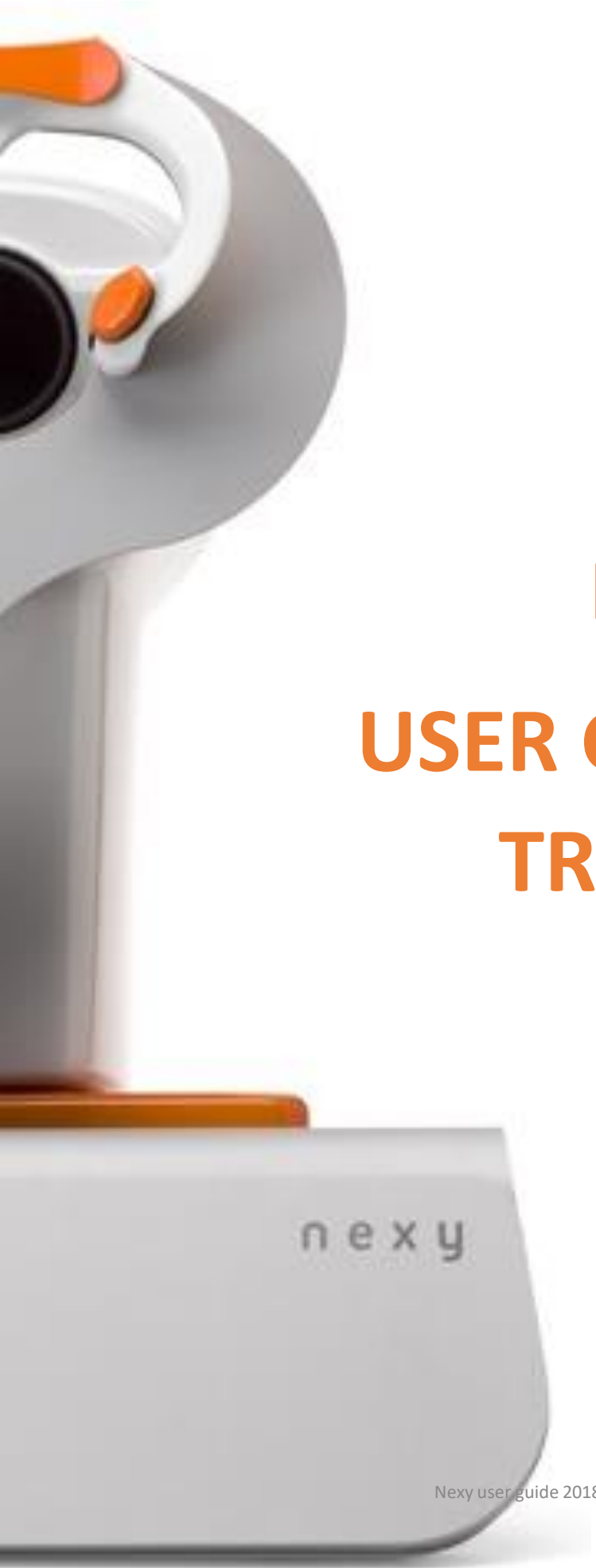
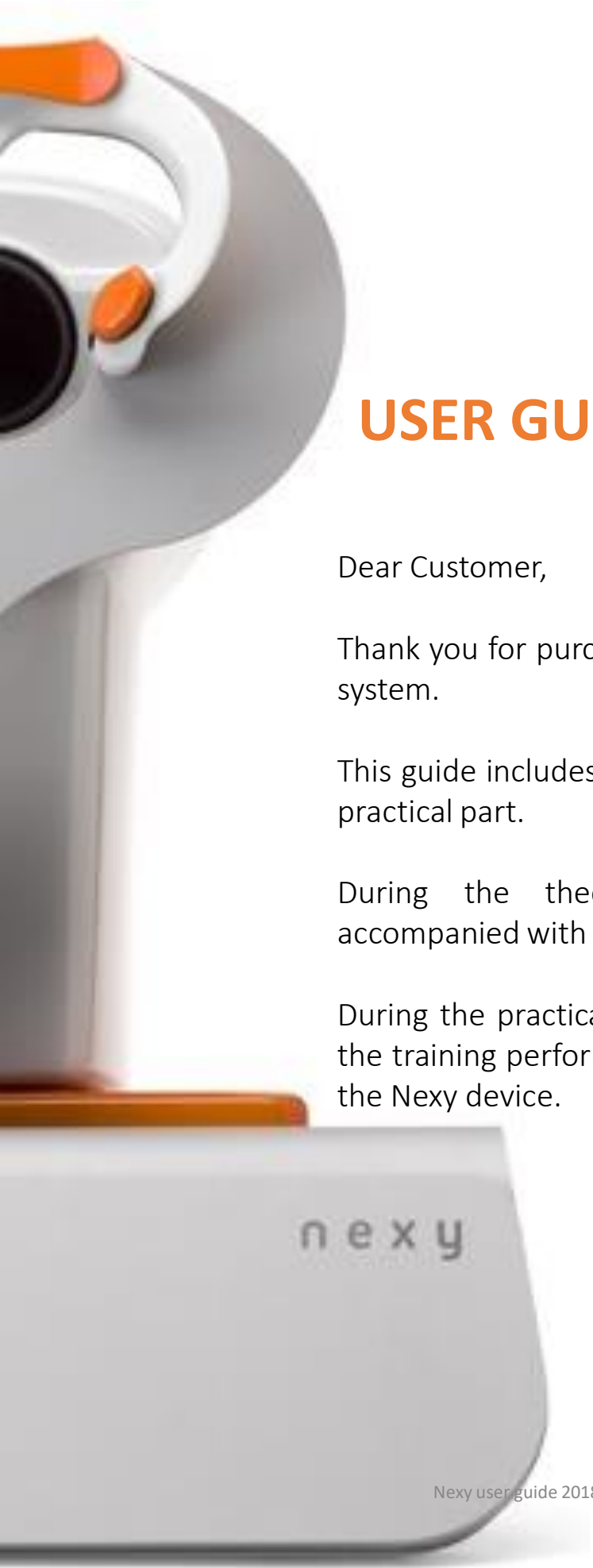


NEXY

USER GUIDE AND TRAINING



NEXY

USER GUIDE AND TRAINING

Dear Customer,

Thank you for purchasing Nexy robotic retinal imaging system.

