

CellaVision® Proficiency Software

Instructions for Use

3.1

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1 INTRODUCTION

1.1 About this manual

This manual describes how to:

- Transfer and upload digital slides to and manage them in the CellaVision Proficiency Software
- Add and manage participants in the CellaVision Proficiency Software
- Create, manage, and take tests in WBC classification and RBC morphology grading on digital slides in the CellaVision Proficiency Software

For additional information, such as tutorials and FAQs, go to www.cellavision-proficiency.com.

1.2 About this product

The CellaVision Proficiency Software can be used to educate and test competency in WBC classification and RBC morphology grading in digital peripheral blood and body fluid slides. It has two different user access levels: examiner and participant.

An examiner can:

- Upload and manage slides
- Add and manage participants
- Create and assign tests to participants
- Monitor test progress
- View test results

An examiner can use the CellaVision Transfer Tool to transfer digital slides from a CellaVision database to their account in the CellaVision Proficiency Software. If the examiner doesn't have access to a CellaVision database, they can also upload digital slides from CellaVision Proficiency Software Slide Databases. CellaVision Proficiency Software Slide Databases are available for purchase separately.

A participant can:

- Take tests assigned by the examiner
- Monitor what tests they have ongoing and what tests they have completed
- View test results

1.3 System requirements

The latest version of one of the following browsers:

1 Introduction

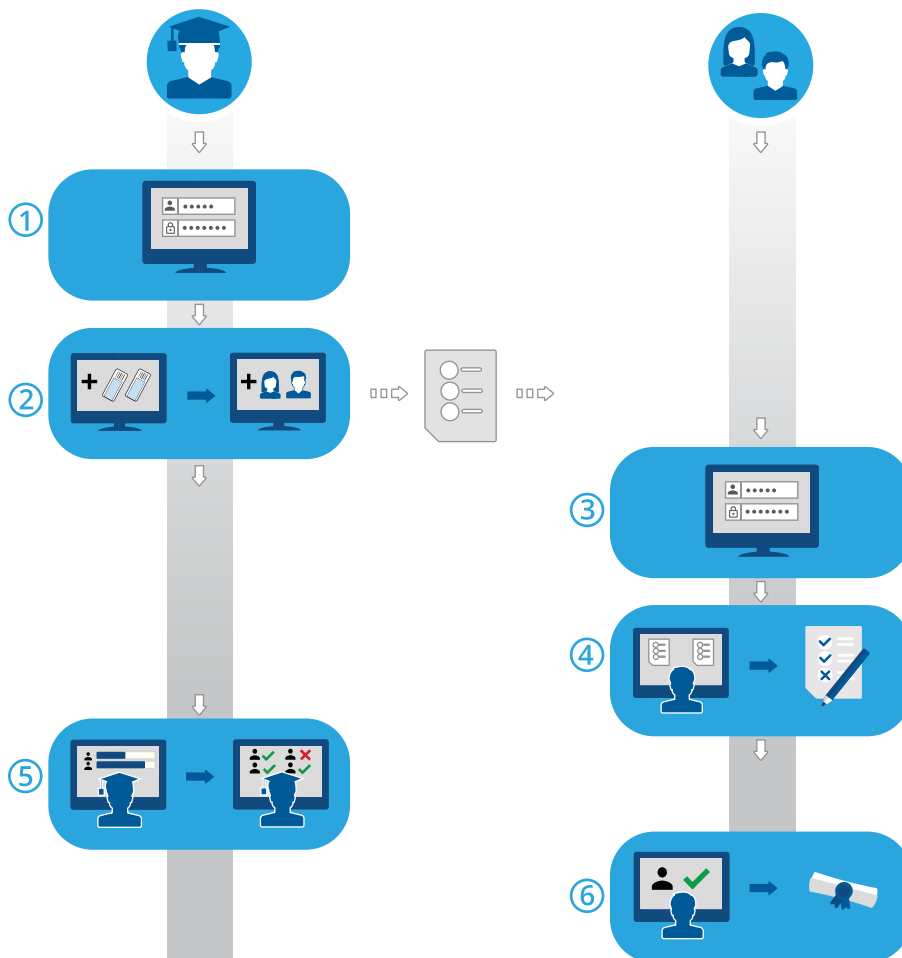
- Google Chrome
- Microsoft Edge (Chromium based)
- Mozilla Firefox
- Apple Safari

To make sure that the entire user interface of the CellaVision Proficiency Software is visible on your monitor, we recommend a minimum screen resolution of 1920 × 1080 pixels.

1.4 Quick reference - create and take tests

This quick reference workflow with links provides access to instructions for:

- The examiner once they have activated their CellaVision Proficiency Software account and uploaded slides and added participants to their account
- The participants once the examiner has created their accounts



1. Log in as examiner: [2.1.2 Log in to the CellaVision Proficiency Software](#) on page 11.
2. Create and send a test to participants: [2.5.2 Create new tests](#) on page 36.
3. Log in as participant: [3.1.1 Log in to the CellaVision Proficiency Software](#) on page 57.
4. Take the test: [3.2.2 Review and sign slides in ongoing tests](#) on page 59.
5. Monitor progress, view results, and give feedback to participants: [2.5.4 View results in ongoing and completed tests](#) on page 42.
6. View results and feedback: [3.2.3 View results in completed tests](#) on page 65.

2 EXAMINER

An examiner can perform tasks specified in this chapter.

2.1 Get started

2.1.1 Activate your CellaVision Proficiency Software license

When you acquire a CellaVision Proficiency Software license, you must first activate it before your CellaVision Proficiency Software account is created.

1. Go to www.cellavision-proficiency-software.com.
2. Click **Activate license**.
3. Enter your personal information.
4. Enter a password you want to use to access your account.

Note: If an account with your email address already exists, you are also given the option to renew your license using your existing account.

5. Enter the product key.
6. Review the license details.
7. To activate your license and create your account, click **Create Account**.

2.1.2 Log in to the CellaVision Proficiency Software

When you have activated your CellaVision Proficiency Software license, your account is created and you receive your account details via email.

1. Go to www.cellavision-proficiency-software.com.
2. In the login dialog, enter your **Username** and **Password**, and then click **Log in**.
3. If you have multiple accounts associated with your credentials, select the one you want to log into, and then click **Continue**.

Note: You can change the language of the login page from the language drop-down list. To change the language of the application after login, go to **Settings**.

Note: If you're inactive in the CellaVision Proficiency Software for more than 10 minutes, you are automatically logged out.

2.1.3 Customize your account

When you log in to the CellaVision Proficiency Software for the first time, the **Customize your account** dialog opens. Here you can:

- Check and edit your account details
- Change your password
- Select a preferred language for the user interface

To manage your account settings later, click  **Settings** on the main view of the CellaVision Proficiency Software. For more information, see [2.6.1 Edit account information](#) on page 51.

2.1.4 Reset password

If you forgot your password, you can reset it.

1. In the **Login** dialog, click **Forgot password?**
2. Enter the email address that is associated with your CellaVision Proficiency Software account.
3. Click **Reset password**.

A new password is delivered to your email address.

2.2 Transfer and upload slides to your CellaVision Proficiency Software account

You can use slides from a CellaVision database. You can also purchase CellaVision Proficiency Software Slide Databases.

To upload slides to your CellaVision Proficiency Software account:

- Export slides from the CellaVision Review Software to a chosen location, and upload the slides from there. Go to [2.2.1 Export slides for upload from the CellaVision Review Software](#) below.
- Use the CellaVision Transfer Tool to transfer slides from a CellaVision database to a location on your hard drive, and upload the slides from there. Go to [2.2.2 Transfer slides for upload from a CellaVision database using the CellaVision Transfer Tool](#) on page 14.
- Acquire and activate a license for a CellaVision Proficiency Software Slide Database, and import the slides from the database. Go to [2.2.3 Upload slides from a CellaVision Proficiency Software Slide Database via license activation](#) on page 17.

2.2.1 Export slides for upload from the CellaVision Review Software

You can export slides directly from the CellaVision Review Software to use in the CellaVision Proficiency Software.

Note: The CellaVision Review Software needs to be version 7.2 or higher.

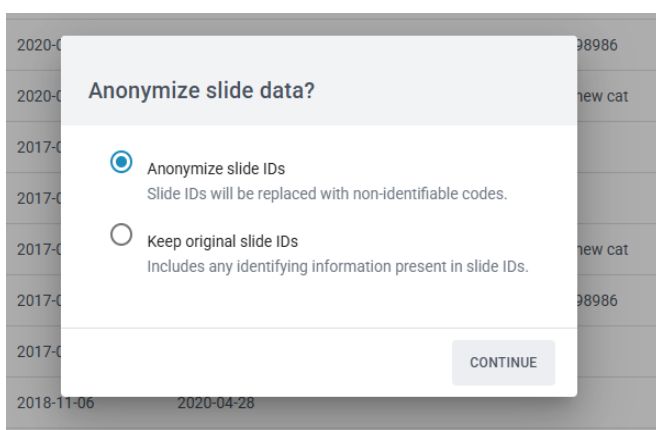
To export a slide for CellaVision Proficiency Software

1. Start the CellaVision Review Software.
2. In **Order manager**, in the **Processed orders** list, select the order or orders you want to export for CellaVision Proficiency Software
 - To select a consecutive group of orders, click the first order, hold down Shift, and then click the last order. You can also click the first order and drag the mouse pointer to the last order of your selection.
 - To select non-consecutive orders, hold down Ctrl, and then click each order that you want to select.
3. Right-click the selected order or orders, and then select **Export for Proficiency Software**.
4. Enter or browse to the location where you want to save the order.
5. Click Save. One .cvtj file for each slide in the selected order is saved in the chosen location. The .cvtj files are compatible with the CellaVision Proficiency Software. If any of the exported slides contains cell class comments or cell comments, the comments are included in the .cvtj file.

Note: You can't export archived orders.

To upload exported slides to your CellaVision Proficiency Software account

1. In the CellaVision Proficiency Software, go to the **Slides** view.
2. Click  **Upload slides**.
3. Locate and select the exported slides that you want to upload.
4. If you want to exclude any identifying information present in the slide ID, select **Anonymize slide IDs**.



5. If the slides you want to upload contain user-defined WBC or non-WBC classes or RBC morphologies, select which ones to include to your CellaVision Proficiency Software account.

Note: You get notified if you exceed the maximum number of allowed user-defined WBC or non-WBC classes or RBC morphologies in your account. For more information, see [2.6.3 Manage user-defined WBC classes](#) on page 53 and [2.6.4 Manage user-defined RBC morphologies](#) on page 53

Note: If you deselect a user-defined WBC or non-WBC class during upload, all cells in that class are moved to the **Unidentified** class, and you must reclassify them.

Depending on the number of slides, the upload can take a few minutes.

Note: No patient information is transferred with the slides. All transferred cell images are copies of the original cell images.

Note: You can upload the same slide again to your CellaVision Proficiency Software account. If you had made edits to the slide that already exists in your account, the slide is uploaded as a copy to the existing slide.

2.2.2 Transfer slides for upload from a CellaVision database using the CellaVision Transfer Tool

If you use the CellaVision DM Software version 7.1 or earlier, you can transfer slides using the CellaVision Transfer Tool.

The CellaVision Proficiency Software accepts slides from these CellaVision databases:

- Processing database
- Export database

Before you can transfer and upload slides from these databases to your CellaVision Proficiency Software account, you must install the CellaVision Transfer Tool:

- If you have a stand-alone installation, install the CellaVision Transfer Tool on the system computer of your CellaVision analyzer.
- If you have a server installation, install the CellaVision Transfer Tool on the same computer that runs the CellaVision Server Software.

For more information on installation configurations, see the IT Configuration Guidelines.

Note: You may have restricted access depending on the version of the Windows® operating system that runs on your system computer. For more information, contact your IT department or your local vendor.

To install the CellaVision Transfer Tool on a computer with internet access

Note: You need administrator privileges to install the CellaVision Transfer Tool.

1. On the system computer of your CellaVision analyzer, or on the server that runs the CellaVision Server Software, open the browser and go to www.cellavision-proficiency-software.com.

2. Log in to your CellaVision Proficiency Software account.
3. Go to the **Slides** view.
4. Click  **Download Transfer Tool**.
5. Double-click the transfertool_installer.exe file, and follow the instructions in the installation wizard.

To install the CellaVision Transfer Tool on a computer with no internet access

Note: You need administrator privileges to install the CellaVision Transfer Tool.

1. On a computer with internet access, insert a USB flash drive to a USB port.
2. Open the browser and go to www.cellavision-proficiency-software.com.
3. Log in to your CellaVision Proficiency Software account.
4. Go to the **Slides** view.
5. Click  **Download Transfer Tool**.
6. Save the transfertool_installer.exe file on the USB flash drive.
7. On the system computer of your CellaVision analyzer, or on the server that runs the CellaVision Server Software, insert the USB flash drive to a USB port.
8. On the USB flash drive, locate and double-click the transfertool_installer.exe file, and follow the instructions in the installation wizard.

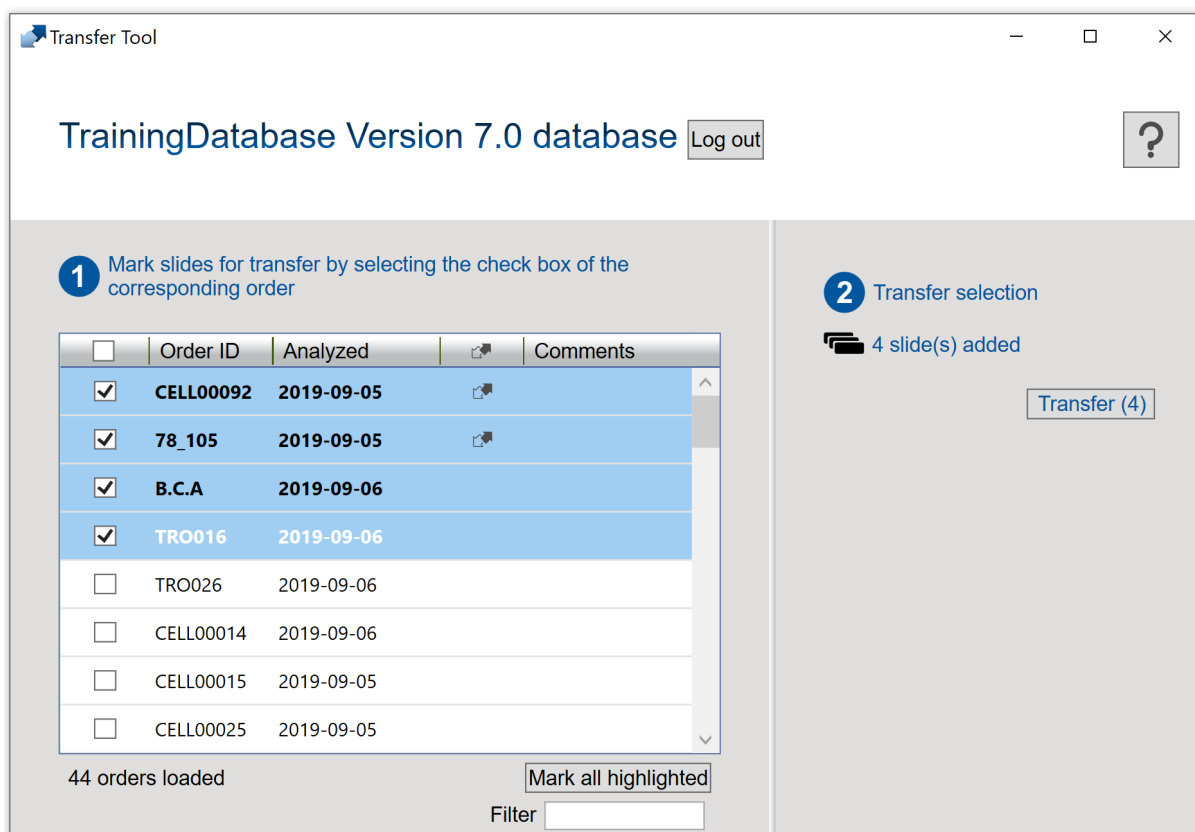
To transfer slides from a selected database

1. Start the CellaVision Transfer Tool.
2. Select the database where you want to transfer slides from.
3. Log in to the database.

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4. Select the slides that you want to transfer:

Note: You can't transfer archived slides, so they are not visible in the CellaVision Transfer Tool.



- Select the check box in the column header to select all slides for transfer.
- Select one or more check boxes next to the **Order IDs** to select those slides for transfer.
- Select one or more slides to highlight them, and then click **Mark all highlighted** to select those slides for transfer:
 - To highlight a consecutive group of slides, click the first slide, hold down Shift, and then click the last slide.
 - To highlight a non-consecutive group of slides, hold down Ctrl/Cmd, and then click each slide that you want to select.

Note: Slides marked for Transfer Tool in the CellaVision DM Software are indicated with . This option is available only in CellaVision DM Software version 7.1 or earlier.

Note: Cell class comments and cell comments are not included in the transfer. This feature is available in CellaVision DM Software version 7.2 or later.

