CELLAVISION

CellaVision® Proficiency Software

Instructions for Use

4.0

🏭 Manufacturer Headquarters

CellaVision AB
Mobilvägen 12
SE-223 62 Lund
Sweden
Phone: +46 (0) 46 460 16 00

CONTENTS

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 cell 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 cell classification and RBC morphology grading in digital peripheral blood, body fluid, and bone marrow 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 transfer digital slides from a CellaVision database to their account in the CellaVision Proficiency Software. For peripheral blood slides, the examiner 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:

- 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
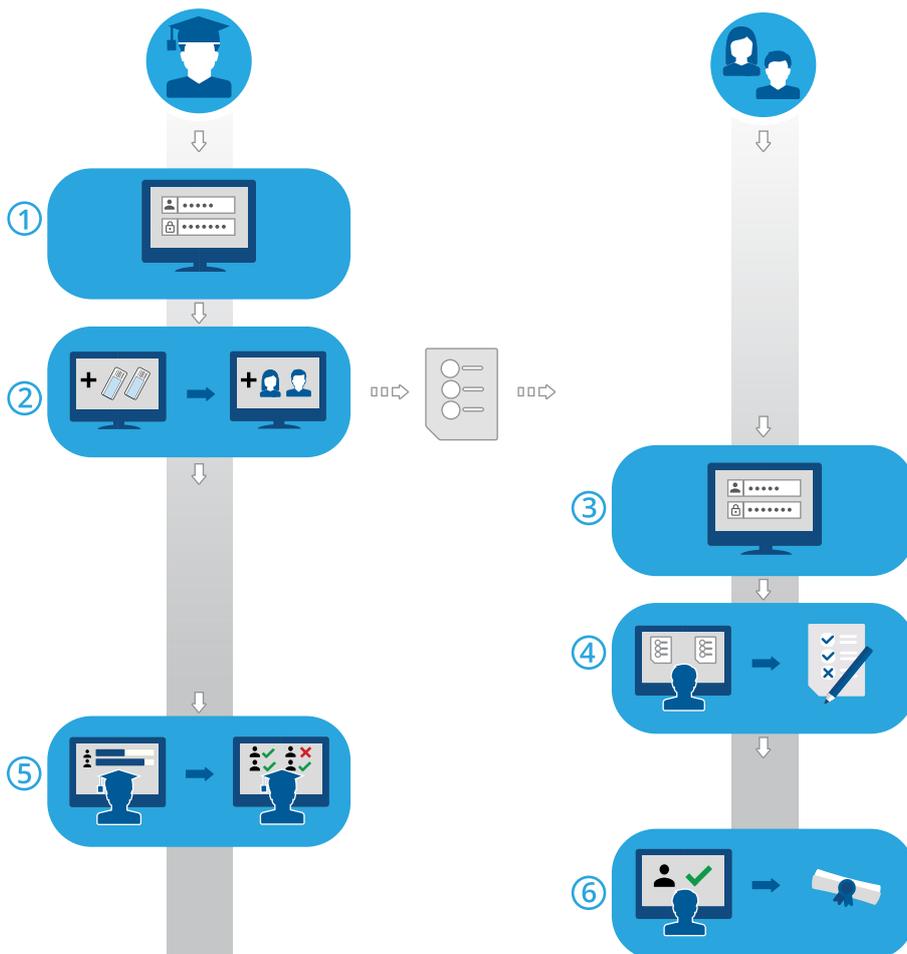
1. Log in as examiner: <u>2.1.2   Log in to the CellaVision Proficiency Software</u> on page 11.

2. Create and send a test to participants: <u>2.5.2   Create new tests</u> on page 36.

3. Log in as participant: <u>3.1.1   Log in to the CellaVision Proficiency Software</u> on page 57.

4. Take the test: <u>3.2.2   Review and sign slides in ongoing tests</u> on page 59.

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6. View results and feedback: <u>3.2.3   View results in completed tests</u> 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. For peripheral blood slides, you can also purchase CellaVision Proficiency Software Slide Databases.

- To upload slides from a CellaVision database to your CellaVision Proficiency Software account, do one of the following:

  - If you use the CellaVision Review Software version 7.2 or higher, or the CellaVision BMA Review Software, go to 2.2.1   Export slides for upload below.

  - If you use the CellaVision DM Software version 7.1 or earlier, go to 2.2.2   Transfer slides using the CellaVision Transfer Tool on page 14.

- To acquire and activate a license for a CellaVision Proficiency Software Slide Database, go to 2.2.3   Upload slides via license activation on page 17.

2.2.1 Export slides for upload

If you use the CellaVision Review Software version 7.2 or higher, or the CellaVision BMA Review Software, you can export slides to use in the CellaVision Proficiency Software.

Note: If you use the CellaVision DM Software version 7.1 or earlier, go to 2.2.2   Transfer slides using the CellaVision Transfer Tool on page 14.
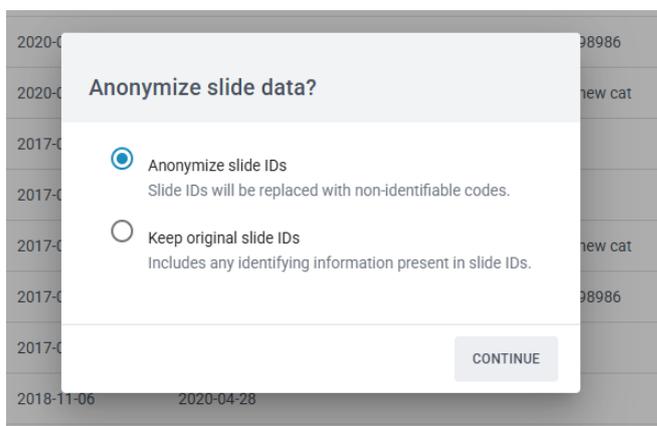
To export a slide for CellaVision Proficiency Software

1. Start the CellaVision Review Software or the CellaVision BMA 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 notes, the comments and notes 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 cell classes or 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 cell classes or morphologies in your account. For more information, see 2.6.3   Manage user-defined cell classes on page 52 and 2.6.4   Manage user-defined RBC morphologies on page 53

    Note: If you deselect a user-defined cell class during upload, all cells in that class are moved to the **Unidentified** class, and you must reclassify them. The same goes for all cells that belong to a cell class not included in the CellaVision Proficiency Software.

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 a slide that already exists in your account, the slide is uploaded as a copy to the existing slide.

2.2.2 Transfer slides 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.

Note: If you use the CellaVision Review Software version 7.2 or higher, or the CellaVision BMA Review Software, go to 2.2.1   Export slides for upload on page 12.

