



AS-3 Microscope Workstation

Software Operation Instructions



Before using the product, read this user manual carefully to ensure proper use. Please keep this user manual in a safe place after reading, so you can refer to it whenever needed.

User Manual Information

Product Name: Microscope

Product Model: AS-3

Software Name: AS-3 Digital Microscope Workstation

Software Main Release Version: V1.0

User Manual Version: V1.1

Manufacturer Information

TooToo MediTech Co., Ltd.

Address: 2401, 3A, Phase II, Smart Home, Baolong Street,

Longgang District, Shenzhen, Guangdong, China

Tel: +86-755-28306385

Email: info@newtootoo.com

Web: www.newtootoo.com



CONTENT

Chapter 1 Manual Overview	3
1.1. Overview	3
1.2. Scope of application of the manual	3
1.3. Intended use	3
1.4. Manual conventions	3
Chapter 2 Software System Configuration	4
Chapter 3 Login	5
Chapter 4 Main Interface	6
Chapter 5 Add Microscopic Exam	8
5.1. New pet information	8
5.2. Edit pet information	9
5.3. Delete pet information	10
5.4. Microscopic examination process	10
Chapter 6 Report Management	24
6.1. Search Report	24
6.2. View Report	24
6.3. Delete Report	26
Chapter 7 Sample Preparation	27
Chapter 8 Report Template	28
8.1. Default Report Templates	28
8.2. Creating a New Report Template	29
Chapter 9 Rapid microscopic Examination	32
Chapter 10 Account Management	33
Chapter 11 Data Maintenance	35
11.1. Basic Information	35
11.2. Inspection items	36
11.3. Professional Library	38
11.4. Positive control library	40
11.5. Video	41
11.6. Cell Count	42
Chapter 12 System Management	43
12.1. Institution Setting	43
12.2. Device Parameter	43
12.3. Image Setting	44
12.4. Video Storage	45
12.5. Distance Calibration	45
12.6. Camera Registration	46
Chapter 13 Common Faults and Troubleshooting	47



Chapter 1 Manual Overview

1.1. Overview

This chapter describes how to use this user manual. This manual provides detailed information regarding the intended use, structural composition, functions, and operation of the microscope workstation software. Before using the instrument, please read and understand this manual carefully to ensure the correct operation of the microscope workstation software, to achieve optimal performance, and to ensure operator safety.

1.2. Scope of application of the manual

The microscope workstation user manual is intended for use by medical laboratory professionals or trained physicians, nurses, or laboratory technicians.

1.3. Intended use

This software is specifically developed for the AS-3 microscope as a microscope workstation application, compatible with the trinocular microscope produced by TooToo MediTech Co., Ltd. It utilizes electronic microscopy imaging technology to capture high-definition images of samples such as cells, tissues, and pathological sections, and transmits them at high speed to the software via a USB 3.0 data cable for real-time image display, supporting image observation and processing in clinical laboratories.

1.4. Manual conventions

The manufacturer reserves the final right of interpretation of this manual.

All illustrations provided in this manual are for example purposes only and should not be used for any other purposes. The graphics, settings, or data in the illustrations may not exactly match what you see on your microscope station.



Chapter 2 Software System Configuration

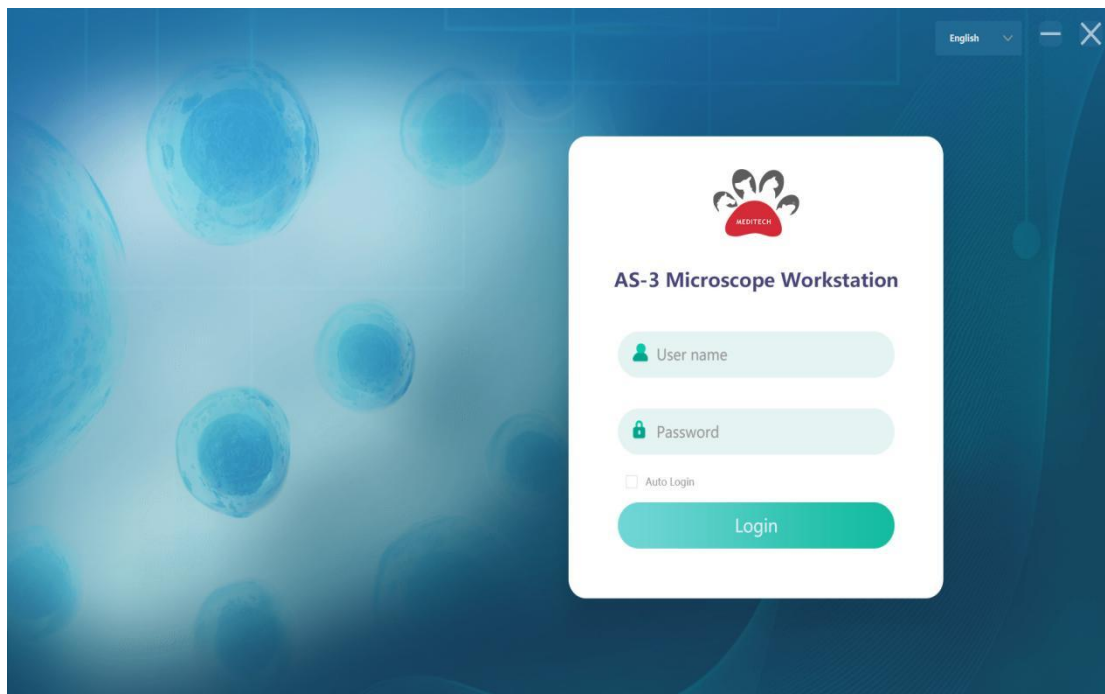
Processor	8th Generation Intel i5 or higher, 1 GHz or above
Memory	8 GB or more
Storage	128 GB solid-state drive (SSD) or larger
Data Interface	USB interface of the electronic microscope camera, supporting USB 2.0 or higher
Operating System	64-bit systems including Windows 7 SP1 or later, Windows 10, Windows 11, etc.

Note: The above specifications represent the minimum requirements for software operation. For optimal performance, it is recommended to upgrade the computer hardware configuration.



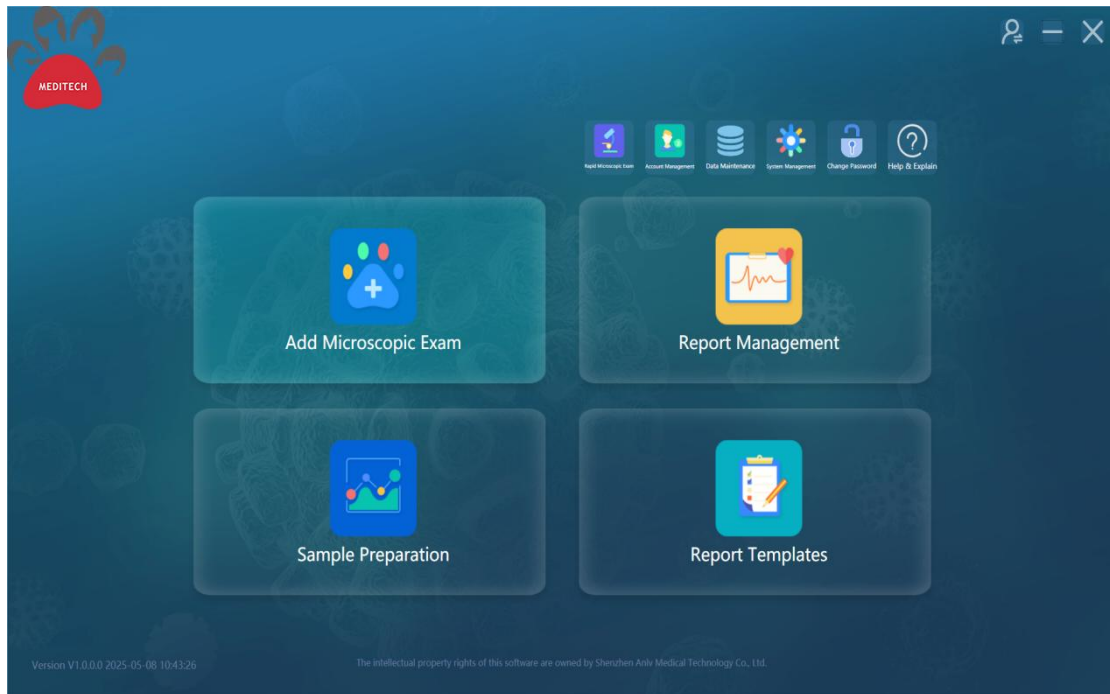
Chapter 3 Login

1. After installing the software, you can access the login interface upon successful activation.
2. For first-time use, you can enter the admin account; the **default admin username is: manage, and the password is: 123456.**
3. Selecting **Auto Login**, you will be able to access the main operation interface directly without entering your username and password during next logins.
4. The icons in the upper right corner of the login interface, from left to right: language switch(support **Chinese, English**), **minimize, close.**



Chapter 4 Main Interface

1. After logging into the admin account, you will enter the main operation interface.



The icons in the upper right corner of the main interface, from left to right: account switch, minimize, close.

2. The main interface menu bar is as follows:

No.	Menu Bar	Description
1	Add Microscopic Exam	This menu allows you to add new pet information and perform all microscopy operations such as capturing images, recording videos, and generating reports for the newly added pet.
2	Report Management	This menu allows you to view past pet medical records.
3	Sample Preparation	This menu provides users with demonstrations of sample preparation, including illustrated tutorials and video tutorials, and supports custom sample preparation demonstrations.
4	Report Templates	This menu provides users with a default report template for examination items, while also supporting custom report templates. This menu provides users with default report templates for examination items (including professional and condensed templates), while also supporting custom report templates.



3. The icons in the upper right corner of the main interface are as follows.

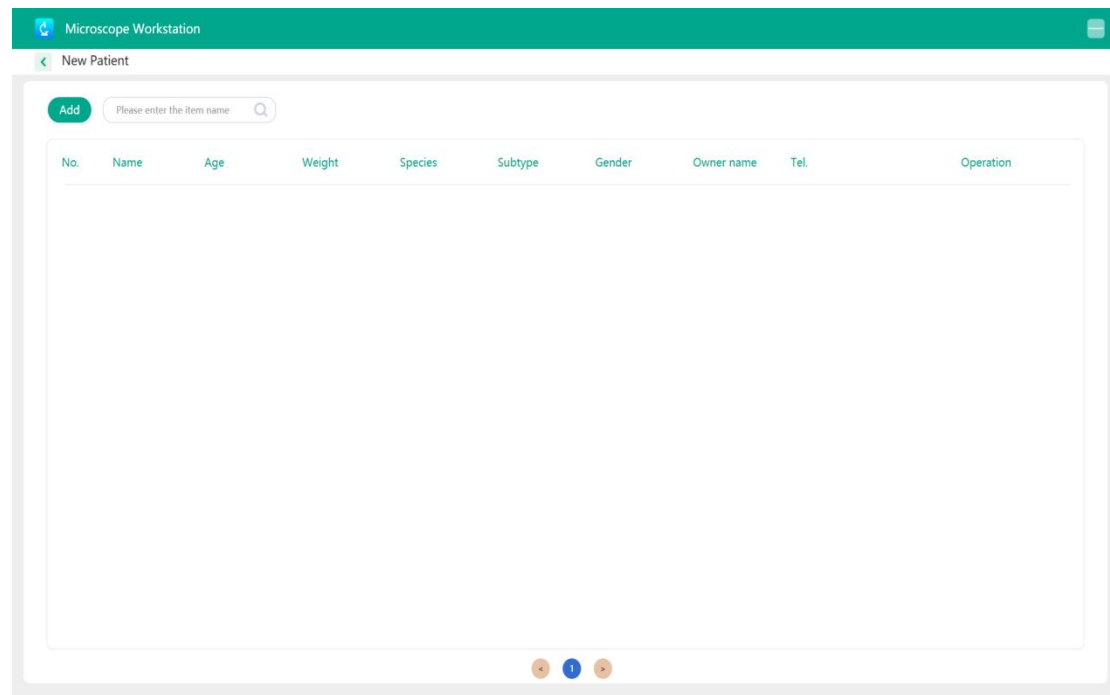
1	Rapid Microscopic Exam	Allows basic operations such as image capture, video recording, microscopy tools usage, and camera parameter settings, but does not generate examination reports.
2	Account Management	Used for creating new accounts and managing account permissions.
3	Data Maintenance	Used to manage and maintain the preset basic information, inspection items, professional library, positive control library, video, cell count, and other data in various software modules. These data will be automatically linked to relevant modules, and users are also allowed to customize settings for each option.
4	System Management	Used to set institution information, device parameters, image settings, video storage, distance calibration, camera registration, and other system information.
5	Change Password	Allows users to change their passwords
6	Help & Explain	Provides users with the instructions for use



Chapter 5 Add Microscopic Exam

5.1. New pet information

1. Click "**Add Microscopic Exam**" on the main interface to enter the **New Patient interface**, where you can search information on previously ill pets or create new records for sick pets.



2. Click the "**Add**" button in the upper right corner of the pet management screen to enter the information entry screen, where you can set details such as ***Patient Name**, ***Owner name**, ***Species**, subtype, Patient Gender, Age(Years,Months), Weight, and Tel. (items marked with "*" are required). After completing the information setup, click "**Save**," and the pet information will automatically display in the pet information list.



Microscope Workstation

New Patient

Add Please enter the item name

No. Name Age

Operation

Add

* Patient Name:

* Owner name:

* Species:

Subtype:

Patient Gender:

Age (Years, Months):

Weight(KG):

* Tel.:

Save

Microscope Workstation

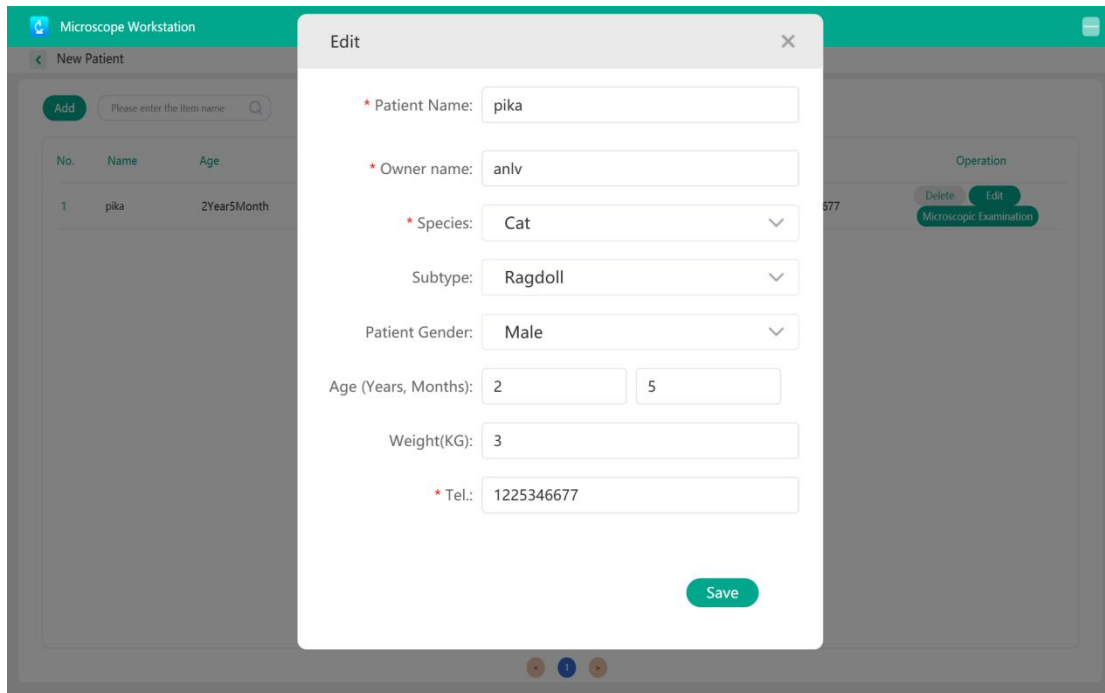
New Patient

Add Please enter the item name

No.	Name	Age	Weight	Species	Subtype	Gender	Owner name	Tel.	Operation
1	pika	2Year5Month	3 Kg	Cat	Ragdoll	Male	anlv	1225346677	Delete Edit Microscopic Examination

5.2. Edit pet information

In the pet information list, click the **"Edit"** button on the right side of the pending information list. You can modify the pet information in the editing interface, and after making changes, simply click **"Save"** to finish.



The screenshot displays the 'Microscope Workstation' software interface. A modal window titled 'Edit' is open, allowing for the modification of patient information. The form contains the following fields:

- * Patient Name: pika
- * Owner name: anlv
- * Species: Cat (dropdown menu)
- Subtype: Ragdoll (dropdown menu)
- Patient Gender: Male (dropdown menu)
- Age (Years, Months): 2 (Years), 5 (Months)
- Weight(KG): 3
- * Tel.: 1225346677

A green 'Save' button is located at the bottom right of the form. In the background, a table lists patient information, and a 'Microscopic Examination' button is visible on the right side of the interface.

5.3. Delete pet information

Click the "**Delete**" button on the right side of the pending information in the pet information list to remove this pet's information.

Important Notice: When you delete a pet from the pet information list, all test reports associated with that pet will also be permanently removed. And this data cannot be recovered. Please proceed with caution!

5.4. Microscopic examination process

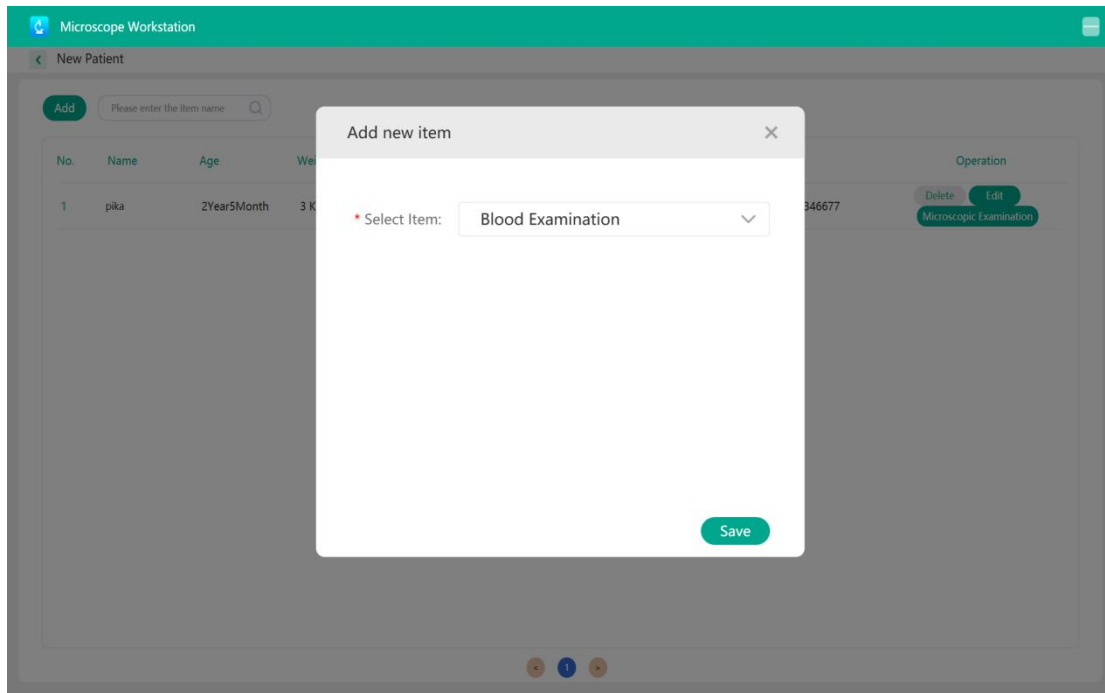
Click the "**Microscopic Examination**" button --- Add inspection items --- Open the device --- Capture photo/Record video --- Generate a report.