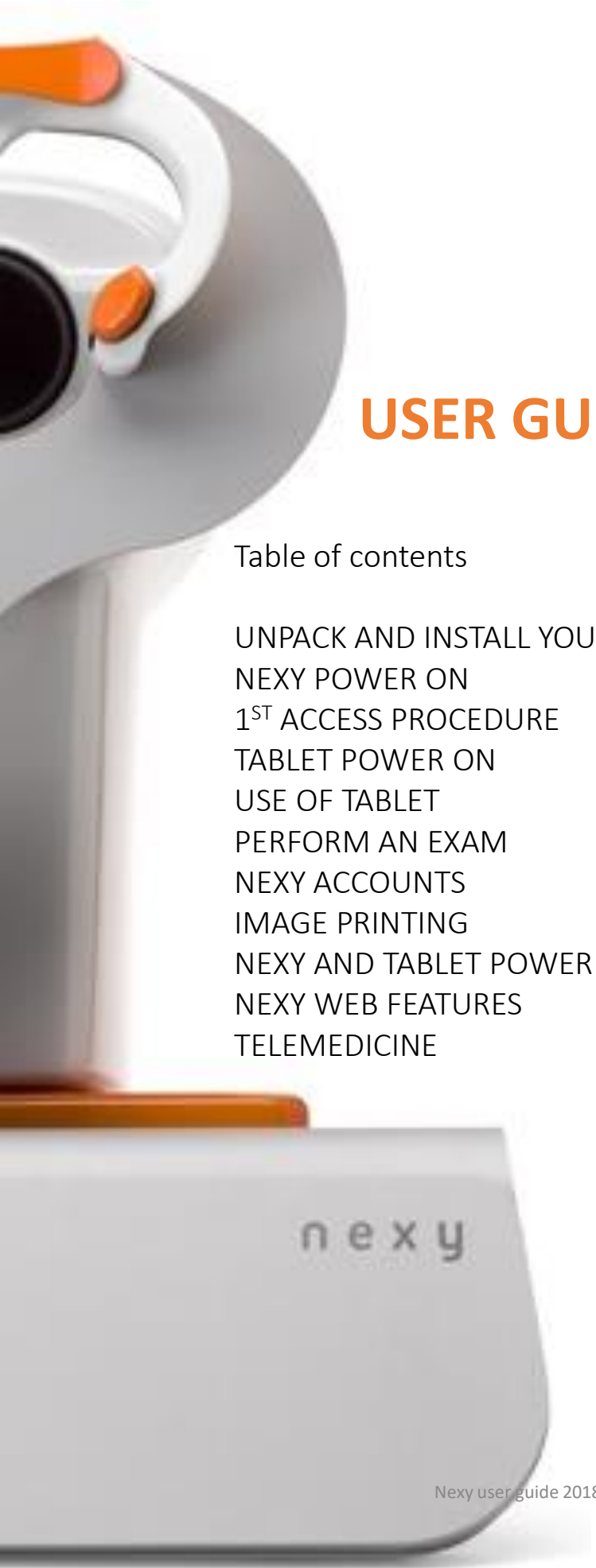
This guide includes a theoretical section followed by a practical part.

During the theoretical part, explanations are accompanied with illustrations.

During the practical part the subject who underwent the training performs the operations of normal use of the Nexy device.

Now, let's start!