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.
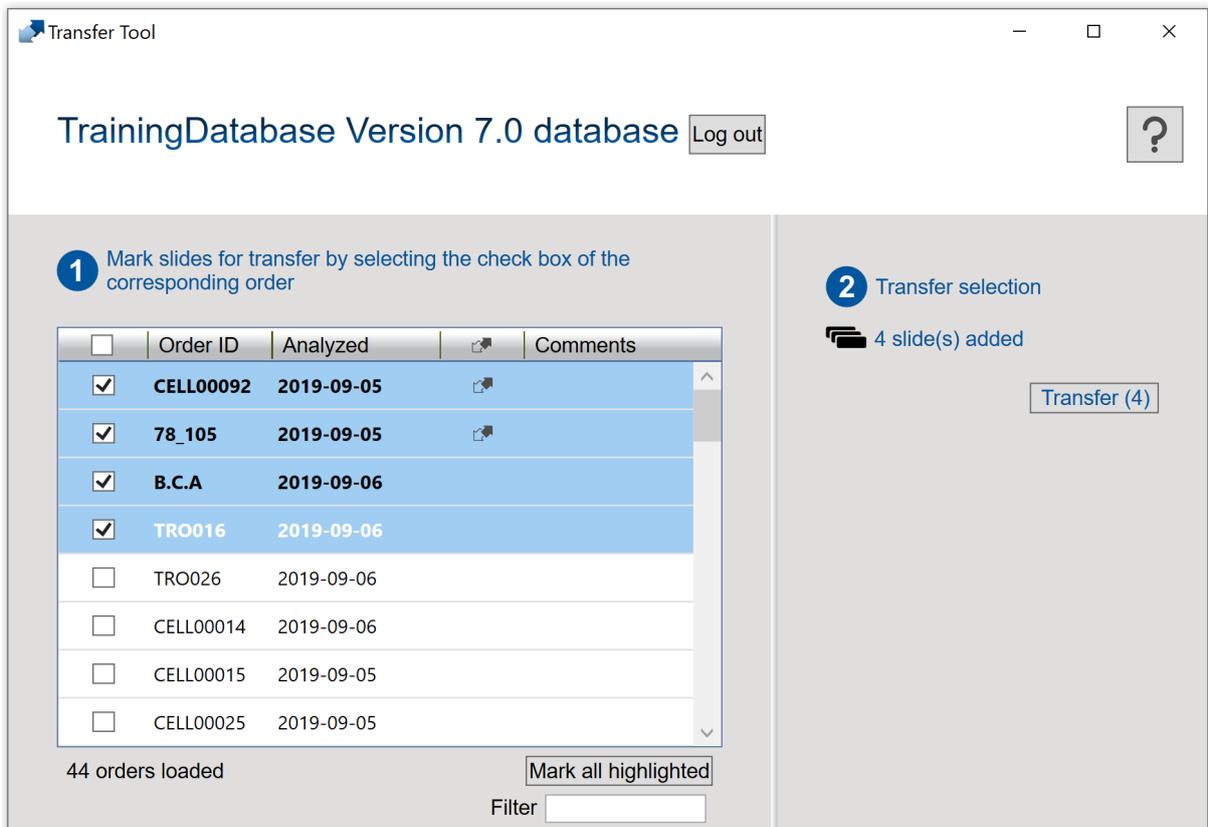
To transfer slides from a selected database

1. Start the CellaVision Transfer Tool.

2. Select the database where you want to transfer slides from.

3. Log in to the database.

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 ID**s 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 notes are not included in the transfer. This feature is available in CellaVision DM Software version 7.2 or later.
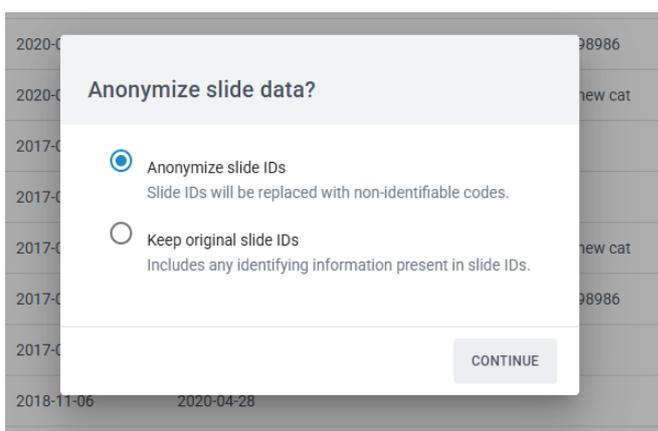
5. Click **Transfer**.

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 cell 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 cell classes or RBC morphologies in your account. For more information, see 2.6.3   Manage user-defined cell classes on page 52 and 2.6.4   Manage user-defined RBC morphologies on page 53

   Note: If you deselect a user-defined cell class during upload, all cells in that class are moved to the **Unidentified** class, and you must reclassify them. The same goes for all cells that belong to a cell class not included in the CellaVision Proficiency Software.

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 a slide that already exists in your account, the slide is uploaded as a copy to the existing slide.

2.2.3 Upload slides via license activation

For peripheral blood slides, you can purchase CellaVision Proficiency Software Slide Databases.

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 51.

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

Note: You can upload the same slide again to your CellaVision Proficiency Software account. If you had made edits to a 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

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 cells. You must reclassify all unidentified cells before you can mark the slide as reviewed and include it in a test.
No icon	Slide doesn't contain any unidentified cells but you haven't marked the slide as reviewed yet.
👁✓	Slide doesn't contain any unidentified cells 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**, **BF**, or **BMA**.

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. You can attach up to five additional slide data files per slide. For each file, 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: Differential cells 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.
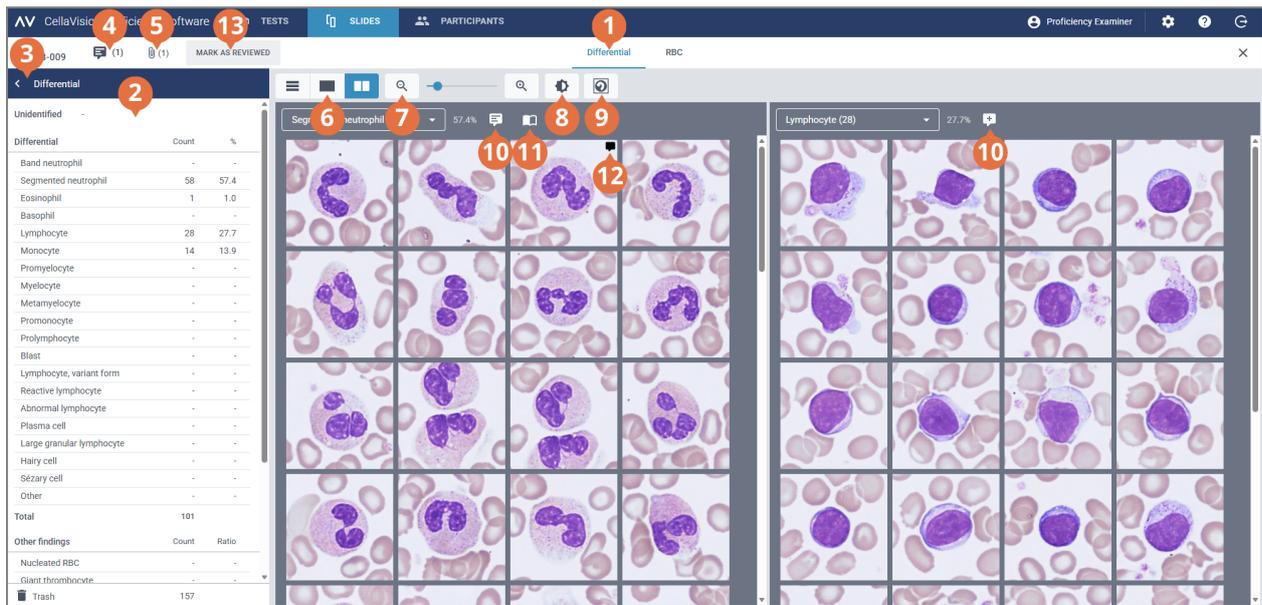
1 Differential navigation link
2 Differential side panel
3 Collapse or expand side panel
4 Manage slide comments
5 View additional slide data file (if added)
6 Switch between cell gallery views
7 Zoom in or out on image

8 Adjust image brightness and color
9 Show or hide cell markers
10 Manage cell class comments
11 Show reference cells (if added)
12 Manage cell notes
13 Mark slide as reviewed
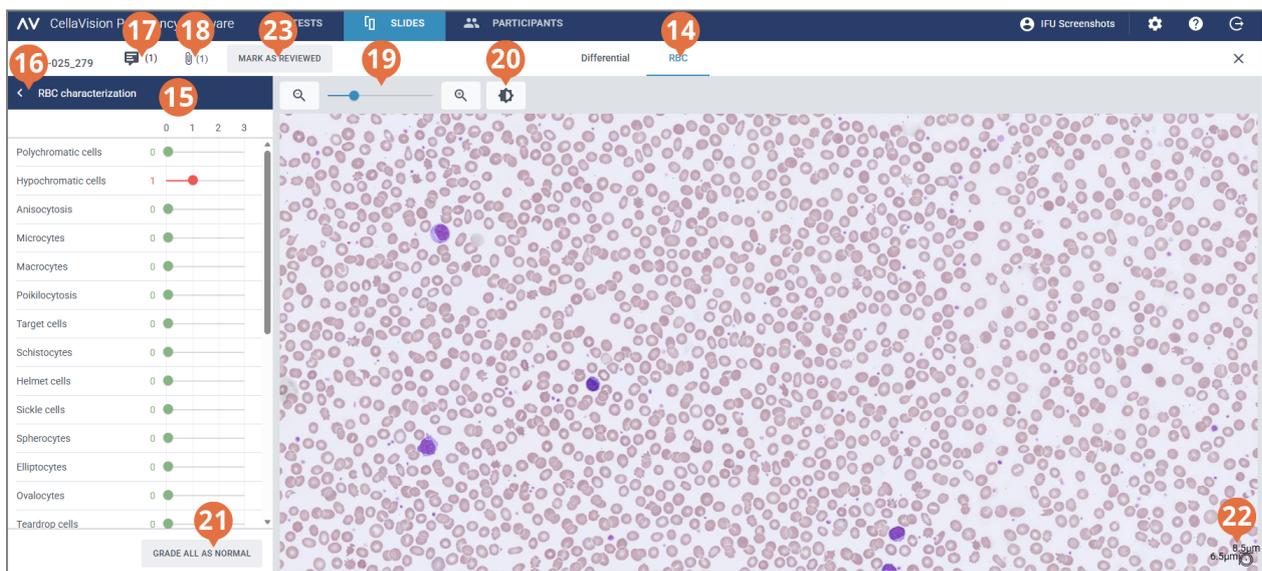
14 RBC view navigation link
15 RBC characterization side panel
16 Collapse or expand side panel
17 Manage slide comments
18 View additional slide data file (if added)