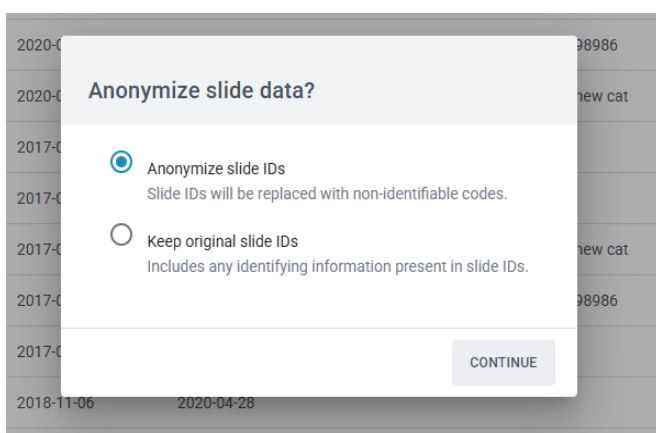
5. Click **Transfer**.

6. Choose a location where you want to save the selected slides and then click **OK**.

Note: You can open the slides for viewing only in your CellaVision Proficiency Software account after upload.

To upload transferred slides to your CellaVision Proficiency Software account

1. In the CellaVision Proficiency Software, go to the **Slides** view.
2. Click  **Upload slides**.
3. Locate and select the transferred slides that you want to upload.
4. If you want to exclude any identifying information present in the slide ID, select **Anonymize slide IDs**.



5. If the slides you want to upload contain user-defined WBC or non-WBC classes or RBC morphologies, select which ones to include to your CellaVision Proficiency Software account.

Note: You get notified if you exceed the maximum number of allowed user-defined WBC or non-WBC classes or RBC morphologies in your account. For more information, see [2.6.3 Manage user-defined WBC classes](#) on page 53 and [2.6.4 Manage user-defined RBC morphologies](#) on page 53

Note: If you deselect a user-defined WBC or non-WBC class during upload, all cells in that class are moved to the **Unidentified** class, and you must reclassify them.

Depending on the number of slides, the upload can take a few minutes.

Note: No patient information is transferred with the slides. All transferred cell images are copies of the original cell images.

Note: You can upload the same slide again to your CellaVision Proficiency Software account. If you had made edits to the slide that already exists in your account, the slide is uploaded as a copy to the existing slide.

2.2.3 Upload slides from a CellaVision Proficiency Software Slide Database via license activation

To activate the license for a CellaVision Proficiency Software Slide Database and to upload slides from it to your CellaVision Proficiency Software account, see [2.6.2 Manage licenses](#) on page 52.

If you delete the uploaded slides from your CellaVision Proficiency Software account, you can upload them again from the CellaVision Proficiency Software Slide Database.

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Note: You can upload the same slide again to your CellaVision Proficiency Software account. If you had made edits to the slide that already exists in your account, the slide is uploaded as a copy to the existing slide.

2.3 Manage and review slides

2.3.1 Slides view

The screenshot displays the CellaVision Proficiency Software interface. The top navigation bar includes tabs for TESTS, SLIDES, and PARTICIPANTS. The SLIDES tab is selected, showing a list of slides. The list has columns for Status, Slide ID, WBC, RBC, Analyzed, Added, Laboratory, Category, Slide Note, and Patient Information. A search bar and filter buttons (PB, BF) are at the top. Action buttons for duplicate, download, upload, and delete are also present. A detailed slide view for slide ER269 is shown on the right, displaying sample type, contains, analyzed, added, laboratory, category, and slide note.

- | | |
|--|-----------------------|
| 1 Slide status | 6 Upload slides |
| 2 Filter slides | 7 Download slides |
| 3 Sort slides | 8 Delete slides |
| 4 Duplicate slides | 9 Detailed slide view |
| 5 Download the CellaVision Transfer Tool | |

In the **Slides** view, you can:

- Upload slides to your CellaVision Proficiency Software account
- View a list of uploaded slides
- View status information of uploaded slides
- View and edit information on a selected slide in the detailed slide view
- Filter the slide list
- Sort the slide list
- Duplicate slides
- Open slides for review
- Download slides
- Delete slides

To access the detailed slide view, click a slide in the slide list.

To open a slide, double-click it in the slide list.

2.3.2 Manage slides

To view slide statuses

In the **Slides** view, you can see icons in the slide list. These icons give you more information on the slide statuses.

Status column	Description
	Slide contains unidentified WBCs. You must reclassify all unidentified WBCs before you can mark the slide as reviewed and include it in a test.
No icon	Slide doesn't contain any unidentified WBCs but you haven't marked the slide as reviewed yet.
	Slide doesn't contain any unidentified WBCs and you have marked the slide as reviewed.

 column	Description
No icon	Slide is unlocked. You haven't included the slide in an ongoing or completed test. You can review or delete the slide.
	Slide is locked. You have included the slide in an ongoing or completed test. You can't review or delete the slide.

To filter the slide list

You can filter the slide list by:

- Sample type
- Laboratory
- Category
- Slide note
- Slide ID

To filter the slide list by sample type, click **PB** or **BF**.

To filter the slide list by the other filtering options, click or enter a filtering criterion in the **Type to filter...** field, and then, from the drop-down list, select the option that you want to filter by. You can see all slides that include the same filtering option, for example the same laboratory, in the slide list.

Note: You can apply multiple filters. For example, you can first select the sample type, and then, from the drop-down list, select a laboratory.

You can clear the filters as follows:

- To clear the sample type filter, click the sample type icon you previously applied as filter or click **Clear all filters**.
- To clear the other filtering options one-by-one, click  next to the applied filter.
- To clear all applied filters simultaneously, click **Clear all filters**.

To sort the slide list

You can sort the slide list by certain columns.

To sort the slide list, click the header in the column that you want to sort by. The ascending  or descending  sort order is indicated by an arrow next to the column header.

To edit slide identifiers

Note: You can edit slide identifiers only in unlocked slides.

1. In the detailed slide view, in the **Slide ID** area, click  **Edit**.
2. Edit the **Slide ID**, and then click **Save**.

To manage laboratory and category information for slides

You can assign different laboratory or category tags to individual slides. This can be useful, for example, if you want to track where slides originate from or what clinical conditions can be found on slides.

To assign a slide to a laboratory or category, you must first add a laboratory or category. Once added, you can edit laboratory or category information and delete them as needed.

1. In the detailed slide view, in the **Laboratory** or the **Category** area, click  **Edit**.
2. To open a drop-down list, click  next to the content field.
3. Add and manage laboratory and category information as follows:
 - To add a new laboratory or category, click **Add new**, enter a name for the laboratory or category, and then click **Create**.
 - To edit the laboratory or category name, click **Manage laboratories** or **Manage categories**, edit the name, and then click **Save**.
 - To delete a laboratory, click **Manage laboratories**, click  **Delete laboratory** next to the laboratory you want to delete, and then click **Save**.
 - To delete a category, click **Manage categories**, click  **Delete category** next to the category you want to delete, and then click **Save**.

Note: Any changes that you do to laboratory or category information in the detailed slide view of a given slide, are automatically reflected in the detailed slide views of all other slides in the list that include the same information.

To assign a slide to a laboratory or category

1. In the detailed slide view, in the **Laboratory** or the **Category** area, click  **Edit**.
2. To open a drop-down list with predefined laboratories or categories, click ▼ next to the content field.
3. Select a laboratory or a category, and then click **Save**.

To manage slide notes

Note: You can manage slide notes only in unlocked slides.

1. In the detailed slide view, in the **Slide note** area, click  **Edit**.
2. Manage the slide notes as follows:
 - Enter a new slide note, and then click **Save**.
 - Edit an existing slide note, and then click **Save**.
 - Delete an existing slide note, and then click **Save**.

Note: Participants can't see your slide notes.

To manage patient information

Note: You can manage patient information only in unlocked slides.

1. In the detailed slide view, in the **Patient information** area, click  **Edit**.
2. Manage the patient information as follows:
 - Enter new patient information, and then click **Save**.
 - Edit existing patient information, and then click **Save**.
 - Delete existing patient information, and then click **Save**.

Note: Patient information is visible to participants when they take the test only if you select the **Patient information** option for what participants can see when you create a test. For more information, see [2.5.2 Create new tests](#) on page 36.

To manage additional slide data files

Note: You can manage additional slide data files only in unlocked slides.

You can create additional slide data files that contain, for example, scattergrams or clinical notes, and attach them to slides. The maximum file size is 3 MB. The supported file types are: .pdf, .doc, .docx, .txt, .bmp, .jpg, .gif, .png.

1. In the detailed slide view, in the **Additional slide data** area, click  **Attach**.
2. Browse to and select the file you want to attach.

Note: Additional slide data files are visible to participants when they take the test if you select the **Additional slide data** option for what participants can see when you create a test. For more information, see [2.5.2 Create new tests](#) on page 36.

To delete an additional slide data file, in the detailed slide view, click  next to the file name, and then click **Delete**.

To duplicate slides

You can duplicate a slide and then edit and review the duplicate. This can be useful, for example, if you have included the original slide in a test and it's locked for editing.

1. In the **Slides** view, select a slide that you want to duplicate from the slide list.
2. Click  **Duplicate slide**.
3. Enter a new name for the duplicate slide.

Note: We recommend that you don't use the original slide name for the new slide. This makes it easier to track your edits and make sure that you include the correct slide in a test.

4. Click **Duplicate**.

The duplicate slide with the new name (slide ID) appears at the top of the slide list.

To download slides

You can download slides from the CellaVision Proficiency Software in a .zip file.

Note: WBCs that are placed in **Trash** are not included in the download. If you want to include them, you must reclassify them first or place them under the **Unidentified** class.

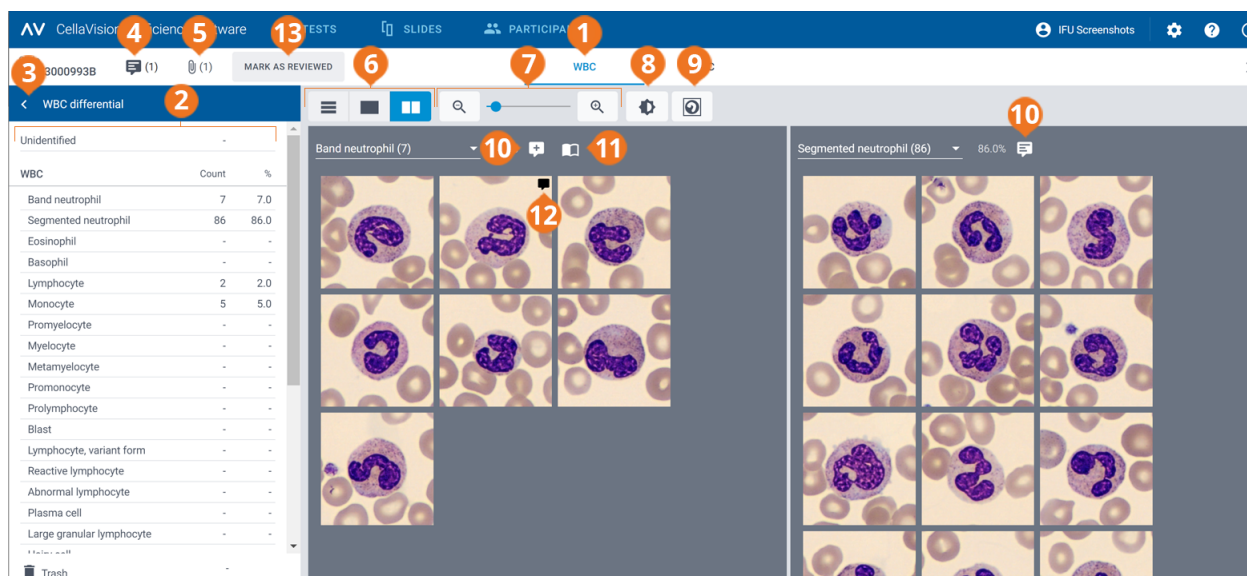
1. In the **Slides** view, select one or more slides from the slide list.

Note: You can select a maximum of 50 slides per download.

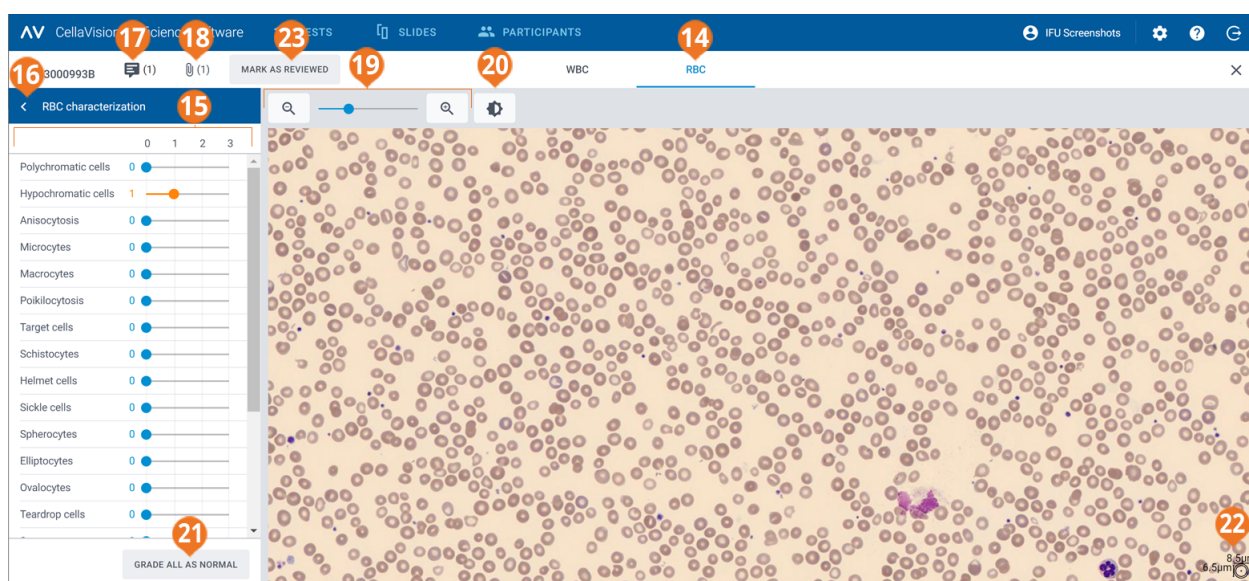
 - To select a consecutive group of slides, click the first slide, hold down Shift, and then click the last slide.
 - To select a non-consecutive group of slides, hold down Ctrl/Cmd, and then click each slide that you want to select.
2. Click  **Download slides**.
3. Choose a location where you want to save the .zip file.

2.3.3 Review slides

To open a slide for review, double-click it in the slide list in the **Slides** view.



- | | |
|--|-------------------------------------|
| 1 WBC view navigation link | 8 Adjust image brightness and color |
| 2 WBC differential side panel | 9 Show or hide cell markers |
| 3 Collapse or expand side panel | 10 Manage cell class comments |
| 4 Manage slide comments | 11 Show reference cells (if added) |
| 5 View additional slide data file (if added) | 12 Manage cell comments |
| 6 Switch between WBC gallery views | 13 Mark slide as reviewed |
| 7 Zoom in or out on image | |



- | | |
|---|---|
| 14 RBC view navigation link | 19 Zoom in or out on image |
| 15 RBC characterization side panel | 20 Adjust image brightness and color |
| 16 Collapse or expand side panel | 21 Grade all RBC morphologies as normal |
| 17 Manage slide comments | 22 RBC ruler |
| 18 View additional slide data file (if added) | 23 Mark slide as reviewed |

You can switch between the **WBC** and **RBC** views using the navigation links. If the slide doesn't contain any RBCs, only the **WBC** navigation link is visible and vice versa.

In the **WBC** view, you can see:

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- WBC images categorized by cell classes
- Count and percentage of WBCs from all WBCs in each class
- Total count and ratio per 100 WBCs for each non-WBC class

In the **RBC** view, you can see:

- The RBC overview image
- RBC grading of different morphologies

Note: When you open a slide for the first time in your CellaVision Proficiency Software account, the WBC classification and RBC characterization shown on the slide depends on where you uploaded the slide from:

- If you uploaded the slide from a CellaVision Proficiency Software Slide Database, all WBCs are in the **Unidentified** class and all RBC morphology grades are **0**.
- If you transferred and uploaded the slide from a CellaVision database, WBC classification and RBC grading statuses are the same as just before upload. The only exception is user-defined cell classes that you can select to include or exclude when you upload the slide. If you exclude a user-defined cell class, all WBCs in that class are placed in the **Unidentified** class.

To collapse or expand side panels in the WBC and RBC views

The **WBC differential** side panel in the **WBC** view provides more detailed information on the WBC classification. The **RBC characterization** side panel in the **RBC** view provides more detailed information on the RBC morphology grading.

To collapse or expand the side panels, click  or  next to the panel name.

To zoom in or out on all images in the WBC and RBC views

To simultaneously zoom in or out on all WBC images in an open gallery or to zoom in or out on the RBC overview image:

- In the **WBC** or the **RBC** view, use the zoom slider with  and  buttons.
- In the **RBC** view, scroll your mouse wheel up or down.

To adjust image brightness and color in the WBC and RBC views

1. Click  **Adjust brightness or color**.
2. Adjust the sliders.
3. Click **Save**

To restore the default settings, click **Reset**.