5.4.1. Add inspection items

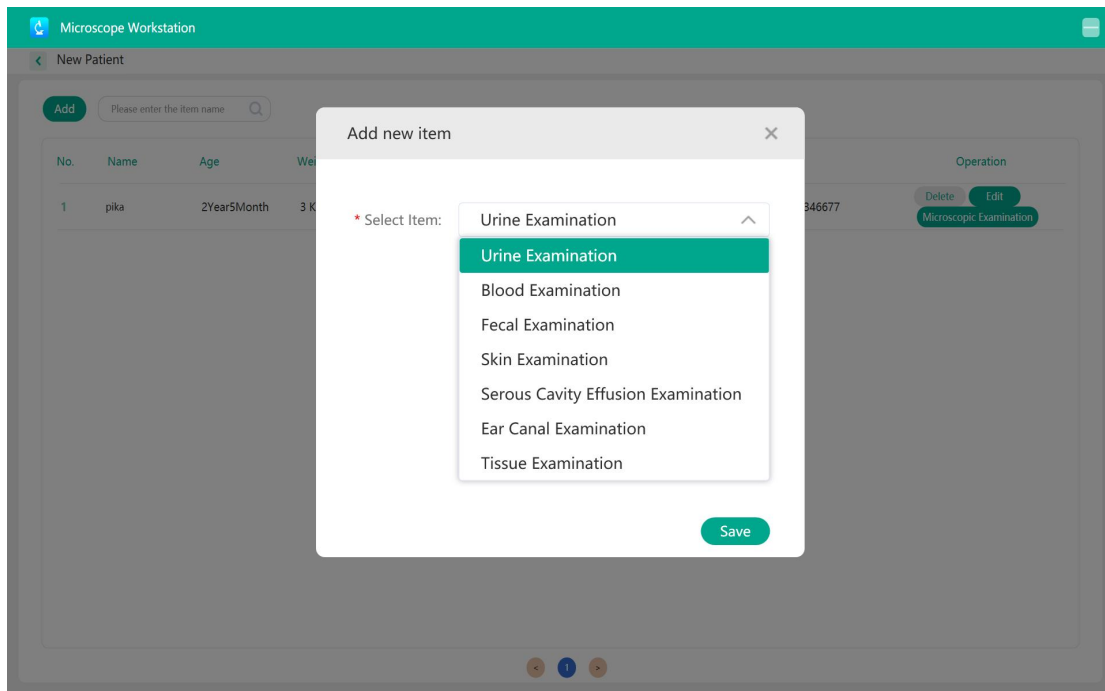
1. In the pet information list, click the "**Microscopic Examination**" button on the right side of the pending information list, select the examination items, and then enter the microscopic examination interface.

Note: During microscopic examination, the prepared sample slide should be placed on the mechanical stage and secured with the specimen clip handle.

For details on the specimen preparation process, please go to the Sample Preparation interface (or refer to Chapter 7 Sample Preparation).



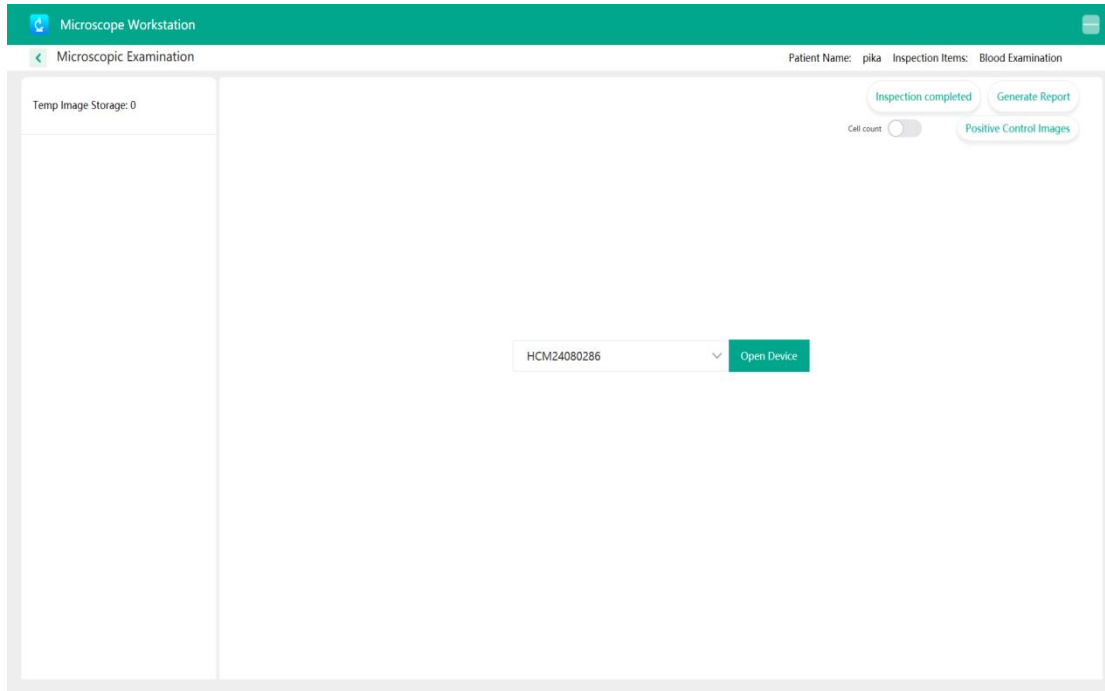
2. Select the examination items to be detected. After clicking "**Save**" the system will redirect you to the microscopic examination interface.
 - Default selectable items: Urine Examination, Blood Examination, Fecal Examination, Skin Examination, Serous Cavity Effusion Examination, Ear Canal Examination, and Tissue Examination.
 - Customizable examination items: Users can create new examination items by navigating to "**Data Maintenance --- Inspection Items**".





5.4.2. Open the device

1. After entering the **microscopic examination interface**, the connected device's serial number will be displayed automatically. Alternatively, you can click the dropdown button to view multiple connected device serial numbers. Select a device and click **"Open Device"** to access the live examination display interface.



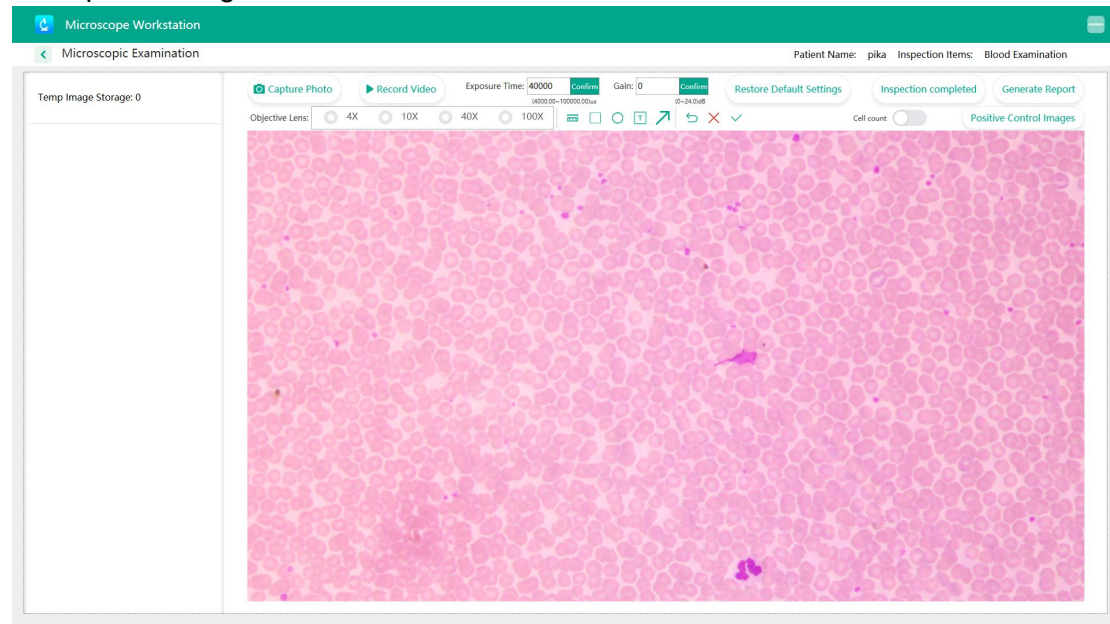
2. Place the prepared specimen into the sample holder of the microscope station, then adjust the coarse and fine focus knobs to achieve clarity. Once focused, you will obtain a clear image.
3. Click **"Inspection completed"** to exit the real-time display interface of the microscopic examination.



5.4.3. Routine operations of microscopic examination

5.4.3.1. Camera parameters adjustment

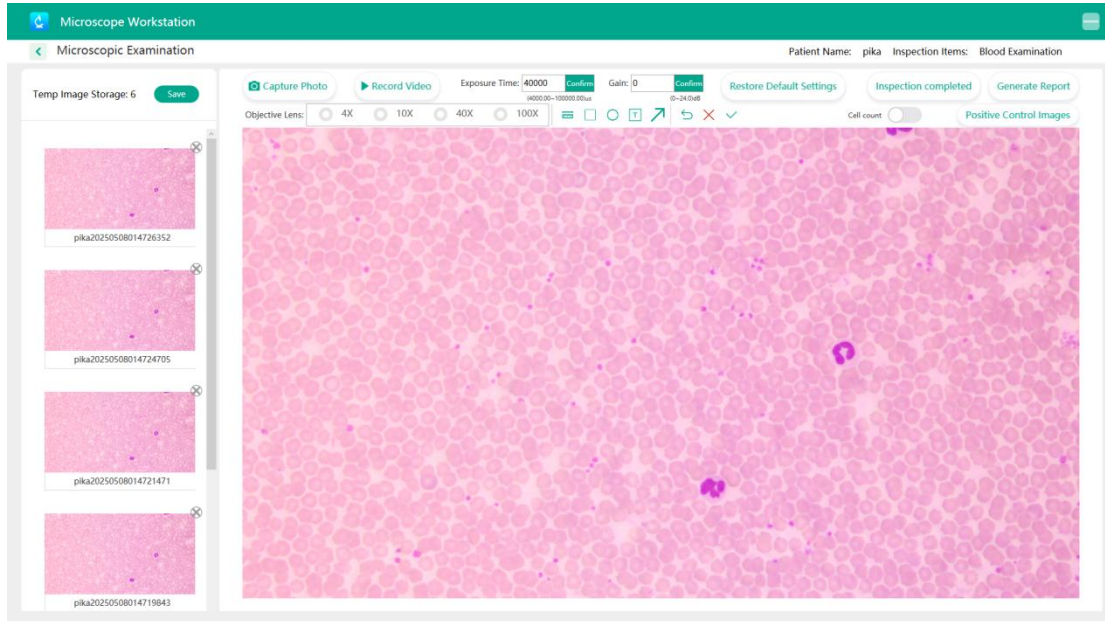
1. The microscopic examination interface displays the "**Exposure time**" and "**Gain**" adjustment areas, allowing real-time adjustments to the imaging exposure value and gain to change the visual effect. When the imaging field appears too dark, appropriately adjusting the exposure and gain values can help achieve the optimal image effect.



2. After adjustment, click "**Capture Photo**" to take a photo using the adjusted parameters. These parameters are only for this adjustment; the next time you turn on the camera, it will default to the parameters in "**System Management --- Device Parameters**".

5.4.3.2. Capture photo

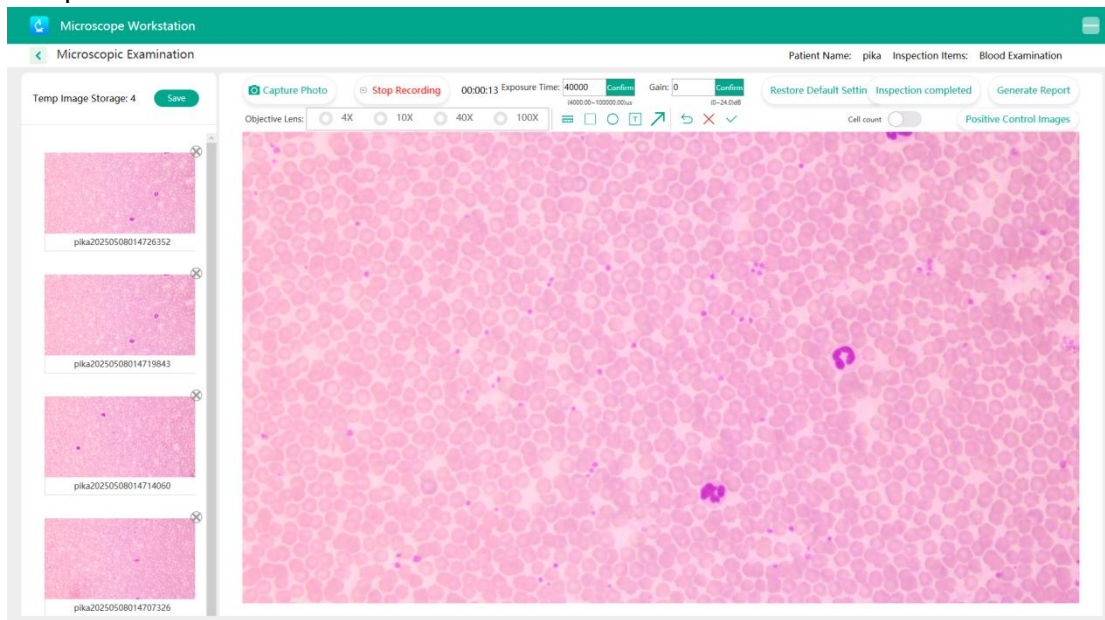
1. Click the "**Capture Photo**" button to trigger the camera for image acquisition. During the capture process, an animation effect will be displayed.
2. The captured images will be automatically stored in the temporary storage area on the left side of the microscopy interface.



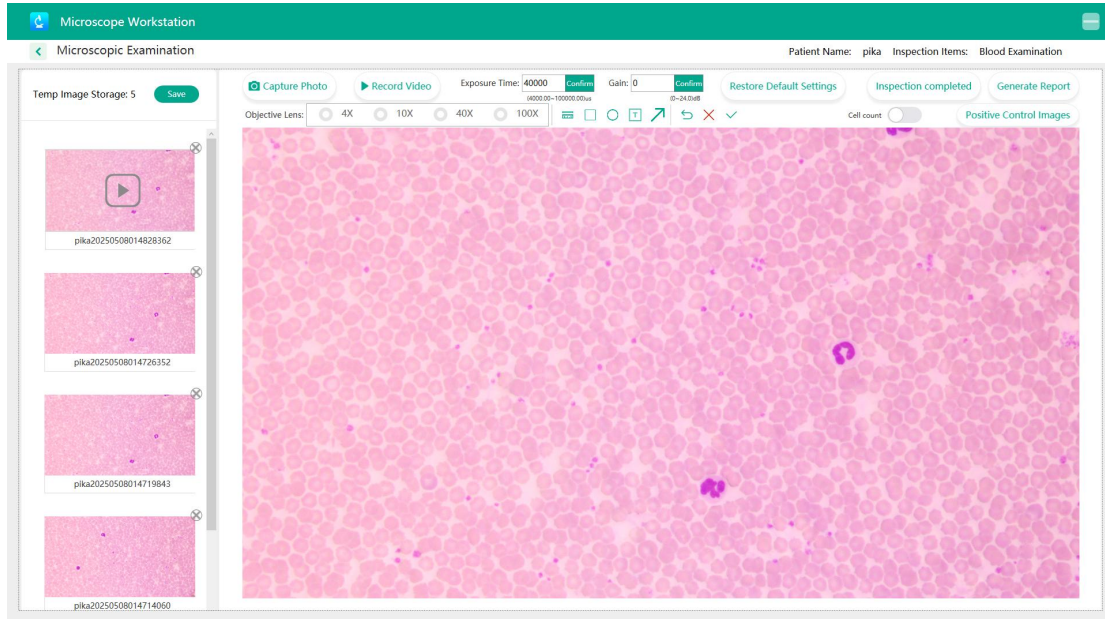
3. You can configure the image format, size, quality etc. for captured images by navigating to "**System Management --- Image Settings**". For detailed instructions, please refer to Chapter 12.3 Image Setting

5.4.3.3. Record video

1. Click the "**Record Video**" button to activate the camera and begin video recording. The recording duration will be displayed in real time during the process.



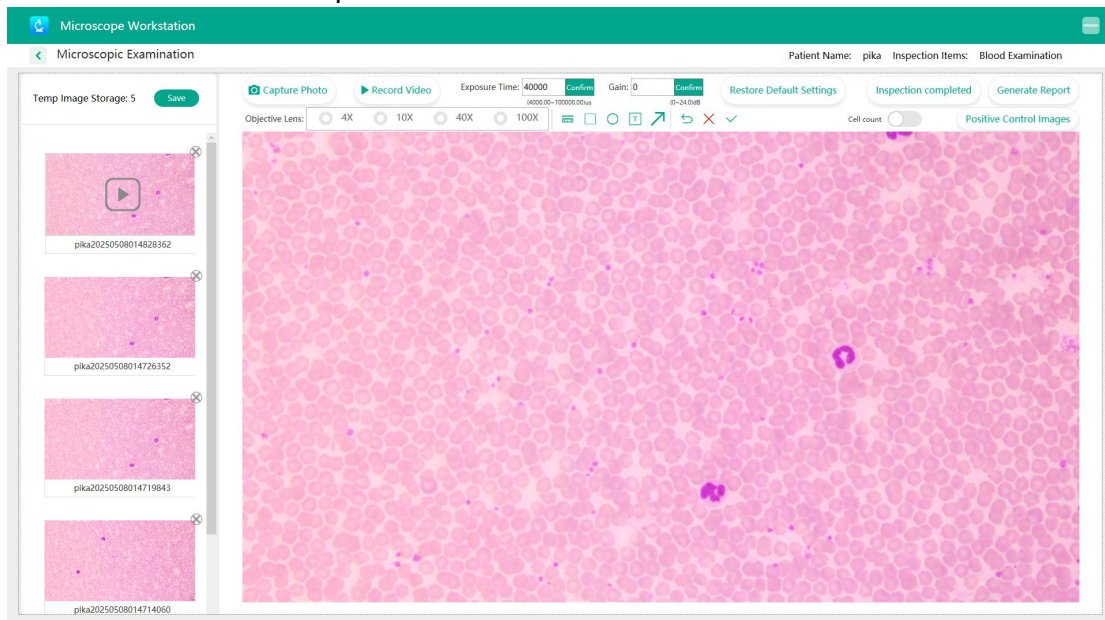
2. Click the "**Stop Recording**" button to end the recording. The recorded video will be automatically stored in the temporary image storage area on the right side of the microscopy interface.