19 Zoom in or out on image
20 Adjust image brightness and color
21 Grade all RBC morphologies as normal
22 RBC ruler
23 Mark slide as reviewed

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

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

- Cell images categorized by cell classes

- Count and percentage of cells from all differential cells in each class

- Total count and ratio per 100 findings for each Other findings 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 differential cell 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 differential cells are in the **Unidentified** class and all RBC morphology grades are **0**.

- If you transferred and uploaded the slide from a CellaVision database, cell 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 cells in that class are placed in the **Unidentified** class.

To collapse or expand side panels in the verification views

The **Differential** side panel in the **Differential** view provides more detailed information on the cell 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 verification views

To simultaneously zoom in or out on all differential cells in an open gallery or to zoom in or out on the RBC overview:

- In the **Differential** 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 verification 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 **Differential** 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 **Differential** and **RBC** views, the change is reflected also in other views where differential cell or RBC images are present (for example under test results).

To manage slide comments in the verification 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 cells in different gallery views

- To view all differential cells from all cell classes in the same view, click ☰ **All galleries view**.

  Note: When you access the **Differential** view, cells are visible in the ☰ **All galleries view** by default.

- To view differential cells only from two cell classes at a time, click ▐▌ **Split gallery view**.

- To view differential cells 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 **Differential** side panel.

  Note: This works in the ■ **Single gallery view** only if there are differential cells in the cell class that you click.

  ○ In the ▐▌ **Split gallery view**, right-click a cell class in the **Differential** side panel to view that cell class in the right gallery.

To zoom in and out on individual cell images

1. To magnify a cell image, double-click it.

2. To zoom in and out on the magnified cell image, scroll your mouse wheel up or down.

3. To shift to another zoomed cell image in the same gallery view, use the arrow keys on your keyboard.

4. To close the magnified cell image:

- Click **Cancel** if you didn't add, edit, or delete a cell note.

- Click **Save** if you added, edited, or deleted a cell note.

To show or hide cell markers

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

To split cells inside one cell marker

Note: You can split cells only in unlocked slides.

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

1. Right-click the cell image, and select **Split cell**.

2. In the magnified cell image, click to mark the center of each cell inside the cell marker.

3. Click **Split**.

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

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

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

To manage comments for differential cell 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.

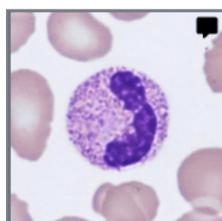## To manage notes for individual differential cells

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

1. Double-click a differential cell or select one or more differential cells and then right-click **Add or edit cell note**.

   - To select a consecutive group of differential cells, click the first differential cell, hold down Shift, and then click the last differential cell.

   - To select a non-consecutive group of differential cells, hold down Ctrl/Cmd, and then click each differential cell that you want to select.

2. Manage cell notes as follows:

   Note: You can enter and edit cell notes in several selected differential cells at the same time.

   - Enter a note in the **Cell note** field, and then click **Save**.

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

Differential cells that include a cell note display a note icon 💬.

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

To reclassify differential cells

Note: You can reclassify differential cells only in unlocked slides.

Note: You can also add your own cell classes to the **Differential** side panel. For more information, see 2.6.3   Manage user-defined cell classes on page 52.

1. Click to select one or more differential cells.

   - To select a consecutive group of differential cells, click the first differential cell, hold down Shift, and then click the last differential cell.

   - To select a non-consecutive group of differential cells, hold down Ctrl/Cmd, and then click each differential cell that you want to select.

2. To reclassify the selected differential cells:

   - Drag and drop from a cell class in a gallery view to a cell class on the **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 differential cells to and from trash

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

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

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

1. Click to select one or more differential cells.

    - To select a consecutive group of differential cells, click the first differential cell, hold down Shift, and then click the last differential cell.

    - To select a non-consecutive group of differential cells, hold down Ctrl/Cmd, and then click each differential cell that you want to select.

2. To move the selected differential cells to trash:

    - Right-click and select **Move to trash**.

    - Drag and drop to 🗑 **Trash** on the **Differential** side panel.

3. To move the selected differential cells from 🗑 **Trash** on the **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 **Differential** side panel.

To manage reference cell libraries

A reference cell library contains differential cells that serve as good reference examples of a specific cell class.

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

    Note: You can't add cells from the **Unidentified** class or from 🗑 **Trash** to a reference cell library.

2. To view the differential cell you added to a reference cell 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 differential cell from a reference cell library, right-click the differential cell, 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 .

To view RBCs in an RBC overview image (PB)

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, click and hold the RBC ruler, and then drag it to any cell that you want to measure. The ruler size automatically scales up and down as you zoom in and out on the RBC overview image.
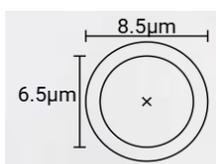
To grade RBC morphologies in the RBC overview image (PB)

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 differential cells in the **Unidentified** class before you can mark a slide as reviewed.

When you have reviewed a slide and reclassified differential cells 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 differential cells are correctly classified and RBC morphologies correctly graded. You can then safely use these slides in tests.
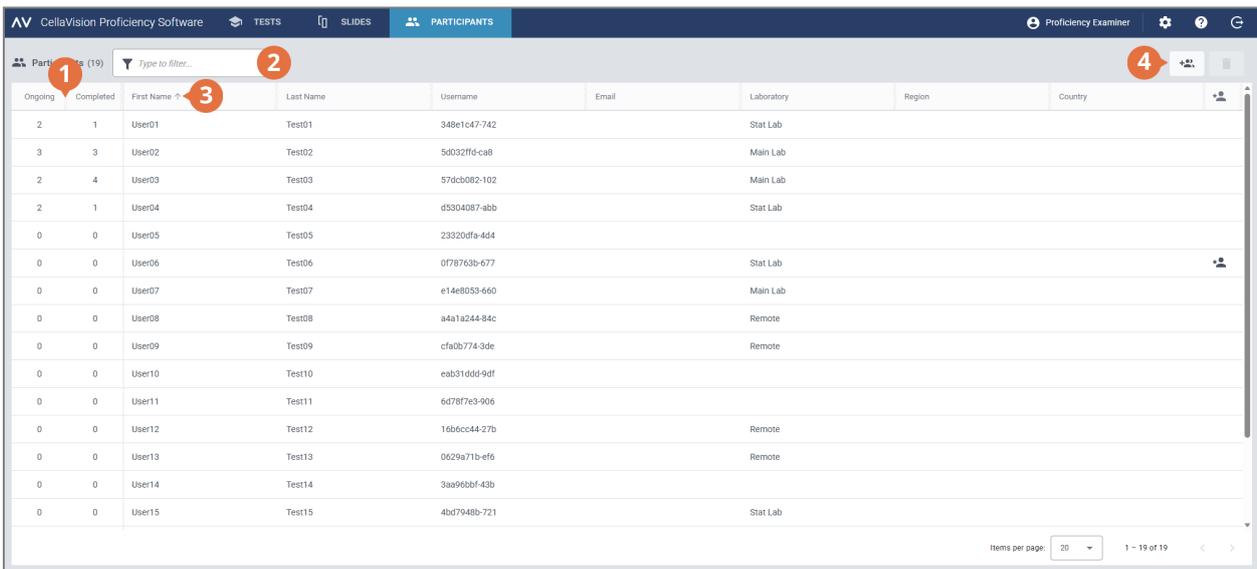
2.3.4 Delete slides

Note: You can delete only unlocked slides.