Note: When you change the brightness and color settings in the **WBC** view, it doesn't impact the same settings in the **RBC** view, and vice versa.

Note: When you change the brightness and color settings in the **WBC** and **RBC** views, the change is reflected also in other views where WBC or RBC images are present (for example under test results).

To manage slide comments in the WBC and RBC views

Note: You can manage slide comments only in unlocked slides.

You can manage slide comments as follows:

- To add a slide comment, click  **Add slide comment**, enter the comment, and then click **Save**.
- To edit or delete a slide comment, click  **View or edit slide comment**, edit or delete the comment, and then click **Save**.

Slide comments are visible to participants only after their test results are available.

To view WBCs in different gallery views

- To view all WBC images from all cell classes in the same view, click  **All galleries view**.

Note: When you access the **WBC** view, WBC images are visible in the  **All galleries view** by default.

- To view WBC images only from two cell classes at a time, click  **Split gallery view**.
 - To view WBC images only from one cell class at a time, click  **Single gallery view**.
 - To change the cell class you want to view in the gallery views:
 - In the  **Split gallery view** or the  **Single gallery view**, click the arrow ▼ next to the cell class name, and select a new cell class from the drop-down list.
 - In the  **Split gallery view** or the  **Single gallery view**, left-click a cell class in the **WBC differential** side panel.
- Note:** This works in the  **Single gallery view** only if there are WBCs in the cell class that you click.
- In the  **Split gallery view**, right-click a cell class in the **WBC differential** side panel to view that cell class in the right gallery.

To zoom in and out on individual WBC images

1. To magnify a WBC image, double-click it.
2. To zoom in and out on the magnified WBC image, scroll your mouse wheel up or down.
3. To shift to another zoomed WBC image in the same gallery view, use the arrow keys on your keyboard.

4. To close the magnified WBC image:

- Click **Cancel** if you didn't add, edit, or delete a cell comment.
- Click **Save** if you added, edited, or deleted a cell comment.

To show or hide WBC cell markers

A cell marker is a square box that surrounds the WBC in the image. To show or hide the cell markers for individual WBCs, click  **Cell marker**.

To split WBCs

Note: You can split WBCs only in unlocked slides.

If you see more than one WBCs inside a cell marker, you can split the WBCs.

1. Right-click a WBC image, and select **Split cell**.
2. In the magnified WBC image, click to mark the center of each WBC inside the cell marker.
3. Click **Split**.

Copies of the WBC image are created, and they replace the original WBC image in the same cell class. Each copy shows a different WBC with its center marked. Reclassify each marked WBC to the correct cell class as needed.

To delete a split WBC image, right-click it and then select **Delete split cell**. If you delete all split WBC images created from the same original WBC image, the original WBC image is shown again with no centers marked.

Note: You can't resplit a WBC that is already split.

To manage comments for WBC classes

Note: You can manage cell class comments only in unlocked slides.

Note: You can't add a cell class comment to the **Unidentified** class or to  **Trash**.

Manage cell class comments as follows:

- To add a cell class comment, click  **Add cell class comment** next to a cell class name, enter the comment, and then click **Save**.
- To edit or delete a cell class comment, click  **View or edit cell class comment** next to a cell class name, edit or delete the comment, and then click **Save**.

Cell class comments are visible to participants only after their test results are available.

To manage comments for individual WBCs

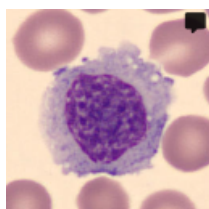
Note: You can manage cell comments only in unlocked slides.

1. Double-click a WBC or select one or more WBCs and then right-click **Add or edit cell comment**.
 - To select a consecutive group of WBCs, click the first WBC, hold down Shift, and then click the last WBC.
 - To select a non-consecutive group of WBCs, hold down Ctrl/Cmd, and then click each WBC that you want to select.
2. Manage cell comments as follows:

Note: You can enter and edit cell comments in several selected WBCs at the same time.

 - Enter a cell comment in the **Cell comment** field, and then click **Save**.
 - Edit or delete a comment in the **Cell comment** field, and then click **Save**.

WBC images that include a cell comment display a comment icon .



Cell comments are visible to participants only after their test results are available.

To reclassify WBCs

Note: You can reclassify WBCs only in unlocked slides.

Note: You can also add your own cell classes to the **WBC differential** side panel. For more information, see [2.6.3 Manage user-defined WBC classes](#) on page 53.

1. Click to select one or more WBCs.
 - To select a consecutive group of WBCs, click the first WBC, hold down Shift, and then click the last WBC.
 - To select a non-consecutive group of WBCs, hold down Ctrl/Cmd, and then click each WBC that you want to select.
2. To reclassify the selected WBCs:
 - Drag and drop from a cell class in a gallery view to a cell class on the **WBC differential** side panel.
 - Drag and drop from one cell class to another in the  **All galleries view** or the  **Split gallery view**.
 - Right-click, and under **Classification**, select the desired cell class.

To move WBCs to and from trash

Note: You can move WBCs to trash only in unlocked slides.

If you want to exclude WBCs from a slide, you can move them to trash.

Note: Participants can't see WBCs that are moved to trash.

1. Click to select one or more WBCs.
 - To select a consecutive group of WBCs, click the first WBC, hold down Shift, and then click the last WBC.
 - To select a non-consecutive group of WBCs, hold down Ctrl/Cmd, and then click each WBC that you want to select.
2. To move the selected WBCs to trash:
 - Right-click and select **Move to trash**.
 - Drag and drop to  **Trash** on the **WBC differential** side panel.
3. To move the selected WBCs from  **Trash** on the **WBC differential** side panel:
 - Right-click, and under **Classification**, select the desired cell class.
 - Drag and drop to the correct cell class in a gallery view or on the **WBC differential** side panel.

To manage WBC reference libraries

A WBC reference library contains WBCs that serve as good reference examples of a specific cell class.

1. To add a WBC in any of the gallery views to a WBC reference library, right-click the WBC, and then select **Add as reference cell**.

Note: You can't add WBCs in the **Unidentified** class or in  **Trash** to a WBC reference library.

2. To view the WBC you added to a WBC reference library, in the  **Split gallery view** or the  **Single gallery view**, select the desired cell class, and then click  **Show reference cells**. You can see the reference cells for the selected cell class in the right image gallery.
3. To delete a WBC from a WBC reference library, right-click the WBC, and then click **Delete reference cell**.

Note: Reference cells are available to participants only if you select that option under test preferences when you create a test. Only reference cells that you added before you sent the test are visible to the participants. For more information, see [2.5.2 Create new tests](#) on page 36.

To view RBCs in an RBC overview image

1. Click the **RBC** view navigation link.
2. To zoom in and out on the RBC overview image:
 - Scroll up or down with your mouse wheel
 - Use the zoom slider with  and  buttons
 - Click the image to zoom in on it
3. To move the RBC overview image around, click and drag it.
4. To measure the size of the RBCs, drag the RBC ruler on top of the RBC overview image. The ruler size automatically scales up and down as you zoom in and out on the RBC overview image.

To grade RBC morphologies in the RBC overview image

Note: You can grade RBC morphologies only in unlocked slides.

Note: You can add your own RBC morphologies to the **RBC characterization** side panel. For more information, see [2.6.4 Manage user-defined RBC morphologies](#) on page 53.

To grade RBC morphologies, use the sliders on the **RBC characterization** side panel.

RBC morphology grades	
0	Morphology present at normal level
1	Morphology present at low level
2	Morphology present at moderate level
3	Morphology present at high level

To reset your grading or to grade all RBC morphologies as normal, click **Grade all as normal**.

To mark slides as reviewed

Note: You must reclassify all WBCs in the **Unidentified** class before you can mark a slide as reviewed.

When you have reviewed a slide and reclassified WBCs and graded RBC morphologies on it as needed, click **Mark as reviewed**. This status is indicated with  icon in the slide list. For more information on slide statuses, see [2.3.2 Manage slides](#) on page 19.

Note: We recommend that you mark slides as reviewed. This helps you to track slides where WBCs are correctly classified and RBC morphologies correctly graded. You can then safely use these slides in tests.

2.3.4 Delete slides

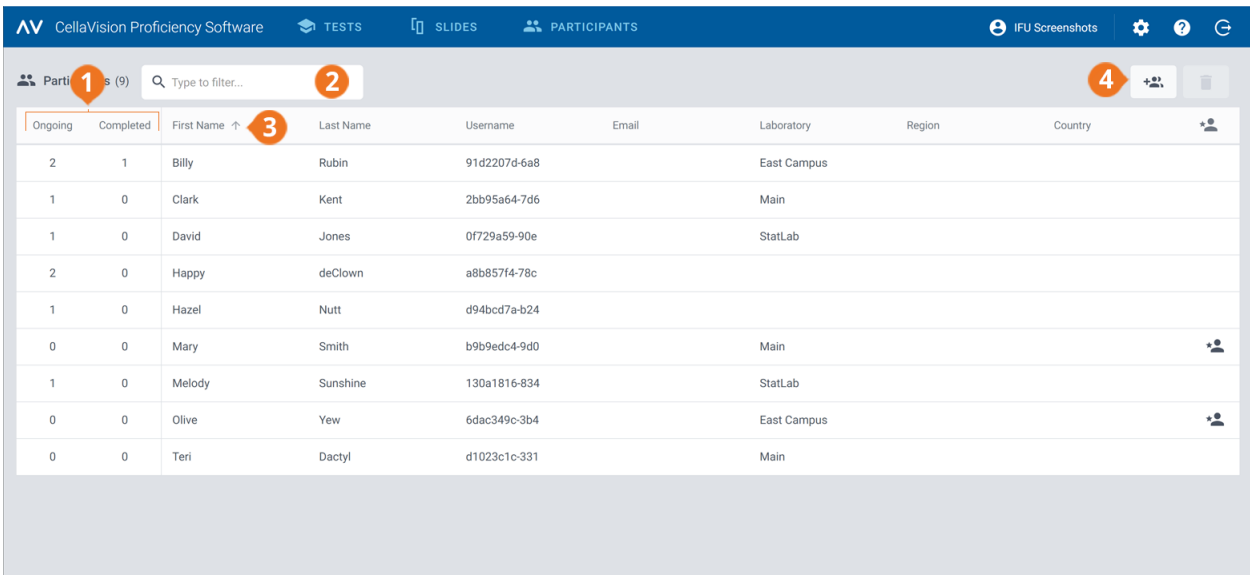
Note: You can delete only unlocked slides.

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1. In the **Slides** view, select one or more slides from the slide list.
 - To select a consecutive group of slides, click the first slide, hold down Shift, and then click the last slide.
 - To select a non-consecutive group of slides, hold down Ctrl/Cmd, and then click each slide that you want to select.
2. Click , and then click **Delete**.

2.4 Add and manage participants

2.4.1 Participants view



Ongoing	Completed	First Name	Last Name	Username	Email	Laboratory	Region	Country
2	1	Billy	Rubin	91d2207d-6a8		East Campus		
1	0	Clark	Kent	2bb95a64-7d6		Main		
1	0	David	Jones	0f729a59-90e		StatLab		
2	0	Happy	deClown	a8b857f4-78c				
1	0	Hazel	Nutt	d94bcd7a-b24				
0	0	Mary	Smith	b9b9edc4-9d0		Main		
1	0	Melody	Sunshine	130a1816-834		StatLab		
0	0	Olive	Yew	6dac349c-3b4		East Campus		
0	0	Teri	Dactyl	d1023c1c-331		Main		

- 1 Number of ongoing and completed tests per participant
- 2 Filter participants
- 3 Sort participants
- 4 Add new participants

AV CellaVision Proficiency Software TESTS SLIDES PARTICIPANTS IFU Screenshots

ed participants: 1

Ongoing	Completed	First Name	Last Name	Username	Email	Laboratory	Region	Country
2	1	Billy	Rubin	91d2207d-6a8		East Campus		
1	0	Clark	Kent	2bb95a64-7d6		Main		
1	0	David	Jones	0f729a59-90e		StatLab		
2	0	Happy	deClown	a8b857f4-78c				
1	0	Hazel	Nutt	d94bcd7a-b24				
0	0	Mary	Smith	b9b9edc4-9d0		Main		
1	0	Melody	Sunshine	130a1816-834		StatLab		
0	0	Olive	Yew	6dac349c-3b4		East Campus		
0	0	Teri	Dactyl	d1023c1c-331		Main		

Participant Billy Rubin

First name Billy

Last name Rubin

Username 91d2207d-6a8

Password

Email

Laboratory East Campus

Region

Country

Ongoing tests

5 Number of ongoing and completed tests per participant

6 Sort participants

7 Delete participants

8 Detailed participant view

9 Manage supervisor privileges for participant

10 Reset password for participant

In the **Participants** view, you can:

- Add new participants
- View a list of added participants
- View the number of ongoing and completed tests for each participant
- View and edit information on and change the password for a selected participant in the detailed participant view
- Filter the participant list
- Sort the participant list
- Delete existing participants

To access the detailed participant view, click a participant in the participant list.

2.4.2 Add participants

You can add participants manually or via a .csv file upload. Once added, you receive the account details of all added participants via email.

Participants with an email address specified in their account receive their account details and test notifications via email. You must notify other participants about their account details and tests separately.

Note: The number of participants that you can add depends on your license type. For more information on how to increase the number of participant seats, see [2.6.2 Manage licenses](#) on page 52.

To add participants manually

1. In the **Participants** view, click  **Add participants**.
2. Enter the **First name** and the **Last name**.
3. If known, enter the **Email address**.
4. If known, enter the **Laboratory**, **Region**, and **Country** information.
5. Click **Add participant**.
6. If you want to save the account information to a .pdf file, select **PDF** next to the participant name.
Note: You can save the account information to a .pdf file only at this point. It's not possible to do it later.
7. Click **Save**.

To add participants via .csv file upload

Note: We recommend that your .csv file uses UTF-8 character encoding. This is to make sure that all characters show correctly in the participant list after file upload.

1. In your participant file, arrange and name the first row data in English as shown in this table.

	A	B	C	D	E	F
1	First name	Last name	Email	Laboratory	Region	Country
2	John	Smith	john.smith@organization.com	Labville	Neverwood	Neverland
3						

2. Add the participant information to the file.
Note: Don't exceed the number of participant seats allowed in your license.
3. Save the file in .csv format.
4. In the **Participants** view, click  **Add participants**.
5. In the **Upload a .csv file** area:
 - **Click to add a file**, select the .csv file you want to upload, and then click **Save**.
 - Drag and drop the .csv file to the area, and then click **Save**.

2.4.3 Manage participants

To filter the participant list

You can filter the participant list by:

- Laboratory
- Region
- Country

- Email
- First name
- Last name
- Username

To filter the participant list by one of these options, click or enter a filtering criterion in the **Type to filter...** field, and then, from the drop-down list, select the option that you want to filter by. You can see all participants that include the same filtering option, for example the same laboratory, in the participant list.

Note: You can apply multiple filters. For example, you can first select a region and then a laboratory from the drop-down list.

You can clear the filters as follows:

- To clear the filtering options one-by-one, click **X** next to the applied filter.
- To clear all filters simultaneously, click **Clear all filters**.

To sort the participant list

You can sort the participant list by certain columns.

To sort the participant list, click the header in the column that you want to sort by. The ascending  or descending  sort order is indicated by an arrow next to the column header.

To manage participant information

Note: You can't edit the usernames of participants.

1. In the detailed participant view, click  **Edit** next to any of the information fields you want to edit.
2. Manage the participant information as follows:
 - Enter new participant information, and then click **Save**.
 - Edit existing participant information, and then click **Save**.
 - Delete existing participant information, and then click **Save**.

To reset participant passwords

1. In the detailed participant view, click  **Reset password for the participant**.
2. Click **Reset**.

A new password is automatically generated for the participant and delivered to you via email. If the participant has an email address specified in their account, their new password will be delivered via email to them instead. You must notify other participants about their new passwords separately.

Note: A participant who has an email address specified in their account can also reset their own password. For more information, see [3.1.3 Reset password](#) on page 57.

To manage supervisor privileges for participants

You can give supervisor privileges to participants so that they can see the names of other participants in test results. This can be useful if your participants come from many different locations and you want to allow a more direct supervisor to view local results.

1. In the detailed participant view, click  **Give supervisor privileges**.
2. Select which category of participants to show by name to the participant that you are assigning supervisor privileges to:
 - **Laboratory**
 - **Region**
 - **Country**

Note: You can select only a category that you have specified also for the supervisor. For example, if you have specified only a laboratory for the supervisor, you can only select laboratory.

3. Click **Save**.

A participant with supervisor privileges is indicated with  in the participant list.

To edit or remove the supervisor privileges for a given participant, in the detailed participant view, click  **Edit supervisor privileges**, make the needed changes, and then click **Save**.

2.4.4 Delete participants

1. In the **Participants** view, select one or more participants from the participant list.
 - To select a consecutive group of participants, click the first participant, hold down Shift, and then click the last participant.
 - To select a non-consecutive group of participants, hold down Ctrl/Cmd, and then click each participant that you want to select.
2. Click , and then click **Delete**.

