
- Interactive & Streamlined Pathology Viewing
- Digital Pathology Library
- Remote Pathology Diagnostic Collaboration

PathOrchestra

China's First Original Pathology Foundation Model

Stomach	Colorectal	Cervix	Lung
Prostate	Lymph Node	Breast	Vesical

Focus: **AI-Empowered Digital & Intelligent Transformation of Pathology Departments**

AI Inference Time	1 ~ 4 mins	50%	Improved Diagnostic Workflow
Improved Slide Imaging Quality	35%	100%	Cancer Case Detection Sensitivity

Clinical: Precision Diagnosis

Research: Accelerated Translation

Education: Digital Data Loop

Clinical Application

The accuracy of the subtype classification model for pulmonary frozen small nodules

Frozen small nodules are very common in intraoperative rapid diagnosis **accurate classification** is of critical significance for the selection of subsequent treatment pathways.

Accuracy of BA **99.4%**
Accuracy of Intraoperative Diagnosis **90.8%**

Model Tasks and Core Outcomes

Categorized Data Enrollment

- Bronchiolar Adenoma
- Adenocarcinoma In Situ
- Invasive Adenocarcinoma

Core Results

Using leading pathology foundation models—including PathOrchestra, Titan, and MUSK—as base models, we completed the training of over 10 models.
Among these, **Model #18 based on PathOrchestra achieved the best performance.**

Confusion Matrix	BA	AIS	IAC
BA	**25**	0	1
AIS	0	**30**	16
IAC	0	6	**85**

Model Research Pathway

Project Initiation, Data Collection & Curation	Data Annotation	Model Training & Optimization	External Data Validation	Model training completed in 2 months Clinical analysis enabled
2 WEEKS	1 WEEK	6 WEEKS	2 WEEKS	

Unified Data & Intelligence: A Multimodal Foundation Model Driving Holistic Smart Pathology Integration