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

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

5 Delete participants

6 Detailed participant view

7 Manage supervisor privileges for participant

8 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 51.

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 ✕ 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

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

1 Filter tests
2 Sort tests
3 Tests under construction
4 Add new test

5 Edit test under construction
6 Delete tests
7 Detailed test view

8 Ongoing tests
9 View ongoing test

10 Add participants to ongoing test
11 End ongoing test

12 Completed tests
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.

Note: If you start creating a test but don't finish, you can continue working on it later. For more information, see .

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**, **Body fluid**, or **Bone marrow aspirate** 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, body fluid, or bone marrow aspirate slides

    *   A maximum of 20 slides

    *   Only slides that don't contain any unidentified differential cells (slides with unidentified differential cells 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 differential cell reference 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 <u>2.5.3   Manage tests</u> 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

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

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 <u>2.5.4   View results in ongoing and completed tests</u> 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 <u>2.5.2   Create new tests</u> 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**, **BF**, or **BMA**.

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 .

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 comments and notes	
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

• **Differential classes** to view results for differential cell classification by cell class

• **Differential cells** to view results for differential cell classification by individual differential cells

• **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 comments and notes

The participants can add slide comments, cell class comments, and cell notes when they take the test. To view their and your own comments and notes, 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 differential cell classification and RBC characterization results of an individual participant:
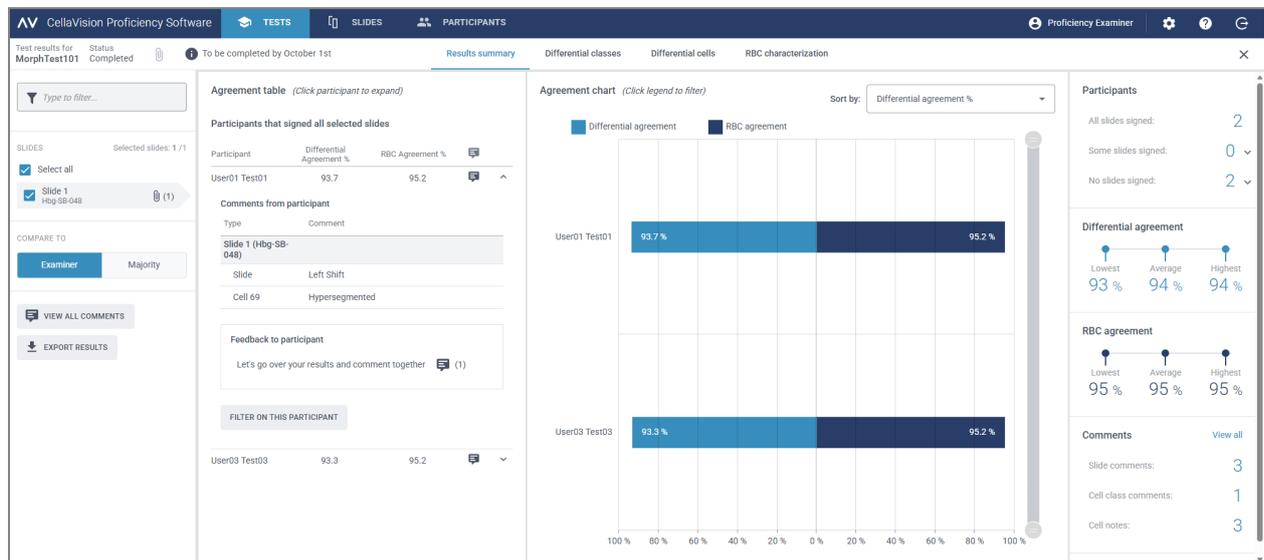
- If you select **Examiner**, the results are compared to the differential cell classification and RBC characterization of the slide when the test was created.

- If you select **Majority**, the results are compared to the differential cell classification and RBC characterization results of other participants in the test:

  - With differential cell results, this means the cell classes to which the majority of the participants classified the differential cells.

  - 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 differential cell 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 table** and the **Agreement chart** show the average differential 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: Differential agreement calculation on page 76 and Appendix B: RBC agreement calculation on page 77.

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

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

- Click a participant to

  - View the slide IDs of their unsigned slides (if any)

  - View their slide comments, cell class comments, and cell notes

  - Give feedback on their test results

  - Filter the result view by that participant

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

- Sort the order of the bars by:

  - Participant

  - Differential 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 (differential or RBC)

- Drag the range selector to show only some participant charts in the view

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 **Differential agreement** area, you can:

- See the lowest, average, and highest differential 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
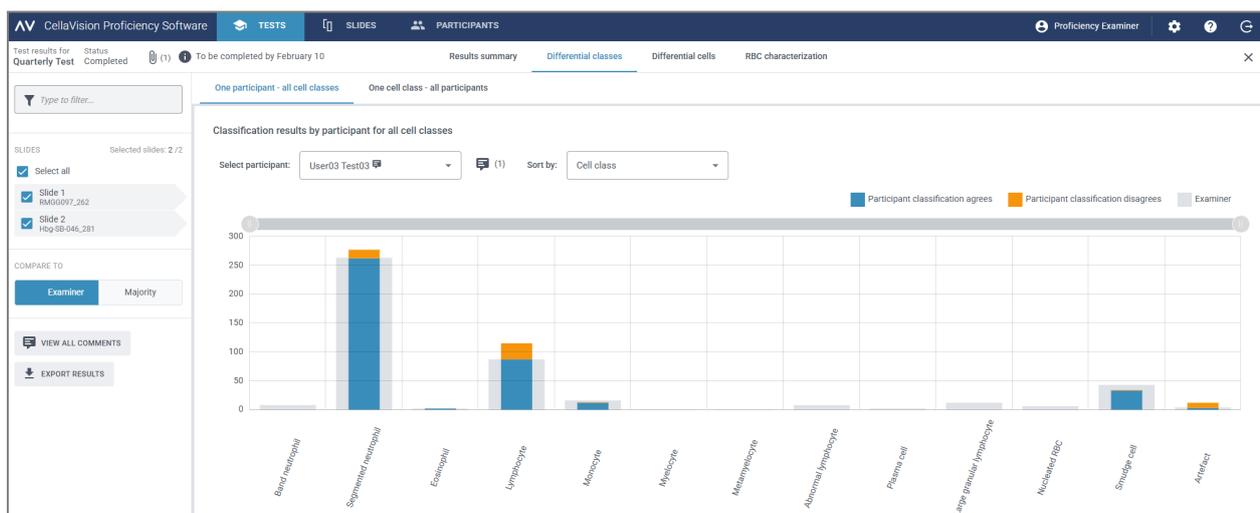
In the **Comments** area, you can:

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

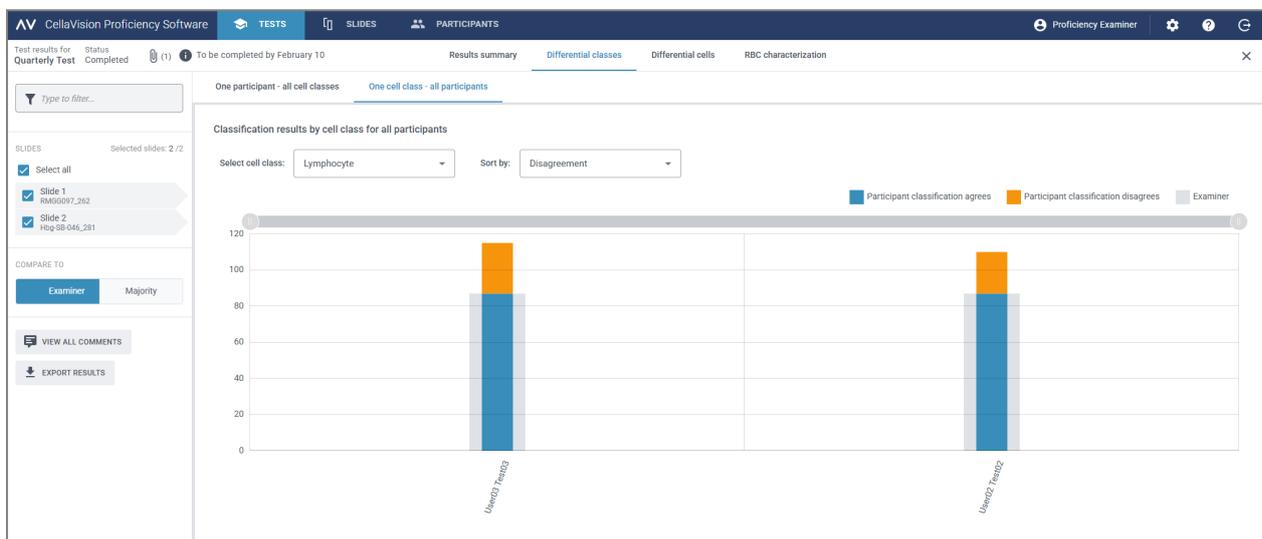## To view the differential cell class results

To view the differential cell classification results by differential cell classes, click the **Differential 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 differential cells in total the selected participant placed in each cell class

- See how many differential cells in total the reference placed in each cell class

- See how many differential cells the participant placed to the same cell class as the reference (agreement)

- See how many differential cells 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 differential cell class charts in the view
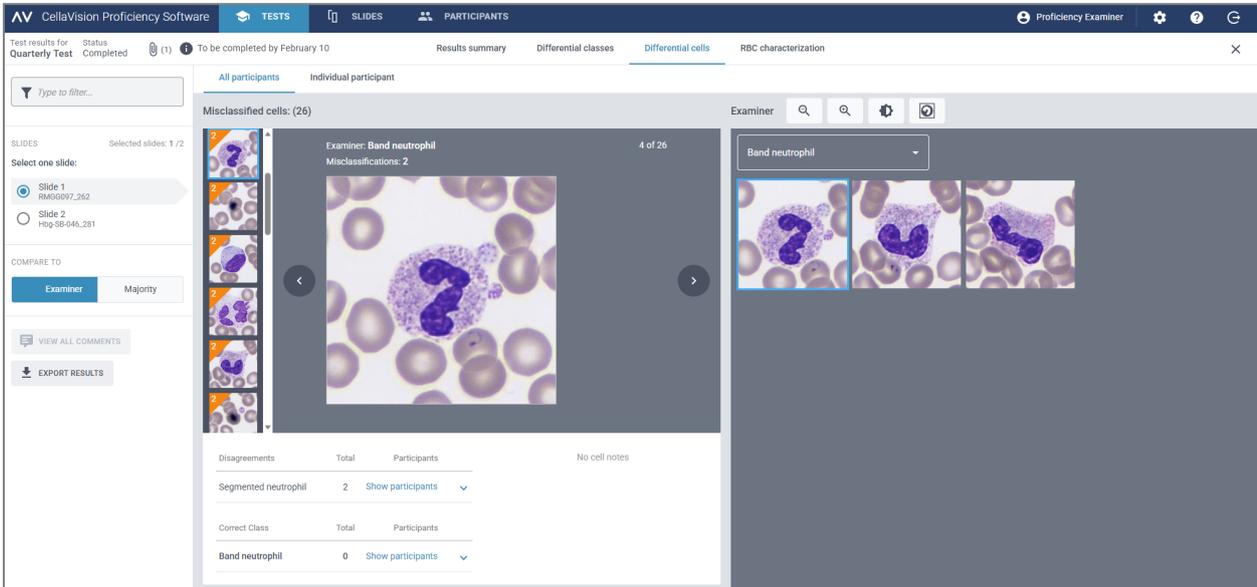

In the **One cell class - all participants** view, you can:

- Select a cell class to view its results

- Sort the results by differential cell classification disagreement or by participant

- See how many differential cells in total each participant placed in the selected cell class

- See how many differential cells in total the reference placed in the selected cell class

- See how many differential cells each participant placed in the selected cell class compared to the reference (agreement)

- See how many differential cells 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 differential cell results

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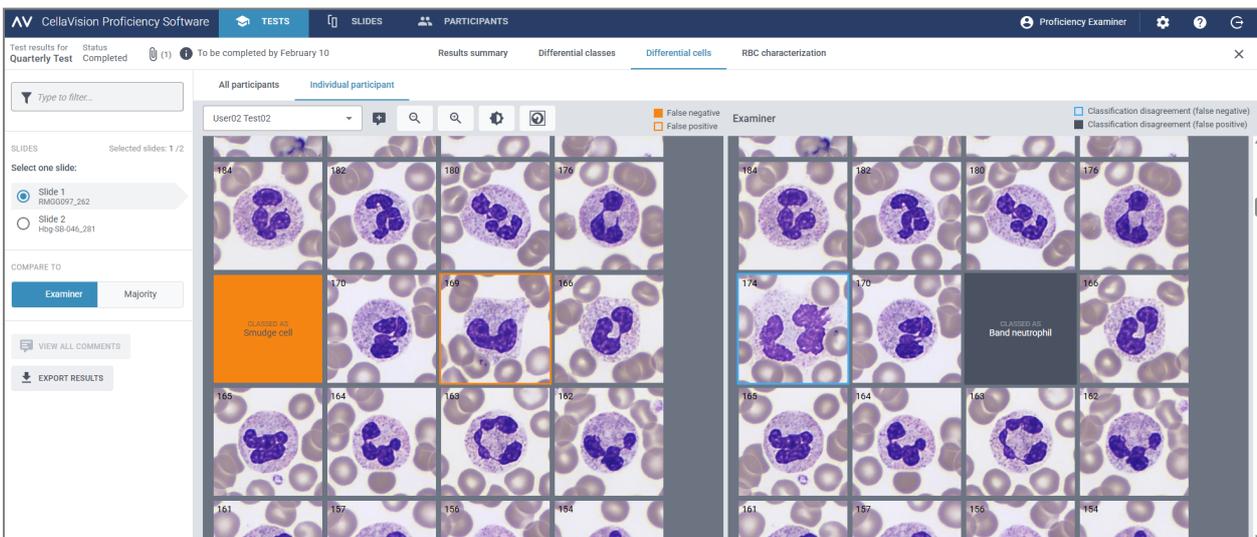

In the **All participants** view, you can:

- See to which incorrect class the participants misclassified a given differential cell and to which class the reference classified the same differential cell on the selected slide
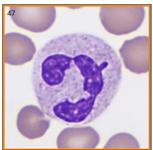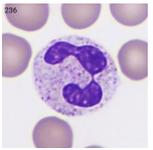
  Note: To move from one differential cell image to another, click ‹ or › , click a differential cell image in the scroll bar area, or use the arrow keys on your keyboard.
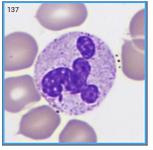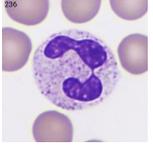
- See the reference result for each differential cell in context of a cell class on the selected slide

- View notes for individual differential cells (if added)

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

- See to which cell class an individual participant and the reference placed the differential cells

- See the difference in differential cell classification between an individual participant and the reference through color coding in the cell images

Color coding in differential cell images for an individual participant		
	A solid orange box with no differential cell visible	A differential cell that the participant should have placed in the indicated cell class but placed instead in the cell class shown in the box
	A cell image with an orange frame	A differential cell 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 cell image with no color coding	A differential cell that the participant placed in the correct cell class

Color coding in differential cell images for the reference		
	A solid gray box with no differential cell visible	A differential cell that the participant should have placed in the cell class shown in the box
	A cell image with a solid blue frame	A differential cell that the reference placed to a different cell class from the participant
	A cell image with no color coding	A differential cell 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

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 **Differential cell classes** or **Differential 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 cell classes

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

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

To add or edit user-defined cell classes

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

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

1. Click **Differential classes**.

2. To select the sample type for which to add or edit a user-defined cell class, click the **Peripheral blood**, **Body fluid**, or the **Bone marrow aspirate** navigation link.

