



SmartZoom® Manual

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1. Introduction

Thank you for purchasing the SmartZoom® images viewing solution. An interactive network, in which experts and students can interact and exchange information about the slides. You can view slides of pathology, anatomy and hematology and add your own slides and annotations!

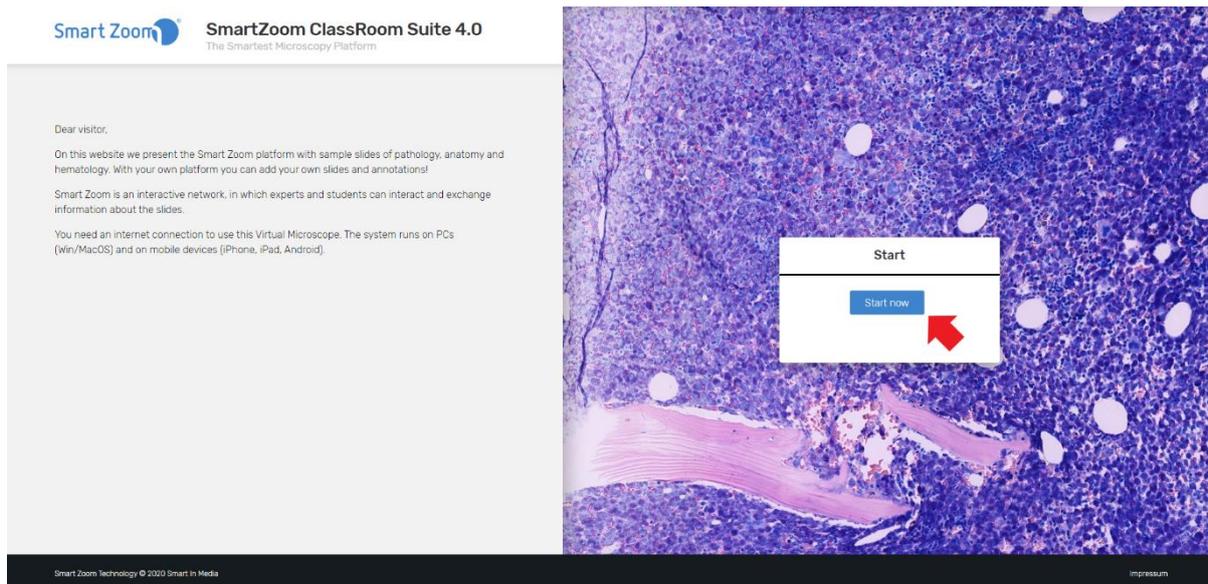
You need an internet connection to use this Virtual Microscope. The system runs on PCs (Win/MacOS) and on mobile devices (iPhone, iPad, Android).

2. Log In

- We enter with the link provided: "demo.smartzoom.com", followed by a sequence of specific digits. This will redirect you to the home page.
- There are 3 possible ways to log in.

2.1. Direct Login

- Click on "Start now".



The screenshot displays the SmartZoom Classroom Suite 4.0 interface. On the left, there is a text area with the following content:

Smart Zoom  SmartZoom Classroom Suite 4.0
The Smartest Microscopy Platform

Dear visitor,
On this website we present the Smart Zoom platform with sample slides of pathology, anatomy and hematology. With your own platform you can add your own slides and annotations!
Smart Zoom is an interactive network, in which experts and students can interact and exchange information about the slides.
You need an internet connection to use this Virtual Microscope. The system runs on PCs (Win/MacOS) and on mobile devices (iPhone, iPad, Android).

At the bottom left, it says "Smart Zoom Technology © 2020 Smart In Media". At the bottom right, there is a small "impressum" link.

On the right side, there is a large histological slide image. Overlaid on this image is a white dialog box titled "Start". Inside the dialog box, there is a blue button labeled "Start now" and a red arrow pointing to it.

- We will be automatically redirected to the home page with the different categories.

Seminary Images - Winter Semester 2020

Here you can find all the images we used during the course with some annotations, which are important to face the practice exam. The study of the theory given in the practices is also highly recommended to pass the exam.

Cytology

Hematology

Histology

2.2. Login with Password

- We must enter the password provided by an admin.
- Click on “Login”

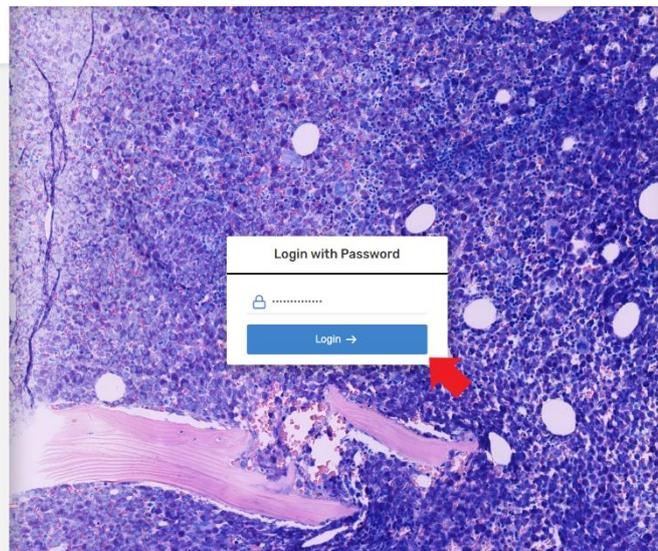
Smart Zoom  SmartZoom Classroom Suite 4.0
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Cytology

Hematology

Histology

2.3. Login with Authentication

- Click on "Register".

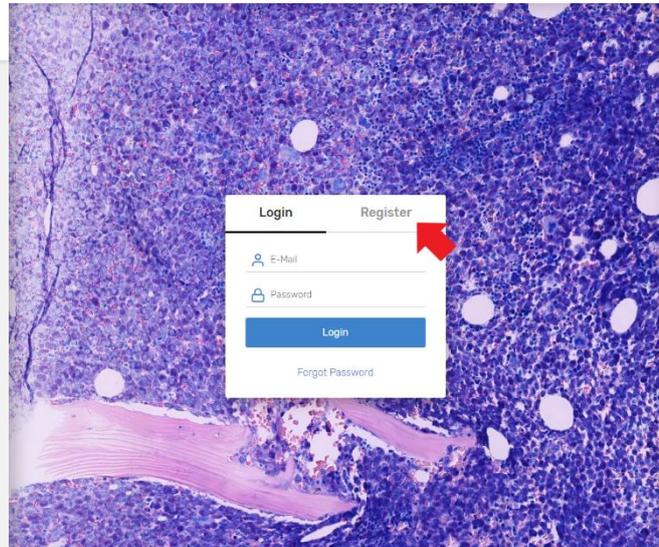
Smart Zoom  SmartZoom Classroom Suite 4.0
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Dear visitor,

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Smart Zoom is an interactive network, in which experts and students can interact and exchange information about the slides.