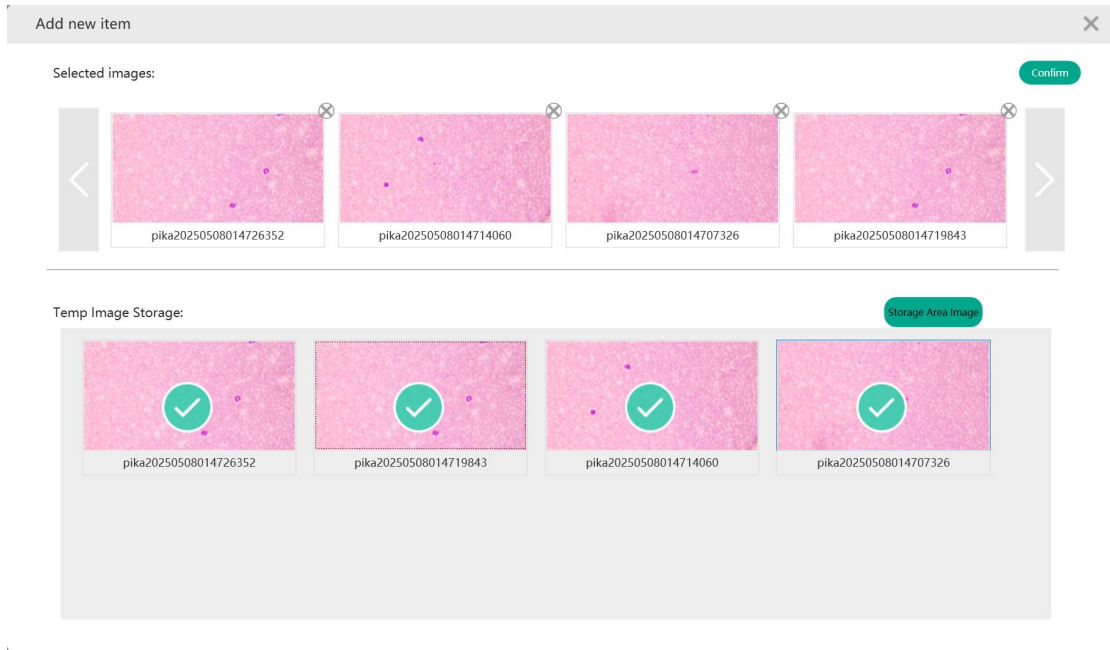
3. You can configure the storage path and the naming rules for recorded videos in "**System Management --- Video Storage**".

5.4.3.4. Temporary image storage

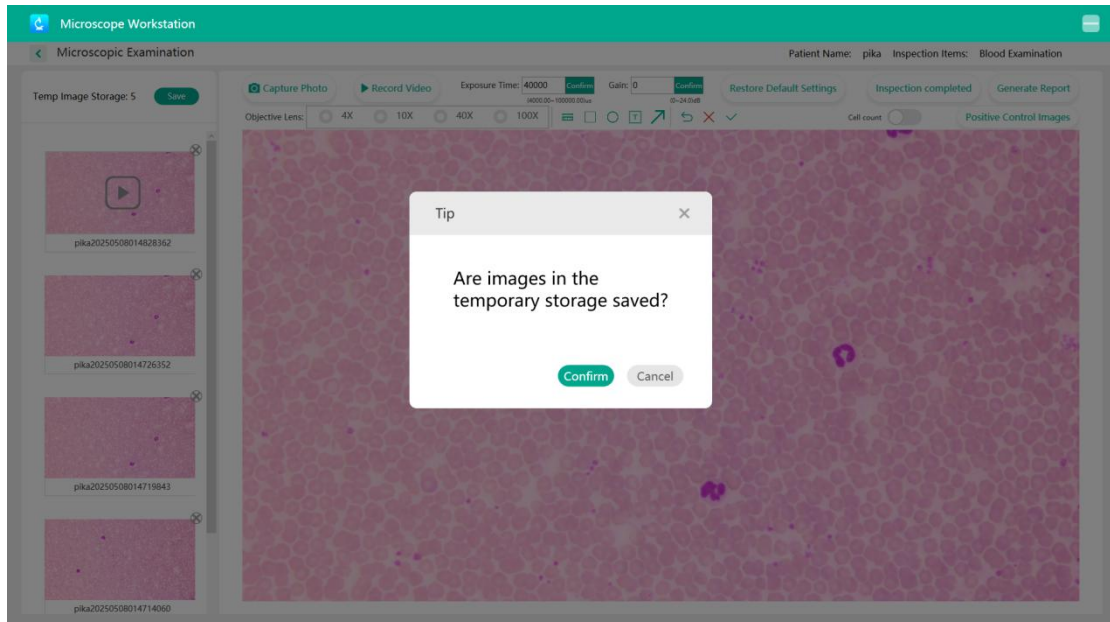
1. After clicking "**Capture Photo**" or "**Capture Video**", the photo or video captured will automatically display in the temporary image storage area located at the left interface of microscopic examination.



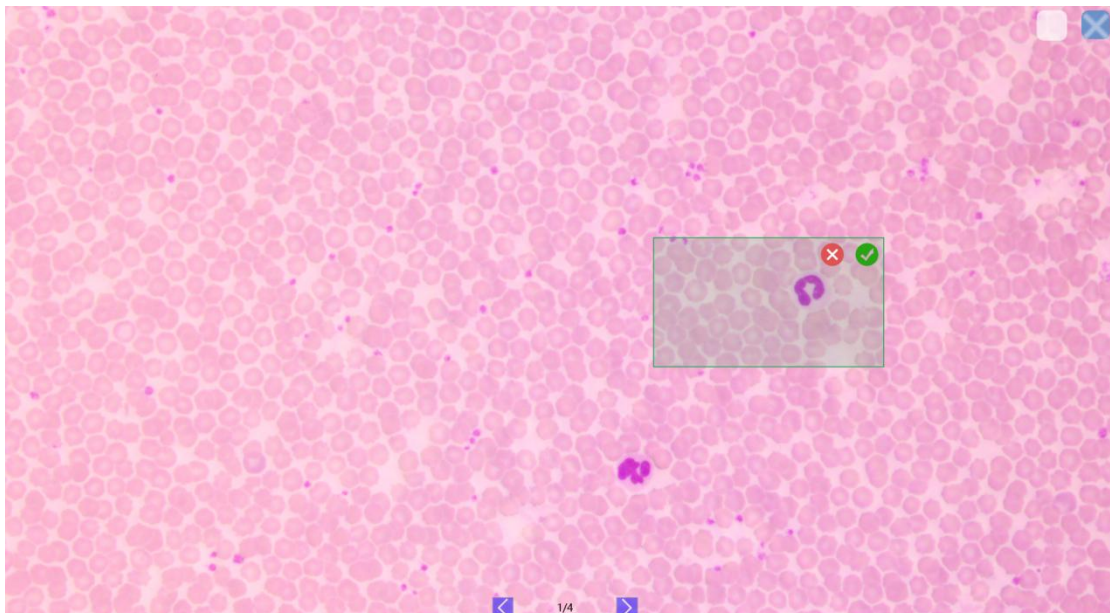
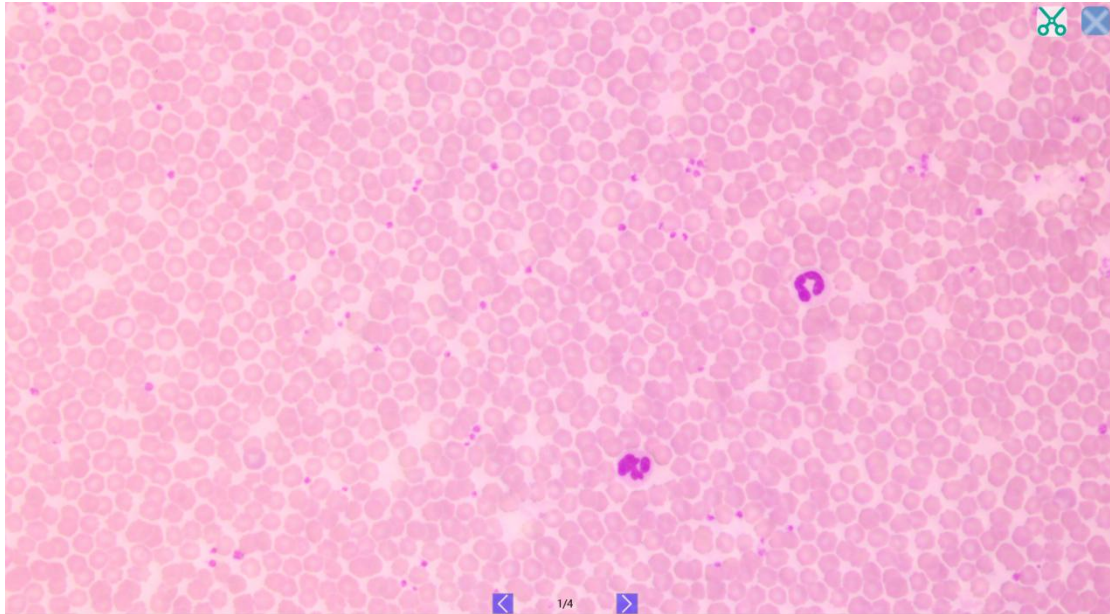
2. Click the "**Save**" button in the upper right corner of the photo to save it to the storage area, making it available for selection when generating a report (Generate Report --- Select Template --- Click "Storage area image" --- Confirm).



3. The temporary image storage area displays the number of captured images, which is updated in real time based on capture operations.
4. When returning to the main interface or exiting the microscopic examination, a display will prompt: "Are images in the temporary storage saved?"
 - Clicking "**Confirm**" will store the images in the preset directory defined in "**System Management --- Image Settings**" (default path: D:\MicroscopeStudio\Resources\images).
 - Clicking "**Cancel**" will delete all images in the temporary storage area, and they cannot be recovered.



5. Images in the temporary storage area can be clicked to view. In the viewing interface, a cropping function is available. Clicking the Crop button allows the image to be cropped, and clicking the Save button will save the cropped image as a new file without deleting the original photo.



- When viewing an enlarged image from the temporary storage area, the interface will display the total number of images and the current image number. You can navigate left or right to view the previous or next image.

5.4.3.5. Microscopic examination tools

The microscopic examination tools include, from left to right: objective lens magnification selection(4X,10X,40X,100X), Ruler Tool(Distance Measurement), Rectangle Tool, Circle Tool, Text Tool , Arrow Tool, Undo, Cancel, and Save.

No.	Tools	Description
1	Objective Magnification	Selectable magnifications: 4X, 10X, 40X, 100X.



2	Ruler Tool (Distance Measurement)	<ul style="list-style-type: none"> - After selecting the corresponding objective magnification, click the ruler tool to measure the target object within the image. The measured length reflects the actual physical length (calculated based on the pixel-to-physical size calibration coefficient set in "System Management ---Distance Calibration"). - Line thickness and color are customizable.
3	Rectangle Tool	<ul style="list-style-type: none"> - Click the rectangle tool to draw a rectangular frame around the target object within the image. - Line thickness and color are customizable.
4	Circle Tool	<ul style="list-style-type: none"> - Click the circle tool to draw a circular frame around the target object within the image. - Line thickness and color are customizable.
5	Text Tool	<ul style="list-style-type: none"> - Click the text tool to annotate the image with text. - Font thickness and color are customizable.
6	Arrow Tool	<ul style="list-style-type: none"> - Click the arrow tool to point to the target object within the image. - Line thickness and color are customizable.
7	Undo	<ul style="list-style-type: none"> - Allows step-by-step undo of the above operations (2–6). One click undoes one action.
8	Save	<ul style="list-style-type: none"> - After performing any of the above operations (2–6), click the "Save" button to store the annotated image in the temporary storage area.
9	Cancel	<ul style="list-style-type: none"> - Click the "Cancel" button to clear all annotations from the current image.



5.4.3.6. Cell count

1. The microscopy interface supports the cell counting function. When this feature is enabled, a cell counting panel will appear. Each click on a specific cell type button will count one instance of that cell, and repeated clicks will automatically accumulate the count. The total number (N) and percentage (P) for each cell type will be displayed next to the corresponding quick-access button.



2. To include cell counting results in the report, use a report template that contains the cell counting module. By default, report templates do not include this module; users must create a new report template with the cell counting module in the Report Management interface beforehand.

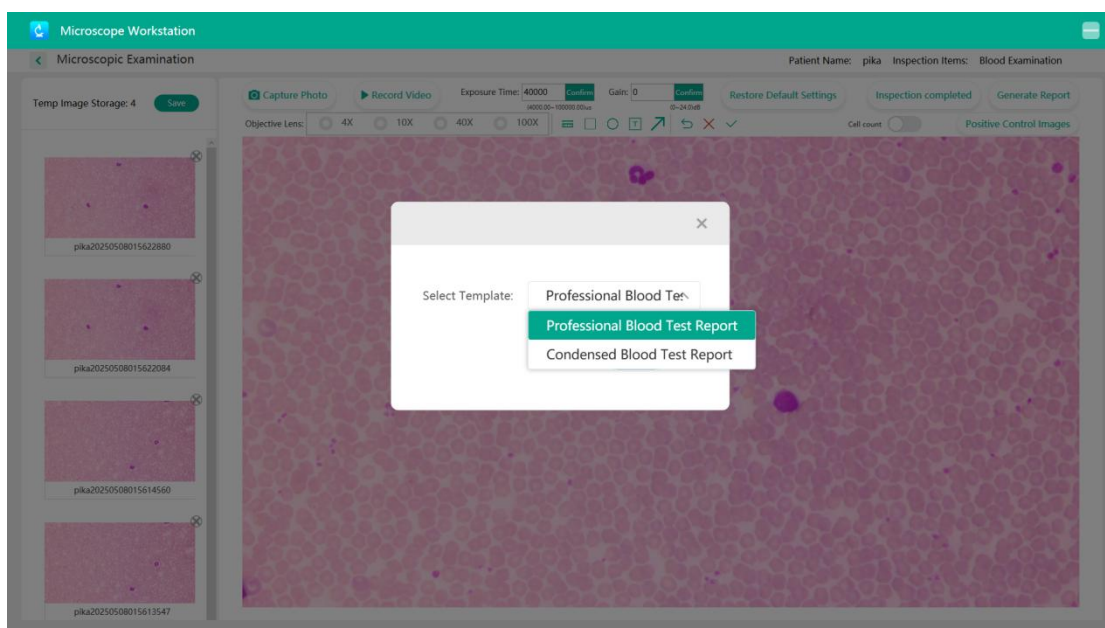
5.4.3.7. Positive control Images

1. In the microscopy interface, the current microscopic image can be compared with images from the positive control images to assist in the identification of target objects in the field of view.
2. Click the "**Positive Control Images**" button to open the positive control image library.
Note: Use the mouse wheel to scroll through pages or switch between enlarged images
3. Click the "**Positive Control Images**" button again to hide the positive control image library.



5.4.3.8. Generate report

1. Click the **"Generate Report"** button to open the template selection window, you can select the professional test report templates and condensed test report templates by default. Click **"Confirm"** to proceed to the report editing and saving.



2. Click within the image selection area to choose images from either the **Temp Image Storage Area** or the **Stored Area Images**. At least one image must be selected. The maximum number of selectable images depends on the image limit of the chosen report template. Click **"Confirm"** to import the selected images into the report.



Microscopic Examination Report

Case ID: Casepika1746683899 Inspection Items: Blood Examination

Patient Name: pika Species: Cat Owner's name: anlv Tel: 15372717188

Subtype: Ragdoll Age: 2Year5Month Weight: 3 Gender:

Microscopic Exam Image

Red blood cell (RRC)

Uniformity in size	Uniform in size	Normal	Normal condition
Cell arrangement	Scattered	Normal	Normal condition
Hemoglobin content	The pale staining area is approximately...	Normal	Normal condition

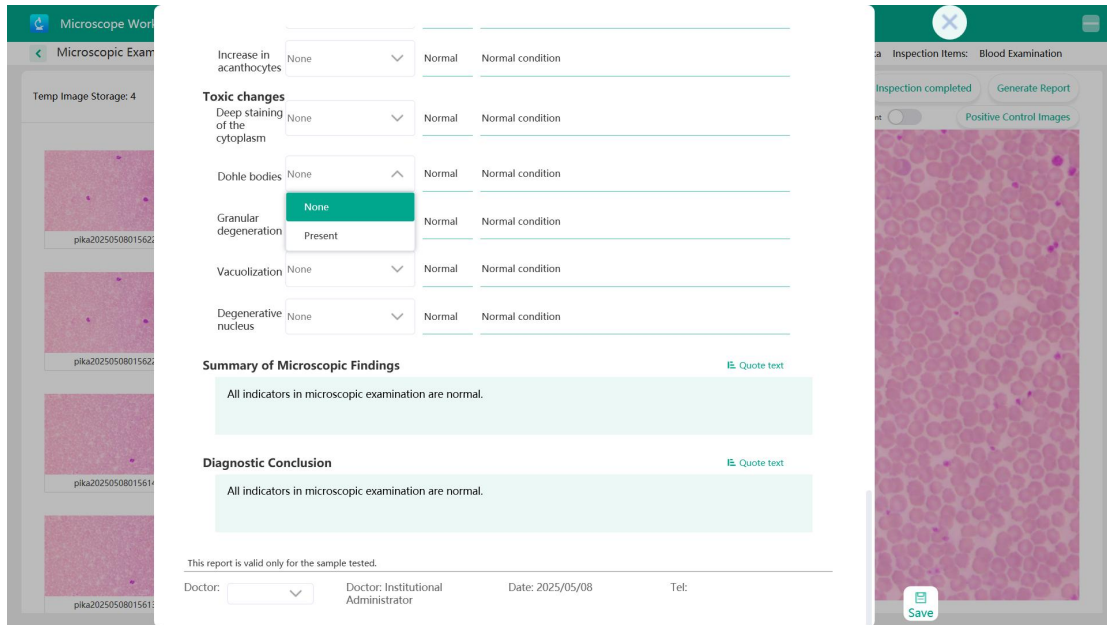
Add new item

Selected images:

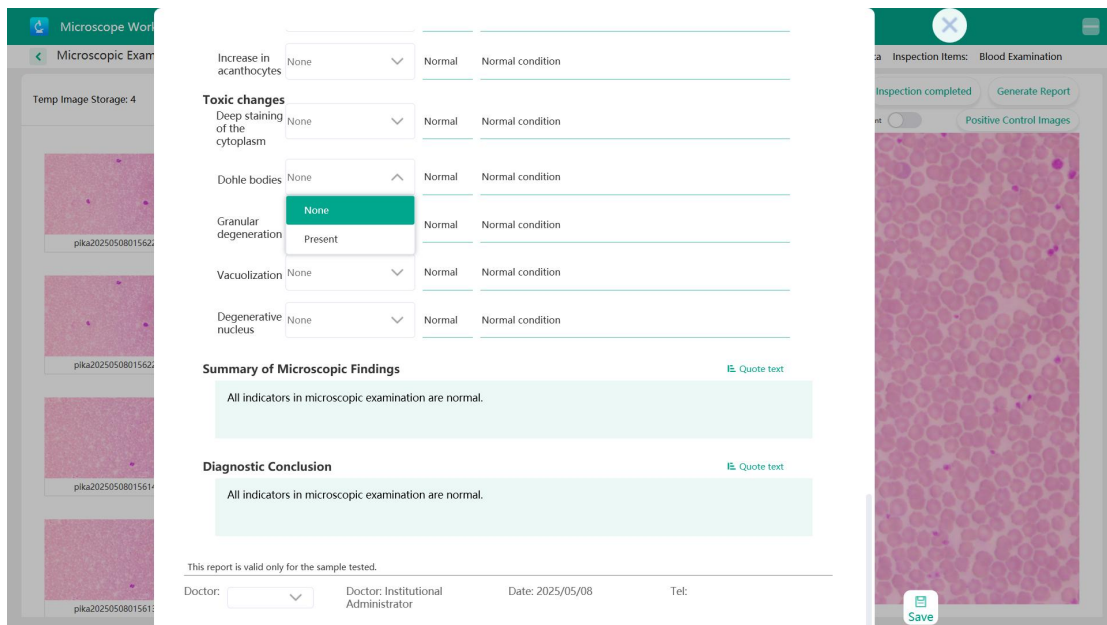
Temp Image Storage:

Storage Area Image

3. After images are imported, **select examination results** from the examination parameters dropdown menu based on actual sample findings. The system will automatically generate the result status (Normal or Abnormal) and relevant clinical reference interpretation based on the selected results.



