

Solutions for Pulmonary Lab

HOW ORPHEUS SOLVES PULMONARY WORKFLOW

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Efficient All-in-One Workflow for the Pulmonary Lab

The Pulmonary department is both a diagnostic and therapeutic lab. These procedures need to be well documented and centrally managed with a strong emphasis on ease of use and workflow efficiently. There are several types of bronchoscopy procedures:

1. **Rigid** – its larger lumen allows for therapeutic approaches and is preferred for recovery of objects because it allows protection of the airway and control of the foreign body.
2. **Flexible** – longer and thinner, its tip can be oriented allowing navigation into individual lobes or segment bronchi. There is a channel for suctioning and smaller instrumentation. It causes less discomfort and can be performed under moderate sedation.

The procedure is done for diagnostic and therapeutic purposes:

1. **Diagnostic** – view abnormalities of airways, obtain tissue samples of the lung, evaluate bleeding in the lungs (lung cancer, chronic cough or sarcoidosis)
2. **Therapeutic** – remove secretions, blood or foreign objects; laser resection of tumors or benign strictures; insertion of stents; percutaneous tracheostomy; tracheal intubation.

Workflow in the Pulmonary Lab

Whether it is a rigid or flexible bronchoscope, many of the pulmonary procedures involve recording videos and taking images for documentation.

In some cases, the procedure involves taking biopsies and analyzing them in real-time using a digital microscope. Also, several modalities may be used such as US or Fluoroscopy for image guidance of the tools.

Clinicians require a convenient way to:

1. Easily capture video and still images with hands-free controls.

2. Instant access, anywhere, to the video and images for annotations, tagging and review with patients.
3. Quickly report using a wide range of configurable structured templates.
4. Free up the scope tower and workstation for the next procedure and complete documentation anywhere and anytime.
5. Share reports, images and videos with hospital information systems and the patient.



A fluoroscopy navigation image of the bronchoscope taken using the Orpheus CAST

How Orpheus Improves Pulmonary Lab Documentation Workflow

The Orpheus System combines a state of the art video and image capture device that serves as the expert workflow and documentation workstation and a centralized image management solution that provides tools for clinicians anywhere and anytime to complete their diagnostic reporting workflow.

All-in-One Point of Care Workflow

The Orpheus CAST video and image capture solution combined with the Orpheus workflow software connected to the centralized Orpheus server empowers you with an all-in-one workstation for end-to-end pulmonary workflow.

- The Orpheus CAST is a scope vendor neutral solution that directly connects to any raw video source and displays it at high fidelity.
- The Orpheus CAST can serve as the only display monitor used during the procedure or alongside an existing display monitor.

- The Orpheus CAST is centrally connected and brings modality worklist at point of care modality for accurate and time saving patient and procedure identification.
- The Orpheus CAST provides intra-procedure documentation with customizable On Screen image tagging.
- The Orpheus CAST provides access to patient's prior images for comparison and post procedure image editing and procedure documentation.



Orpheus CAST installed alongside a bronchoscopy tower proves a superior workflow

Anywhere, Anytime Diagnostic Documentation

The Orpheus system provides web-enabled clinical documentation user interfaces accessible anywhere and anytime. This enables the clinician to perform their diagnostic procedure documentation and increases room efficiency by freeing up the device for additional procedures.

With the Orpheus user interface clinicians can:

- Review procedure images and videos
- Compare prior studies
- Create additional images
- Tag images and annotate with graphics and text on the image (report over the image)
- Create physician structured reports using templates, speech to text tools and multi-media images.
- Share images and reports with EMR, PACS and the referring physician.
- Create catalogs of cases and presentations for training, research and conferences.

Patient Engagement leads to better care

The following case study is based on a true one but names of the hospital and staff have been changed

At the JTK medical center they use the Orpheus system to record every bronchoscopy at the pulmonary lab.

Dr. Pramod was performing a routine diagnostic study on a patient but found out that he will not be able to complete the study due to a block in one of the airways. The doctor clicked on the scope button connected to Orpheus CAST to easily take pictures and document.

At the end of the case, he turned around and faced the patient with the Orpheus application open and showed him exactly what occurred and why a different procedure would be required.

Advantages of a Centralized Approach

The advantages of a centralized clinical media management platform include:

- Instant access from anywhere, anytime for uploading images and reviewing them.
- Standardized documentation and accessibility for clinical diagnostics and reporting.
- Minimal ongoing costs to capture and store thousands of videos and images.
- Secure storage, access controls and auditing that enhance patient privacy.
- Single point of integration with enterprise systems such as electronic medical record (EMR) and PACS.