You need an internet connection to use this Virtual Microscope. The system runs on PCs (Win/MacOS) and on mobile devices (iPhone, iPad, Android).



- We fill in the spaces by creating our own password.
- Click on "Register".

Login **Register**

 Dr. SmartZoom

Dr.SmartZoom@gmail.com





[Register](#)

[Forgot Password](#) 

- Click on "Login" (upper left corner of the login window).

Login **Register**

 Dr. SmartZoom

Dr.SmartZoom@gmail.com





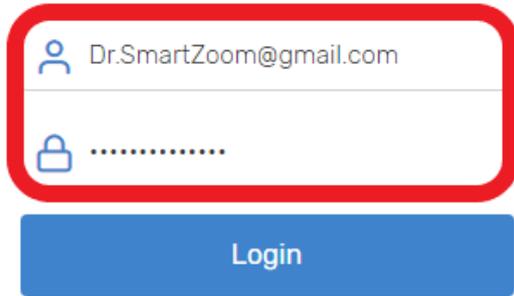
[Register](#)

[Forgot Password](#)

- Fill with an e-mail and password.

Login

Register



Dr.SmartZoom@gmail.com

.....

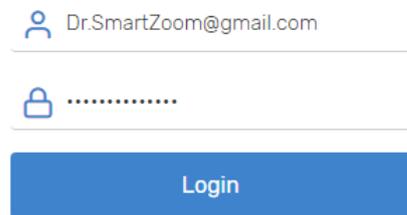
Login

[Forgot Password](#)

- Click on "Login".

Login

Register



Dr.SmartZoom@gmail.com

.....

Login

[Forgot Password](#)



- We will be automatically redirected to the home page with the different categories.

Seminary Images - Winter Semester 2020

Here you can find all the images we used during the course with some annotations, which are important to face the practice exam. The study of the theory given in the practices is also highly recommended to pass the exam.

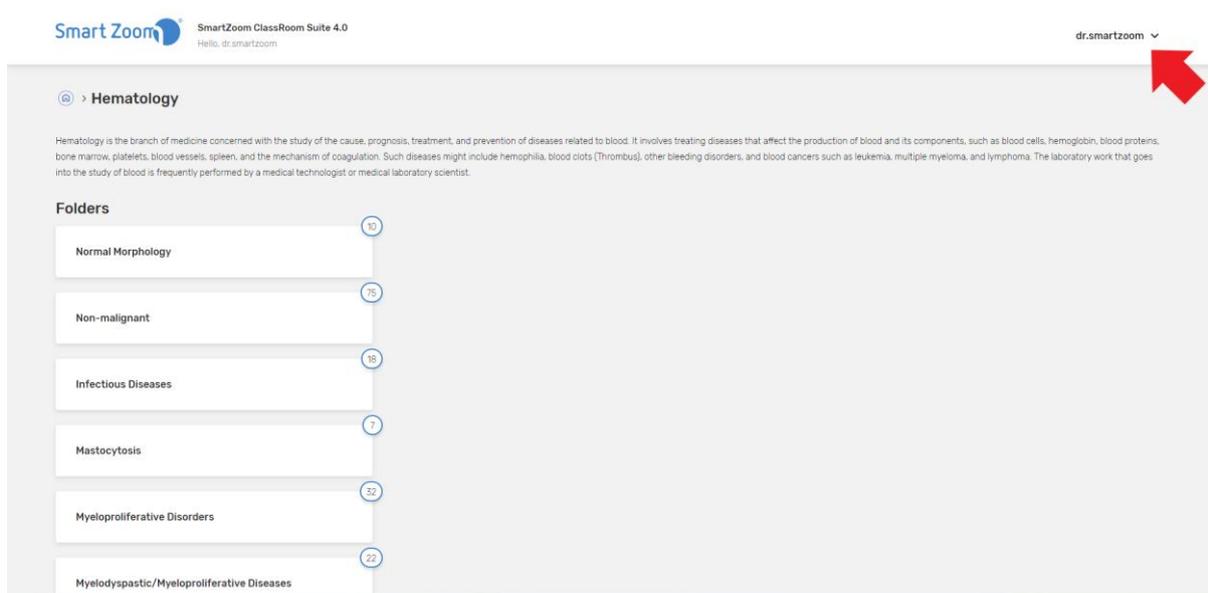
Cytology

Hematology

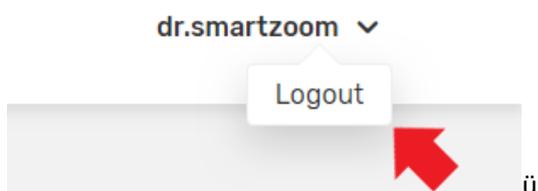
Histology

3. Log Out

- To log out we must click on our alias, located in the upper right corner of the screen.