- Once the examination results are selected, you can add or edit additional report sections at the bottom of the report template (e.g., Summary of Microscopic Findings, Diagnostic Conclusion):
 - To insert preset text, go to **"Data Maintenance --- Inspection Items --- Add Item Name ---Add Report Module --- Add Quote Text"** to define fields in advance. Then, click the **"Quote Text"** button at the top right corner of the "Summary of Microscopic Findings" or "Diagnostic Conclusion" section to select the preset field.



- After completing the report content, select the submitting physician from the dropdown menu at the lower-left corner of the template under **"Doctor"**, and then click the **"Save"** button to save the report.



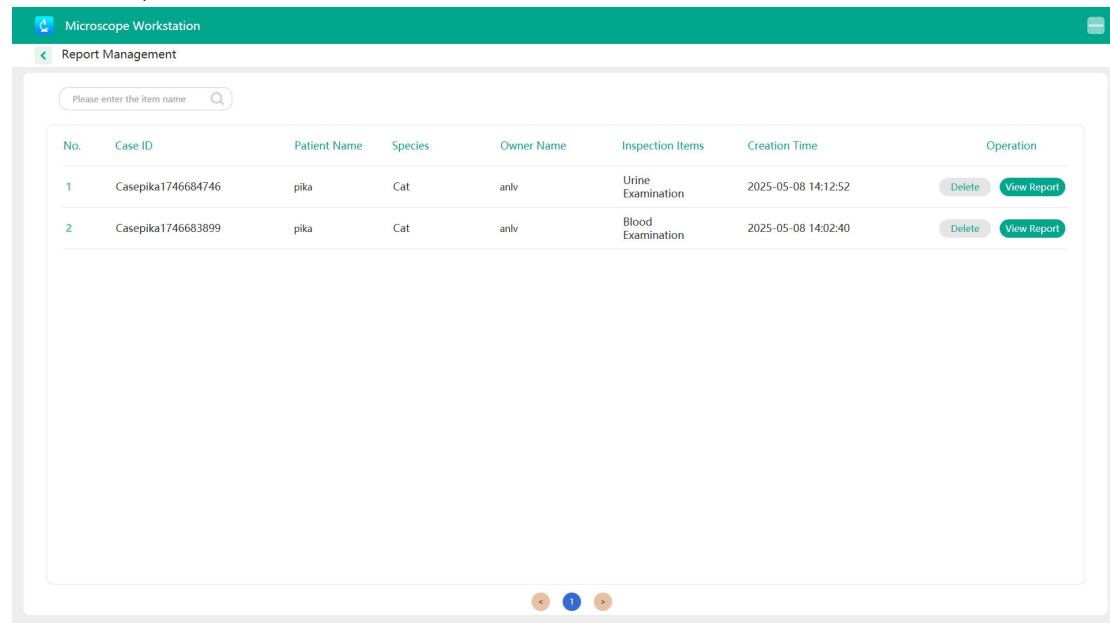
6. Once the report is saved, the system will automatically return to the microscopy interface. Click the "**Inspection Completed**" button to go back to the main interface. The report can then be viewed in the Record Management Interface.



Chapter 6 Report Management

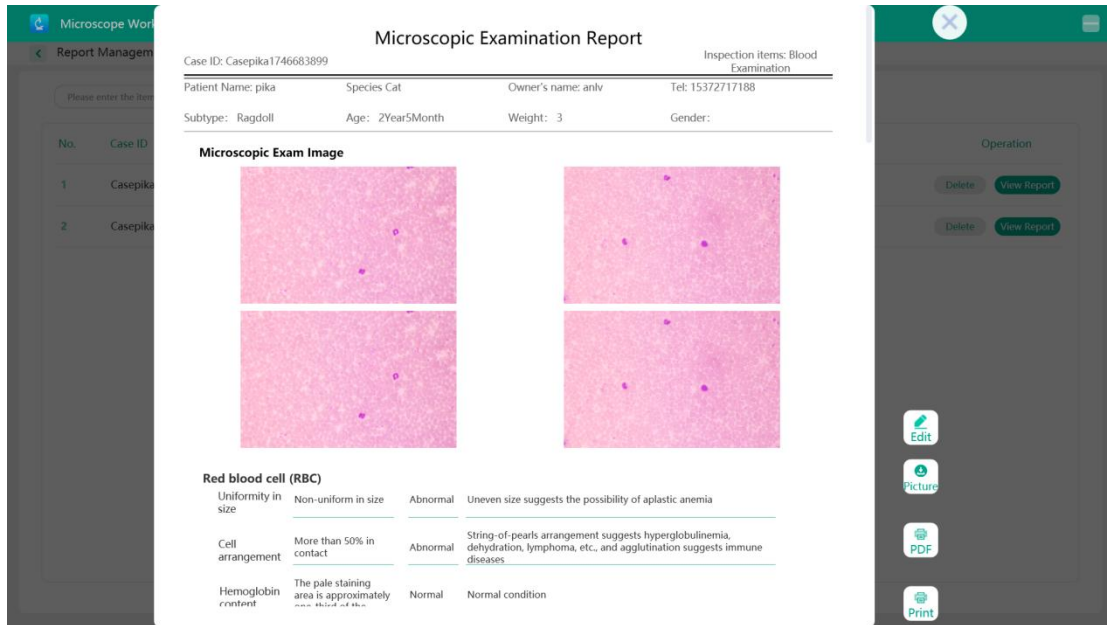
6.1. Search Report

1. Click **"Report Management"** on the main interface to enter the report management interface, where you can directly search for past cases in the case list.
2. You can search by Case ID, Patient Name, Species, Owner Name, or Inspection Items, etc.

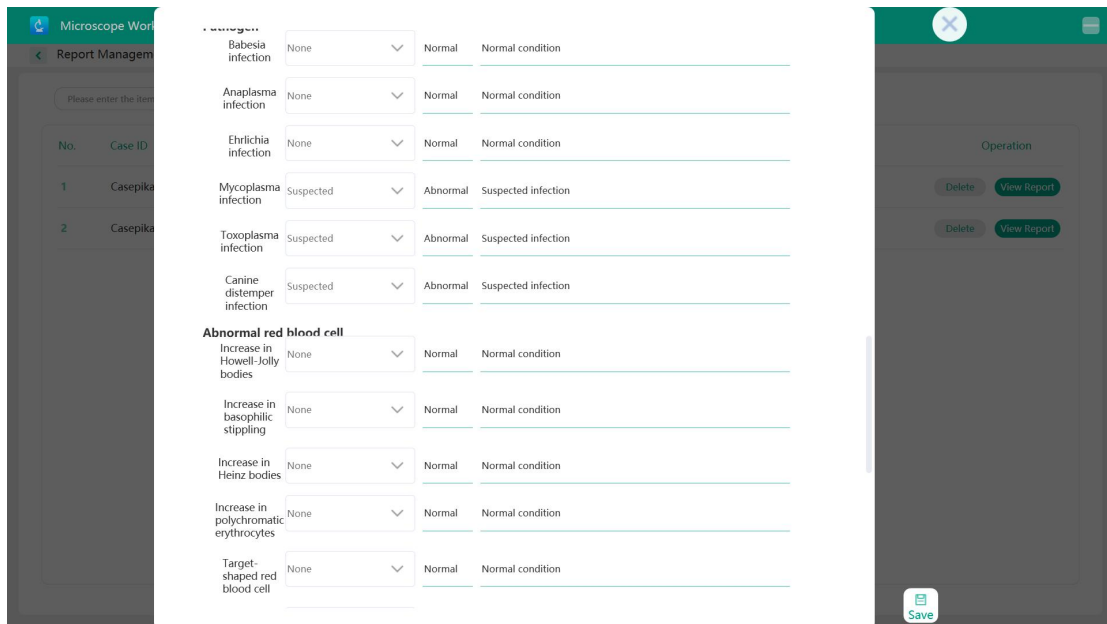


6.2. View Report

1. Click **"Report Management"** on the main interface to enter the report management interface. Locate the desired record in the list and click the **"View"** button on the right to open the report preview interface.



2. In the report preview interface, click the **"Edit"** button to modify the existing report. The following elements can be edited:
 - In the examination parameter dropdown, you can reselect the examination result; the corresponding result status (Normal or Abnormal) and clinical reference interpretation will update automatically.
 - You can edit the clinical reference interpretation and additional report sections such as Summary of Microscopic Findings and Diagnostic Conclusion.

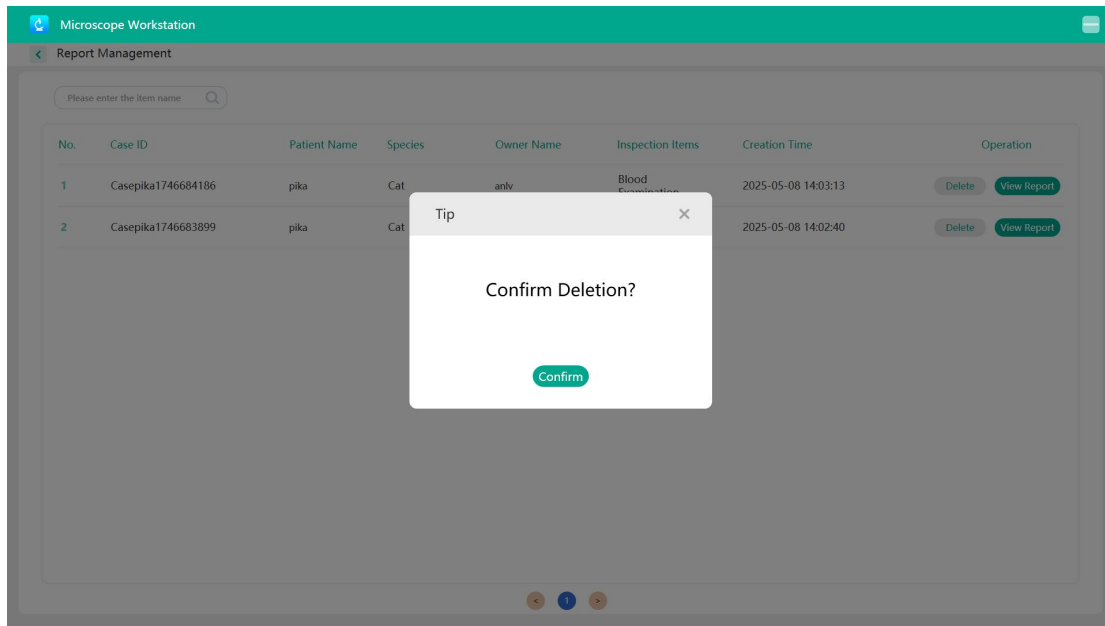


3. After editing, click the **"Save"** button to update and store the report in the Report Management.
4. Click the **"Picture"** button in the report preview to export the report as an image.
5. Click the **"PDF"** button to export the report as a PDF file.
6. Click the **"Print"** button to print the report as a hard copy.



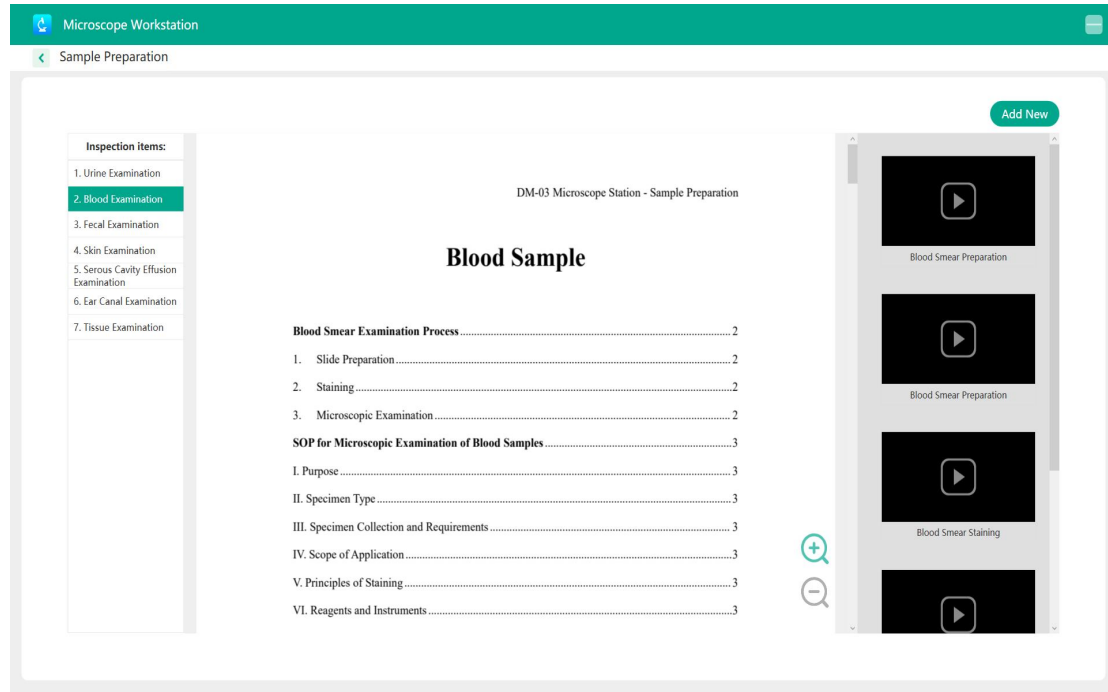
6.3. Delete Report

1. Click "Report Management" on the main interface to enter the report management interface. Locate the record to be deleted in the list and click the "**Delete**" button on the right.
2. A confirmation popup will appear with the message "Confirm Deletion?". Click "Confirm" to permanently delete the medical record.



Chapter 7 Sample Preparation

Sample Preparation offers two preset tutorials for users to understand the sample preparation process: a text-and-image tutorial and a video tutorial. Users can also customize and create new samples based on the specific requirements of their laboratories.



1. Default preset tutorial:

- Click "**Sample Preparation**" on the main interface to enter the sample preparation interface.
- On the left side of the interface, select the item type in the test item column to view the default preset tutorial. The tutorial can be zoomed in or out.
- On the left side of the interface, select the item type in the test item column, and click the demo video on the right to view the default preset tutorial video. Multiple video tutorials can be displayed for the same examination item; the displayed tutorials are not editable.

2. Custom creation of tutorial:

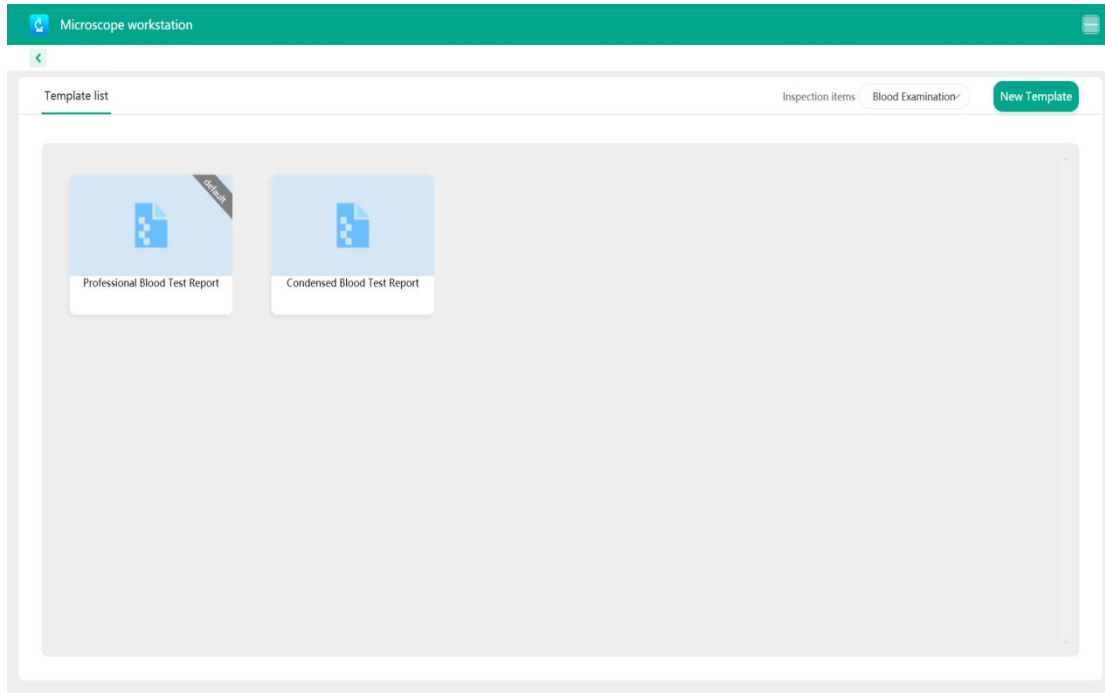
- You can create a tutorial based on the specific requirements of each laboratory by clicking "**Add New --- Select Inspection Items --- Select File --- Upload File --- Save**" to create a new one.
- Video tutorials can be customized according to the specific requirements of each laboratory and can be pre-set accordingly. Settings can be adjusted in "**Data Maintenance --- Video --- New --- Select Inspection Item --- Input Video Name --- Add Video --- Save**". After completing the settings, return to the sample preparation interface. Select the inspection item to view the newly added video tutorial.



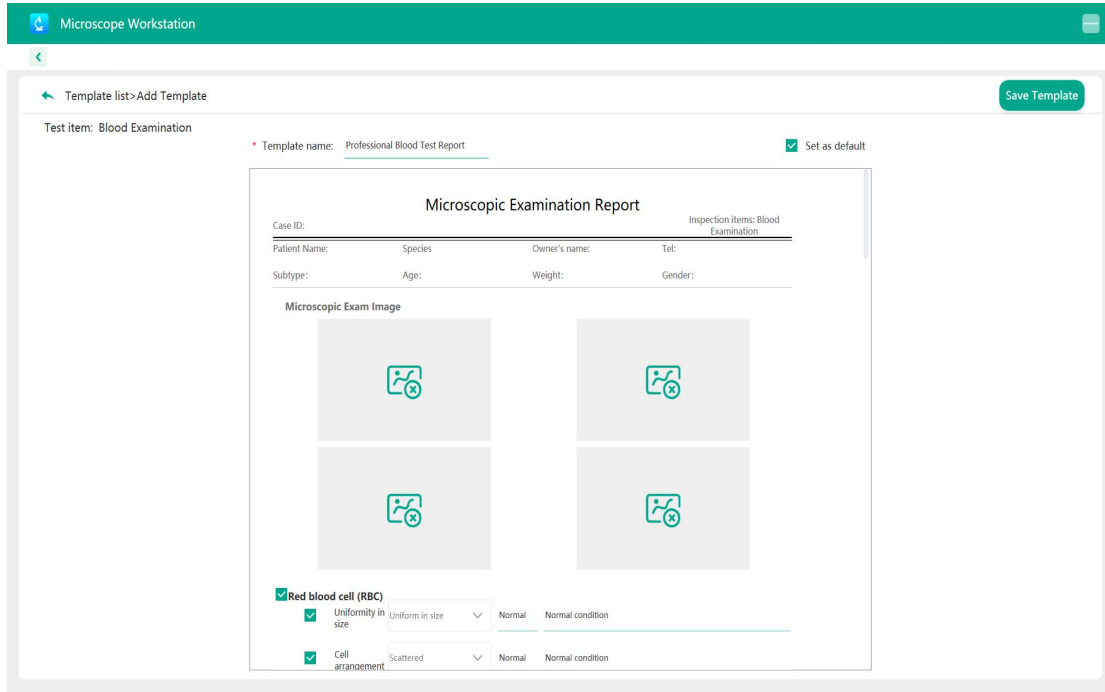
Chapter 8 Report Template

8.1. Default Report Templates

1. Click "**Report Templates**" on the main interface to enter the template interface. In the template list, select the corresponding examination item. By default, both the Professional Report Template and the Condensed Report Template will be displayed.