3. To add a new user-defined cell class, click ✛ **Add** and enter a name for the new cell class.

4. To edit the name of an existing user-defined cell class, click the cell class and edit the name.

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

To delete user-defined cell 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, click 🗑 next to the cell class name, and then click **Delete**.

All differential cells 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 cells as described in .

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 log in to my account	Follow these steps one by one until the issue is resolved: 1. Restart the web-browser 2. Clear all cookies 3. Make sure the clock on the computer is synced correctly 4. Reset your password
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 any differential cells images or RBC images	Make sure the clock on the computer is synced correctly
	Check with your IT department that the firewall isn't blocking requests
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 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

Issue	Possible solution
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.
Uploaded slides missing on test creation	You can't include slides that contain unclassified differential cells to tests. These slides are marked with ⚠ in the slide list in the **Slides** view. Reclassify unclassified differential cells and try again: 1. In the **Slides** view, double-click the slide that includes unclassified differential cells to open it in the review view. 2. In the **Differential** view, reclassify all differential cells 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.

Issue	Possible solution
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.

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

For each test, you can:

- See the sample type of slides included in test (PB, BF, or BMA)

- 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 differential cells are placed in the **Unidentified** class and RBC morphology is not graded.

1 Differential navigation link	**8** Zoom in or out on image
2 Differential side panel	**9** Adjust image brightness and color
3 Collapse or expand side panel	**10** Show or hide cell markers
4 Manage slide comments	**11** Manage cell class comments
5 View additional slide data file (if added)	**12** Show reference cells (if added)
6 View test description (if added)	**13** Manage cell notes
7 Switch between cell gallery views	**14** Sign slide
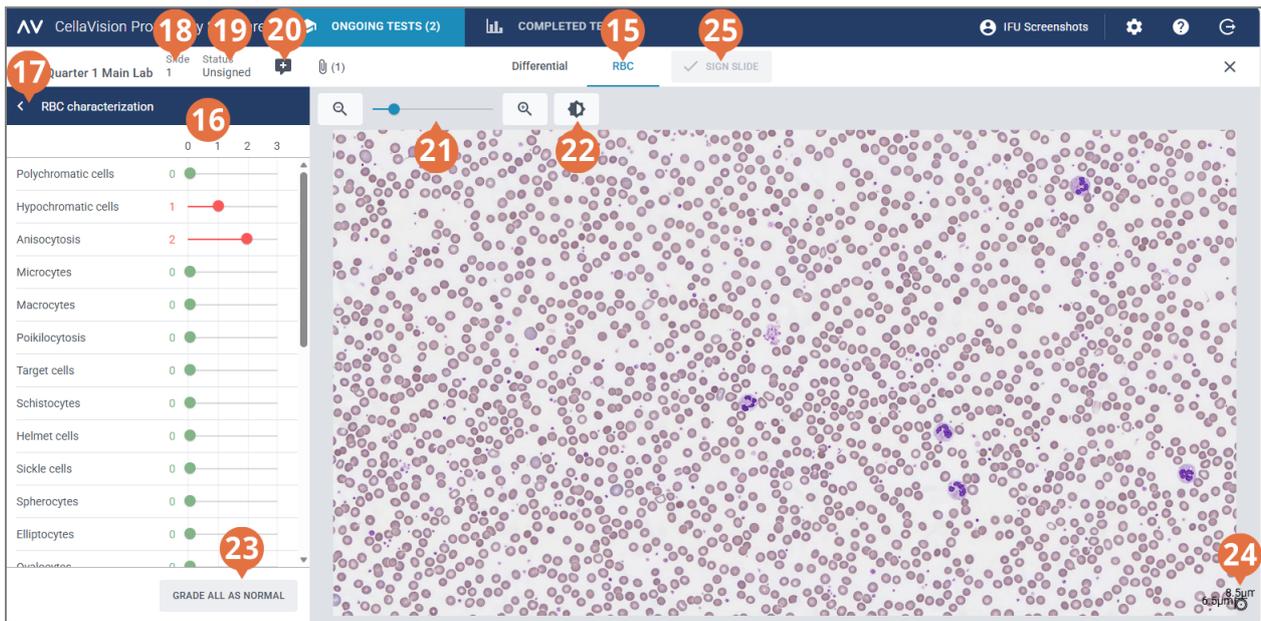
15 RBC view navigation link
16 RBC characterization side panel
17 Collapse or expand side panel
18 Manage slide comments
19 View additional slide data file (if added)
20 View test description (if added)

21 Zoom in or out on image
22 Adjust image brightness and color
23 Grade all RBC morphologies as normal
24 RBC ruler
25 Sign slide

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

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

- Cell images categorized by cell classes

- Count and percentage of cells from all differential cells in each class

- Total count and ratio per 100 findings for each Other findings 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 verification views

The **Differential** side panel in the **Differential** view provides more detailed information on the cell 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 verification views

To simultaneously zoom in or out on all differential cells in an open gallery or to zoom in or out on the RBC overview:

- In the **Differential** 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 verification 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 **Differential** 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 **Differential** and **RBC** views, the change is reflected also in other views where differential cell or RBC images are present (for example under test results).

To manage slide comments in the verification 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 cells in different gallery views

- To view all differential cells from all cell classes in the same view, click ☰ **All galleries view**.

  Note: When you access the **Differential** view, cells are visible in the ☰ **All galleries view** by default.

- To view differential cells only from two cell classes at a time, click ▮▮ **Split gallery view**.

- To view differential cells 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 **Differential** side panel.

      Note: This works in the ▉ **Single gallery view** only if there are differential cells in the cell class that you click.

    ○ In the ▉▉ **Split gallery view**, right-click a cell class in the **Differential** side panel to view that cell class in the right gallery.

To zoom in and out on individual cell images

1. To magnify a cell image, double-click it.

2. To zoom in and out on the magnified cell image, scroll your mouse wheel up or down.

3. To shift to another zoomed cell image in the same gallery view, use the arrow keys on your keyboard.

4. To close the magnified cell image:

    - Click **Cancel** if you didn't add, edit, or delete a cell note.

    - Click **Save** if you added, edited, or deleted a cell note.

To show or hide cell markers

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

To view reference cell libraries

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

A reference cell library contains differential cells that serve as good reference examples of a specific cell class.

To view the differential cells in the reference cell libraries, 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.

To manage cell class comments

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 notes for individual cells
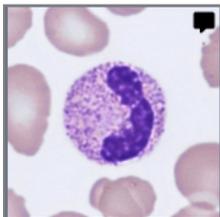
Note: You can manage cell notes only in unsigned slides.

1. Double-click a differential cell or select one or more differential cells and then right-click **Add or edit cell note**.

    - To select a consecutive group of differential cells, click the first differential cell, hold down Shift, and then click the last differential cell.

    - To select a non-consecutive group of differential cells, hold down Ctrl/Cmd, and then click each differential cell that you want to select.

2. Manage cell notes as follows:

    Note: You can enter and edit cell notes in several selected differential cells at the same time.

    - Enter a note in the **Cell note** field, and then click **Save**.

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

Differential cells that include a cell note display a note icon .

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

To reclassify differential cells

Note: You can reclassify differential cells only in unsigned slides.

1. Click to select one or more differential cells.

    - To select a consecutive group of differential cells, click the first differential cell, hold down Shift, and then click the last differential cell.

    - To select a non-consecutive group of differential cells, hold down Ctrl/Cmd, and then click each differential cell that you want to select.

2. To reclassify the selected differential cells:

- Drag and drop from a cell class in a gallery view to a cell class on the **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 (PB)

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, click and hold the RBC ruler, and then drag it to any cell that you want to measure. The ruler size automatically scales up and down as you zoom in and out on the RBC overview image.
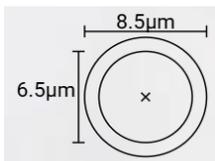
To grade RBC morphologies in the RBC overview image

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 differential cells 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 differential cell reclassification or 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.