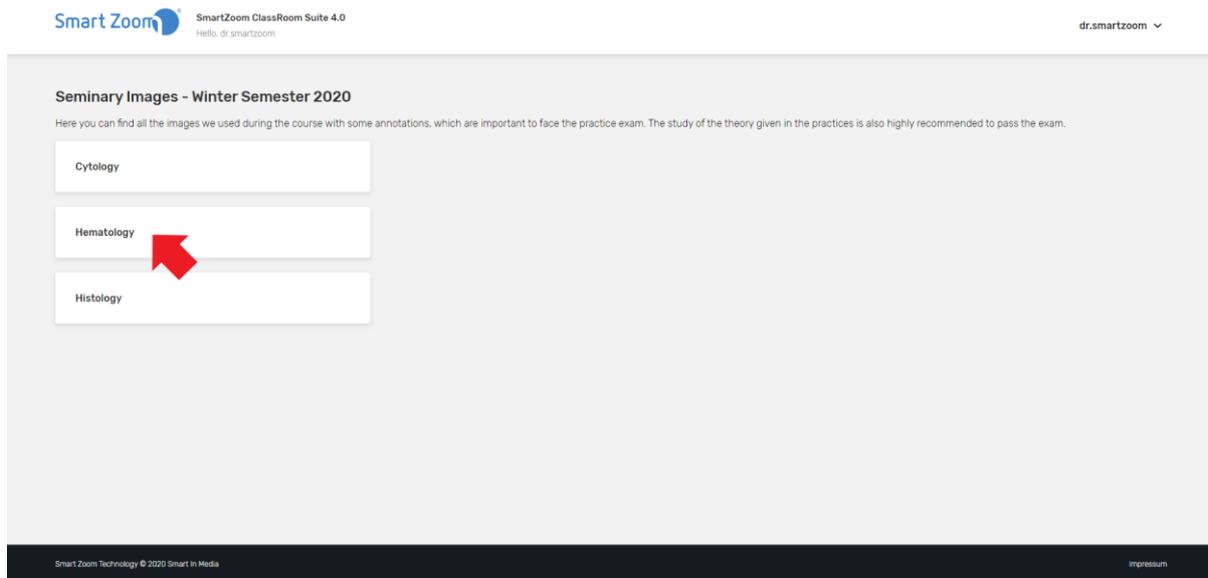


- Click on "Logout".

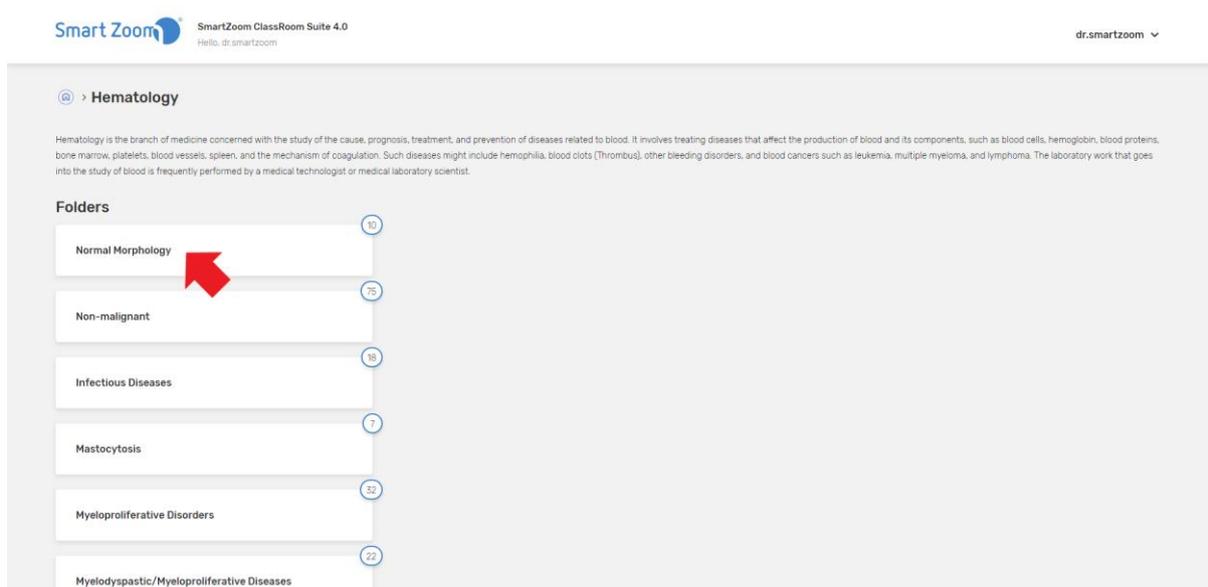


4. Image Selection

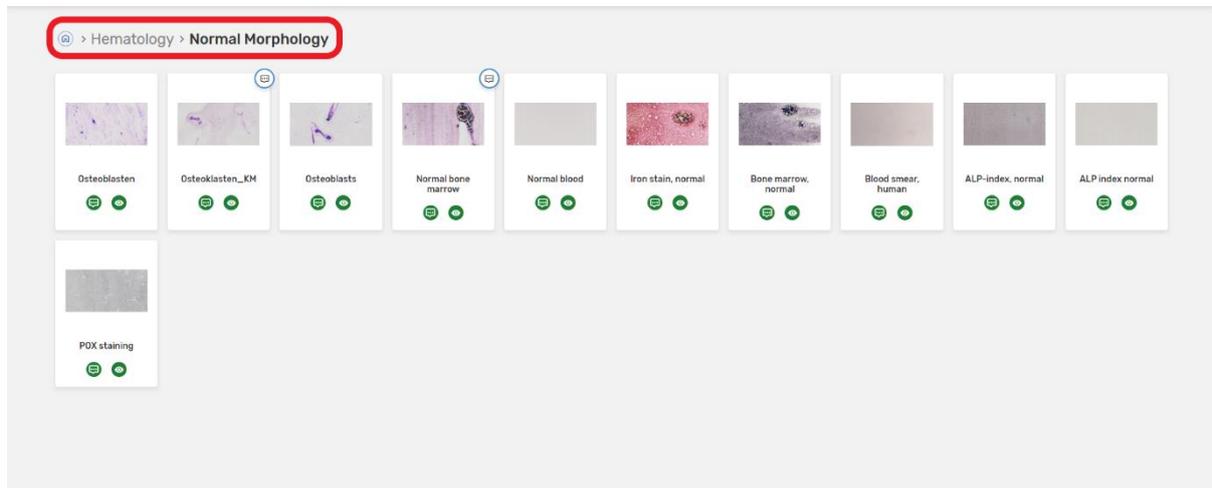
- Click on the category where your image is located. In our example "Hematology".



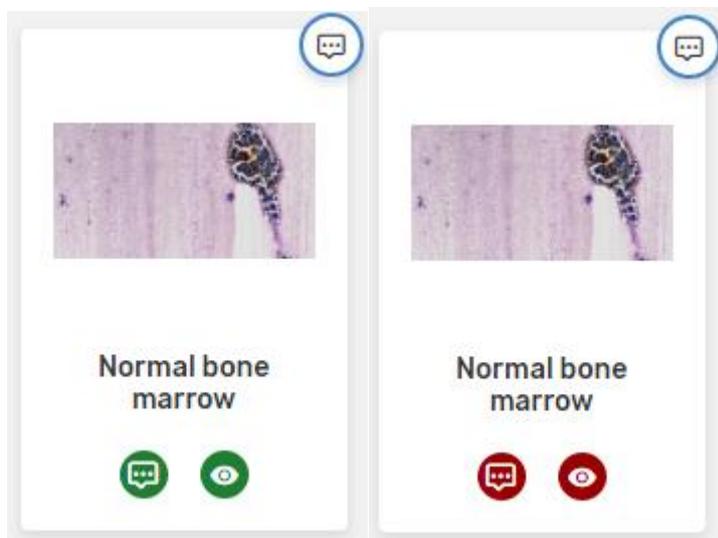
- Click on the sub-folder where the images are located. For example, "Normal Morphology".