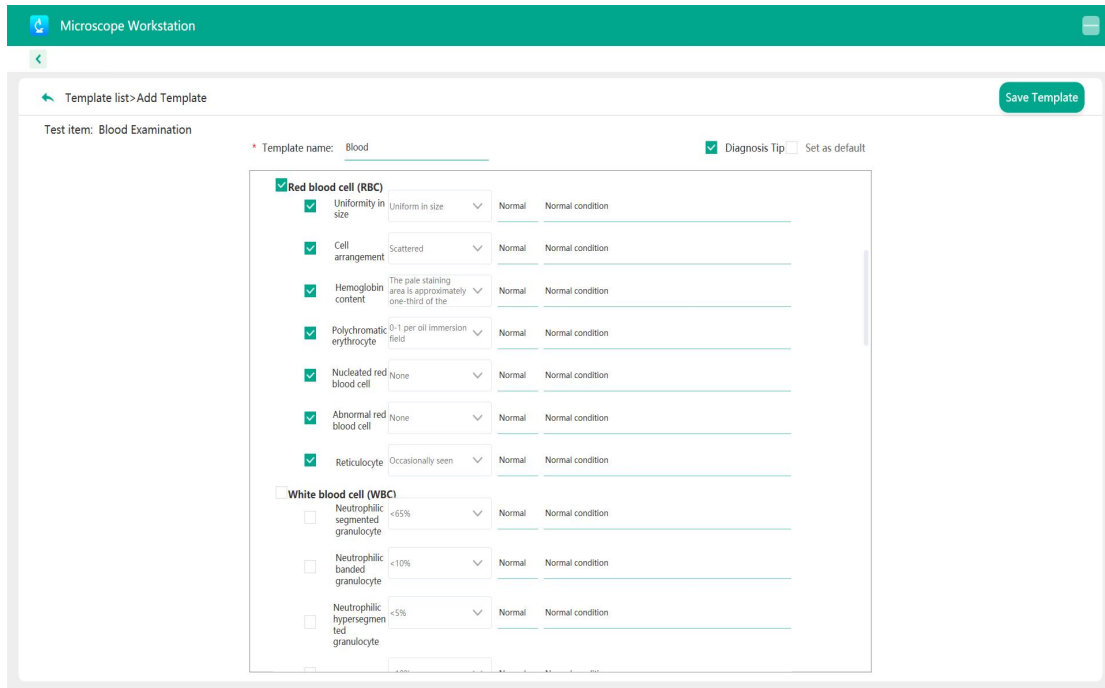


2. For each examination item, the default report template is the Professional Report Template. To change the default template, enter the Report Template Preview interface, check the box "**Set as Default**", and click the "**Save Template**" button to update the default template.

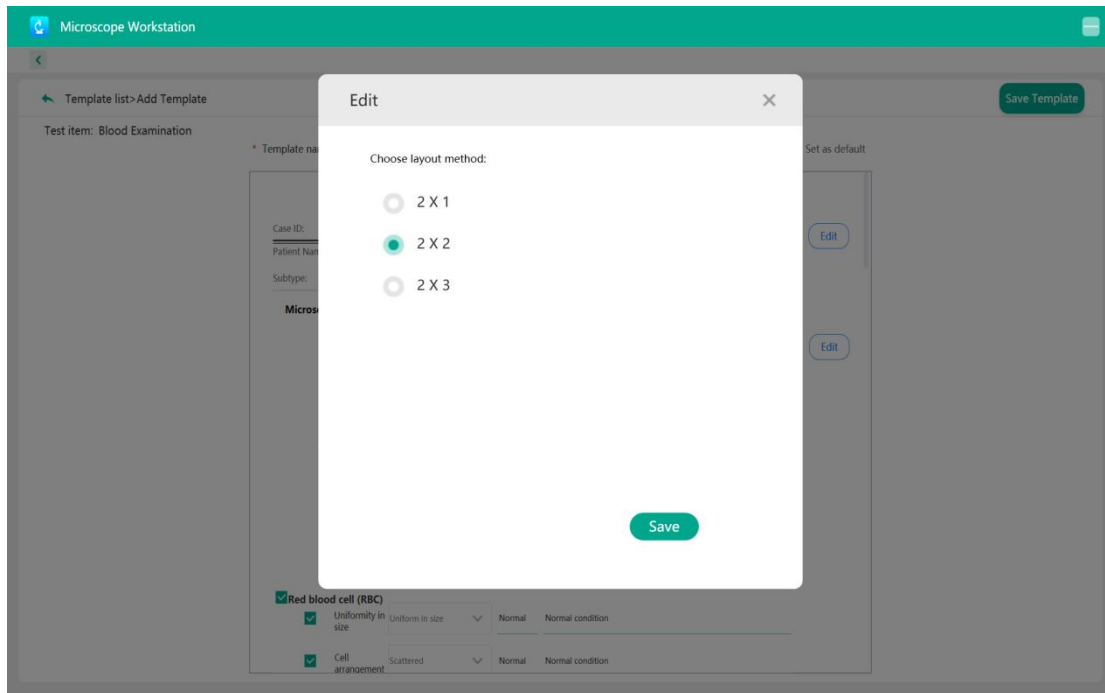


8.2. Creating a New Report Template

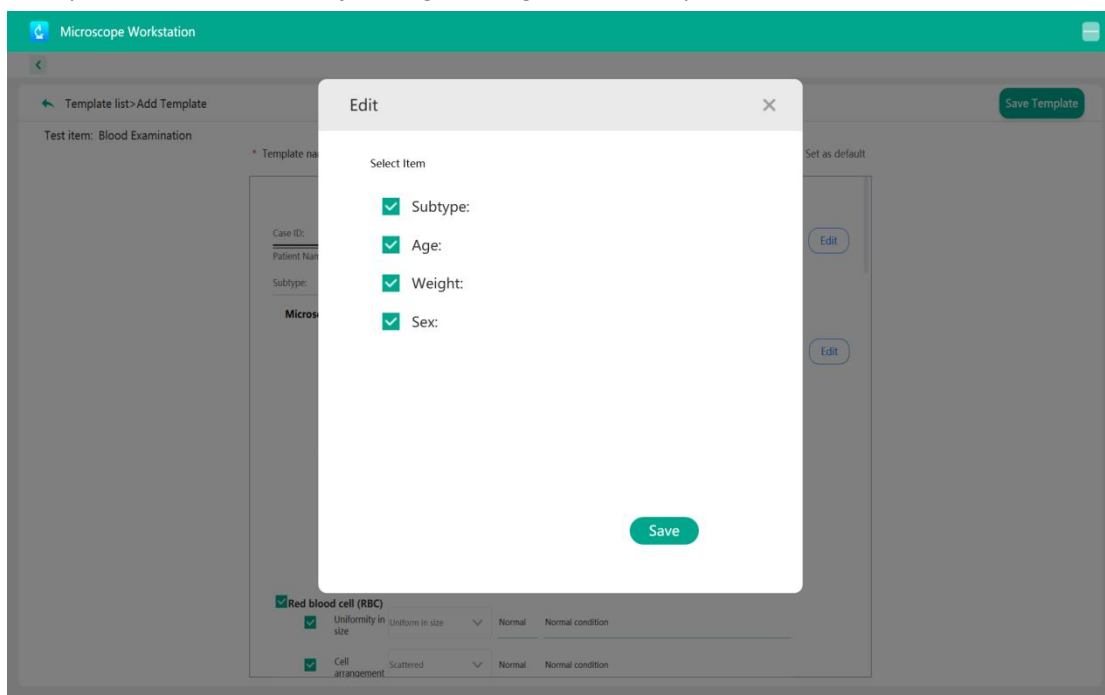
1. Click **"Report Templates"** on the main interface to enter the template interface. In the template list, select the corresponding examination item.
2. Click the **"New Template"** button to enter the template setup interface. Users can choose to include all or selected examination parameters as part of the template content.



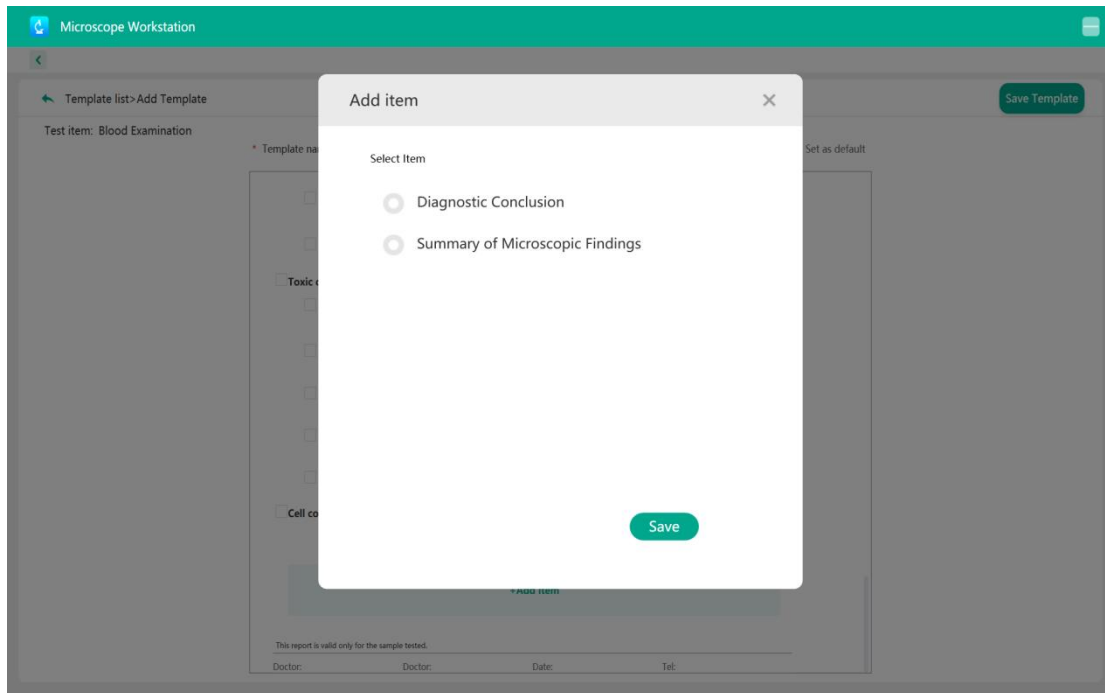
3. Click the **"Edit"** button in the image layout area to select the image layout format (options include 2×1, 2×2, or 2×3).



4. Click the **"Edit"** button in the report header section to configure header fields (options include Subtype, Age, Weight, and Sex).



5. At the bottom of the report template, click **"Add Item"** to insert additional content such as Diagnostic Conclusion, Summary of Microscopic Findings, etc.

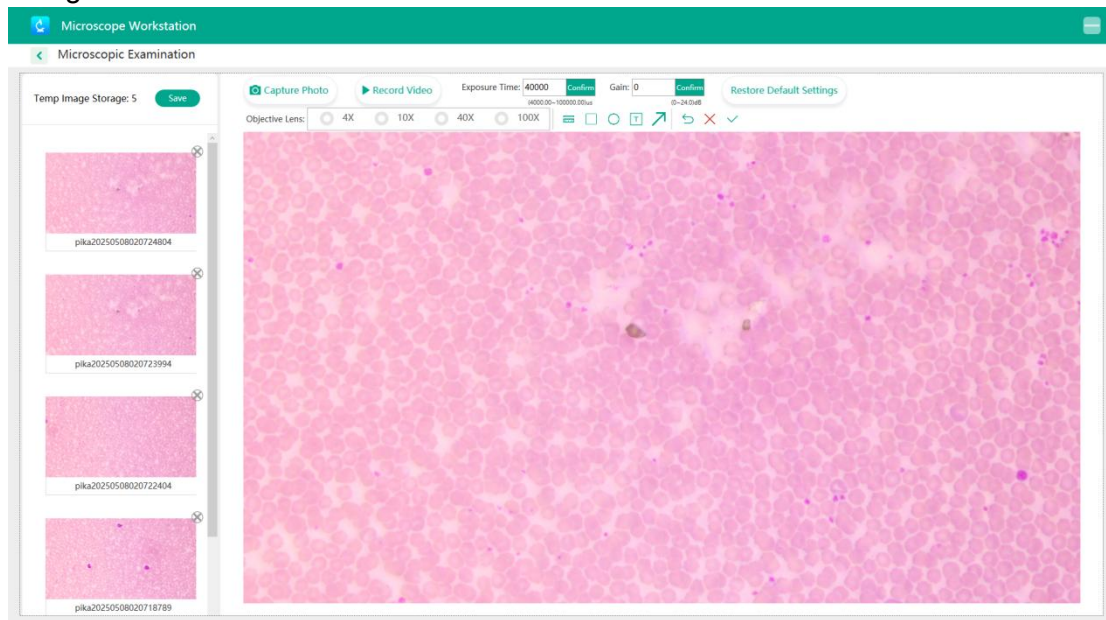


6. After completing the editing, click "**Save Template**" to save the template, which will then appear in the template list.



Chapter 9 Rapid microscopic Examination

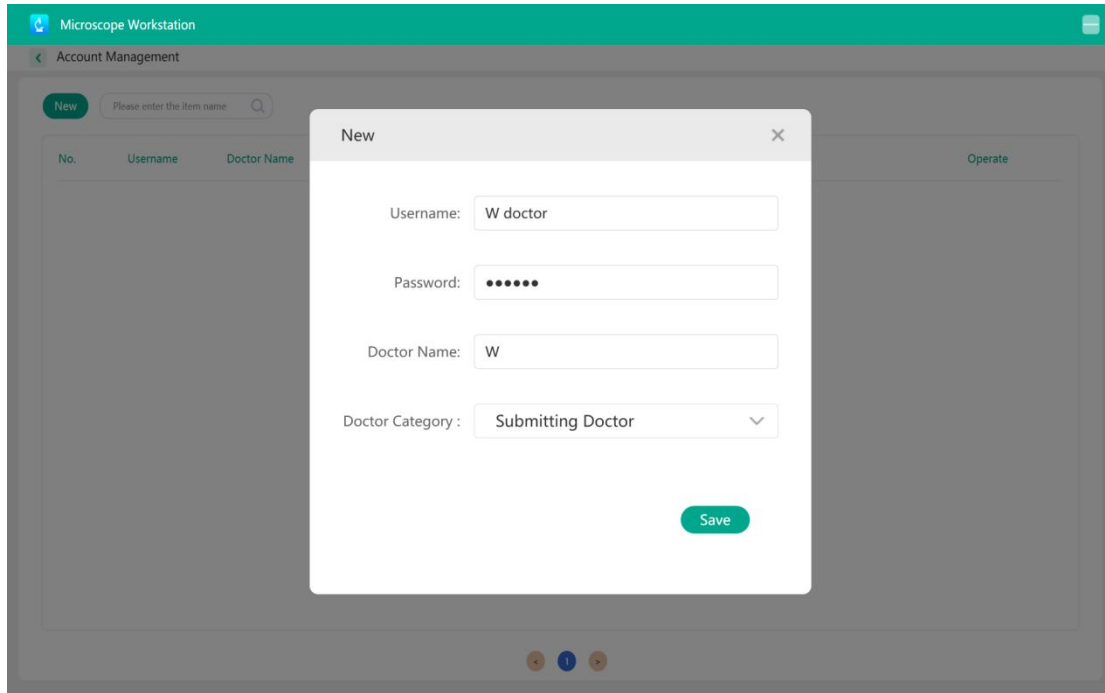
1. After entering the Rapid Microscopic Examination interface, select the corresponding microscope workstation camera serial number and click "**Open device**" to access the microscopic examination interface. Place the pretreated specimen into the sample holder, and adjust the coarse and fine focus knobs to focus. Once properly focused, a clear image will be obtained.
2. Within the Rapid Microscopic Examination interface, users can adjust camera parameters, capture photos, record videos, and use microscopy tools to acquire visual data. Click "**Save**" to save the images from the temporary image storage area to the storage area.
3. The Rapid Microscopic Examination process differs from the standard workflow in New Microscopic Examination on the main interface and does not support report generation.