Next Sight Team



NEXY

USER GUIDE AND TRAINING

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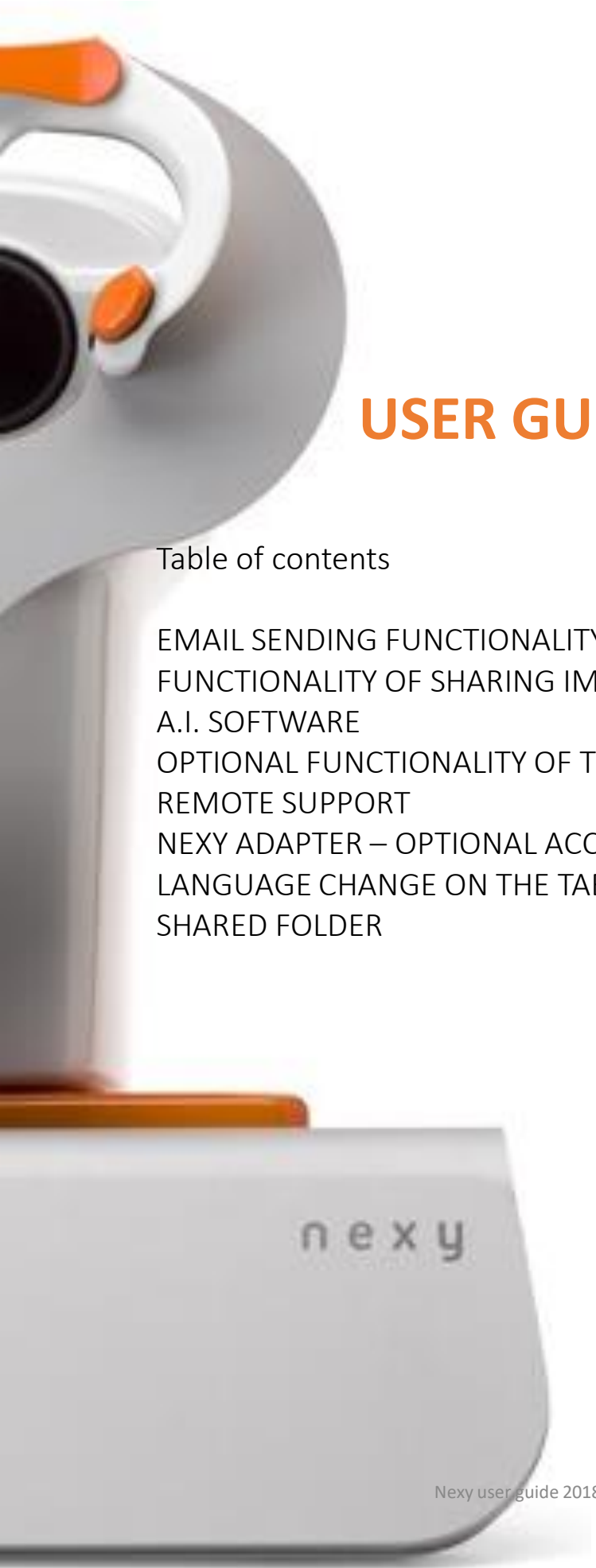

NEXY

USER GUIDE AND TRAINING

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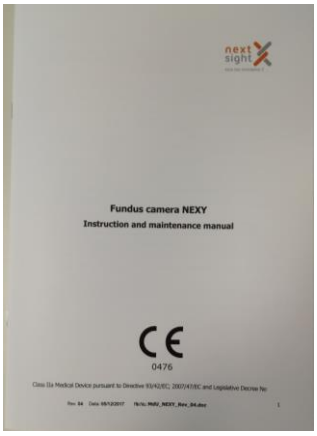
UNPACK AND INSTALL YOUR NEXY

This is how the Nexy and all the components are packed

Nexy + AC/DC adaptor

User Manual



Tablet

PLEASE FOLLOW STEP BY STEP THE PROCEDURE HEREAFTER:

1. Open the box

2. Remove the Tablet box and Accessories box

3. Remove the 1st center upper foam

4. Device in the right position

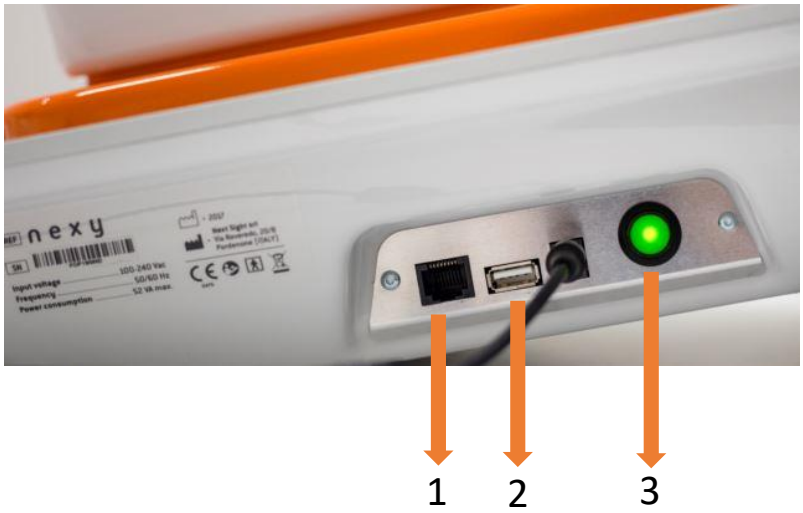
5. Hold the device at its base and pull it up carefully

6. Keep the box and all foam parts in a safe and dry place

7. Please make sure all material and components are on flat surface

NEXY POWER ON

Insert the power supply into the wall socket and switch the Nexy on by pushing for 3 seconds the on/off green button located on the side



1. Ethernet socket
2. USB socket
3. Power ON/OFF button

1. The ethernet socket is used only in case of technical assistance from Next Sight personnel.
2. The USB socket next to the power button Ethernet socket is used to charge the tablet.

3. After 30 seconds from switching on, Nexy's head will move automatically.
4. This signal indicates that the machine is ready.

Remove the cap from the Nexy front lens. Make sure the lens is free of dust. Do not touch the lens with your fingers. If cleaning is needed, please use “Berkshire Bluesorb® 750 cloth moistened with 95% neutral pure ethyl alcohol.