- In the upper left corner of the menu we find a guide to know where the image is located.

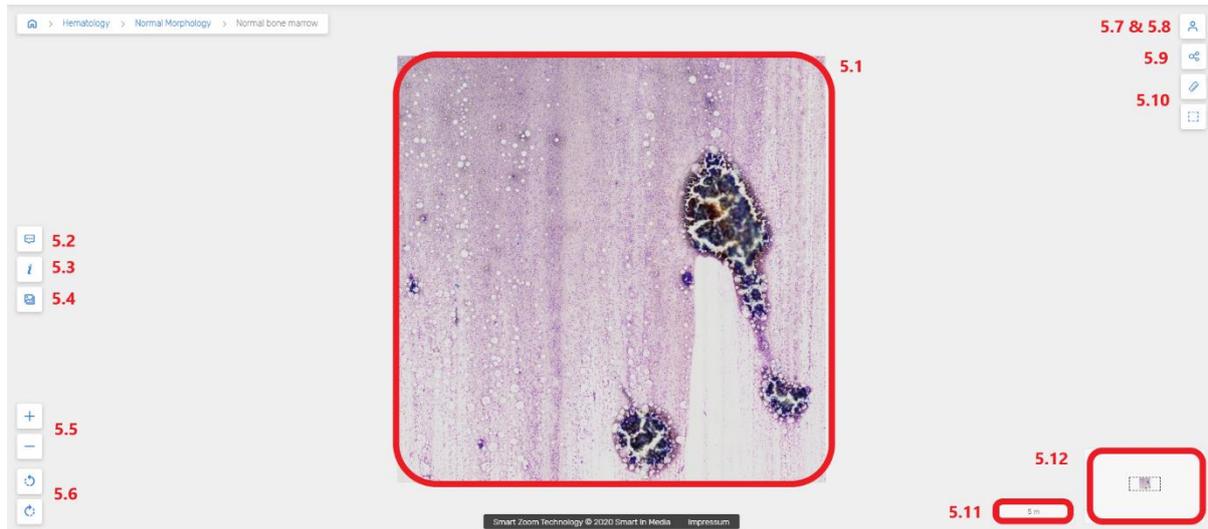


- The images with a dialogue icon in the upper right corner will have comments/annotations, which can be deactivated/activated by clicking on the buttons below the image.



- Search image and click on it.

5. Working with Image

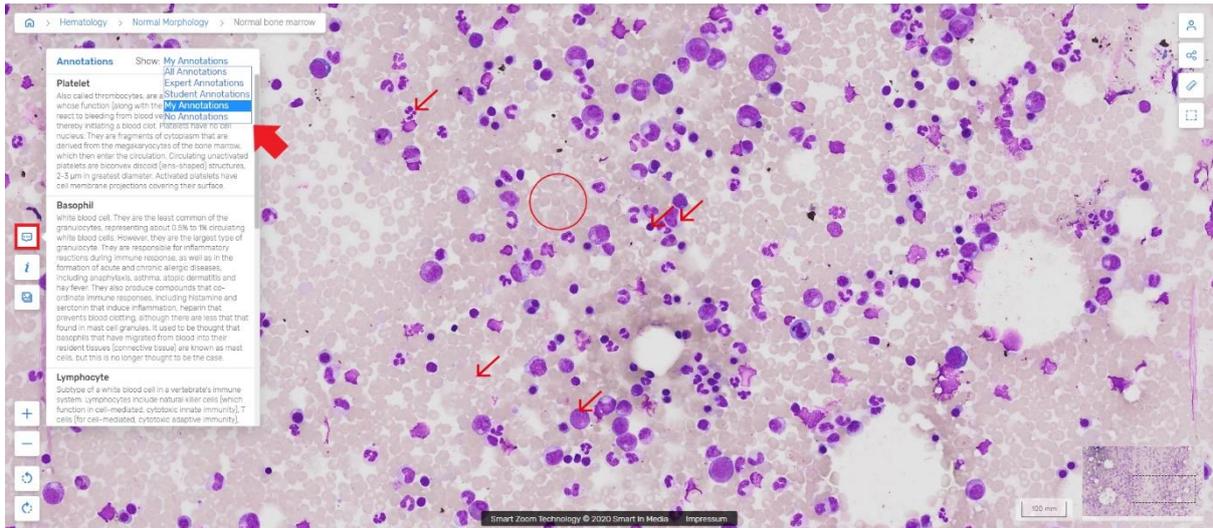


5.1. Image

- The image we are working with will be centered and we will be able to see the annotations in case they are activated

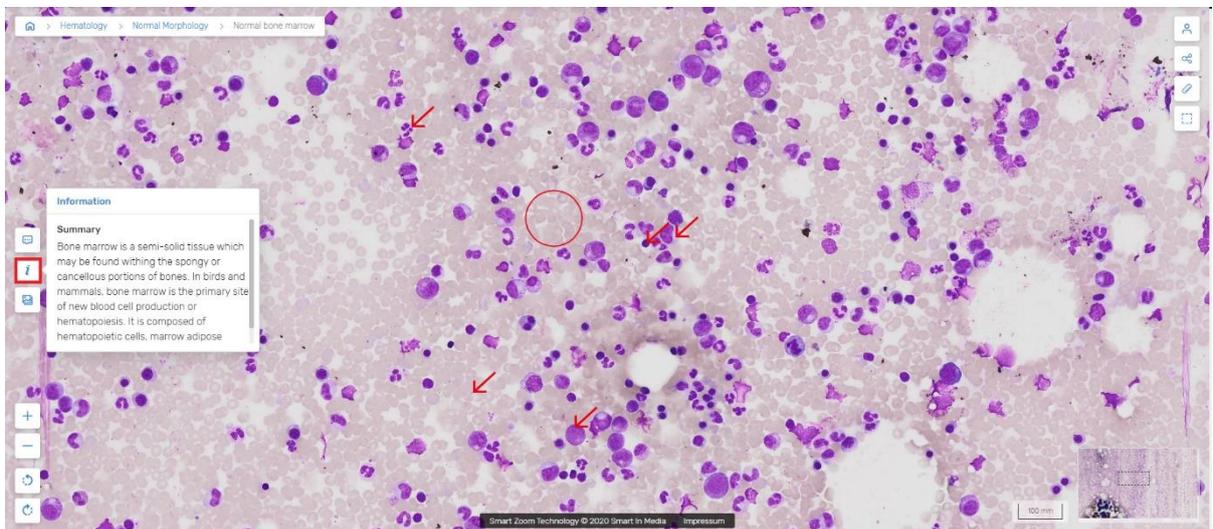
5.2. Note Filter

- Click on .
- We will be able to see and activate the annotations.