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.
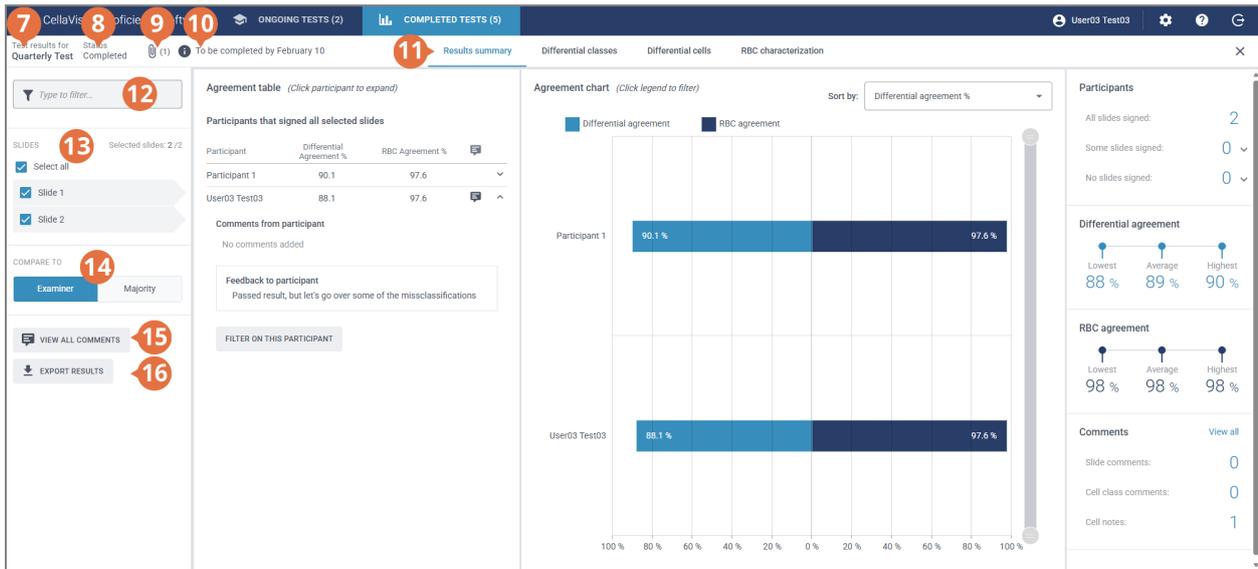
To sort the test list

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.

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 notes
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

- **Differential classes** to view results for differential cell classification by cell class

- **Differential cells** to view results for differential cell classification by individual differential cells

- **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 comments and notes

If the examiner added slide comments, cell class comments, and cell notes to the test before sending it, you can see them when the results are available. To view your and the examiner's comments and notes, 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 differential cell classification and RBC characterization results of an individual participant:

- If you select **Examiner**, the results are compared to the differential cell classification and RBC characterization of the slide when the test was created.

- If you select **Majority**, the results are compared to the differential cell classification and RBC characterization results of other participants in the test:

    - With differential cell results, this means the cell classes to which the majority of the participants classified the differential cells.

    - With RBC results, this means the morphology grades that the majority of the participants selected.
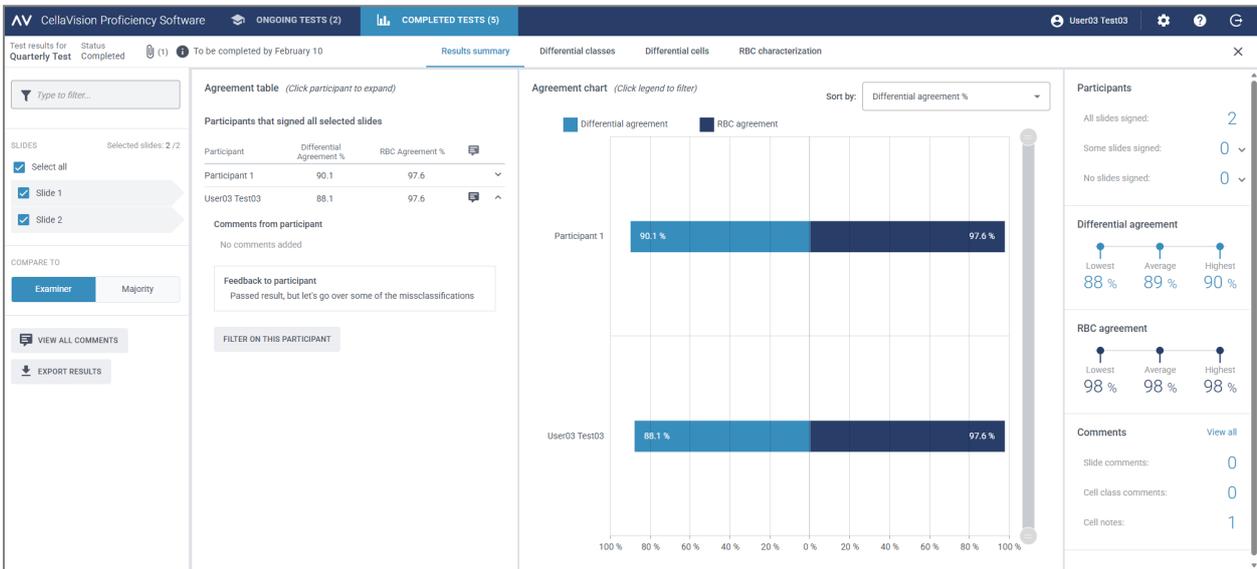
      Note: If it's not possible to deduce majority in a conclusive way, one of the differential cell classes or RBC grades is randomly used to indicate majority.

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 table** and the **Agreement chart** show the average differential 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: Differential agreement calculation on page 76 and Appendix B: RBC agreement calculation on page 77.

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

- View the same differential 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 comments, cell class comments, and cell notes

  - 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 comments, cell class comments, cell notes, and feedback on test results for other participants.

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

- Sort the order of the bars by:

  ○ Participant

  ○ Differential 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 (differential or RBC)

- Drag the range selector to show only some participant charts in the view

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 **Differential agreement** area, you can:

- See the lowest, average, and highest differential 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
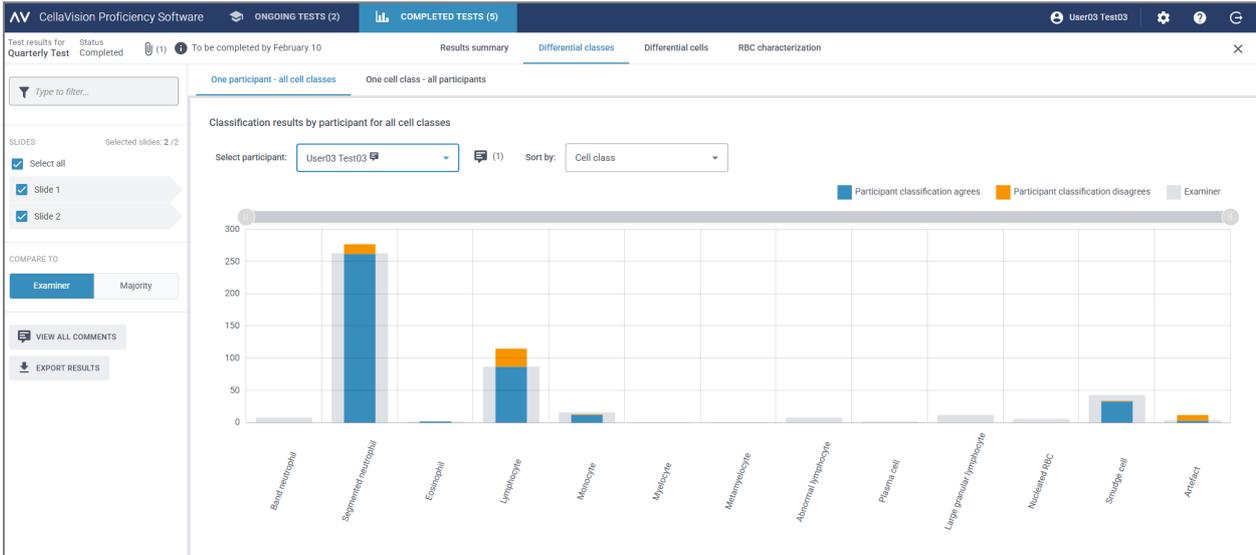
In the **Comments** area, you can:

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

To view the differential cell class results

To view the differential cell classification results by differential cell classes, click the **Differential classes** navigation link. You can view the results as bar charts by **One participant - all cell classes** or by **One cell class - all participants**.
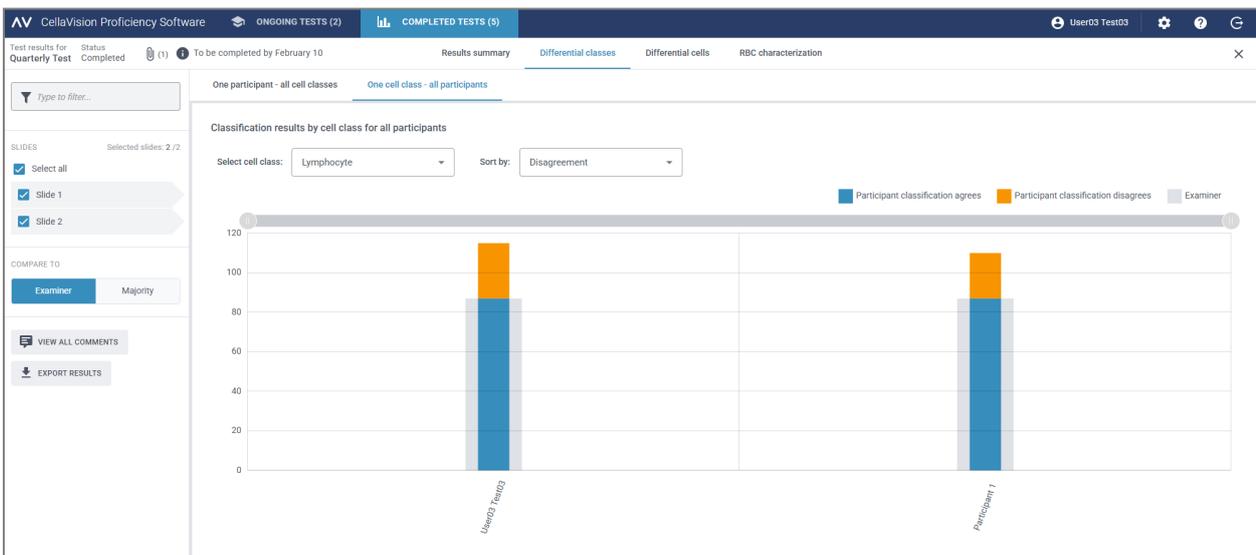
Tip: Hover over the bars with your mouse to see more detailed information on the results.

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

- Select a participant to view their results

- See how many differential cells in total the selected participant placed in each cell class

- See how many differential cells in total the reference placed in each cell class

- See how many differential cells the participant placed to the same cell class as the reference (agreement)

- See how many differential cells 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 differential cell 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 differential cell classification disagreement or by participant

- See how many differential cells in total each participant placed in the selected cell class

- See how many differential cells in total the reference placed in the selected cell class

- See how many differential cells each participant placed in the selected cell class compared to the reference (agreement)

- See how many differential cells 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 differential cell results

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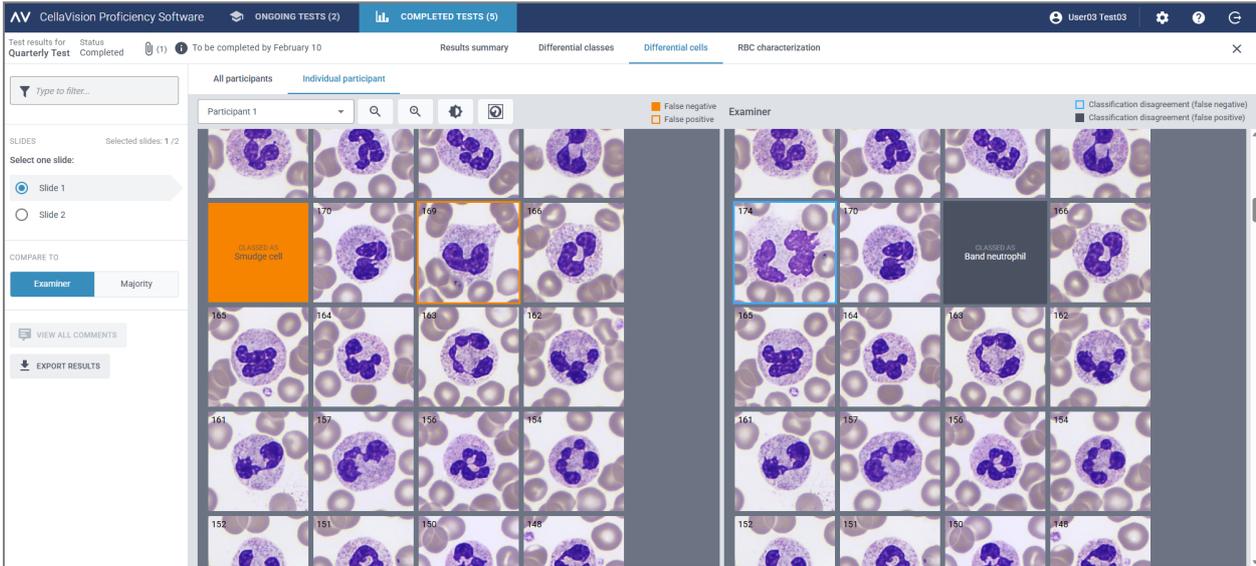

In the **All participants** view, you can:

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

  Note: To move from one differential cell image to another, click ‹ or › , click a differential cell image in the scroll bar area, or use the arrow keys on your keyboard.

- See the reference result for each differential cell in context of a cell class on the selected slide

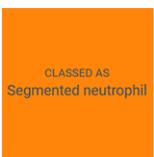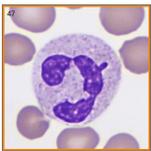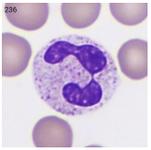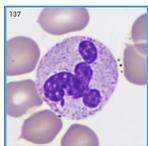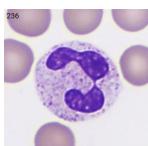- View notes for individual differential cells (if added)

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

- See to which cell class an individual participant and the reference placed the differential cells

- See the difference in differential cell classification between an individual participant and the reference through color coding in the cell images

Color coding in differential cell images for an individual participant		
	A solid orange box with no differential cell visible	A differential cell that the participant should have placed in the indicated cell class but placed instead in the cell class shown in the box
	A cell image with an orange frame	A differential cell 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 cell image with no color coding	A differential cell that the participant placed in the correct cell class

Color coding in differential cell images for the reference

	A solid gray box with no differential cell visible	A differential cell that the participant should have placed in the cell class shown in the box
	A cell image with a solid blue frame	A differential cell that the reference placed to a different cell class from the participant
	A cell image with no color coding	A differential cell 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

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 log in to my account	Follow these steps one by one until the issue is resolved: 1. Restart the web-browser 2. Clear all cookies 3. Make sure the clock on the computer is synced correctly 4. Reset your password
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 any differential cells images or RBC images	Make sure the clock on the computer is synced correctly
	Check with your IT department that the firewall isn't blocking requests
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: DIFFERENTIAL AGREEMENT CALCULATION

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

Example 1

A test has slides that include 200 differential cells. A participant classifies 160 of these differential cells to the same cell classes as the reference.

The differential 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 differential agreement percentages:

- Participant A: 80%

- Participant B: 77%

- Participant C: 95%

The average differential 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 2026-01-28

Section	Change
Whole document	First released revision.

GLOSSARY

C

characterization

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

classification

The process where a user assigns differential cells and other objects to predefined cell classes.

D

Differential agreement

Percentage of differential cells classified in agreement with the reference result.

Differential cell ratio

Calculated value based on the number of Other findings per 100 differential cells.

E

examiner

Access level to manage tests, slides, and participants.

examiner result

Differential cell classification and RBC characterization decided by the examiner.

M

majority result

Differential cell classification and RBC characterization selected by a majority of participants.

N

not classed

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

O

other

Cell class used for a differential cell of a type other than those listed. Included in the differential count.

Other findings

Cells or objects classified as not being differential cells.

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

Cell or other finding 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 differential cell classification and RBC characterization.

U

unidentified

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