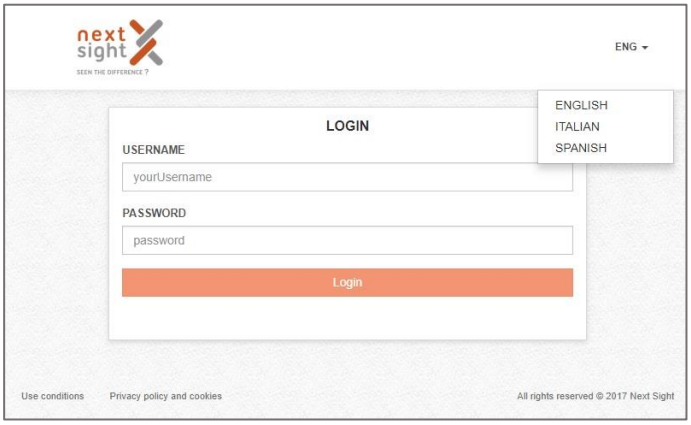
1st ACCESS PROCEDURE

Before delivering the Nexy, Next Sight provides to the Customer the credentials to use for the 1st access. Credentials are:

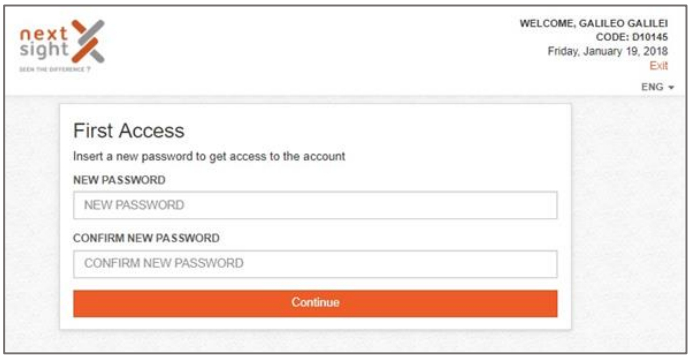
- Username: generated automatically by Next Sight
- Temporary Password: password

IMPORTANT
The USER must run the 1st access on the Reserved Ares of Next Sight website - https://web.nextsight.info/#/login

During the 1st access the user is required to create their own password

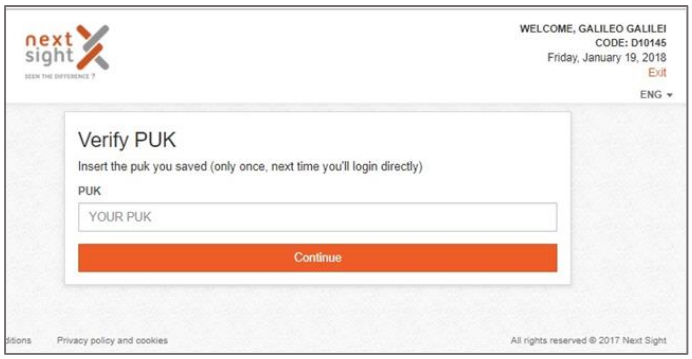


Insert the username and the temporary password



Create your own password

A PUK is automatically generated – Please save the PUK in a safe place.



Insert the PUK

Now the procedure is done, you can enter with your credential directly from the Tablet.

IMPORTANT
For the 1st time access the Tablet must be connected to internet.

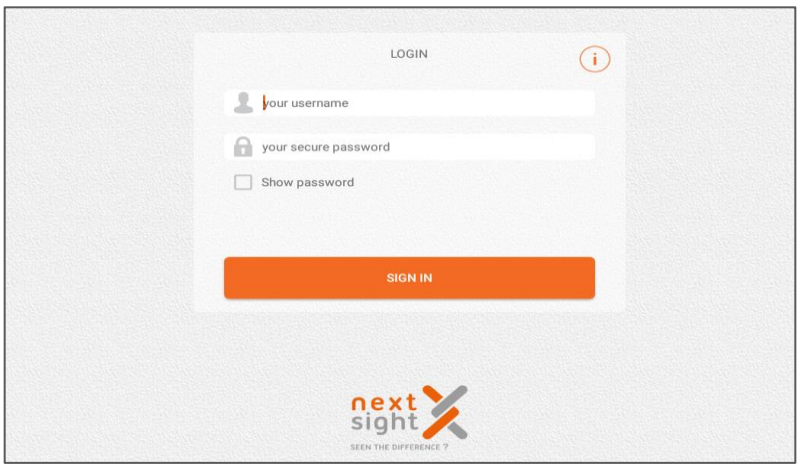
TABLET POWER ON

Remove the tablet from the packaging and press on the circular button on the left

Charger and micro USB cable.

After switching on, a screen like this will appear.

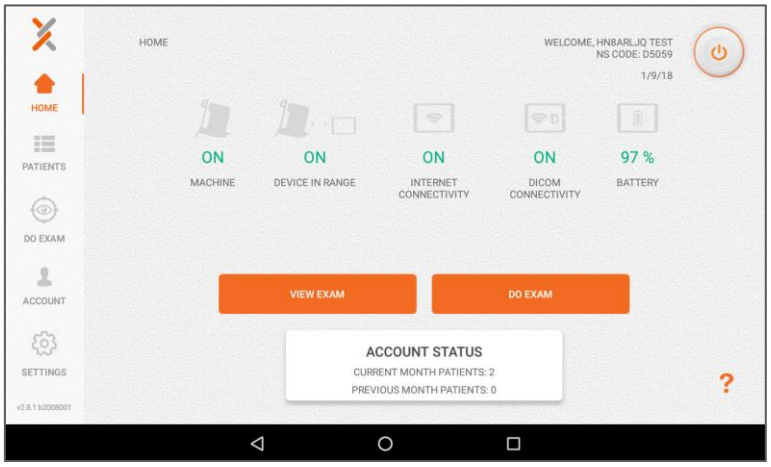
Click on the orange NEXY icon and enter the login and password assigned to you in on the screen below:



USE OF THE TABLET

HOME SCREEN

After entering with your login and password the home screen will appear:

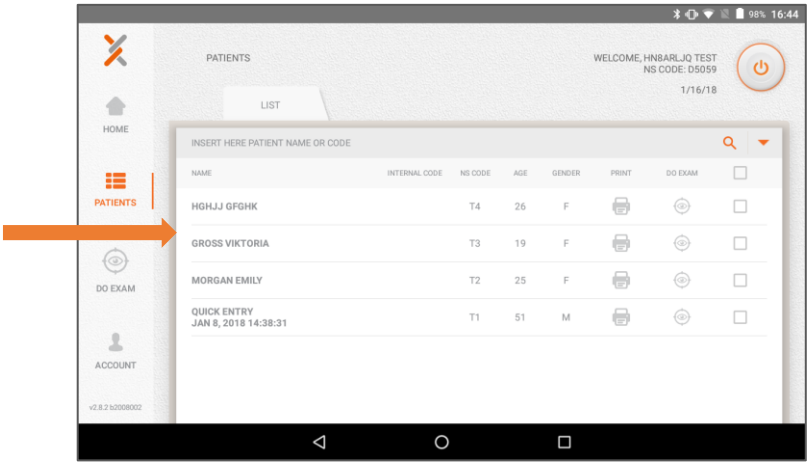


- MACHINE: indicates if the Nexy is on or off.
- DEVICE IN RANGE: indicates if the Bluetooth communication between tablet and device is active (if OFF, enable the Tablet's Bluetooth communication and / or bring the tablet closer to the device).
- INTERNET CONNECTIVITY: indicates the status of the tablet WI-FI.
- DICOM CONNECTIVITY: indicates if there is a connection to a DICOM server.
- BATTERY: indicates the charge status of the tablet battery.

CONFIGURE PATIENT DATA

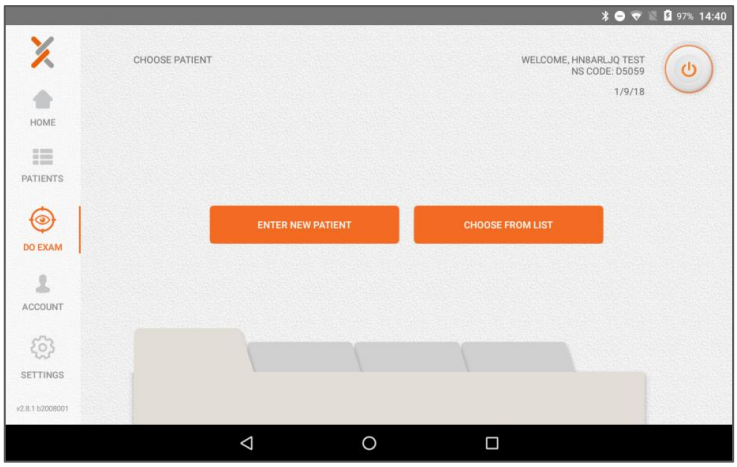
A. IF REGISTERED PATIENT

Search on Patients list



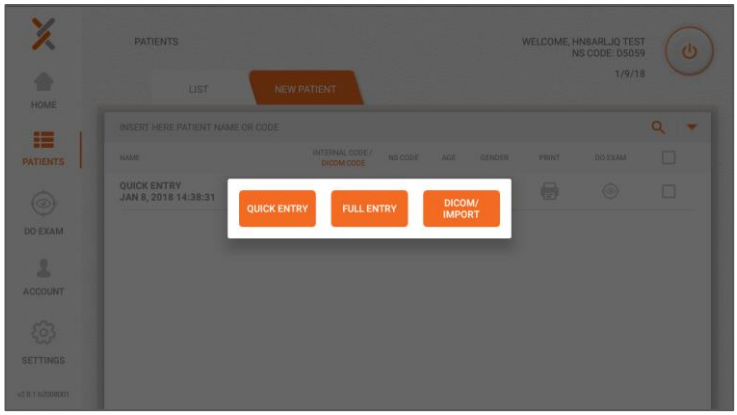
B. IF NEW PATIENT

- To enter the patient's information click on DO EXAM.
- From here select and click on ENTER NEW PATIENT

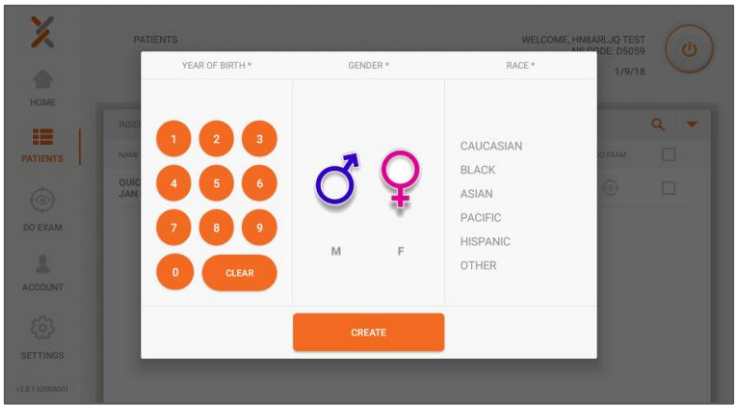


Quick Entry Procedure

- Choose: Quick Entry



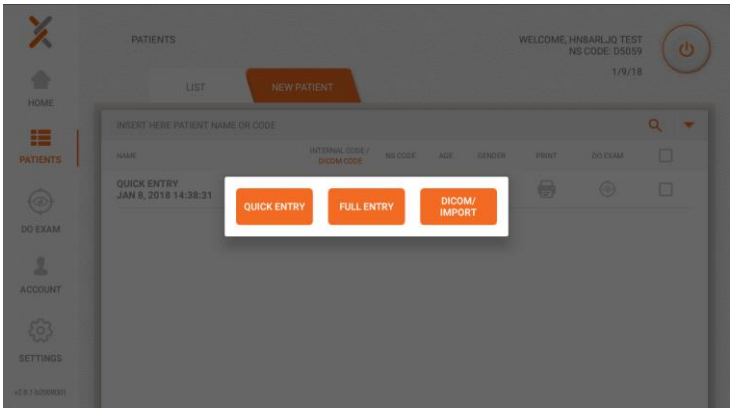
- Enter following information:
  - Year of birth
  - Sex
  - Race