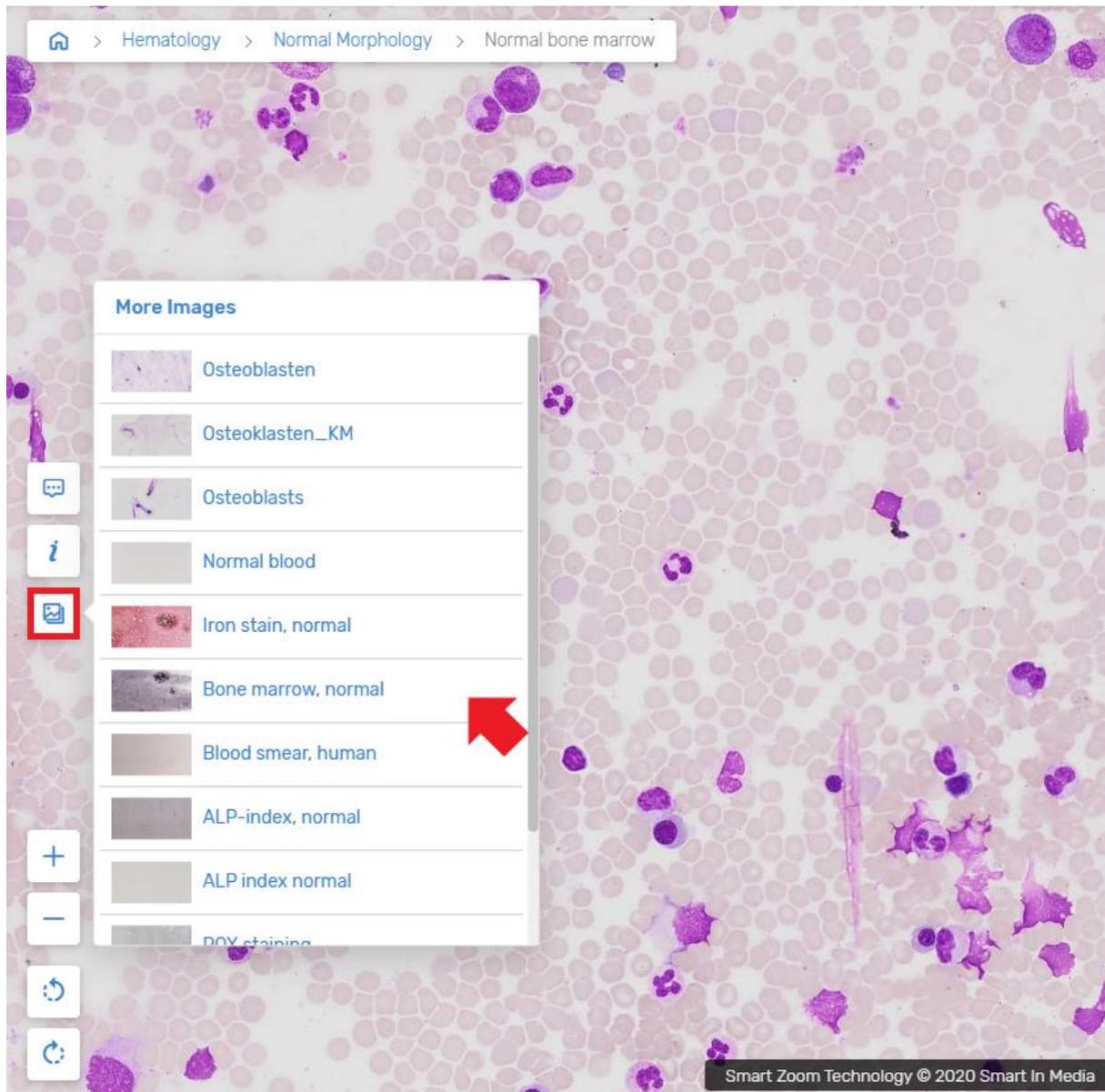
5.3. Summary

- Click on .
- We will find basic information about the image we work with.



5.4. Related Images

- Click on .



- We will be able to see images that are related to our image and are also stored in our database.

5.5. Zoom the Image

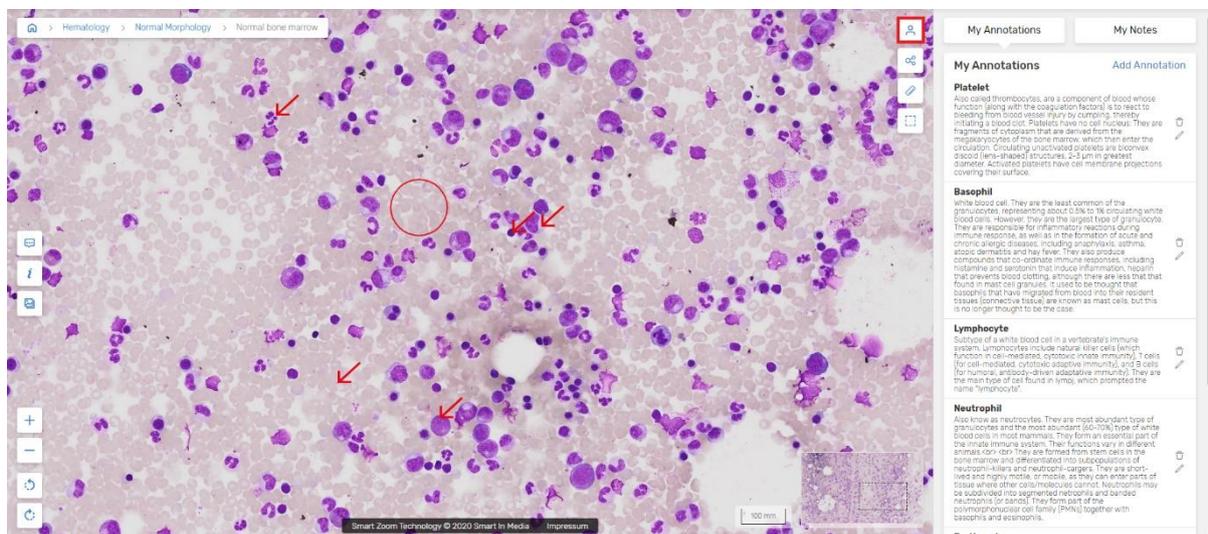
- If we click on the " + " icon we will increase the zoom and if we click on the " — " icon we will decrease it.
- We can also use the mouse wheel.