Note: When you delete a participant, it frees up a participant seat in your CellaVision Proficiency Software license.

2.5 Create and manage tests

2.5.1 Tests view

AV CellaVision Proficiency Software TESTS SLIDES PARTICIPANTS

Search: Type to filter... PB BF

+ ADD NEW TEST EDIT TEST DELETE TEST

Under construction (1)

Start Date	End Date	Test Name	BF	Category	Test Description	Slides	Participants
-	2021-04-01	New employees	BF	Body Fluid	Body Fluid evaluatio...	2	5

Ongoing (3)

Start Date	End Date	Test Name	BF	Category	Test Description	Slides	Participants
2020-11-12	-	All labs annual co...				3	4
2020-11-12	-	Main Lab annual re...		Peripheral Blood		4	3

Completed (1)

Start Date	End Date	Test Name	BF	Category	Test Description	Slides	Participants
2020-11-12	2020-11-12	Q3 Test	BF	Body Fluid		1	1

Test: New employees

Sample type: Body fluid

Start date: -

End date: 2021-04-01

Category: Body Fluid

Test description: Body Fluid evaluation for new employees

Test slides (2): COP047, VGHBF024

1 Tests under construction

2 Ongoing tests

3 Completed tests

4 Filter tests

5 Sort tests

6 Add new test

7 Edit test under construction

8 Delete tests

9 Detailed test view

AV CellaVision Proficiency Software TESTS SLIDES PARTICIPANTS

Search: Type to filter... PB BF

+ ADD NEW TEST VIEW TEST + PARTICIPANTS

Under construction (1)

Start Date	End Date	Test Name	BF	Category	Test Description	Slides	Participants
-	2021-04-01	New employees	BF	Body Fluid	Body Fluid evaluatio...	2	5

Ongoing (3)

Start Date	End Date	Test Name	BF	Category	Test Description	Slides	Participants
2020-11-12	-	All labs annual co...				3	4
2020-11-12	-	Main Lab annual re...		Peripheral Blood		4	3

Completed (1)

Start Date	End Date	Test Name	BF	Category	Test Description	Slides	Participants
2020-11-12	2020-11-12	Q3 Test	BF	Body Fluid		1	1

Test: Main Lab annual review

Sample type: Peripheral blood

Start date: 2020-11-12

End date: -

Category: Peripheral Blood

Test description: Test has no description

Test slides (4): A488633129, CELL00073, JOHOP025

10 View ongoing test

11 Add participants to ongoing test

12 End ongoing test

2 Examiner

13 View completed test
14 Reuse completed test

13 View completed test
14 Reuse completed test

In the **Tests** view, you can:

- Add new tests
- View and take action on tests under construction, ongoing tests, and completed tests
- View and edit information on a selected test in the detailed test view
- Filter test lists
- Sort test lists
- Delete existing tests

To access the detailed test view, click a test in any of the test lists.

To open a test, double-click it in any of the tests list, or click it and then click **Edit test** for tests under construction or **View test** for ongoing and completed tests.

2.5.2 Create new tests

You can create a new test from the start or use an existing completed test as a template.

To create a new test from the start

1. In the **Tests** view, click **+ Add new test**.
2. Enter a name for the test.

3. In the **Available slides** area, select one or more slides in the **Peripheral blood** or the **Body fluid** slide list.

- To select a consecutive group of slides, click the first slide, hold down Shift, and then click the last slide.
- To select a non-consecutive group of slides, hold down Ctrl/Cmd, and then click each slide that you want to select.

Note: A test can include:

- Only peripheral blood or body fluid slides
- A maximum of 20 slides
- Only slides that don't contain any unidentified WBCs (slides with unidentified WBCs are not visible in the **Available slides** area)

4. To add the selected slides, click ➤ **Add selected slides to test.**

Note: You can also just double-click a single slide in the **Available slides** area to add it to the test.

5. In the **Available participants** area, select one or more participants:

- To select a consecutive group of participants, click the first participant, hold down Shift, and then click the last participant.
- To select a non-consecutive group of participants, hold down Ctrl/Cmd, and then click each participant that you want to select.

6. To add the selected participants, click ➤ **Add selected participants to test.**

Note: You can also just double-click a single participant in the **Available participants** area to add them to the test.

7. Set the preferences for the test.

What can participants see?	
Patient information	Select this option if you want the patient information associated with the slides (if added) to be visible to participants when they take the test.
Additional slide data	Select this option if you want the additional slide data files (if attached) to be visible to all participants when they take the test.
Reference cells	Select this option if you want the participants to have access to the WBC reference cell libraries (if available) when they take the test.

When should the test end?	
Note: If the test ends before all participants have reviewed and signed all slides, you have less data available for result statistics. Any slide a participant doesn't sign, is excluded from the test results.	
Automatically on	Select this option if you want the test to end on a specific date. Use the calendar to specify the end date. The end date is visible to the participants when they take the test. The test ends automatically on the specified date regardless of participant progress. Note: When you set the end date, it is set to end at 23:59 on that date based on your time zone. This time may differ for the participant depending on what time zone they are in. Note: You can edit the end date for ongoing tests. For more information, see Ongoing tests in 2.5.3 Manage tests on page 40.
Leave open until all participants complete the test or you end the test manually	Select this option if you want the test to end only when all participants have reviewed and signed all slides, or when you decide to end the test manually regardless of participant progress.

When can participants see their results?**When the test has ended**

Select this option if you want all participants to have access to their results only when the test ends.

Note: Once the test has ended, the participants can compare their results to the results of the examiner and the other participants (majority).

When they have completed the test (early access)

Select this option if you want a participant who has reviewed and signed all slides to have access to their results before the test ends.

Note: Once the participant has completed the test and no other participant has signed any slides by that time, the participant can compare their results only to the results of the examiner.

Note: Once the participant has completed the test and some other participants have signed some slides by that time, the participant can compare their results to the results of the examiner and the other participants (majority).

Assign test to a category?

You can assign the test to a category. The category information is not visible to the participants.

For more information on how to add and manage categories, see [2.5.3 Manage tests](#) on the next page.

Add a test description?

You can add a free-text description about the test. The description is visible to the participants when they take the test.

8. To make sure you have created the test correctly, review the test information.
9. To start the test, click ➔ **Start test**.

To create a new test based on an existing completed test

1. In the **Completed** test list, click the test you want to use as a template for the new test.
2. Click  **Reuse completed test**.
3. Enter a new name for the test, and then follow the same steps as when creating a new test from start.

All participants who have an email address associated with their account, get a notification mail about the test. You must notify other participants about the test separately.

You get an email notification when the participants have completed the test or when the test end date has passed.

2.5.3 Manage tests

Tests under construction

In this list, you can see tests that you started creating earlier but didn't finish yet. These tests are not visible to the participants, and stay here until you start the tests.

To continue working on a test, double-click it in the test list, or click it and then click  **Edit test**.

For more information, see [2.5.2 Create new tests](#) on page 36.

Ongoing tests

In this list, you can see tests that you sent to the participants but that haven't ended yet.

To add new participants to an ongoing test:

1. Select the test you want to add new participants to.
2. Click  **Add participants**.
3. In the **Available participants** area, select one or more participants:
 - To select a consecutive group of participants, click the first participant, hold down Shift, and then click the last participant.
 - To select a non-consecutive group of participants, hold down Ctrl/Cmd, and then click each participant that you want to select.
4. To add the selected participants, click  **Add selected participants to test**.

Note: You can also just double-click a single participant in the **Available participants** area to add them to the test.
5. Click **Add participants**.

To edit the end date for an ongoing test:

1. Select the relevant ongoing test.
2. In the detailed test view, in the **End date** area, click  **Edit**.
3. Select the desired end date, and then click **Save**.

To view participant progress and results in an ongoing test, double-click it in the test list, or click it and then click  **View test**. For more information, see [2.5.4 View results in ongoing and completed tests](#) on page 42.

To end an ongoing test, click it and then click  **End test**. The test is now moved under completed tests.

Note: If you end the test manually:

- The test ends immediately regardless of participant progress. Only slides that the participants signed before the test ended, are included in the test results.

- You can't set the test back to an ongoing test.

Completed tests

In this list, you can see tests that have ended. A test appears in this list when one of the following applies:

- The end date you set for the test was reached
- You manually ended the test

To view results in a completed test, double-click it in the test list, or click it and then click  **View test**. For more information, see [2.5.4 View results in ongoing and completed tests](#) on the next page.

To use an existing completed test as a template for a new test, click it in the test list, and then click  **Reuse completed test**. For more information, see [2.5.2 Create new tests](#) on page 36.

To filter the test lists

You can filter the test lists by:

- Sample type
- Category
- Test description
- Test name

Note: The filter you use applies to all test lists so you can't filter each test list separately.

To filter the test lists by sample type, click **PB** or **BF**.

To filter the test lists by the other filtering options, click or enter a filtering criterion in the **Type to filter...** field, and then, from the drop-down list, select the option that you want to filter by. You can see all tests that include the same filtering option, for example the same category, in the test lists.

Note: You can apply multiple filters. For example, you can first select the sample type, and then, from the drop-down list, select a category.

You can clear the filters as follows:

- To clear the sample type filter, click the sample type icon you previously applied as filter or click **Clear all filters**.
- To clear the other filtering options one-by-one, click  next to the applied filter.
- To clear all applied filters simultaneously, click **Clear all filters**.

To sort the test list

You can sort the test list by certain columns.

To sort the test list, click the header in the column that you want to sort by. The ascending  or descending  sort order is indicated by an arrow next to the column header.

To manage category information for tests

It can be useful to group tests by certain criteria such as time of year, class, sample type, or abnormality.

To assign a test to a category, you must first add a category. Once added, you can edit category information and delete them as needed.

1. In the detailed test view, in the **Category** area, click  **Edit**.
2. To open a drop-down list, click ▼ next to the content field.
3. Manage category information as follows:
 - To add a new category, click **Add new**, enter a name for the category, and then click **Create**.
 - To edit the category name, click **Manage categories**, edit the name, and then click **Save**.
 - To delete a category, click **Manage categories**, click  **Delete category** next to the category you want to delete, and then click **Save**.

Note: Any changes that you make to category information in the detailed test view of a given test, are automatically reflected in the detailed test views of all other tests in the list that include the same information.

Note: You can add and manage categories also in test preferences when you create a test. For more information, see [2.5.2 Create new tests](#) on page 36.

To assign a test to a category

1. In the detailed test view, in the **Category** area, click  **Edit**.
2. To open a drop-down list with predefined categories, click ▼ next to the content field.
3. Select a category, and then click **Save**.

To manage test conclusion files in completed tests

You can create a test conclusion file and attach it to a completed test. You can add only one file per test. The maximum file size is 3 MB. The supported file types are: .pdf, .doc, .txt, .jpg, .png, .gif, .bmp.

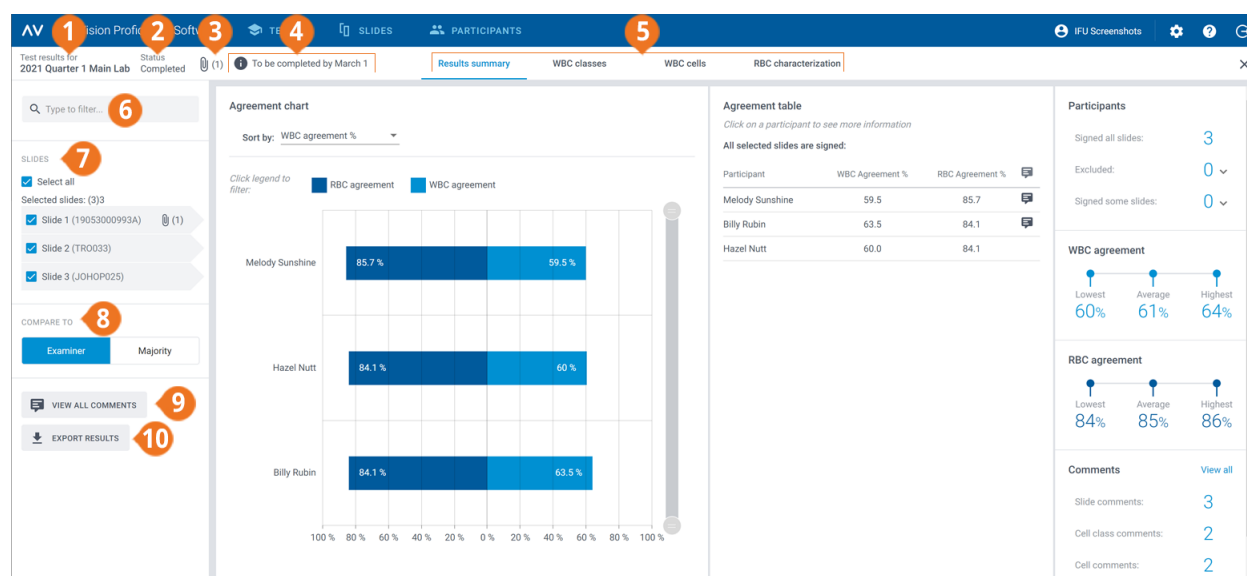
1. In the detailed test view, in the **View test conclusion** area, click  **Attach**.
2. Browse to and select the file you want to attach.

To delete a test conclusion file, in the detailed test view, click  next to the file name, and then click **Delete**.

2.5.4 View results in ongoing and completed tests

To open the results for an ongoing or a completed test, double-click the test in the **Tests** view, or click it and then click  **View test**.

Note: With ongoing tests, you can see results only from slides that the participants have signed by the time you view the results. With completed tests, you can see results only from slides that the participants have signed by the time the test ended.



- | | |
|---|---|
| 1 Test name | 6 Filter results |
| 2 Test status | 7 Slides included in test |
| 3 Test conclusion file (completed tests if added) | 8 Compare results to examiner or majority results |
| 4 Test description (if added) | 9 View slide, cell class, and cell comments |
| 5 Results view navigation links | 10 Export results to a .csv file |

Via the navigation links, you can access the different results views depending on your test setup:

- **Results summary** to view an overview of the results
- **WBC classes** to view results for WBC classification by cell class
- **WBC cells** to view results for WBC classification by individual WBCs
- **RBC characterization** to view results for RBC morphology grading

To filter the results by filtering options

In each results view, you can filter the results by:

- Laboratory
- Region
- Country
- Participant (name)

To filter the results by one of these options, click or enter a filtering criterion in the **Type to filter...** field, and then, from the drop-down list, select the option you want to filter by.

Note: You can apply multiple filters. For example, you can first filter by laboratory and then by participant.

You can clear the filters as follows:

- To clear the filtering options one-by-one, click  next to the applied filter.
- To clear all filters simultaneously, click **Clear all filters**.

To filter the results by slide

To filter the results by slide in each results view, select the slides you want to filter by.

To view your test conclusion files in completed tests

If you added a test conclusion file to a completed test, click  next to the test name and status to view it.

To view your test descriptions

If you added a test description to a test, you can see it  next to the test name and status.

To view your additional slide data files

If you added an additional slide data file to a slide used in the test, click  next to the slide ID to view it. For more information on how to add additional slide data files, see [2.3.2 Manage slides](#) on page 19.

To view slide, cell class and cell comments

The participants can add slide, cell class, and cell comments when they take the test. To view their and your own comments, click **View all comments**.

To compare results from an individual participant with examiner or majority results

In each results view, you can select with whom to compare the WBC classification and RBC characterization results of an individual participant:

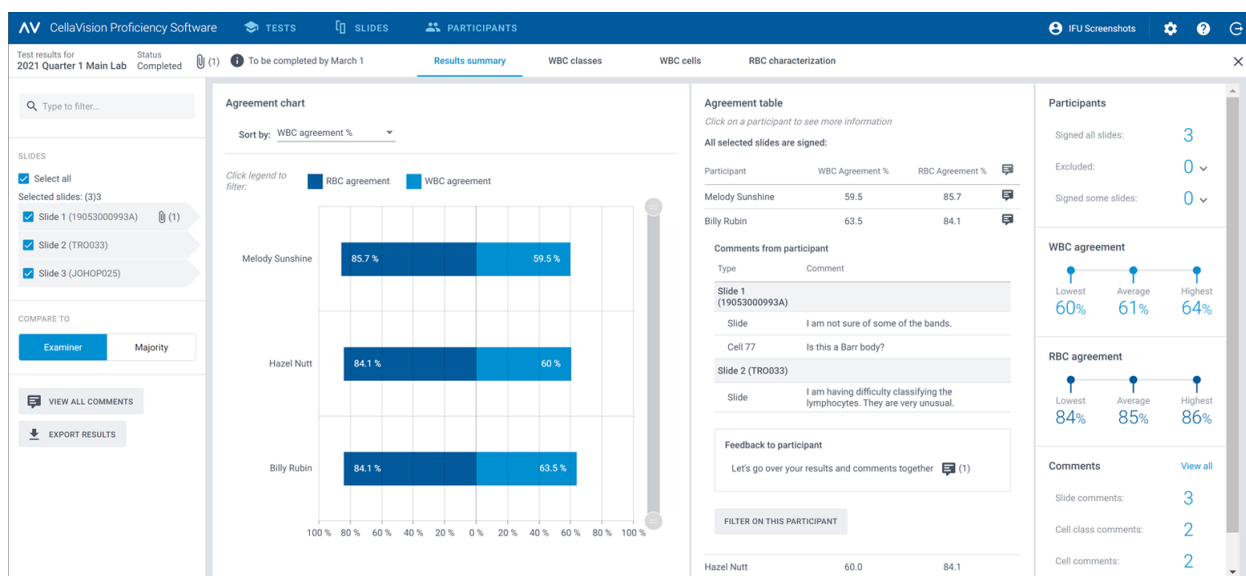
- If you select **Examiner**, the results are compared to the WBC classification and RBC characterization of the slide when the test was created.
- If you select **Majority**, the results are compared to the WBC classification and RBC characterization results of other participants in the test:
 - With WBC results, this means the cell classes to which the majority of the participants classified the WBCs.
 - With RBC results, this means the morphology grades that the majority of the participants selected.