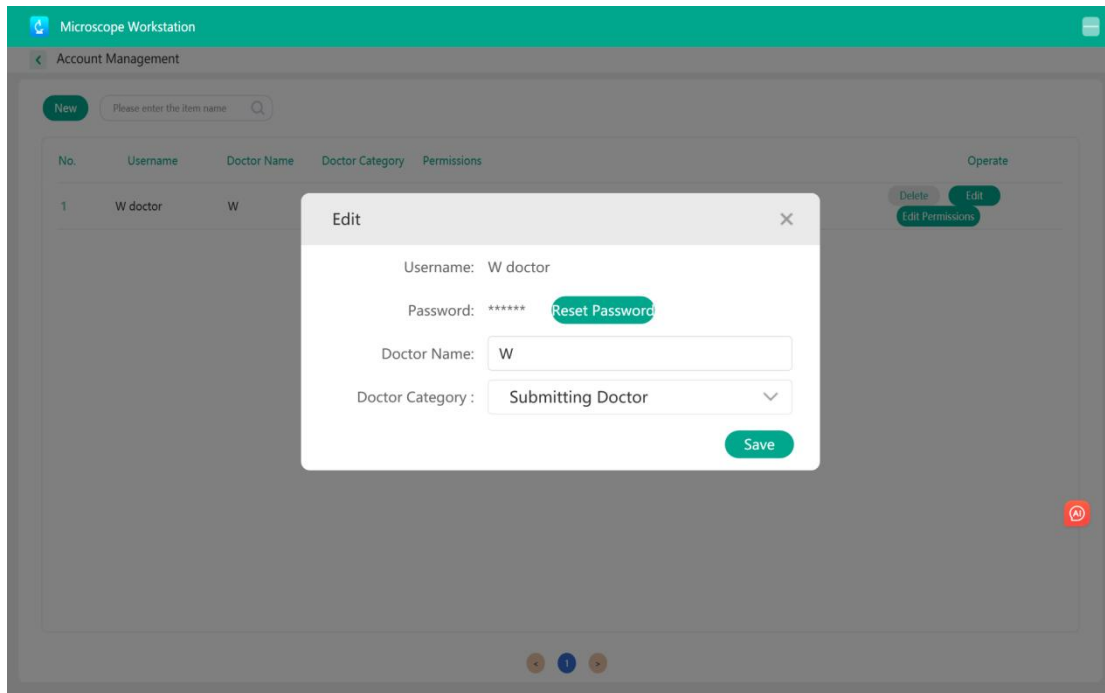


Chapter 10 Account Management

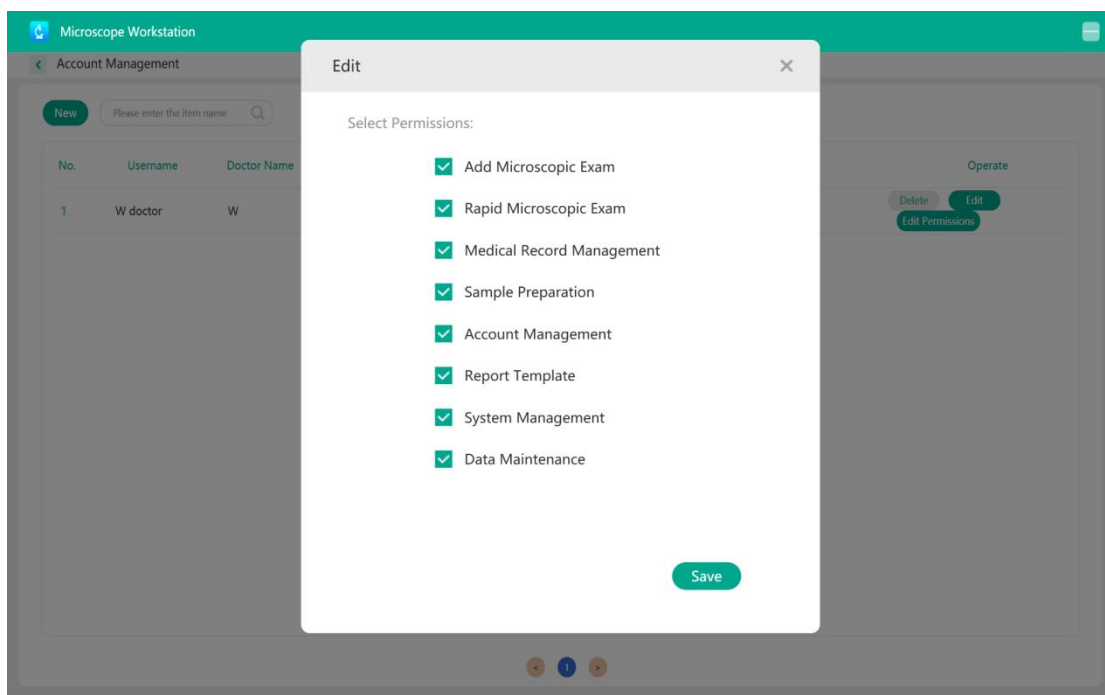
1. Click "**Account Management**" at the top right corner of the main interface to create, delete, edit user accounts, and configure permissions.
2. Click "**New**", then enter the User Name, Password, and doctor's name. From the dropdown menu, select the doctor category (Submitting Doctor or Testing Doctor), and click "**Save**" to complete the account creation.



3. Click "**Edit**" to reset the password, modify the doctor name, or reselect the doctor category. Click "**Save**" to apply changes to the existing account.



4. Click **"Edit Permissions"** to manage the access permissions for the selected account.

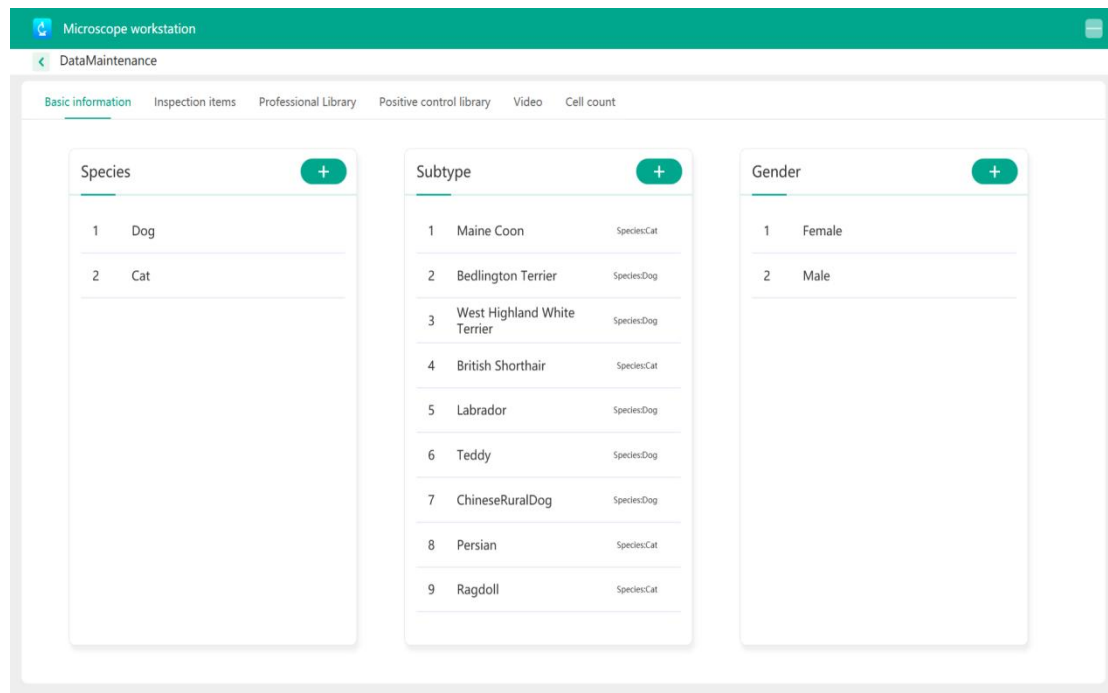




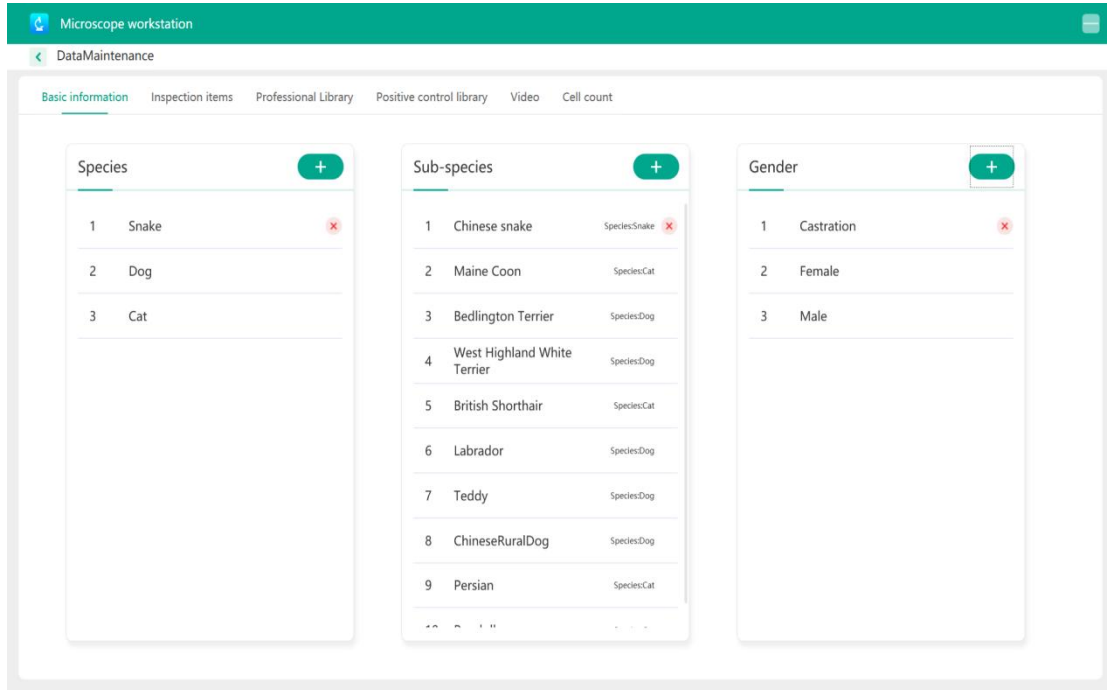
Chapter 11 Data Maintenance

11.1. Basic Information

1. After returning to the **Main Interface**, click "**Data Maintenance**" in the upper right corner. In the "**Basic Information**" section, you can set information for three categories: Species, Subtype, and Gender. The Subtype is a secondary classification of the species. Users can customize these three categories according to their needs.



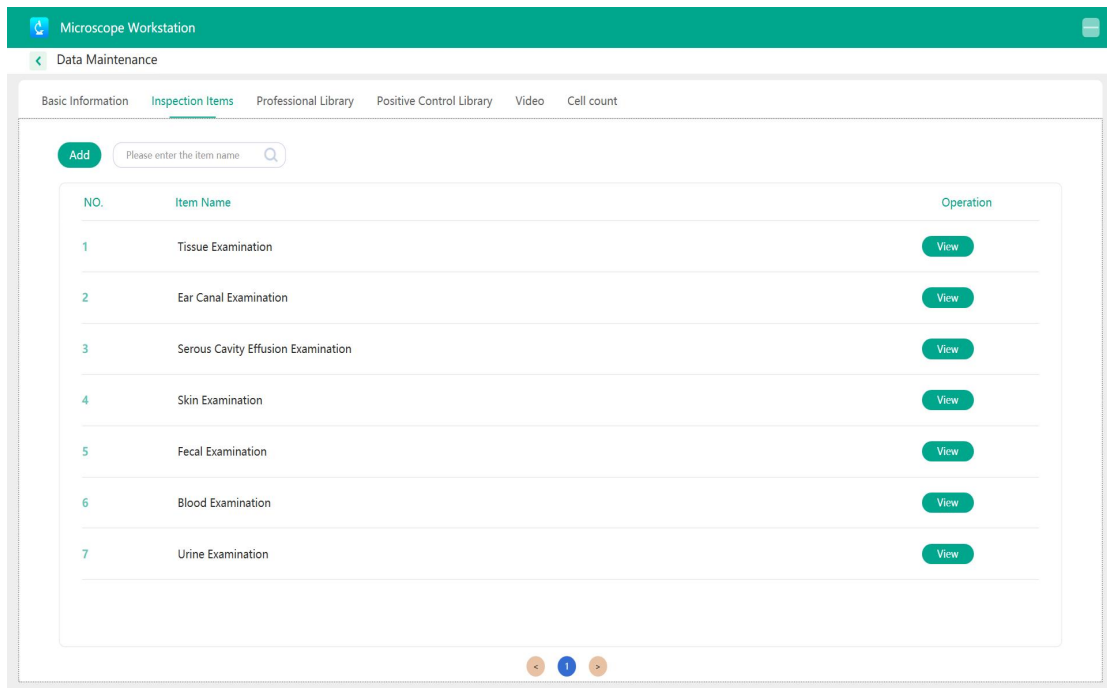
2. Default preset entries for Species, Subtype, and Gender cannot be deleted. Only user-added entries can be removed.



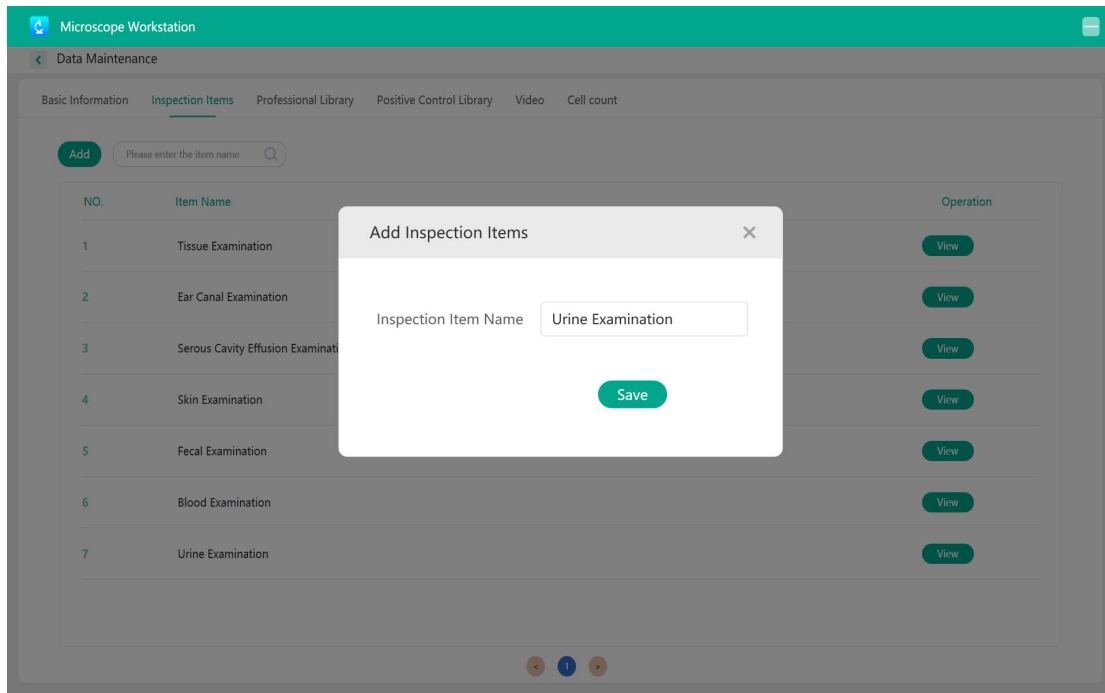
11.2. Inspection items

1. In the "Data Maintenance" section of the management system interface mentioned above, you can set up the inspection items, and based on the displayed content, decide whether to add a new item or view existing ones.

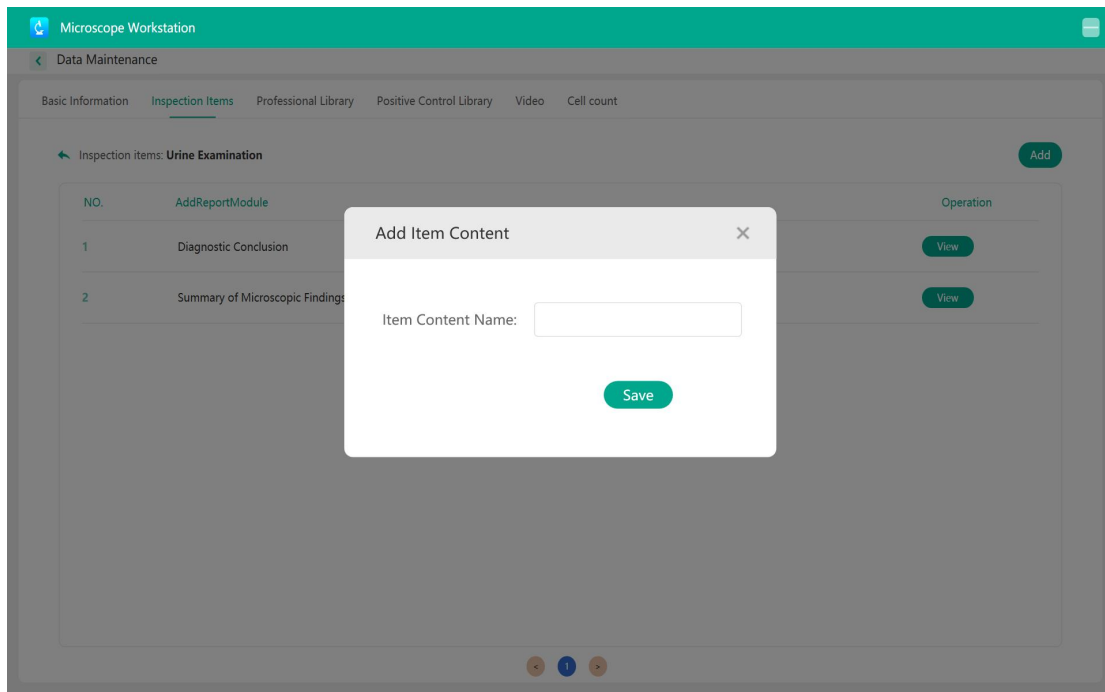
Note: The inspection items settings contain essential information about the software. The item content is related to certain aspects of the report template. Deleting this item may result in the removal of all related professional library and report template, so it is not recommended for users to delete this item on their own.



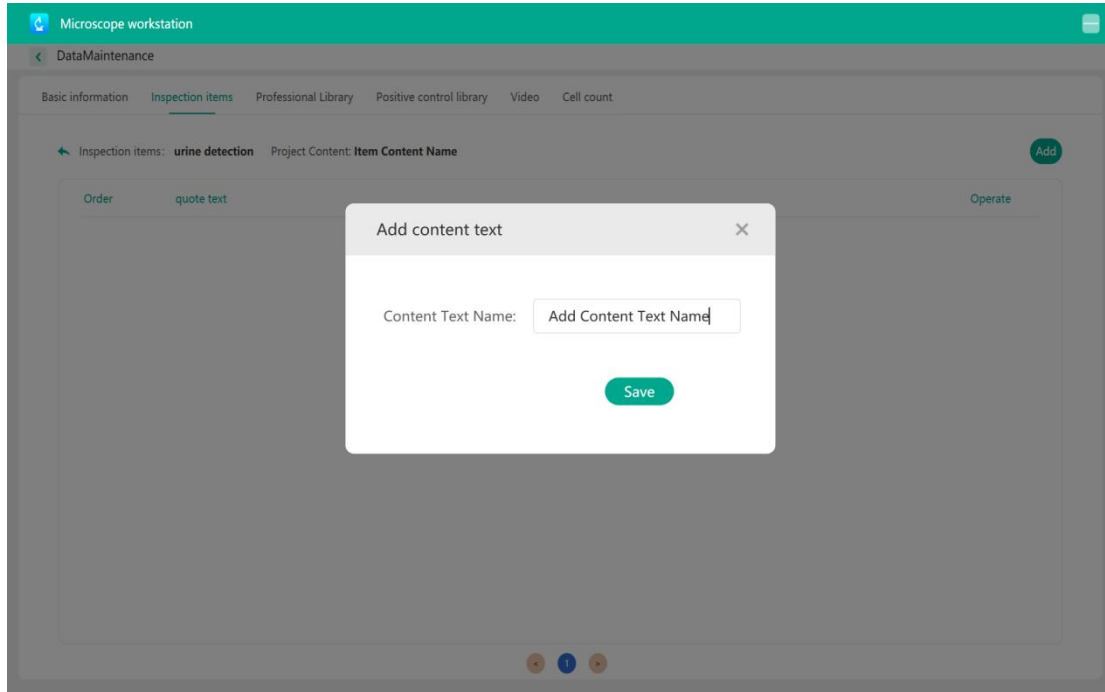
- If you want to add a new **inspection item**, click "**Add - Enter inspection item name -Save**" to complete the addition. This is a preset sample type.



- To add a new **report module**, you can click the corresponding "**Item Category - View - Add - Enter item Content name - Save**" to set it up. This is a preset report module that is selectable.