5.6. Rotate the Image

- Click on  or  to rotate the image 90 degrees to both left and right.
- Annotations will not be affected since both icons and texts will be coupled to the change.

5.7. My Annotations

- Click on  .



The screenshot displays a digital pathology viewer interface. The main window shows a histology slide of normal bone marrow with various white blood cells. Red arrows and a red circle highlight specific cells. The sidebar on the right, titled "My Annotations", lists definitions for Platelet, Basophil, Lymphocyte, and Neutrophil. The interface includes navigation controls on the left and a bottom status bar.

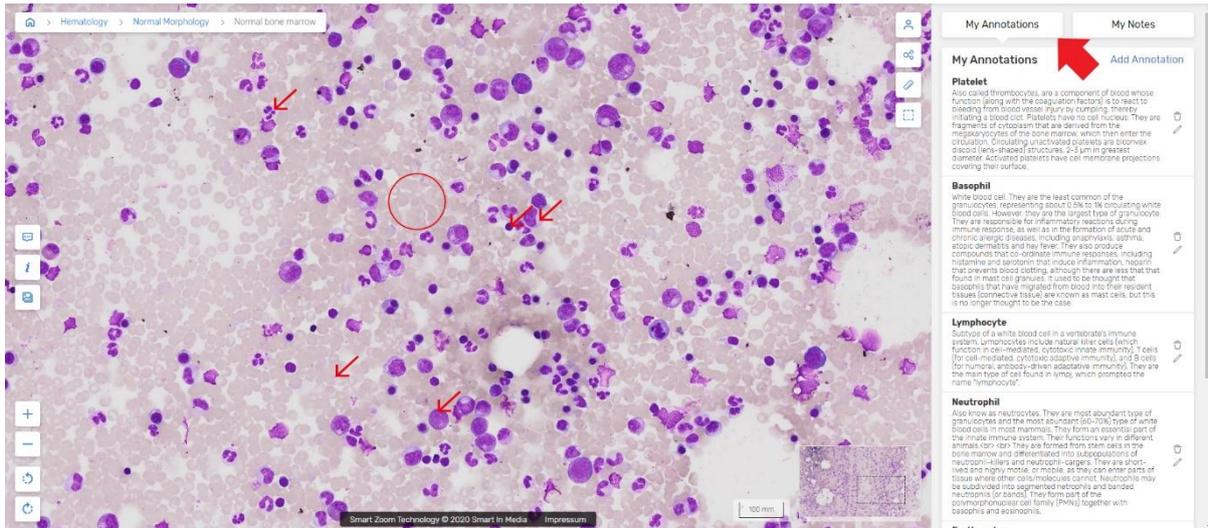
Platelet
Also called thrombocytes, are a component of blood whose function (along with the coagulation factors) is to react to bleeding from blood vessel injury by clumping, thereby initiating a blood clot. Platelets have no cell nucleus. They are fragments of cytoplasm that are derived from the megakaryocytes of the bone marrow, which then enter the circulation. Circulating unactivated platelets are biconcave disc (lens-shaped) structures, 2-3 µm in greatest diameter. Activated platelets have cell membrane projections covering their surface.

Basophil
White blood cell. They are the least common of the granulocytes, representing about 0.5% to 1% circulating white blood cells. However, they are the largest type of granulocyte. They are responsible for inflammatory reactions during immune responses, as well as in the formation of acute and chronic allergic diseases, including anaphylaxis, asthma, atopic dermatitis and hay fever. They also produce compounds that co-ordinate immune responses, including histamine and serotonin that induce inflammation, heparin that prevents blood clotting, although there are less that that found in mast cell granules. It used to be thought that basophils that have migrated from blood into their resident tissues (connective tissue are known as mast cells, but this is no longer thought to be the case).

Lymphocyte
Subtype of a white blood cell in a vertebrate's immune system. Lymphocytes include natural killer cells (perform function in cell-mediated, cytotoxic innate immunity), T cells (for cell-mediated, cytotoxic adaptive immunity), and B cells (for humoral, antibody-driven adaptive immunity). They are the main type of cell found in lymph, which gives them the name "lymphocytes".

Neutrophil
Also known as neutrocytes. They are most abundant type of granulocytes and the most abundant (40-70%) type of white blood cells in most mammals. They form an essential part of the innate immune system. Their function varies in different animals, from killing. They are formed from stem cells in the bone marrow and differentiated into subpopulations of neutrophil-killers and neutrophil-carriers. They are short-lived and highly motile, or mobile, and they can enter parts of tissue where other cells/molecules cannot. Neutrophils may be subdivided into segmented neutrophils and banded neutrophils (or bands). They form part of the polymorphonuclear cell family (PMNs) together with basophils and eosinophils.

- Click on "My Annotations".



- Here we can work with the notes we have written before.

5.7.1. Delete an Annotation

- Click on the "trash" icon to the right of the annotation.

Lymphocyte

Subtype of a white blood cell in a vertebrate's immune system. Lymphocytes include natural killer cells (which function in cell-mediated, cytotoxic innate immunity), T cells (for cell-mediated, cytotoxic adaptive immunity), and B cells (for humoral, antibody-driven adaptive immunity). They are



- An information window will appear.
- Click on "OK".

demo.smartzoom.com says

Are you sure you want to delete this Annotation?



5.7.2. Edit an Annotation

- Click on the "pencil" icon to the right of the annotation.