Note: If it's not possible to deduce majority in a conclusive way, one of the WBC classes or RBC grades is randomly used to indicate majority.

Note: The examiner or the majority result is later referred to as reference result. The examiner or the majority is later referred to as reference.

To view the results summary

To view the results summary for the test, click the **Results summary** navigation link.



The **Agreement chart** and the **Agreement table** show the average WBC and RBC agreement percentages for the participants compared to the selected reference result. For more information on how the agreement percentages are calculated, see [Appendix A: WBC agreement calculation](#) on page 76 and [Appendix B: RBC agreement calculation](#) on page 77.

In the **Agreement chart** area, you can:

- Sort the order of the bars by:
 - Participant
 - WBC agreement % (participant with lowest % at the top)
 - RBC agreement % (participant with lowest % at the top)
- Tip:** Hover over the bars with your mouse to see more detailed information on the results.
- Click the bar legends to show and hide the bars depending on what results you want to view (WBC or RBC)
- Drag the range selector to show only some participant charts in the view

In the **Agreement table** area, you can:

- View the same WBC agreement % and RBC agreement % for the participants as in the **Agreement chart** area

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- Click a participant to
 - View the slide IDs of their unsigned slides (if any)
 - View their slide, cell class, and cell comments
 - Give feedback on their test results
 - Filter the result view by that participant

In the **Participants** area, you can:

- See how many participants signed:
 - All slides
 - No slides (participant excluded from results)
 - Some slides (unsigned slides excluded from results)

In the **WBC agreement** area, you can:

- See the lowest, average, and highest WBC agreement % for all participants with selected slides

In the **RBC agreement** area, you can:

- See the lowest, average, and highest RBC agreement % for all participants with selected slides

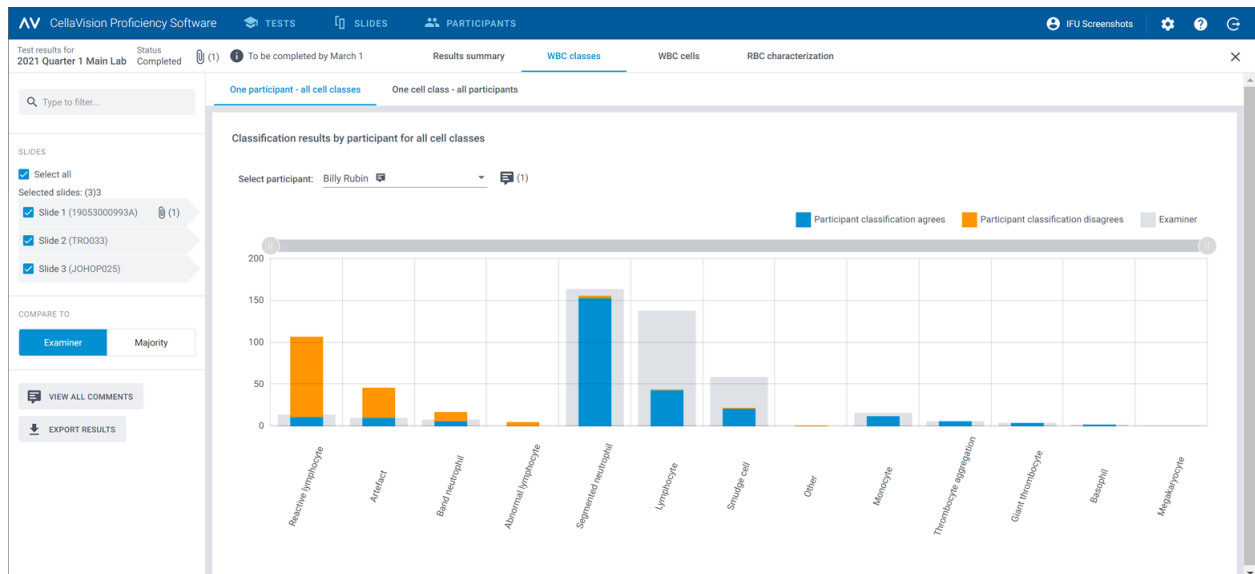
In the **Comments** area, you can:

- See how many slide, cell class and cell comments you and the participants added

To view the WBC class results

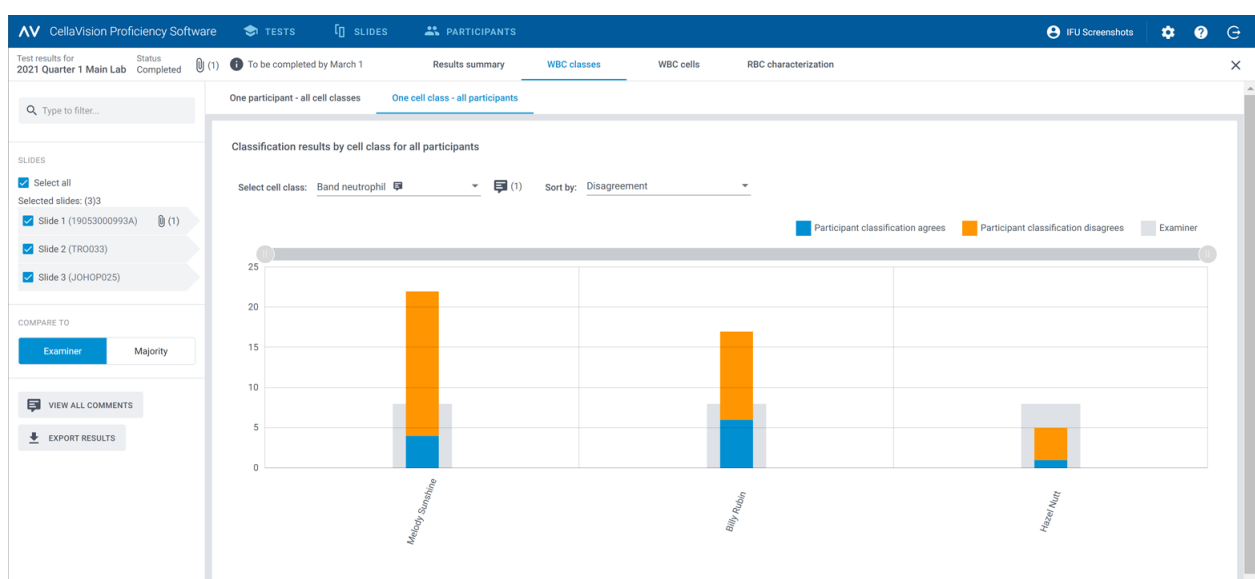
To view the WBC classification results by WBC classes, click the **WBC classes** navigation link. You can view the results as bar charts by **One participant - all cell classes** or by **One cell class - all participants**.

Tip: Hover over the bars with your mouse to see more detailed information on the results.



In the **One participant - all cell classes** view, you can:

- Select a participant to view their results
- See how many WBCs in total the selected participant placed in each cell class
- See how many WBCs in total the reference placed in each cell class
- See how many WBCs the participant placed to the same cell class as the reference (agreement)
- See how many WBCs the participant placed to a different cell class than the reference (disagreement)
- Click the bar legends to show and hide the bars depending on what results you want to view (agreement, disagreement, or reference results).
- Drag the range selector to show only some WBC class charts in the view



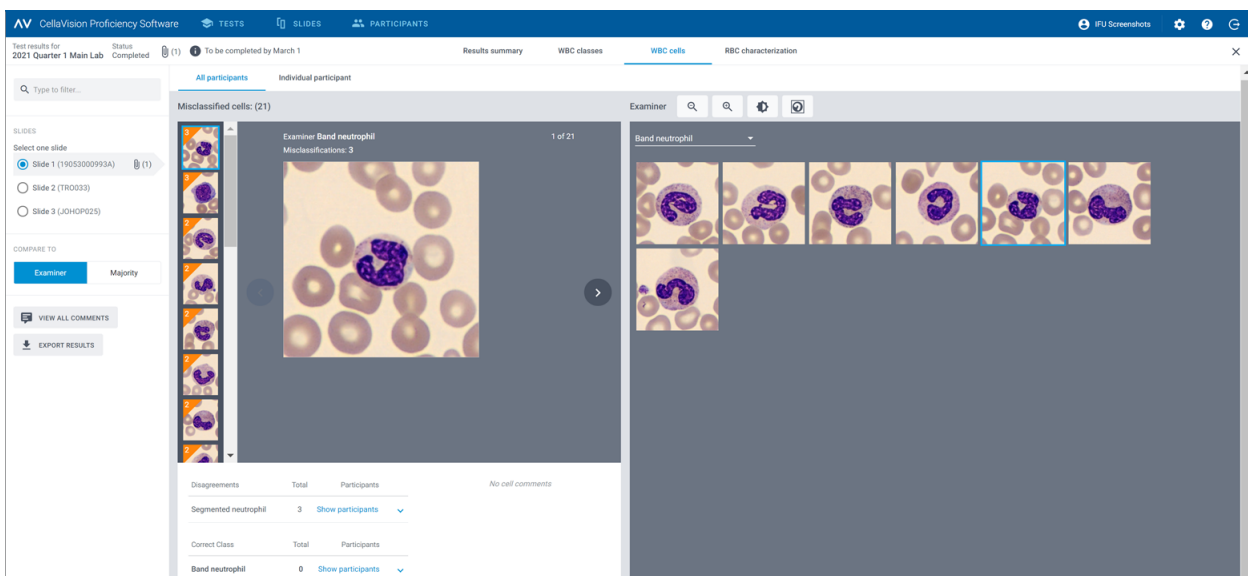
In the **One cell class - all participants** view, you can:

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- Select a cell class to view its results
- Sort the results by WBC classification disagreement or by participant
- See how many WBCs in total each participant placed in the selected cell class
- See how many WBCs in total the reference placed in the selected cell class
- See how many WBCs each participant placed in the selected cell class compared to the reference (agreement)
- See how many WBCs each participant placed to a different cell class compared to the reference (disagreement)
- Click the bar legends to show and hide the bars depending on what results you want to view (agreement, disagreement, or reference results).
- Drag the range selector to show only some participant charts in the view

To view the WBC cell results

To view the WBC classification results by individual WBCs on a selected slide, click the **WBC cells** navigation link. You can view the results by **All participants** or by **Individual participant**.



In the **All participants** view, you can:

- See to which incorrect class the participants misclassified a given WBC and to which class the reference classified the same WBC on the selected slide

Note: To move from one WBC image to another, click **<** or **>**, click a WBC image in the scroll bar area, or use the arrow keys on your keyboard.

- See the reference result for each WBC in context of a cell class on the selected slide
- View comments for individual WBCs (if added)

AV CellaVision Proficiency Software TESTS SLIDES PARTICIPANTS IFU Screenshots

Test results for 2021 Quarter 1 Main Lab Status Completed (1) To be completed ... Results summary WBC classes WBC cells RBC characterization

All participants Individual participant Billy Rubin (1)

SLIDES
Select one slide
Slide 1 (19053000993A) (1)
Slide 2 (TR0033)
Slide 3 (JOHOP025)

COMPARE TO
Examiner Majority

VIEW ALL COMMENTS
EXPORT RESULTS

False negative
False positive

Classification disagreement (false negative)
Classification disagreement (false positive)

Band neutrophil 10.0 %

Band neutrophil 7.0 %

CLASSED AS Segmented neutrophil

CLASSED AS Segmented neutrophil

CLASSED AS Segmented neutrophil

CLASSED AS Segmented neutrophil

CLASSED AS Segmented neutrophil

CLASSED AS Segmented neutrophil

CLASSED AS Segmented neutrophil

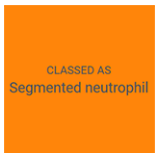
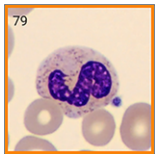
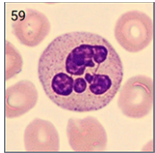
CLASSED AS Segmented neutrophil

CLASSED AS Segmented neutrophil

In the **Individual participant** view, you can:

- See to which cell class an individual participant and the reference placed the WBCs
- See the difference in WBC classification between an individual participant and the reference through color coding in the WBC images

Color coding in WBC images for an individual participant

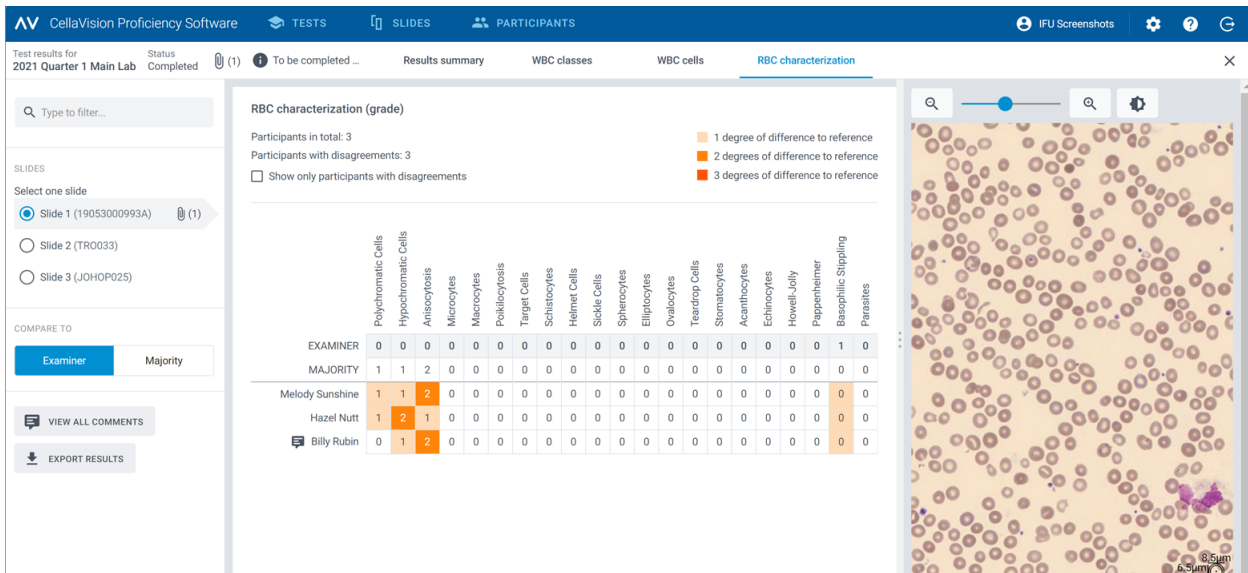
	A solid orange box with no WBC image visible	A WBC that the participant should have placed in the indicated cell class but placed instead in the cell class shown in the box
	A WBC image with an orange frame	A WBC that the participant placed in the indicated cell class but should have placed in the cell class shown in the same location in the reference view
	A WBC image with no color coding	A WBC that the participant placed in the correct cell class

Color coding in WBC images for the reference

	A WBC image with a solid blue frame	A WBC that the reference placed to a different cell class from the participant
	A WBC image with no color coding	A WBC that the reference and the participant placed in the same cell class

To view the RBC characterization results

To view the results for RBC characterization, click the **RBC characterization** navigation link.



The screenshot shows the CellaVision Proficiency Software interface. The top navigation bar includes 'TESTS', 'SLIDES', 'PARTICIPANTS', and 'IFU Screenshots'. The main area is titled 'RBC characterization (grade)' and displays a table of results for participants compared to a reference (Majority). The table columns represent various RBC morphological features, and the rows represent individual participants. The results are color-coded based on the degree of difference from the reference: 1 degree (light orange), 2 degrees (medium orange), and 3 degrees (dark orange).

EXAMINER	Polychromatic Cells	Hypochromatic Cells	Anisocytosis	Microcytes	Macrocytes	Poikilocytosis	Target Cells	Schistocytes	Helmet Cells	Sickle Cells	Spherocytes	Elliptocytes	Ovalocytes	Teardrop Cells	Stomatocytes	Acanthocytes	Echinocytes	Howell-Jolly	Pappenheimer	Basophilic Stippling	Parasites
MAJORITY	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Melody Sunshine	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hazel Nutt	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Billy Rubin	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Legend: 1 degree of difference to reference (light orange), 2 degrees of difference to reference (medium orange), 3 degrees of difference to reference (dark orange).

On the right, there is a large image of a blood smear with a magnified view of a single RBC cell.