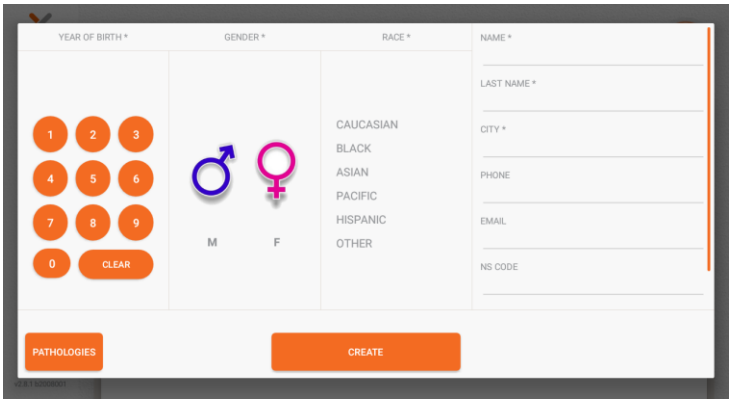
Once patient details are completed click on **CREATE**

Full Entry Procedure

- Choose: Full Entry

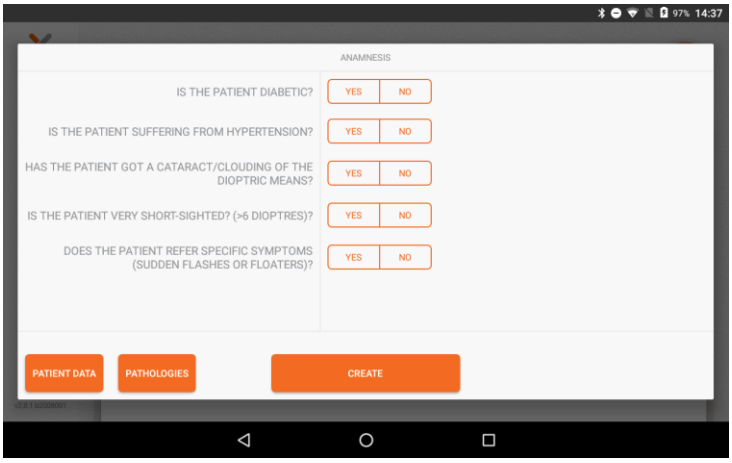


- Enter the patient's information into corresponding fields.



Once patient details are completed click on **CREATE**

- Both in quick and full entry procedure you can add Patient's anamnesis.



PERFORM AN EXAM

Before proceeding to do an exam, please ensure that patient does not have active eye disease, injury or eye abnormality affecting the cornea, conjunctiva or eyelids. Confirm not being allergic to silicone (cleats).

Please observe the following steps :

- Make sure the environment is dim or dark.
- Make sure the front lens cap has been removed
- Ensure the cleats are disinfected before eye exam. Use appropriate tissues.
- Position the patient comfortably in front of the Nexy. Adjust the table height and chair height so the patient feel at ease placing his front and his cheekbones on the orange cleats.
- For patients with small pupil, please bring them inside the dark room and wait a few minutes for the pupil to naturally become larger. With elderly it can take more time.
- Fixation: using an eye patch to cover the other eye will help with the fixation.
- Instruct the patient to position himself facing the machine by first placing the cheekbones on the orange cleats and then the forehead on the orange band. The face should rest well on both the band and the cleats. The tail of the eye should be positioned about halfway up the gray template (as indicated by the orange line in the figure below).
- Use artificial tears for patients with Dry Eye, because it is hard for them to keep the eye open for long.

HEADREST

CHEEKBONES RESTS

CORRECT POSITION OF PATIENT'S HEAD

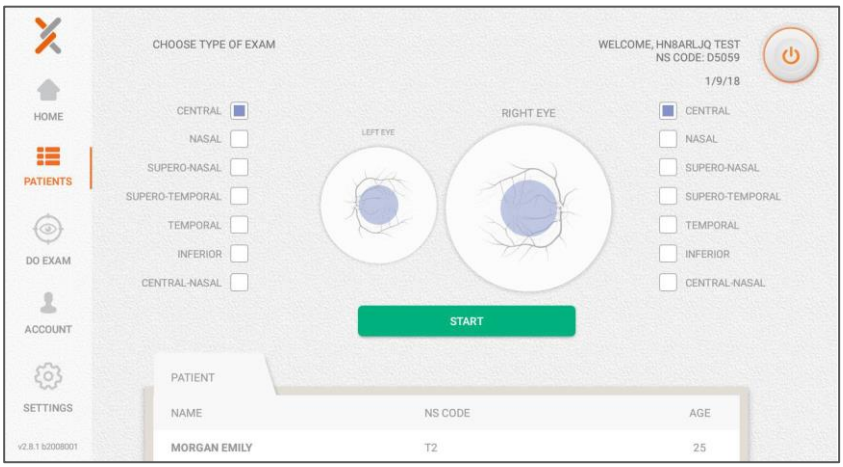
Once patient is well positioned, tell him/her that during the exam he/she has to fixate on **the green light**.