Lymphocyte

Subtype of a white blood cell in a vertebrate's immune system. Lymphocytes include natural killer cells (which function in cell-mediated, cytotoxic innate immunity), T cells (for cell-mediated, cytotoxic adaptive immunity), and B cells (for humoral, antibody-driven adaptive immunity). They are



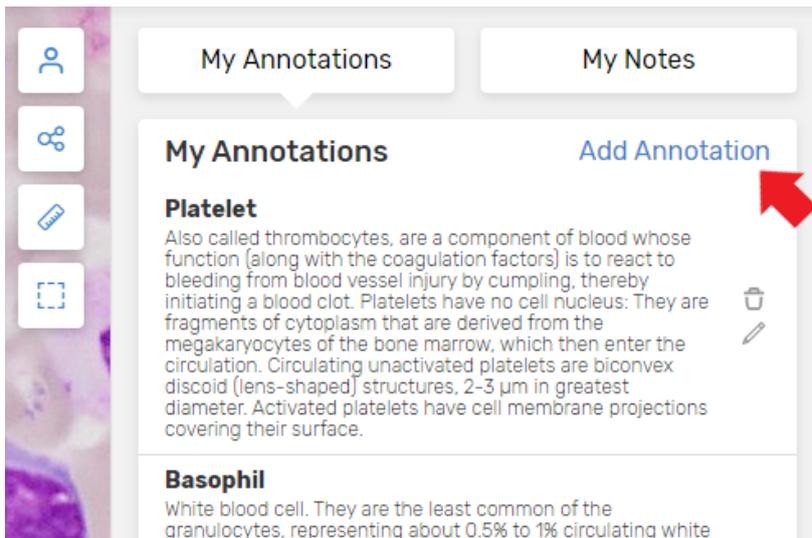
- We will be redirected to the annotation and we can edit it.

5.7.3. Add New Entry

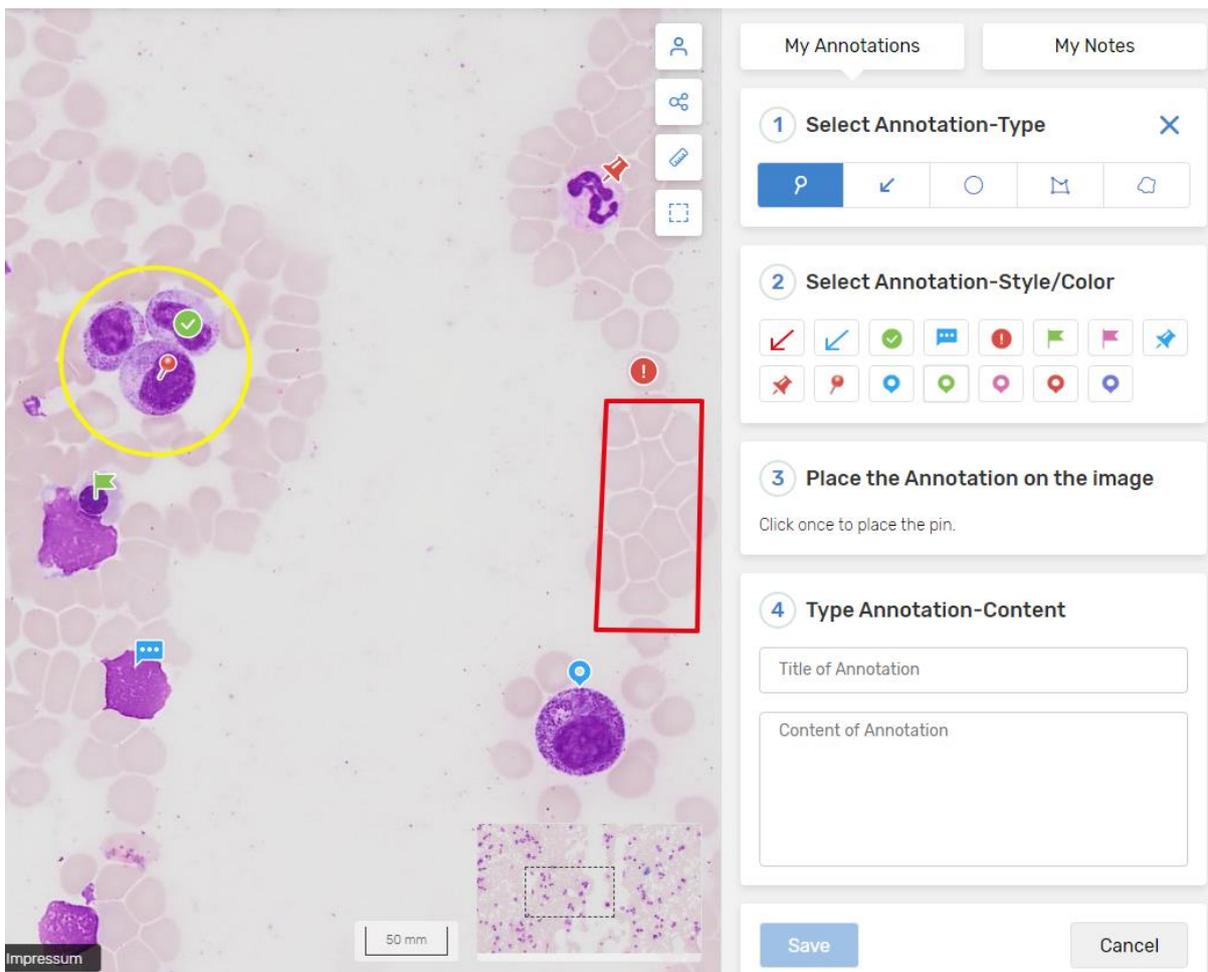
- Click on  .

Smart Zoom Technology © 2020 Smart in Media Impressum 100 µm

- Click on „My Annotations“.
- Click on „Add Annotation“.



- We select the type, style and the colour of the annotation: alert, arrows, areas...
- We place the annotation in our image.
- We write a title and the content of our annotation.



- An information window will appear.
- Click on "OK".

demo.smartzoom.com says

Done! Annotation has been saved



5.8. My Notes

5.8.1. Add a New Note

- Click on .
- Click on „My Notes“.
- Write down the information.
- Click on the blue "Add Note" icon.

- At the bottom of each note we see the date it was written.

Remember to compare the normal bone marrow with a pathological bone marrow.

January 15, 2020

[Edit](#) [Delete](#)

5.8.2. Delete a Note

- Click on "Delete", at the bottom of the page of the note.

Remember to compare the normal bone marrow with a pathological bone marrow.