In the **RBC characterization (grade)** area, you can:

- See the RBC morphology grading results for each participant
- See the RBC morphology grading results for the reference
- See the degrees of difference in RBC morphology grading (if any) between the participant and the reference
- Click to show only participants with degrees of difference in RBC morphology grading compared to the reference

To add and manage feedback comments on tests results to participants

1. In the **Results summary** view, in the **Agreement table** area, click the name of the participant that you want to give feedback to.

2. Under **Feedback to participant**, click  **Add feedback to participant**.
3. Enter a feedback comment, and then click **Save**.
4. To edit or delete the feedback comment, click  **View or edit feedback**, edit or delete the feedback, and then click **Save**.

Note: If you gave feedback to individual participants under the **WBC classes** or **WBC cells** result views, that feedback is also shown here.

To export test results from completed tests

You can export test results from a completed test to a semicolon-delimited .csv file.

1. To open a test in a test list, double-click it.
2. Click  **Export results to a .csv file**.
3. Select the results you want to export, and then click **Export**.

The .csv file is saved to the default download folder you have configured in your browser.

2.5.5 Delete tests

Note: If you delete an ongoing or a completed test, it's removed from all associated participant accounts, and you lose all results for that test.

1. In the **Tests** view, select one or more tests in a test list.
 - To select a consecutive group of tests, click the first test, hold down Shift, and then click the last test.
 - To select a non-consecutive group of tests, hold down Ctrl/Cmd, and then click each test that you want to select.
2. Click , and then click **Delete**.

2.6 Settings

2.6.1 Edit account information

To access your account information, click  **Settings** on the main view of the CellaVision Proficiency Software.

1. Click **Account information**.
2. Edit the following as needed:
 - To add or edit your personal information, click the **First name**, **Last name**, **Email**, or **Organization** fields.
 - To change the user interface language for the CellaVision Proficiency Software, in the **Language** drop-down list, select the language you want to use.
 - To change your password, click  **Change password**, enter your new password, and then click **Save**.

2.6.2 Manage licenses

To access your license information, click  **Settings** on the main view of the CellaVision Proficiency Software.

To add users (participant seats) with an extension license

1. Purchase a license from your local vendor.
2. Click **Licenses**.
3. Click  **Add users**.
4. Enter the product key, and then click **Unlock**.
5. Review the license details, and then click **Activate**.

To renew the CellaVision Proficiency Software license

1. Purchase a license from your local vendor.
2. Click **Licenses**.
3. Click  **Renew license**.
4. Enter the product key, and then click **Unlock**.
5. Review the license details, and then click **Activate**.

To activate a CellaVision Proficiency Software Slide Database license

1. Purchase a license from your local vendor.
2. Click **Slide databases**.
3. Click **Unlock a database**.
4. Enter the product key, and then click **Unlock**.
5. Review the license details, and then click **Activate**.

To upload the slides to your CellaVision Proficiency Software account, click **Import**.

2.6.3 Manage user-defined WBC classes

You can add your own cell classes that then appear in the **WBC differential** side panel.

To access user-defined WBC classes, click  **Settings** on the main view of the CellaVision Proficiency Software.

To add or edit user-defined WBC classes

Note: You can add a maximum of 25 WBC classes and 5 non-WBC classes per sample type (peripheral blood or body fluid). If you included user-defined WBC or non-WBC classes from slides that you uploaded from your CellaVision database, they are also included in this number.

Note: If you change the user-defined WBC classes in locked slides, the change is reflected in slides visible to participants in ongoing and completed tests.

1. Click **WBC classes**
2. To select the sample type for which to add or edit a user-defined cell class, click the **Peripheral blood** or the **Body fluid** navigation link.
3. To add a new user-defined cell class, click **+** **Add** next to **WBC** or **non-WBC**, and enter a name for the new cell class.
4. To edit the name of an existing user-defined cell class under **WBC** or **non-WBC**, click the cell class, and edit the name.

Any changes to the user-defined cell classes are saved automatically.

To delete user-defined WBC classes

Note: You can't delete user-defined cell classes included in slides that you have included in ongoing and completed tests.

To delete a user-defined cell class under **WBC** or **non-WBC**, click  next to the cell class name, and then click **Delete**.

All WBCs in the deleted user-defined cell class, are moved to the **Unidentified** class. The affected slides are marked with  in the slide list in the **Slides** view. To use those slides in tests, you must first reclassify the unidentified WBCs as described in [2.3.3 Review slides](#) on page 22.

2.6.4 Manage user-defined RBC morphologies

You can add your own RBC morphologies that then appear in the **RBC characterization** side panel.

To access the user-defined RBC morphologies, click  **Settings** on the main view of the CellaVision Proficiency Software.

To add or edit user-defined RBC morphologies

Note: You can add a maximum of 25 RBC morphologies. If you included user-defined RBC morphologies from slides that you uploaded from your CellaVision database, they are also included in this number.

Note: If you change the user-defined RBC morphologies in locked slides, the change is reflected in slides visible to participants in ongoing and completed tests.

1. Click **RBC morphologies**.
2. To add a new user-defined morphology, click **+** **Add** next to **RBC**, and enter a name for the new morphology.
3. To edit the name for an existing user-defined morphology, click the morphology and edit the name.

Any changes to morphology information are saved automatically.

To delete user-defined RBC morphologies

Note: You can't delete user-defined RBC morphologies in slides that you have included in ongoing and completed tests.

To delete a user-defined RBC morphology under **RBC**, click **■** next to the morphology name.

2.7 Troubleshooting

Issue	Possible solution
Can't access the login screen	Check that you're using the latest version of one of the following browsers: • Google Chrome • Microsoft Edge (Chromium based) • Mozilla Firefox • Apple Safari
Can't see the whole user interface and all buttons on my screen	Make sure you are using a minimum screen resolution of 1920 × 1080 pixels. Make sure the browser zoom level is at 100%.
CellaVision Transfer Tool can't find any databases	Check that you're using the latest version of the CellaVision Transfer Tool. If not, download it from the Slides view of the CellaVision Proficiency Software. For more information, see 2.2.2 Transfer slides for upload from a CellaVision database using the CellaVision Transfer Tool on page 14.
CellaVision Transfer Tool doesn't show the slide that I want to transfer	Slides included in open orders in the CellaVision DM Software are not shown in the CellaVision Transfer Tool so check that the order is closed. Slides included in archived orders in the CellaVision DM Software are not shown in the CellaVision Transfer Tool and can't be transferred.
Not all slides that I selected to export from the CellaVision Review Software were exported	Slides included in archived orders can't be exported.
No slides available on test creation	You have no slides uploaded to your CellaVision Proficiency Software account. Upload slides and try again: 1. In the Slides view, click ⬆ Upload slides. For more information, see 2.2 Transfer and upload slides to your CellaVision Proficiency Software account on page 12. 2. Return to the Tests view, and click the test in the Under construction test list to continue the test creation.

Issue	Possible solution
Uploaded slides missing on test creation	You can't include slides that contain unclassified WBCs to tests. These slides are marked with  in the slide list in the Slides view. Reclassify unclassified WBCs and try again: 1. In the Slides view, double-click the slide that includes unclassified WBCs to open it in the review view. 2. In the WBC view, reclassify all WBCs that are currently under Unidentified cell class. 3. Return to the Tests view, and click the test in the Under construction test list to continue the test creation. For more information, see 2.3.3 Review slides on page 22.
No participants available on test creation	You have no participants added to your CellaVision Proficiency Software account. Add participants and try again: 1. In the Participants view, click  Add participants, and add participants manually or via .csv file upload. For more information, see 2.4.2 Add participants on page 31. 2. Return to the Tests view, and click the test in the Under construction list to continue the test creation.
Can't see any test results after test completion	The test end date passed or you manually ended the test before any participant had signed the selected slide. Select a different slide or a different participant to view results. The test end date passed or you manually ended the test before any participant had signed any of the slides. Create and start a new test.
A participant didn't receive their account information email	Ask the participant to check that the email didn't end up in the junk folder of their email program. Check that you entered the email address correctly in their account. Ask the participant to check with their IT department that the mail server filters aren't blocking the email address of the sender: noreply@cellavision.com.
Need to change my account information	Edit Account information under  Settings .

3 PARTICIPANT

A participant can perform tasks specified in this chapter.

3.1 Get started

3.1.1 Log in to the CellaVision Proficiency Software

When the examiner creates an account for you in the CellaVision Proficiency Software, you receive the account details:

- Via email if the examiner included your email address in the account
- Directly from the examiner if the examiner didn't include your email address in the account

1. Go to www.cellavision-proficiency-software.com.
2. In the login dialog, enter your **Username** and **Password**, and then click **Log in**.
3. If you have multiple accounts associated with your credentials, select the one you want to log into, and then click **Continue**.

Note: You can change the language of the login page from the language drop-down list. To change the language of the application after login, go to **Settings**.

Note: If you're inactive in the CellaVision Proficiency Software for more than 10 minutes, you are automatically logged out.

3.1.2 Customize your account

When you log in to the CellaVision Proficiency Software for the first time, the **Customize your account** dialog opens. Here you can:

- Check and edit your account details
- Change your password
- Select a preferred language for the user interface

To manage your account settings later, click  **Settings** on the main view of the CellaVision Proficiency Software. For more information, see [3.3.1 Edit account information](#) on page 74.

3.1.3 Reset password

If you forgot your password, you can reset it if you have an email address associated with your CellaVision Proficiency Software account. Otherwise, contact the examiner who created your account.

3 Participant

1. In the **Login** dialog, click **Forgot password?**
2. Enter the email address that is associated with your CellaVision Proficiency Software account.
3. Click **Reset password**.

A new password is delivered to your email address.

3.2 View and take tests

You can access two test views in your CellaVision Proficiency Software: **Ongoing tests** and **Completed tests**.

3.2.1 View information on ongoing tests

Note: If you have an email address specified in your account, you get an email notification of any new tests assigned to you. Otherwise, the examiner informs you separately of any new tests.

In the **Ongoing tests** view, you can see all the tests assigned to you that you haven't completed yet.

- | | |
|---|-----------------------------------|
| 1 Number of ongoing tests | 6 Patient information (if added) |
| 2 Sample type in slides | 7 Number of slides signed in test |
| 3 Test start and end dates | 8 Slide status |
| 4 Test description (if added) | 9 Slide ID |
| 5 Additional slide data file (if added) | 10 Open slide |

For each test, you can:

- See the sample type of slides included in test (PB or BF)
- See the start and end dates for a test

Note: The examiner can end a test manually at any time. You can't review and sign slides anymore when the test has ended.

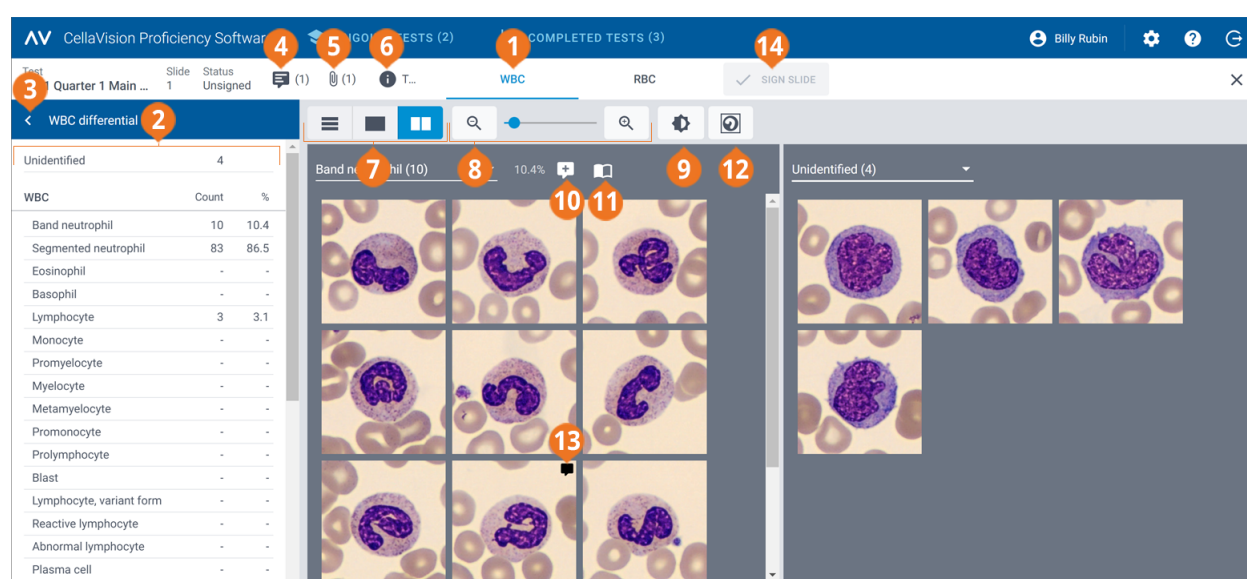
- See a test description from the examiner (if added)
- View additional slide data files from the examiner (if added)

- View patient information from the examiner (if added)
- Access unsigned slides for you to review and sign
- Access signed slides that you have already reviewed and signed
- See how many slides you have signed

3.2.2 Review and sign slides in ongoing tests

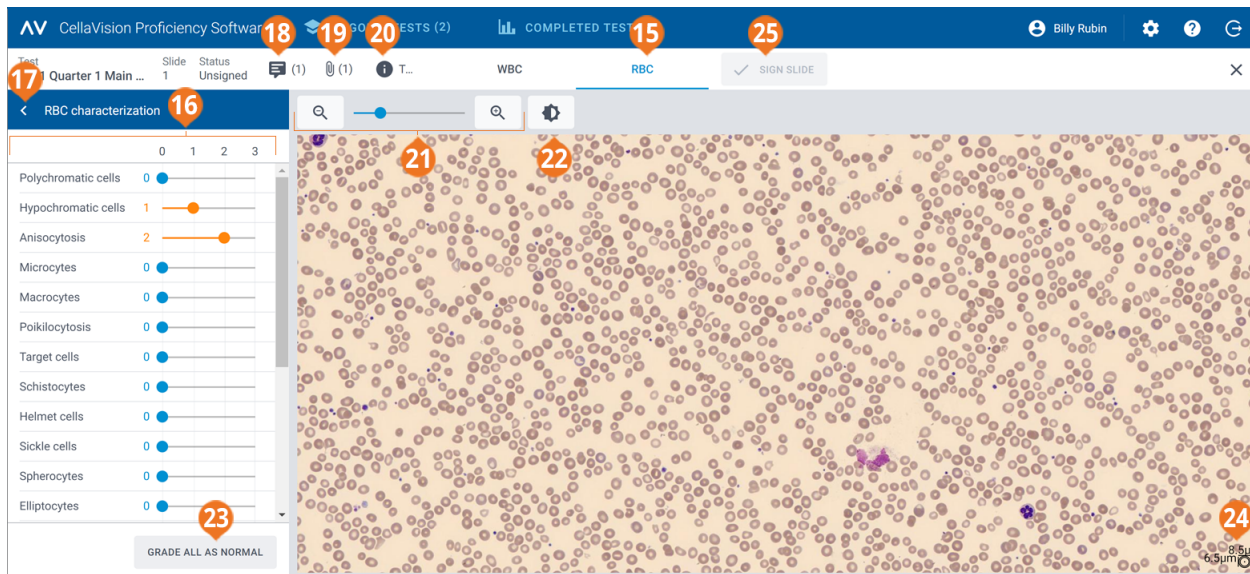
To open an **Unsigned** slide for review and signing in the **Ongoing tests** view, click **Open**.

Note: When you open an unsigned slide for the first time in your CellaVision Proficiency Software, all WBCs are placed in the **Unidentified** class and RBC morphology is not graded.



- | | |
|--|-------------------------------------|
| 1 WBC view navigation link | 8 Zoom in or out on image |
| 2 WBC differential side panel | 9 Adjust image brightness and color |
| 3 Collapse or expand side panel | 10 Manage cell class comments |
| 4 Manage slide comments | 11 Show reference cells (if added) |
| 5 View additional slide data file (if added) | 12 Show or hide cell markers |
| 6 View test description (if added) | 13 Manage cell comments |
| 7 Switch between WBC gallery views | 14 Sign slide |

3 Participant



- | | |
|---|---|
| 15 RBC view navigation link | 21 Zoom in or out on image |
| 16 RBC characterization side panel | 22 Adjust image brightness and color |
| 17 Collapse or expand side panel | 23 Grade all RBC morphologies as normal |
| 18 Manage slide comments | 24 RBC ruler |
| 19 View additional slide data file (if added) | 25 Sign slide |
| 20 View test description (if added) | |

You can switch between the **WBC** and **RBC** views using the navigation links. If the slide doesn't contain any RBCs, only the **WBC** navigation link is visible and vice versa.

In the **WBC** view, you can see:

- WBC images categorized by cell classes
- Count and percentage of WBCs from all WBCs in each class
- Total count and ratio per 100 WBCs for each non-WBC class

In the **RBC** view, you can see:

- The RBC overview image
- RBC grading of different morphologies

To collapse or expand side panels in the WBC and RBC views

The **WBC differential** side panel in the **WBC** view provides more detailed information on the WBC classification. The **RBC characterization** side panel in the **RBC** view provides more detailed information on the RBC morphology grading.

To collapse or expand the side panels, click **<** or **>** next to the panel name.