If the patient does not see it, ask the patient to stare straight ahead.
If the patient says he sees red lights (actually present in the machine) ask the same to fixate on the **green** light and not the red ones.
Ask the elderly patient to close the eye and rest between taking retinal photo of the left and right eye.
Sometimes with old patients, it) is necessary to help support or hold the head in a stable position.

Patient should fixate on **the green light and without blinking the eye.** During this process 2 red lights are flashing. The patient should not fix on red lights. It is just to calibrate the measurement. Once all parameters are ok, a single white flash will record patient's retina. After the first eye exam is finished, the exam will start on the other eye. Patient should observe the same rules.

Make sure the front lens cap has been removed.

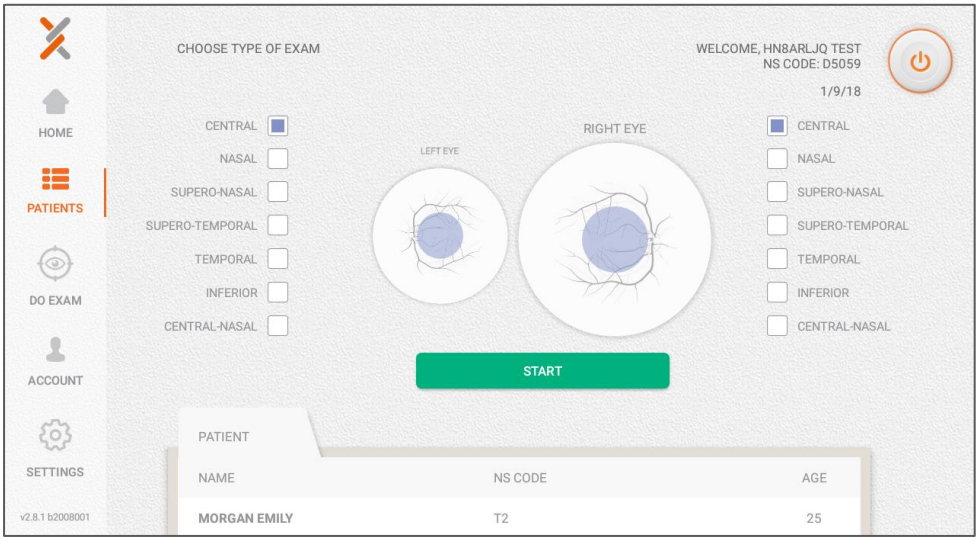
Click on START EXAM  select the eye (Left or Right) and the type of fixation desired.



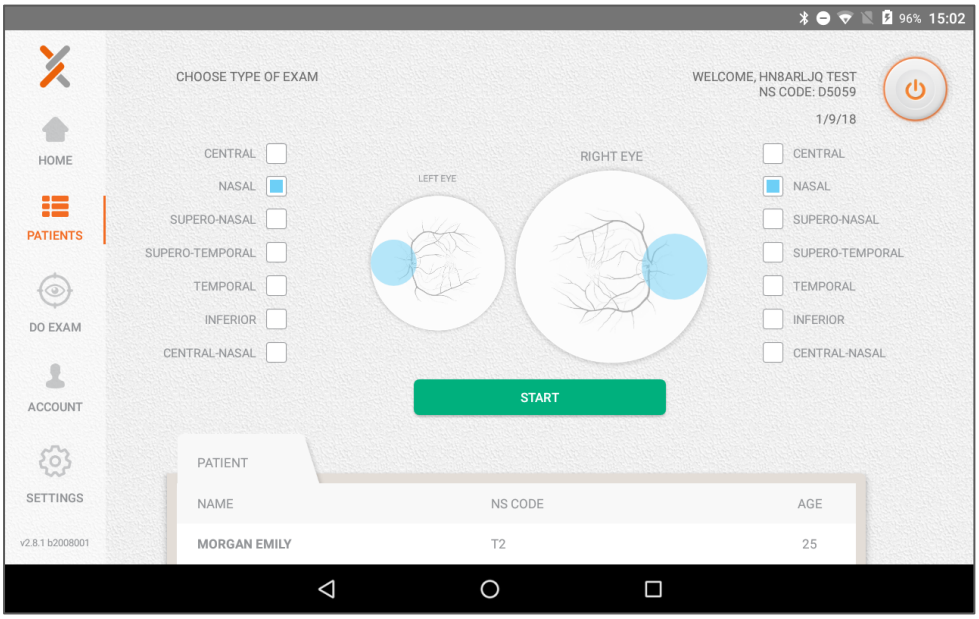
At this point a screen appears to choose the fields available.

Nota: For a better picture quality, we suggest running the exam on the right eye first, wait 1 minute to allow the patient's pupil to naturally dilate and then repeat the procedure on the left eye.
Nexy allows using 7 different fixations
The machine will move by itself.
Patient MUST keep looking straight at the green light without blinking the eye.