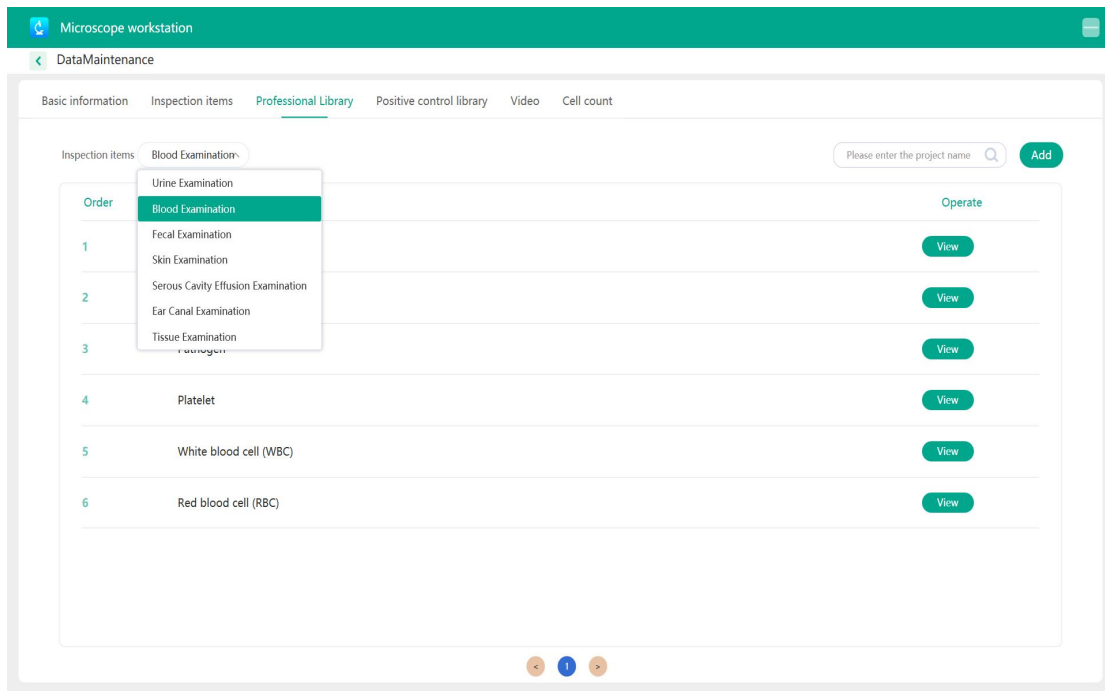
- To add new **quote text**, you can click the corresponding "**Item Category - View - Report module - View - Enter content text name - Save**" to set it up. This is the preset quote text that can be referenced for the item content.



11.3. Professional Library

1. After adding Inspection Items, the **Professional Library** can be configured in the Data Maintenance interface. Select an inspection item to view the associated project names.

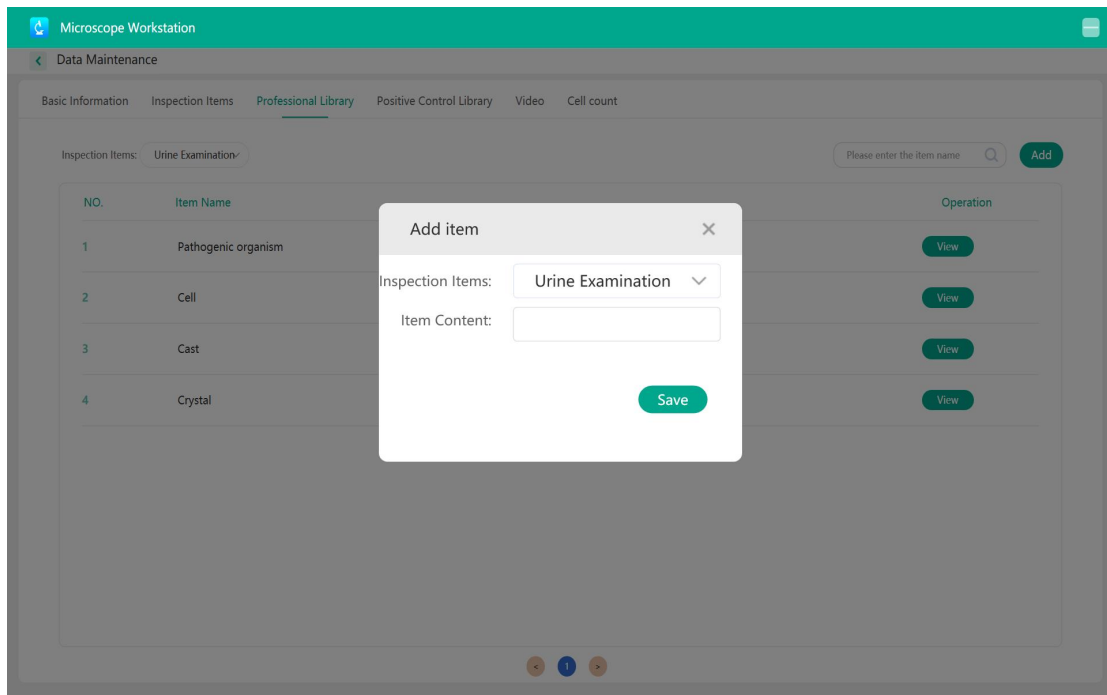
Note: The Professional Library is fundamental to the report templates. Deleting its entries may result in the loss of linked report content. Deletion is not recommended.



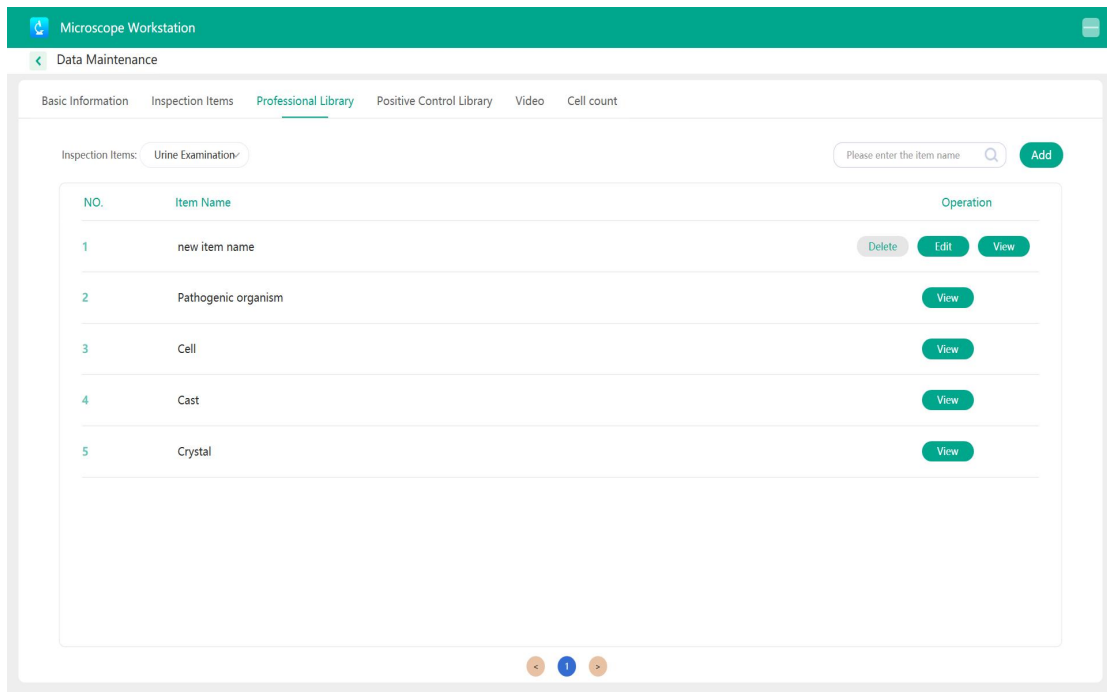
2. To added a new item name, click "Add - Select a inspection item - Enter item



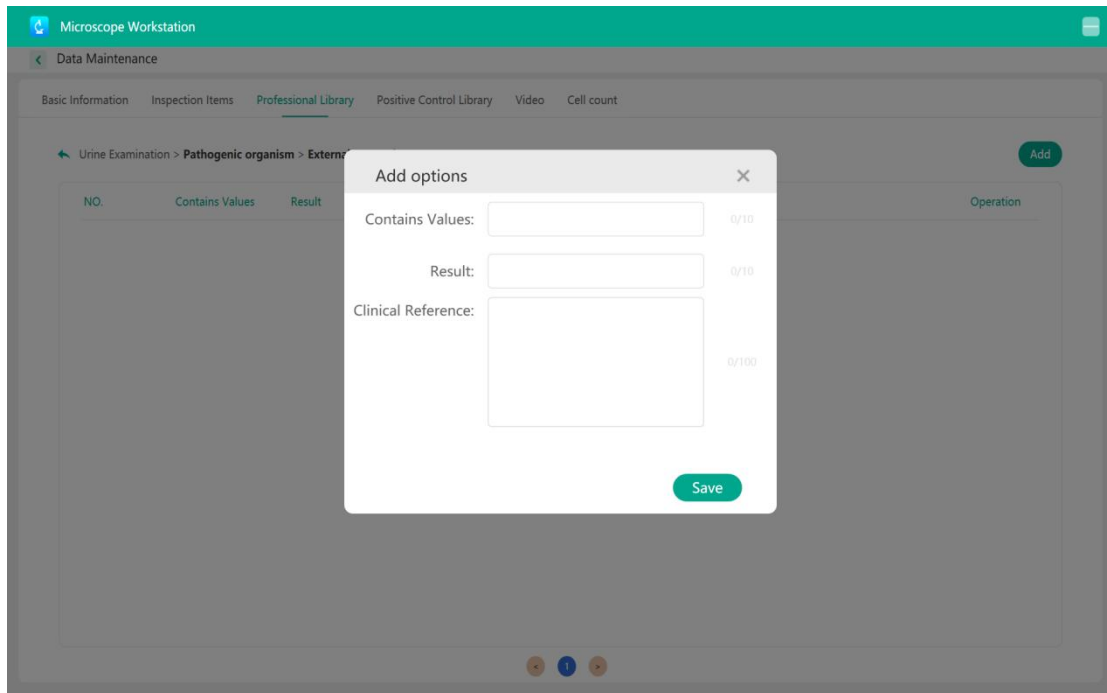
content -Save to add a new item name.



3. After the item name is added, click **"View"** to enter the project content interface. You can **add** new sub-items under the project, **edit** existing content, or **delete** entries. Multiple entries can be added incrementally to describe different types of abnormal results related to the item.



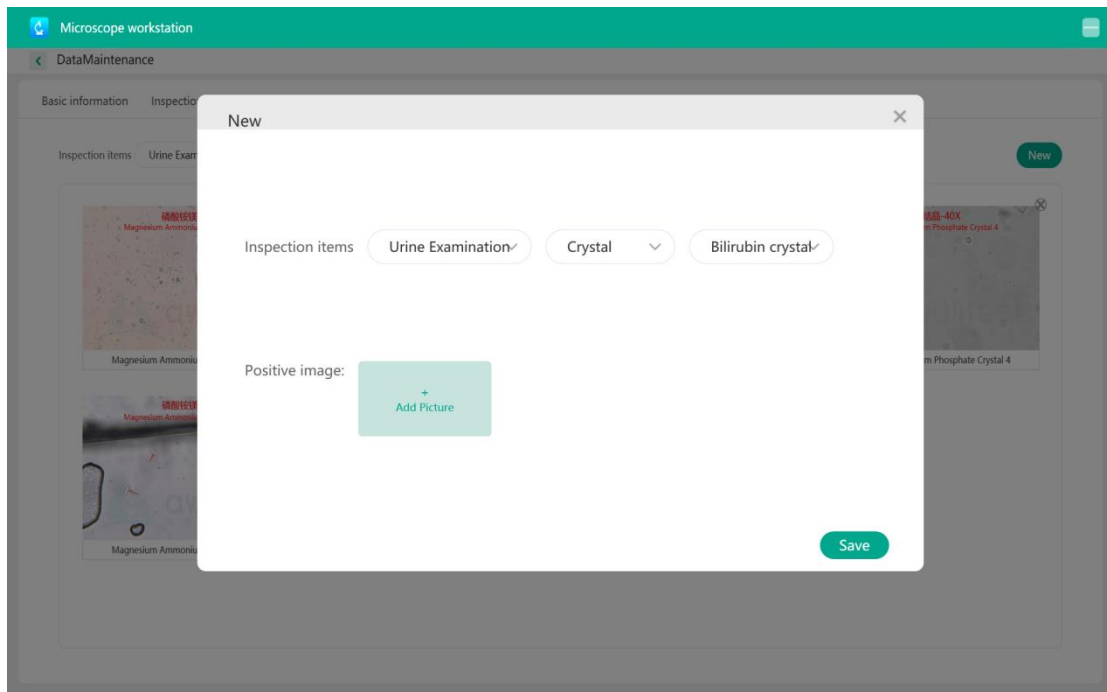
4. After adding sub-items, click **"Add"** to input **"Contains value, Result, and Clinical Reference"**. Each entry can be edited later, and multiple interpretations can be added to cover a variety of abnormal findings.



11.4. Positive control library

1. The Positive Control Library can be configured in the Data Maintenance interface by clicking "New - Select a inspection item - Item -Sub-item-click Add Picture to upload an image" , and clicking "Save".

Note: Please use images with a resolution of 1920*1080 whenever possible, in JPG format.



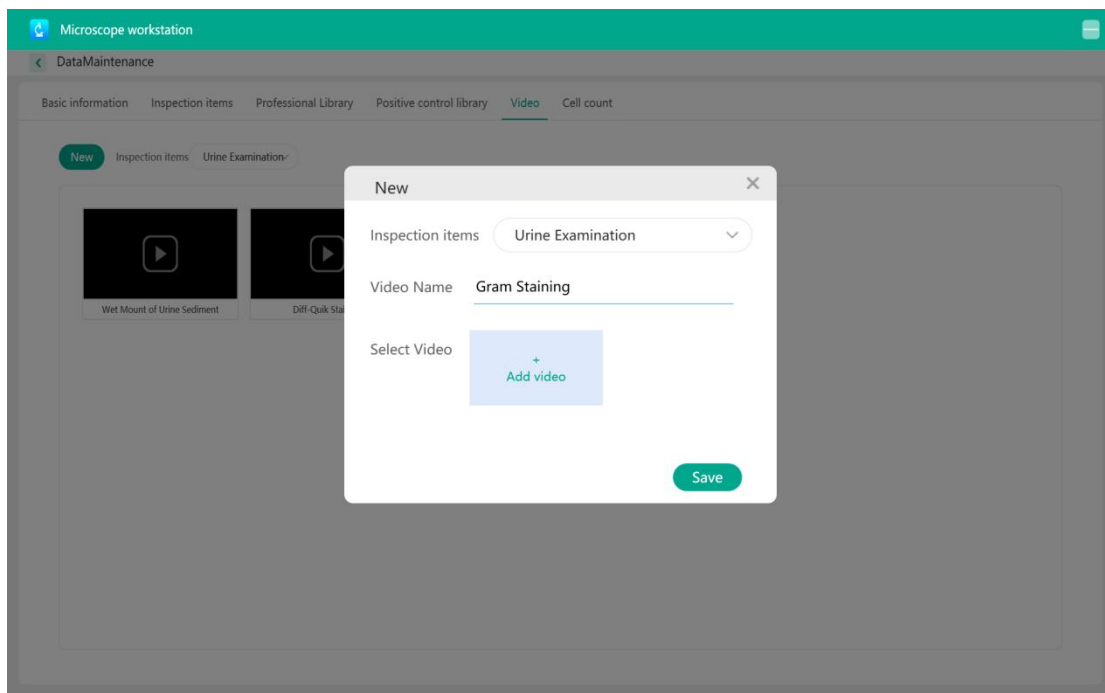
2. The Positive Control Library is linked to the Positive Control Image feature in the microscopy interface. During microscopic examination of the corresponding item,

users can click the **"Positive control chart"** button on the right to open the library. By comparing with the reference images, users can aid in the identification of the specimen under the microscope.



11.5. Video

1. In the **"Data Maintenance"** section of the management system interface, set up the **"Video"** option. Select the examination item, click **"New - Select a inspection item - Enter video name - Click Select "Add video" to upload a video - Save"**.

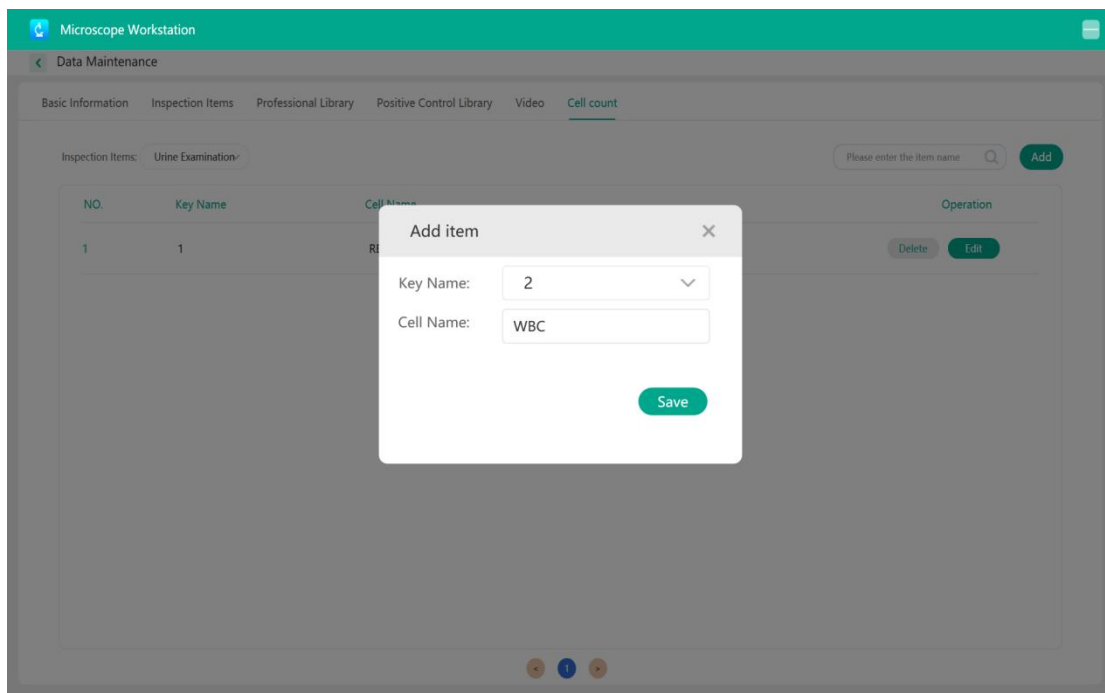
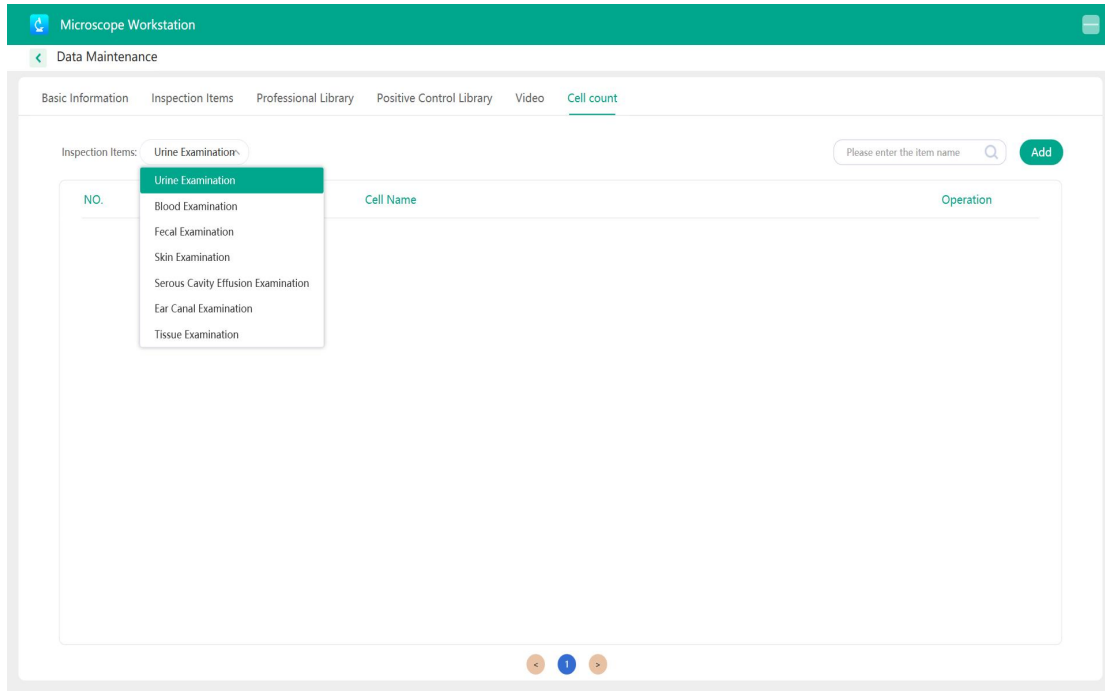


2. The video will then be linked to the Sample Preparation interface for the

corresponding inspection item.