To zoom in or out on all images in the WBC and RBC views

To simultaneously zoom in or out on all WBC images in an open gallery or to zoom in or out on the RBC overview image:

- In the **WBC** or the **RBC** view, use the zoom slider with  and  buttons.
- In the **RBC** view, scroll your mouse wheel up or down.

To adjust image brightness and color in the WBC and RBC views

1. Click  **Adjust brightness or color**.
2. Adjust the sliders.
3. Click **Save**

To restore the default settings, click **Reset**.

Note: When you change the brightness and color settings in the **WBC** view, it doesn't impact the same settings in the **RBC** view, and vice versa.

Note: When you change the brightness and color settings in the **WBC** and **RBC** views, the change is reflected also in other views where WBC or RBC images are present (for example under test results).

To manage slide comments in the WBC and RBC views

Note: You can manage slide comments only in unsigned slides.

You can manage slide comments as follows:

- To add a slide comment, click  **Add slide comment**, enter the comment, and then click **Save**.
- To edit or delete a slide comment, click  **View or edit slide comment**, edit or delete the comment, and then click **Save**.

Slide comments are visible to the examiner when they view your test results.

To view WBCs in different gallery views

- To view all WBC images from all cell classes in the same view, click  **All galleries view**.

Note: When you access the **WBC** view, WBC images are visible in the  **All galleries view** by default.

- To view WBC images only from two cell classes at a time, click  **Split gallery view**.
- To view WBC images only from one cell class at a time, click  **Single gallery view**.

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- To change the cell class you want to view in the gallery views:
 - In the **Split gallery view** or the **Single gallery view**, click the arrow ▼ next to the cell class name, and select a new cell class from the drop-down list.
 - In the **Split gallery view** or the **Single gallery view**, left-click a cell class in the **WBC differential** side panel.

Note: This works in the **Single gallery view** only if there are WBCs in the cell class that you click.
 - In the **Split gallery view**, right-click a cell class in the **WBC differential** side panel to view that cell class in the right gallery.

To zoom in and out on individual WBC images

1. To magnify a WBC image, double-click it.
2. To zoom in and out on the magnified WBC image, scroll your mouse wheel up or down.
3. To shift to another zoomed WBC image in the same gallery view, use the arrow keys on your keyboard.
4. To close the magnified WBC image:
 - Click **Cancel** if you didn't add, edit, or delete a cell comment.
 - Click **Save** if you added, edited, or deleted a cell comment.

To show or hide WBC cell markers

A cell marker is a square box that surrounds the WBC in the image. To show or hide the cell markers for individual WBCs, click  **Cell marker**.

To view WBC reference libraries

Note: WBC reference libraries are available to you only if the examiner has included them in the test.

A WBC reference library contains WBCs that serve as good reference examples of a certain WBC class.

To view the WBC images in the WBC reference libraries, in the **Split gallery view** or the **Single gallery view**, select the desired WBC class, and then click  **Show reference cells**. The reference WBC images for the selected WBC class are visible in the right image gallery.

To manage comments for WBC classes

Note: You can manage cell class comments only in unsigned slides.

Note: You can't add a cell class comment to the **Unidentified** class.

Manage cell class comments as follows:

- To add a cell class comment, click  **Add cell class comment** next to a cell class name, enter the comment, and then click **Save**.
- To edit or delete a cell class comment, click  **View or edit cell class comment** next to a cell class name, edit or delete the comment, and then click **Save**.

Cell class comments are visible to the examiner when they view your test results.

To manage comments for individual WBCs

Note: You can manage cell comments only in unsigned slides.

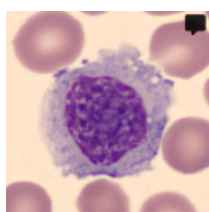
1. Double-click a WBC or select one or more WBCs and then right-click **Add or edit cell comment**.
 - To select a consecutive group of WBCs, click the first WBC, hold down Shift, and then click the last WBC.
 - To select a non-consecutive group of WBCs, hold down Ctrl/Cmd, and then click each WBC that you want to select.

2. Manage cell comments as follows:

Note: You can enter and edit cell comments in several selected WBCs at the same time.

- Enter a cell comment in the **Cell comment** field, and then click **Save**.
- Edit or delete a comment in the **Cell comment** field, and then click **Save**.

WBC images that include a cell comment display a comment icon .



Cell comments are visible to the examiner when they view your test results.

To reclassify WBCs

Note: You can reclassify WBCs only in unsigned slides.

1. Click to select one or more WBCs.
 - To select a consecutive group of WBCs, click the first WBC, hold down Shift, and then click the last WBC.
 - To select a non-consecutive group of WBCs, hold down Ctrl/Cmd, and then click each WBC that you want to select.
2. To reclassify the selected WBCs:

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- Drag and drop from a cell class in a gallery view to a cell class on the **WBC differential** side panel.
- Drag and drop from one cell class to another in the  **All galleries view** or the  **Split gallery view**.
- Right-click, and under **Classification**, select the desired cell class.

To view RBCs in an RBC overview image

1. Click the **RBC** view navigation link.
2. To zoom in and out on the RBC overview image:
 - Scroll up or down with your mouse wheel
 - Use the zoom slider with  and  buttons
 - Click the image to zoom in on it
3. To move the RBC overview image around, click and drag it.
4. To measure the size of the RBCs, drag the RBC ruler on top of the RBC overview image. The ruler size automatically scales up and down as you zoom in and out on the RBC overview image.

To grade RBC morphologies in the RBC overview image

Note: You can grade RBC morphologies only in unsigned slides.

To start the grading, click **Start grading**.

To grade RBC morphologies, use the sliders on the **RBC characterization** side panel.

RBC morphology grades	
0	Morphology present at normal level
1	Morphology present at low level
2	Morphology present at moderate level
3	Morphology present at high level

To reset your grading or to grade all RBC morphologies as normal, click **Grade all as normal**.

To sign slides

When you have reclassified all WBCs and finished grading RBC morphologies on a given slide, click **Sign slide** . The slide status is shown as **Signed**  in the **Ongoing tests** view.

Note: Once you have signed a slide, you can't change the WBC reclassification and the RBC morphology grading anymore on that slide.

When you have signed all slides in a test, the test is moved under **Completed tests**.

3.2.3 View results in completed tests

In the **Completed tests** view, you can see a list of tests that you have completed.

Status	Completion Date	Test Name	Test Description	BF	Test Conclusion	Feedback From Examiner
	2020-11-25	2021 Quarter 1 Main Lab	To be completed by March 1	BF	Conclusion on test results.docx	Let's go over your results and comments t...
	2020-11-12	Q3 Test		BF		
⌂	-	1st Quarter				
🔒	-	Main Lab annual review				

- 1 Number of completed tests
- 2 Status for access to results
- 3 Click test name to access results

- 4 Test description from examiner (if added)
- 5 Test conclusion file from examiner (if added)
- 6 Feedback from examiner (if added)

In the **Status** column of the test list:

- No icon indicates that results from all participants are available. You can compare your and other participants' results to the reference results (examiner or majority).
- 🔒 indicates that your results and the results of those participants who signed some slides are available. If no other participant signed any slides, you can compare your results only to the results of the examiner. If some participants signed some slides, you can compare your results also to the results of those participants (majority).
- ⌂ indicates that no results are available yet.

If the examiner:

- Attached a test conclusion file to a completed test, you can click to open it in the **Test conclusion** column.
- Added feedback to a completed test, you can see it in the **Feedback From Examiner** column.

To sort the test list

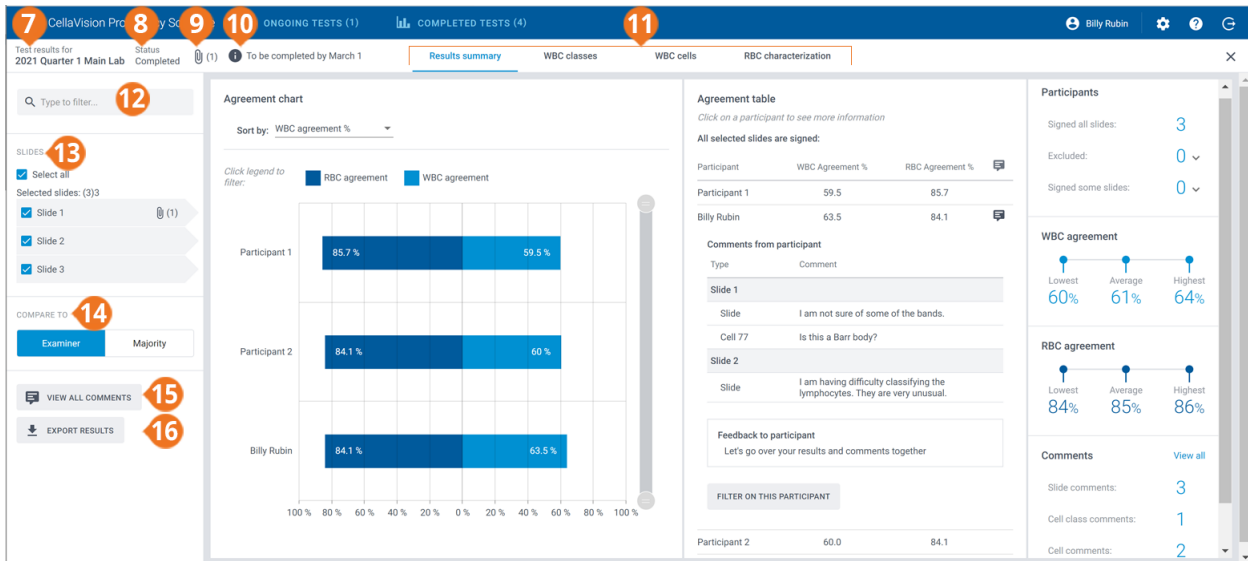
You can sort the test list by certain columns.

To sort the test list, click the header in the column that you want to sort by. The ascending ↑ or descending ↓ sort order is indicated by an arrow next to the column header.

To access the results

To open the results for a completed test, click the test name in the test list.

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- 7 Test name
- 8 Test status
- 9 Test conclusion file (if added)
- 10 Test description (if added)
- 11 Results view navigation links
- 12 Filter results
- 13 Slides included in test
- 14 Compare results to examiner or majority results
- 15 View slide, cell class, and cell comments
- 16 Export results

Via the navigation links, you can access the different results views depending on your test setup:

- **Results summary** to view an overview of the results
- **WBC classes** to view results for WBC classification by cell class
- **WBC cells** to view results for WBC classification by individual WBCs
- **RBC characterization** to view results for RBC morphology grading

Note: By default, you can't see the names of other participants in the test results. They are represented by numbers instead. You can see their names only if the examiner has given you the supervisor privileges. The examiner can select which category of participants to show you by name as a supervisor: laboratory, region, or country.

To filter the results by filtering options

In each results view, you can filter the results by:

- Laboratory
- Region
- Country
- Participant (number or name depending on if you have supervisor privileges or not)

To filter the results by one of these options, click or enter a filtering criterion in the **Type to filter...** field, and then, from the drop-down list, select the option you want to filter by.

Note: You can apply multiple filters. For example, you can first filter by laboratory and then by participant.

You can clear the filters as follows:

- To clear the filtering options one-by-one, click  next to the applied filter.
- To clear all filters simultaneously, click **Clear all filters**.

To filter the results by slide

To filter the results by slide in each results view, select the slides you want to filter by.

To view test conclusion files from the examiner

If the examiner added a test conclusion file to a test, you can see it when the results are available. To view the file, click  next to the test name and status.

To view test descriptions from the examiner

If the examiner added a test description to a test, you can see it  next to the test name and status.

To view additional slide data files from the examiner

If the examiner added an additional slide data file to a slide included in a test, click  next to the slide ID to view it.

To view slide, cell class and cell comments

If the examiner added slide, cell class and cell comments to the test before sending it, you can see them when the results are available. To view your and the examiner's comments, click **View all comments**.

To compare results from an individual participant with examiner or majority results

In each results view, you can select with whom to compare the WBC classification and RBC characterization results of an individual participant:

- If you select **Examiner**, the results are compared to the WBC classification and RBC characterization of the slide when the test was created.
- If you select **Majority**, the results are compared to the WBC classification and RBC characterization results of other participants in the test:
 - With WBC results, this means the cell classes to which the majority of the participants classified the WBCs.
 - With RBC results, this means the morphology grades that the majority of the participants selected.

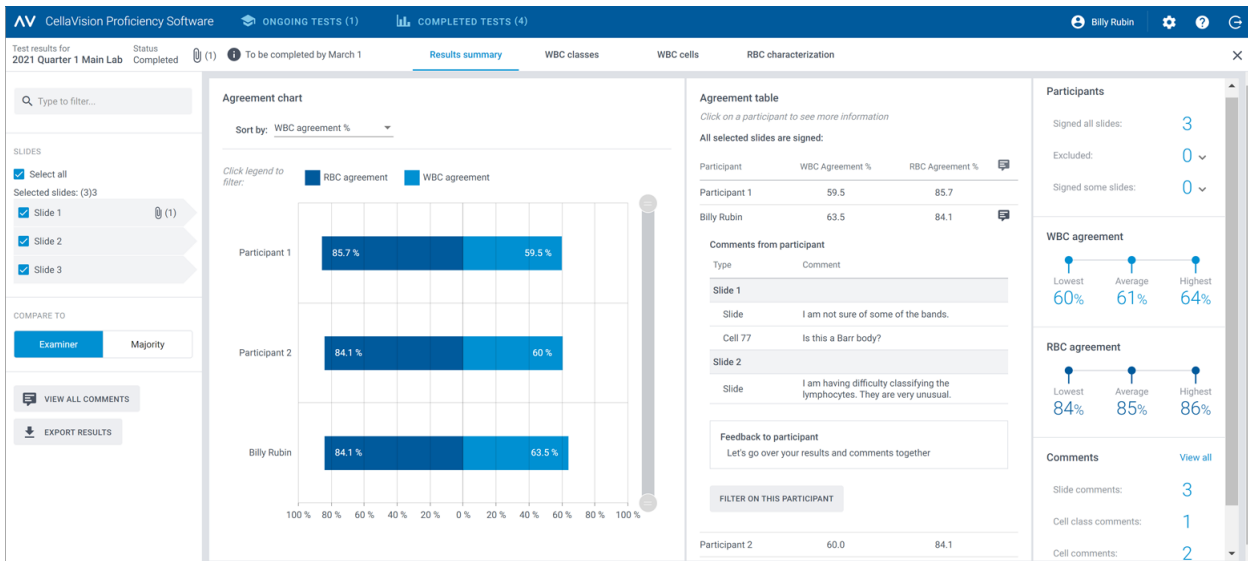
Note: If it's not possible to deduce majority in a conclusive way, one of the WBC classes or RBC grades is randomly used to indicate majority.

Note: The examiner or the majority result is later referred to as reference result. The examiner or the majority is later referred to as reference.

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To view the results summary

To view the results summary for the test, click the **Results summary** navigation link.



The **Agreement chart** and the **Agreement table** show the average WBC and RBC agreement percentages for the participants compared to the selected reference result. For more information on how the agreement percentages are calculated, see [Appendix A: WBC agreement calculation](#) on page 76 and [Appendix B: RBC agreement calculation](#) on page 77.

In the **Agreement chart** area, you can:

- Sort the order of the bars by:
 - Participant
 - WBC agreement % (participant with lowest % at the top)
 - RBC agreement % (participant with lowest % at the top)**Tip:** Hover over the bars with your mouse to see more detailed information on the results.
- Click the bar legends to show and hide the bars depending on what results you want to view (WBC or RBC)
- Drag the range selector to show only some participant charts in the view

In the **Agreement table** area, you can:

- View the same WBC agreement % and RBC agreement % for the participants as in the **Agreement chart** area

- Click your name to view:
 - The slide IDs of your unsigned slides (if any)
 - Your slide, cell class, and cell comments
 - Feedback on your test results from the examiner
 - Filter the result view by your results
- Click another participant to filter the result view by that participant

Note: If you have supervisor privileges, you can also see the slide, cell class, and cell comments, and feedback on test results for other participants.