January 15, 2020

[Edit](#) [Delete](#)

- A notification will appear.
- Click on "OK".

demo.smartzoom.com says

Are you sure you want to delete this note?



5.8.3. Edit a Note

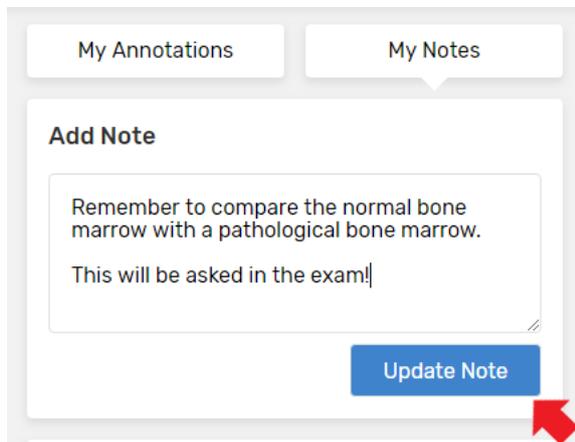
- Click on "Edit", at the bottom of the page of the note to be edited.

Remember to compare the normal bone marrow with a pathological bone marrow.

January 15, 2020

[Edit](#) [Delete](#)

- Edit the text.
- Click on “Update Note”.



- An information window will appear.
- Click on “OK”.

demo.smartzoom.com says

Note updated!



5.9. Share Image

- Click on .
- An information window will appear.
- Click on “Share whole Slide” or “Share current View”.

Share Image



Please select a sharing-mode: Share the slide with your current position & magnification or the whole slide.

Share whole Slide

Share current View

- A link and a code will appear, which we can share with our colleagues.

Share Image



<http://demo.smartzoom.com/share/f2151863eb8182637a071eb5c>

5.10. Measurement Tools

- These tools can be used if the scale is previously calibrated by the uploader.

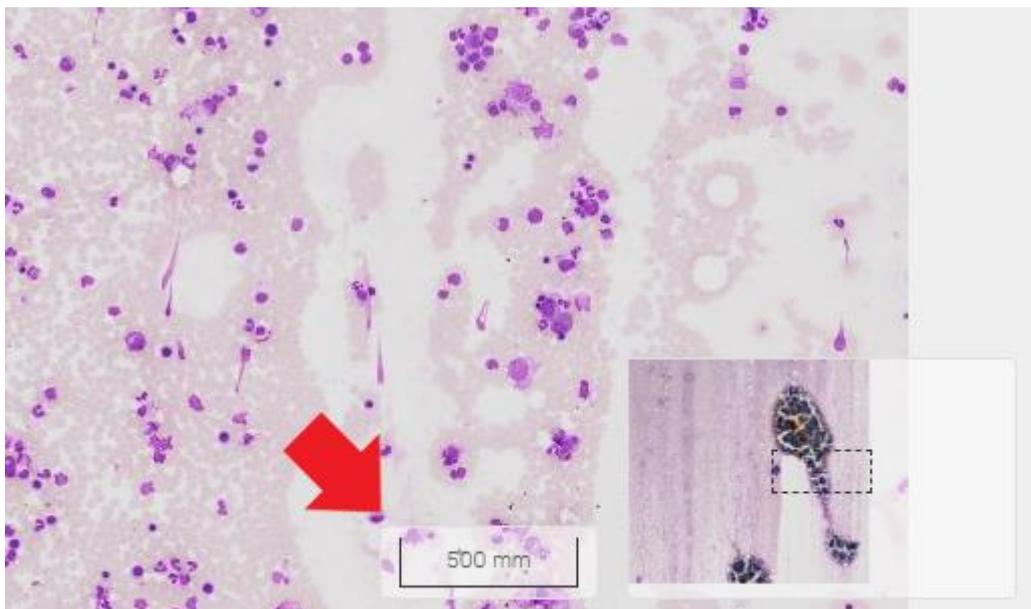
5.10.1.Distances

- Click on .
- To measure distances, we must click on both points of the measurement, that is, click on a point A and again click on another point B.

5.10.2.Areas

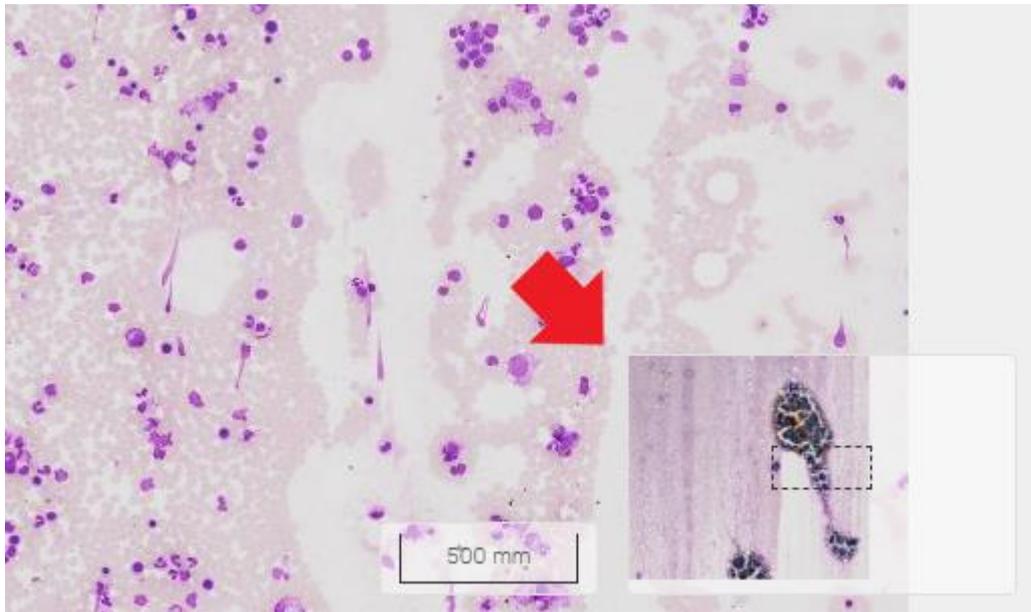
- Click on .
- To measure areas we click on each of the points that delimit our area. Double click to end the measurement.

5.11. Scale



- You need to calibrate it to use the measuring tools.
- It indicates the measurement of the structures of our slide and it adapts when we use the zoom tool.

5.12. Guide Window



- A small window that tells us in which area of our slide we are at any given time.