11.6. Cell Count

1. In the Data Maintenance interface, users can configure Cell Counting by clicking **"Select a inspection item - Add - Select a key Name - Enter cell name - Save"** to create a shortcut button for counting specific cell types.



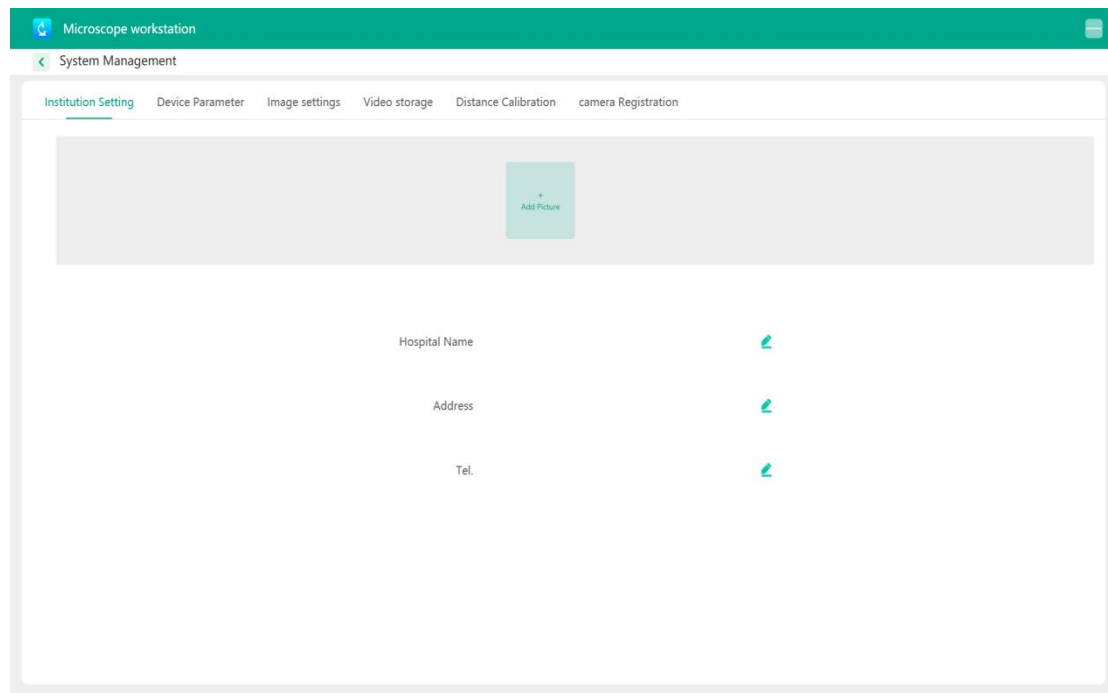
2. After the cell count shortcut button has been added, users can enable Cell Counting during the microscopic inspection of the corresponding item. In the cell counting panel, users can click the shortcut button to perform cell counting.

Chapter 12 System Management

12.1. Institution Setting

1. Click "**System Management**" in the top right corner. In the "**Institution Settings**" option, you can set up the information for the user organization, including: hospital name, address, phone number, and add the hospital Logo photo.

Note: Recommended logo size is 1920×1080 pixels, 2–3MB, in JPG or PNG format.

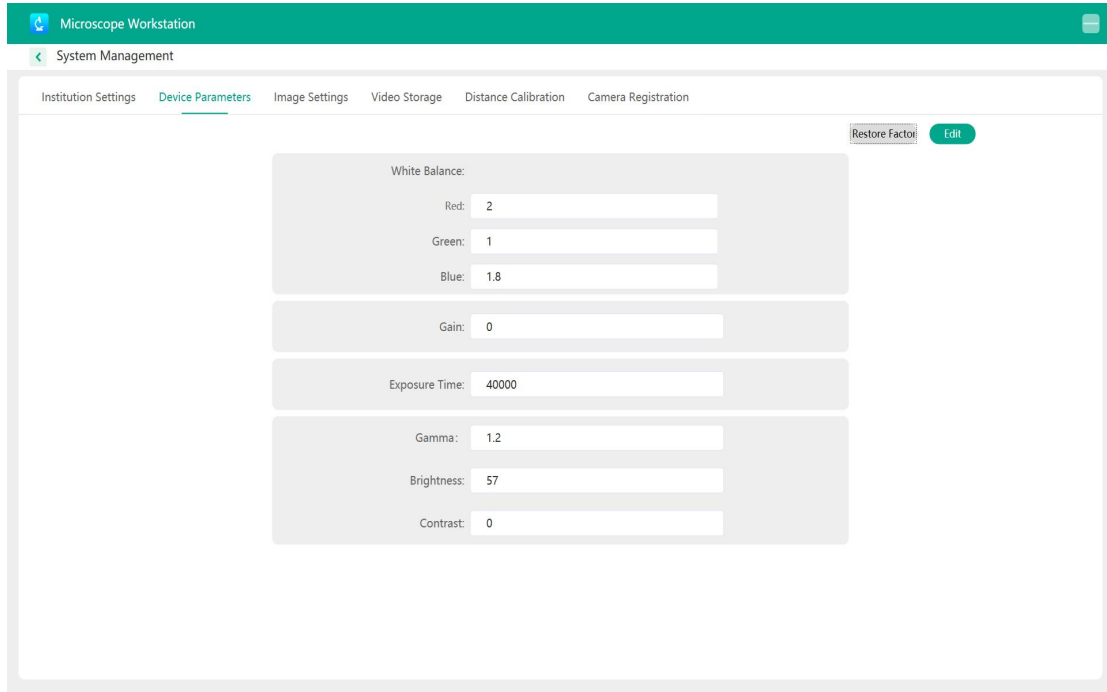


12.2. Device Parameter

1. In "**Device Parameters**" section, you can configure camera parameters such as White balance(Red, Green,Blue), Gain, Exposure time, Gamma, Brightness, and Contrast.

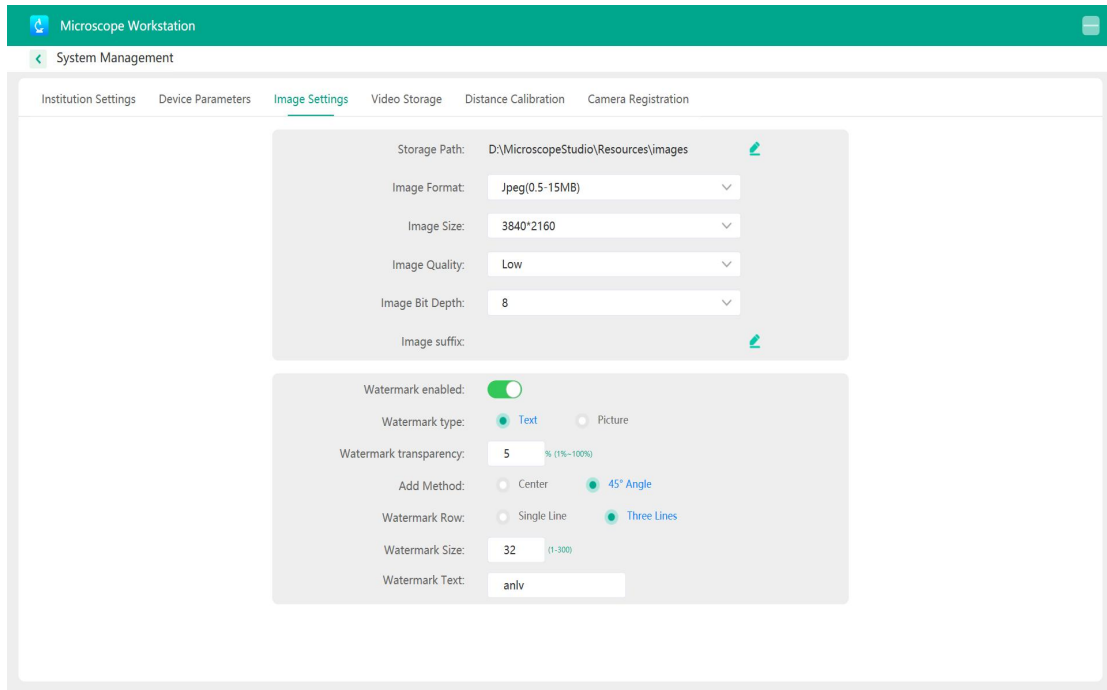
Note: If the image has a color cast, adjust the RGB white balance.

2. Default factory settings are applied. Modified settings can be reset to factory defaults.



12.3. Image Setting

1. You can set up the storage path, image format, image size, image quality, and bit depth in the "**Image Settings**" option on the "**System Management**" interface mentioned above.
2. You can enable/disable watermark function and customize type, transparency, number of rows, size, text, etc.

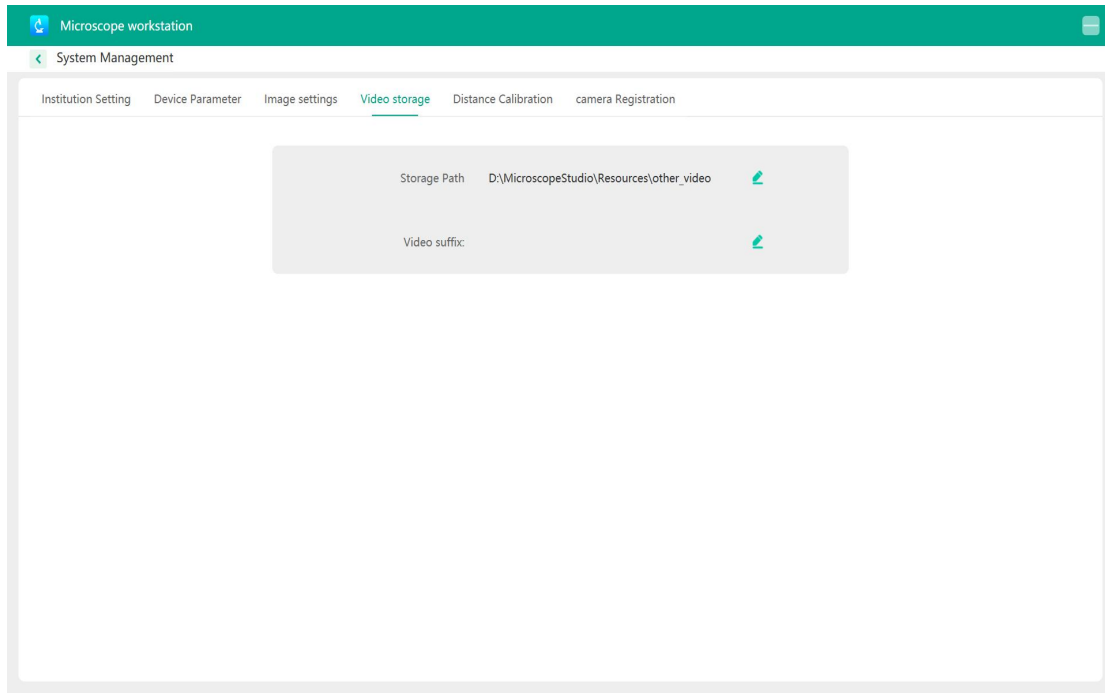




12.4. Video Storage

In "**Video Storage**" section, configure video save path and file format. Click edit button to modify.

Note: MP4 format is supported for upload.

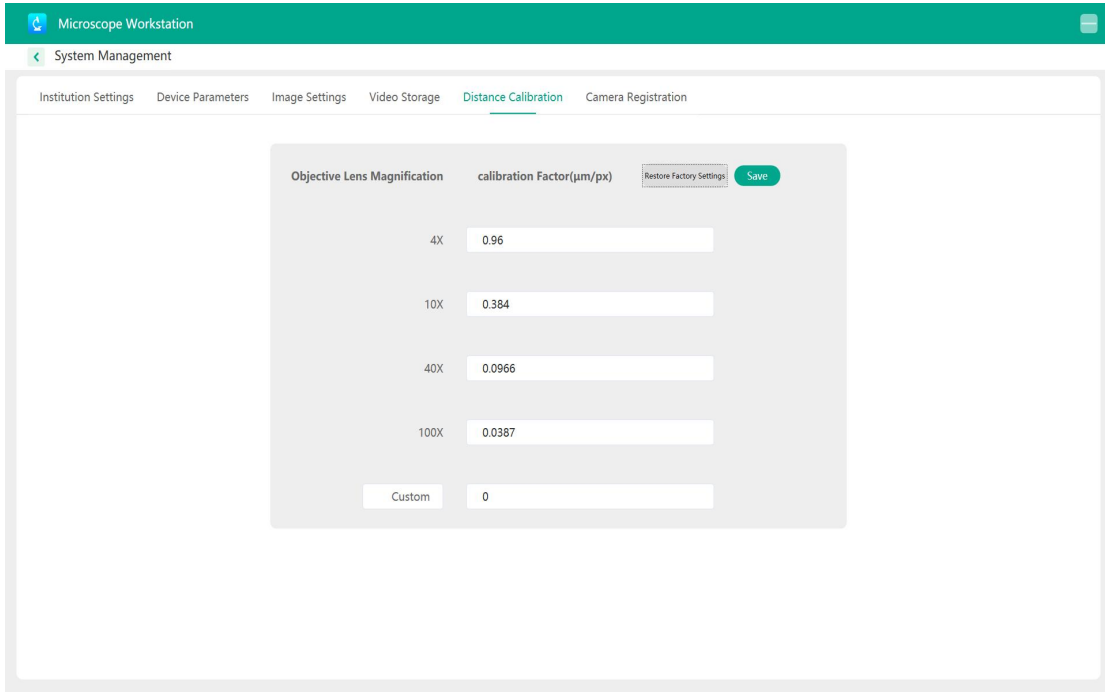


12.5. Distance Calibration

1. In "**Distance Calibration**" section, configure calibration factor for each objective magnification. The set coefficient will apply to the on-screen ruler in the microscopy interface.

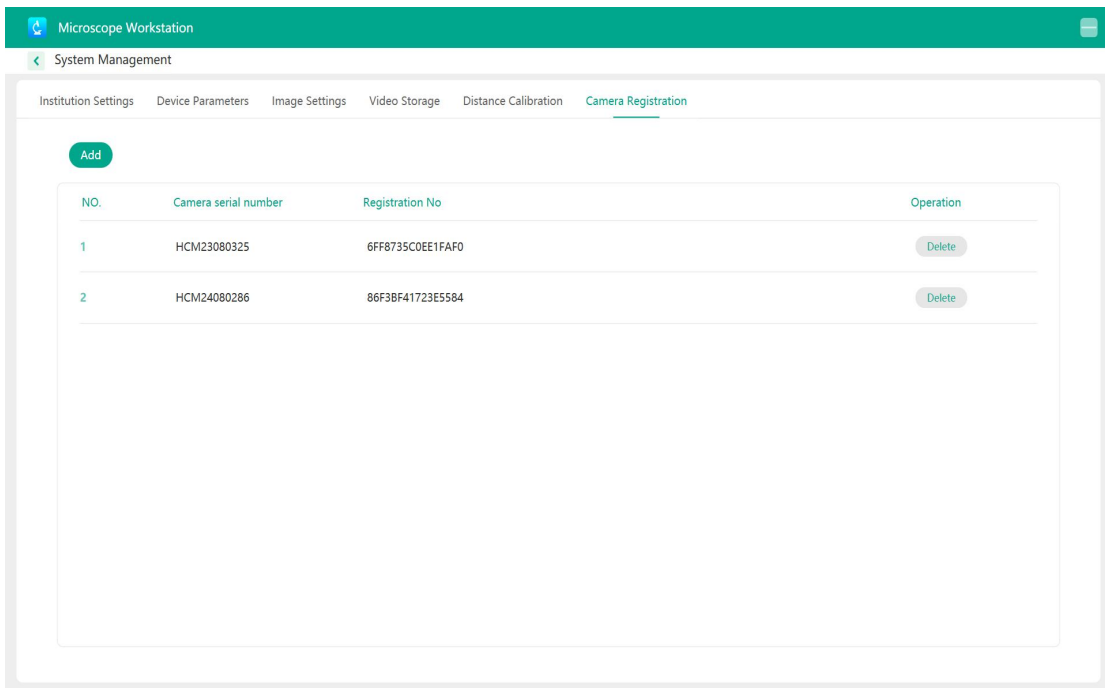
Note: Unauthorized personnel should not modify these settings. Factory defaults can be restored if needed.

2. Users may also customize object lens magnification and their corresponding calibration factor.



12.6. Camera Registration

1. In "**Camera Registration**" section, you can **view**, **add**, or **delete** registration entries.
2. When first launching the software, the activation code will be automatically recorded.
3. To connect a new device, pre-register its serial number and activation code in this section.
4. If registration is missing or deleted, attempting to open the device will result in a "camera not registered" warning.





Chapter 13 Common Faults and Troubleshooting

If a fault is found during operation, refer to the table below to identify the cause and eliminate it accordingly. If you still have difficulties, please contact our company or a nearest distributor. Do not attempt to disassemble it yourself.

Fault	Possible cause	Solution
The microscopy image on the computer screen flickers, but the eyepiece image is normal	The USB connection between the camera and the computer is not properly connected	1. Reconnect the USB cable to another port to ensure a stable connection 2. Use a USB 3.0 port
The device cannot be recognized when opening the microscope software	Loose USB connection	Reconnect the USB cable and restart the software
	The computer fails to recognize the camera (Check Computer Management > Device Manager> no Machine Vision Digital Camera is detected)	Switch to a different USB port
	The computer recognizes the camera, but the camera driver is malfunctioning (Check Computer Management > Device Manager > Machine Vision Digital Camera is listed)	Uninstall and reinstall the camera driver
	Antivirus software is blocking the camera software	Disable the antivirus software, then uninstall and reinstall the software



For the sake of your surroundings, please dispose of packaging waste properly after unpacking and installing the product. Do not discard it carelessly.

Specifications are subject to change without notice. Refer to the actual product.

Tootoo Meditech Co., Ltd.

Address: 2401, 3A, Phase II, Smart Home, Baolong Street,
Longgang District, Shenzhen, Guangdong, China

Technical Support: Please contact our technical engineer directly by scanning the QR below.