In the **Participants** area, you can:

- See how many participants signed:
 - All slides
 - No slides (participant excluded from results)
 - Some slides (unsigned slides excluded from results)

In the **WBC agreement** area, you can:

- See the lowest, average, and highest WBC agreement % for all participants with selected slides

In the **RBC agreement** area, you can:

- See the lowest, average, and highest RBC agreement % for all participants with selected slides

In the **Comments** area, you can:

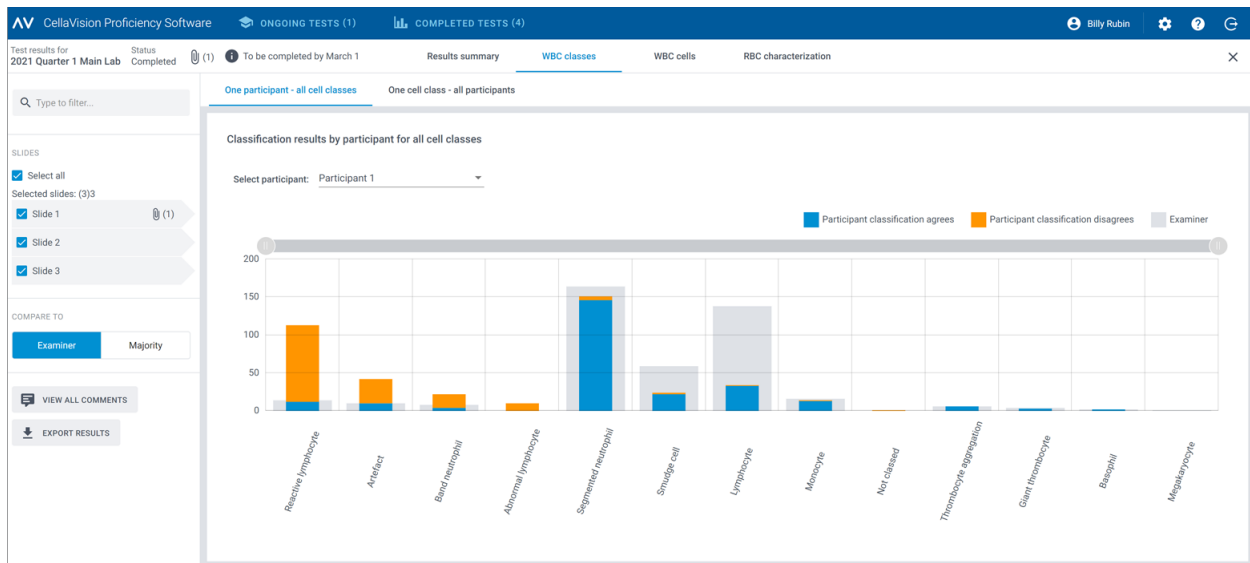
- See how many slide, cell class, and cell comments were added

To view the WBC class results

To view the WBC classification results by WBC classes, click the **WBC classes** navigation link. You can view the results as bar charts by **One participant - all cell classes** or by **One cell class - all participants**.

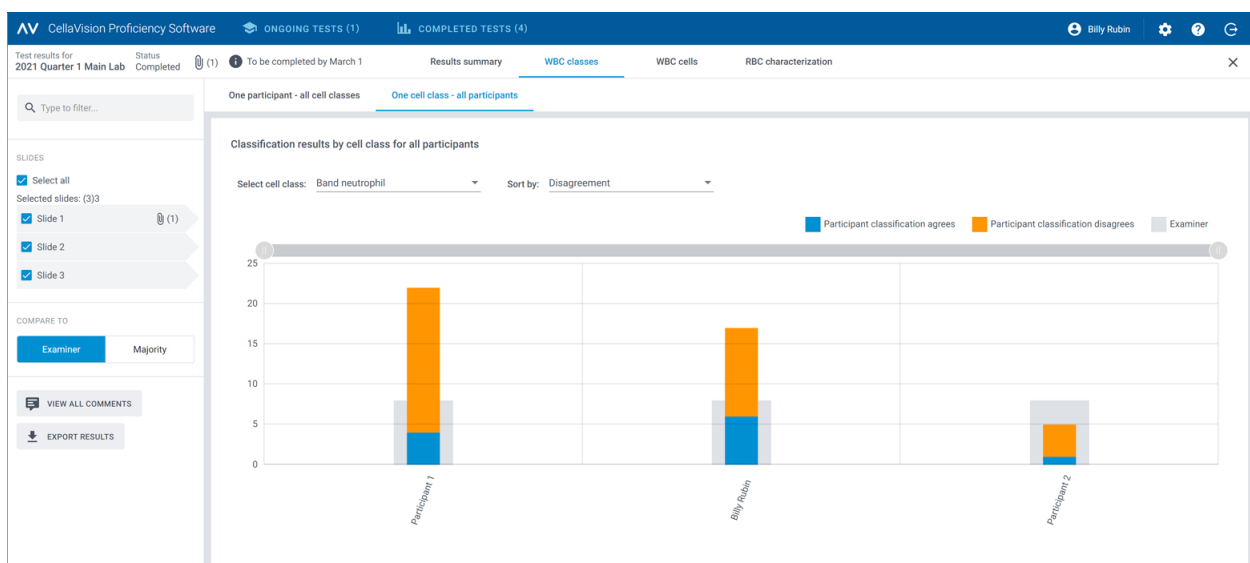
Tip: Hover over the bars with your mouse to see more detailed information on the results.

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In the **One participant - all cell classes** view, you can:

- Select a participant to view their results
- See how many WBCs in total the selected participant placed in each cell class
- See how many WBCs in total the reference placed in each cell class
- See how many WBCs the participant placed to the same cell class as the reference (agreement)
- See how many WBCs the participant placed to a different cell class than the reference (disagreement)
- Click the bar legends to show and hide the bars depending on what results you want to view (agreement, disagreement, or reference results).
- Drag the range selector to show only some WBC class charts in the view

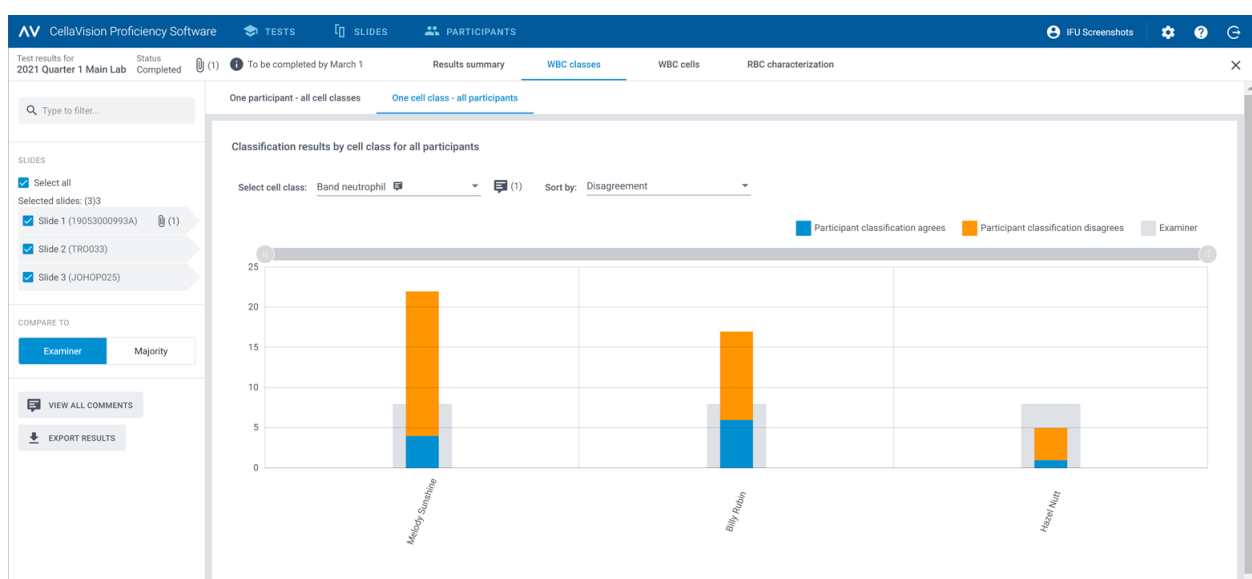


In the **One cell class - all participants** view, you can:

- Select a cell class to view its results
- Sort the results by WBC classification disagreement or by participant
- See how many WBCs in total each participant placed in the selected cell class
- See how many WBCs in total the reference placed in the selected cell class
- See how many WBCs each participant placed in the selected cell class compared to the reference (agreement)
- See how many WBCs each participant placed to a different cell class compared to the reference (disagreement)
- Click the bar legends to show and hide the bars depending on what results you want to view (agreement, disagreement, or reference results).
- Drag the range selector to show only some participant charts in the view

To view the WBC cell results

To view the WBC classification results by individual WBCs on a selected slide, click the **WBC cells** navigation link. You can view the results by **All participants** or by **Individual participant**.



In the **All participants** view, you can:

- See to which incorrect class the participants misclassified a given WBC and to which class the reference classified the same WBC on the selected slide

Note: To move from one WBC image to another, click **<** or **>**, click a WBC image in the scroll bar area, or use the arrow keys on your keyboard.

- See the reference result for each WBC in context of a cell class on the selected slide
- View comments for individual WBCs (if added)

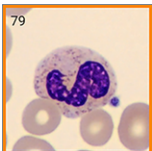
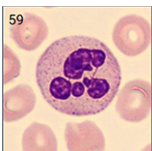
3 Participant

The screenshot shows the CellaVision Proficiency Software interface. The top bar indicates 'ONGOING TESTS (1)' and 'COMPLETED TESTS (4)'. The main view is titled 'Individual participant' and shows a grid of WBC images for 'Participant 1'. The grid is labeled 'Band neutrophil 12.9 %'. The images are arranged in a 4x5 grid. Some images have orange borders, indicating classification disagreements. The interface also includes a search bar, slide selection, and comparison options.

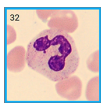
In the **Individual participant** view, you can:

- See to which cell class an individual participant and the reference placed the WBCs
- See the difference in WBC classification between an individual participant and the reference through color coding in the WBC images

Color coding in WBC images for an individual participant

	A solid orange box with no WBC image visible	A WBC that the participant should have placed in the indicated cell class but placed instead in the cell class shown in the box
	A WBC image with an orange frame	A WBC that the participant placed in the indicated cell class but should have placed in the cell class shown in the same location in the reference view
	A WBC image with no color coding	A WBC that the participant placed in the correct cell class

Color coding in WBC images for the reference

	A WBC image with a solid blue frame	A WBC that the reference placed to a different cell class from the participant
	A WBC image with no color coding	A WBC that the reference and the participant placed in the same cell class

To view the RBC characterization results

To view the results for RBC characterization, click the **RBC characterization** navigation link.

In the **RBC characterization (grade)** area, you can:

- See the RBC morphology grading results for each participant
- See the RBC morphology grading results for the reference
- See the degrees of difference in RBC morphology grading (if any) between the participant and the reference
- Click to show only participants with degrees of difference in RBC morphology grading compared to the reference

AV CellaVision Proficiency Software

ONGOING TESTS (1) COMPLETED TESTS (4)

Test results for 2021 Quarter 1 Main Lab Status Completed (1) To be completed ... Results summary WBC classes WBC cells **RBC characterization**

Q Type to filter...

SLIDES

Select one slide

☒ Slide 1 (1)

☐ Slide 2

☐ Slide 3

COMPARE TO

Majority

RBC characterization (grade)

Participants in total: 3

Participants with disagreements: 3

☐ Show only participants with disagreements

☐ 1 degree of difference to reference
☐ 2 degrees of difference to reference
☐ 3 degrees of difference to reference

	Polychromatic Cells	Hypochromatic Cells	Anisocytosis	Microcytes	Macrocytes	Poikilocytosis	Target Cells	Schistocytes	Helmet Cells	Sickle Cells	Spherocytes	Elliptocytes	Ovalocytes	Tear-drop Cells	Stomatocytes	Acanthocytes	Echinocytes	Howell-Jolly	Pappenheimer	Basophilic Stippling	Parasites
EXAMINER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
MAJORITY	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Participant 1	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Participant 2	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Billy Rubin	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

8.5um 6.5um

To view feedback comments on your tests results from the examiner

1. In the **Results summary** view, in the **Agreement table** area, click your name.
2. Under **Feedback to participant**, view the feedback comment from the examiner.

To export test results from completed tests

You can export test results from a completed test to a semicolon-delimited .csv file.

1. To open a test in a test list, double-click it.
2. Click  **Export results to a .csv file**.
3. Select the results you want to export, and then click **Export**.

The .csv file is saved to the default download folder you have configured in your browser.

3.3 Settings

3.3.1 Edit account information

To access your account information, click  **Settings** on the main view of the CellaVision Proficiency Software.

1. Click **Account information**.
2. Edit the following as needed:
 - To add or edit your email address, click the **Email** field.
 - To change the user interface language for the CellaVision Proficiency Software, in the **Language** drop-down list, select the language you want to use.
 - To change your password, click  **Change password**, enter your new password, and then click **Save**.

3.4 Troubleshooting

Issue	Possible solution
Didn't receive the account information email	Check that the email didn't end up in the junk folder of your email program. Check with the examiner that they entered your email address correctly when creating your account. Check with your IT department that the mail server filters aren't blocking the email address of the sender: noreply@cellavision.com.
Can't access the login screen	Check that you're using the latest version of one of the following browsers: • Google Chrome • Microsoft Edge (Chromium based) • Mozilla Firefox • Apple Safari
Can't access my account	The examiner may have deleted your account. Contact the examiner for more information.
Can't see the whole user interface and all buttons on my screen	Make sure you are using a minimum screen resolution of 1920 × 1080 pixels.
	Make sure the browser zoom level is at 100%.
Can't see my test results even though I have completed the test	The examiner has made the results available to all participants only when the test has ended.
Need to change my account information	Edit Account information under  Settings .

APPENDIX A: WBC AGREEMENT CALCULATION

WBC agreement in the results summary reflects the percentage of WBCs where participant classification agrees with the reference classification on slides included in the test. The WBC agreement percentage is shown separately for each participant and as an average for all participants.

Example 1

A test has slides that include 200 WBCs. A participant classifies 160 of these WBCs to the same WBC classes as the reference.

The WBC agreement for that participant is calculated as:

$$(160 \div 200) \times 100 = 80\%$$

Example 2

A test has three participants. The participants have the following WBC agreement percentages:

- Participant A: 80%
- Participant B: 77%
- Participant C: 95%

The average WBC agreement for the three participants is calculated as:

$$(80\% + 77\% + 95\%) \div 3 = 84\%$$

APPENDIX B: RBC AGREEMENT CALCULATION

RBC agreement in the results summary reflects the percentage of RBC morphologies where participant characterization agrees with the reference characterization on slides included in the test. Differences in grading above 0 within given RBC morphologies between participants and the reference do not impact the RBC agreement percentage.

The RBC agreement percentage is shown separately for each participant and as an average for all participants.

Example 1

A test has slides that include 25 RBC morphologies. A participant characterizes 20 of these RBC morphologies in agreement with the reference.

The RBC agreement for that participant is calculated as:

$$(20 \div 25) \times 100 = 80\%$$

Example 2

A test has three participants. The participants have the following RBC agreement percentages:

- Participant A: 80%
- Participant B: 75%
- Participant C: 91%

The average RBC agreement for the three participants is calculated as:

$$(80\% + 75\% + 91\%) \div 3 = 82\%$$

REVISION HISTORY

Revision 2025-08-22

Section	Change
Front page	Changed software version to 3.1.
2.2 Transfer and upload slides to your CellaVision Proficiency Software account on page 12	Added option to export slides from CellaVision Review Software.
2.2.1 Export slides for upload from the CellaVision Review Software on page 12	New chapter, describing new function in 7.2 to export slides from the CellaVision Review Software.
2.2.2 Transfer slides for upload from a CellaVision database using the CellaVision Transfer Tool on page 14	Added information that the CellaVision Transfer Tool is valid for version 7.1 or earlier. Removed CellaVision Competency Software database. Changed version of CellaVision DM Software needed to install the CellaVision Transfer Tool from 4.0 or later, to 7.1 or earlier. Clarified where to install the CellaVision Transfer Tool. Changed CellaVision Remote Review Software to system computer or server computer. Added information that cell class comments and cell comments are not included in the transfer. Added information on how to anonymize slides.
2.4.3 Manage participants on page 32	Added information that when resetting a password for a participant who has an e-mail specified in their account, their new password will be delivered to them instead of the examiner.
2.7 Troubleshooting on page 55	Added information that archived files can't be exported from the CellaVision Review Software.
Last page	Removed CE mark.

Revision 2022-06-08

Section	Change
2.7 Troubleshooting on page 55, 3.4 Troubleshooting on page 75	Changed email address from noreply@cellavision.se to noreply@cellavision.com.

Revision 2021-03-08

Section	Change
Whole document	First revision.

GLOSSARY

C

characterization

The process where a user grades the presence of predefined RBC morphology characteristics.

classification

The process where a user assigns WBCs and non-WBCs to predefined cell classes.

E

examiner

Access level to manage tests, slides, and participants.

examiner result

WBC classification and RBC characterization decided by the examiner.

H

HPF

Acronym for high-power field. The field of view under maximum magnification power.

M

majority result

WBC classification and RBC characterization selected by a majority of participants.

N

non-WBC

Cell or object classified as not being a white blood cell.

non-WBC ratio

Calculated value based on the number of non-WBCs per 100 WBCs.

not classed

Cell class used for a cell or object that the user cannot identify.

O

other

Cell class used for a WBC of a type other than those listed.

P

participant

Access level to take tests and view results.

R

RBC agreement

Percentage of RBC morphologies in agreement with the reference result.

reference cell

WBC or non-WBC with typical characteristics for its cell class.

reference result

Examiner or majority result that a participant result is compared to.

review

To examine and, if needed, adjust the results of a processed slide.

S

sign

To finally confirm the results. After this action, the results can no longer be changed.

supervisor

User privilege by category given to a participant to see the names of other participants in test results.

T

test

A selection of slides and participants to determine competency in WBC classification and RBC characterization.

U

unidentified

Cell class used for a cell or object that must be classified.

W

WBC agreement

Percentage of WBCs classified in agreement with the reference result.