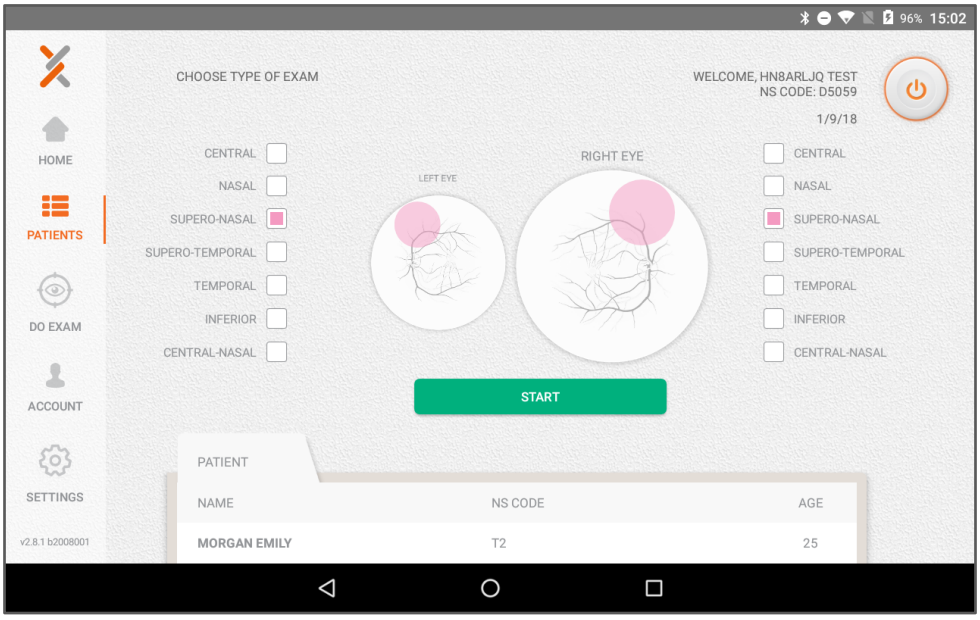
1. Select the **Central** fields for the right eye and the left eye as illustrated and click the START button



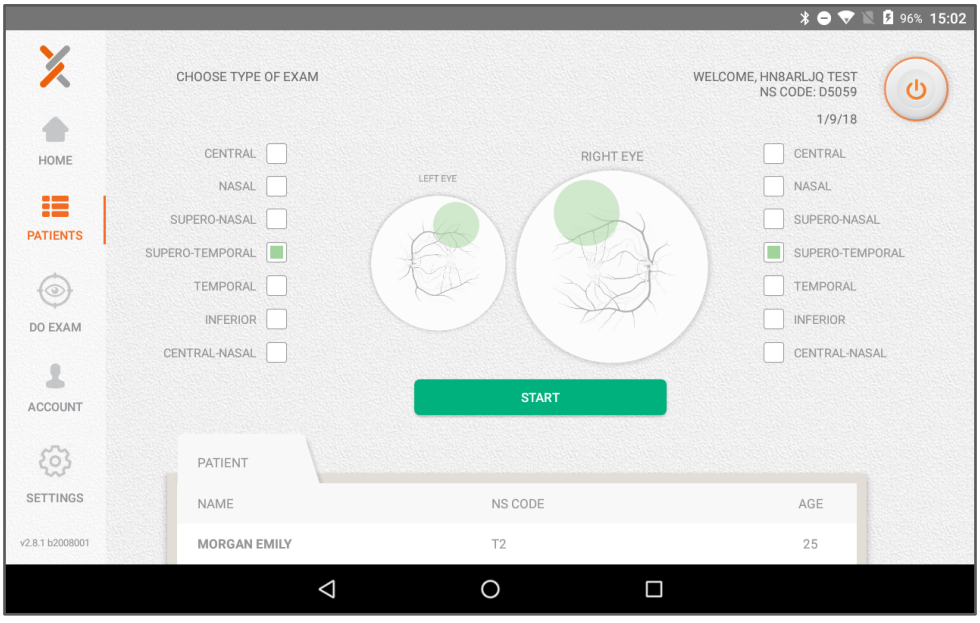
2. Select the **Nasal** fields for the right eye and the left eye as illustrated and click the START button



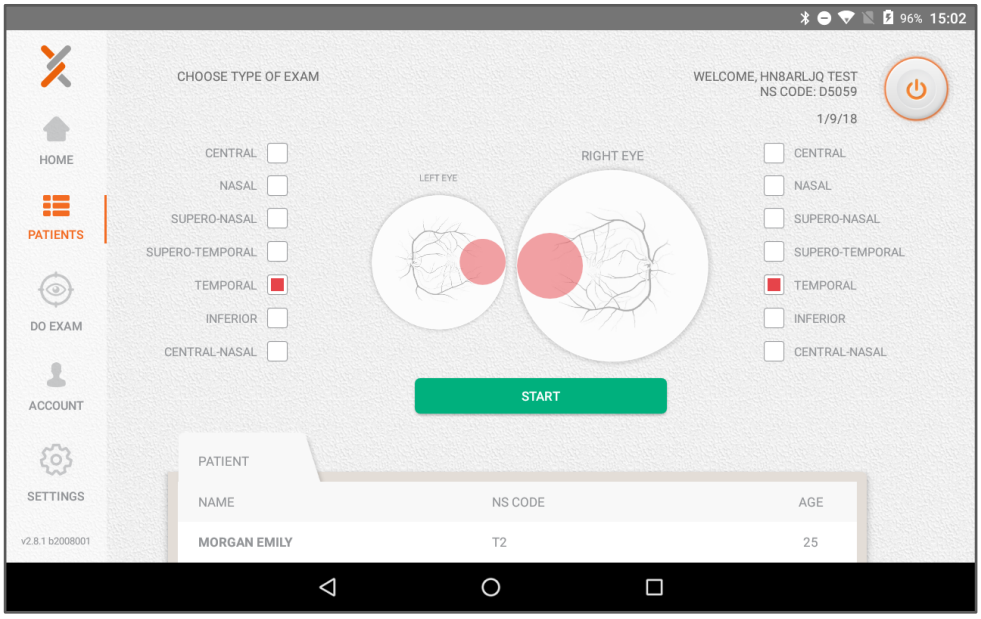
3. Select the **Superonasal** fields for the right eye and the left eye as illustrated and click the START button



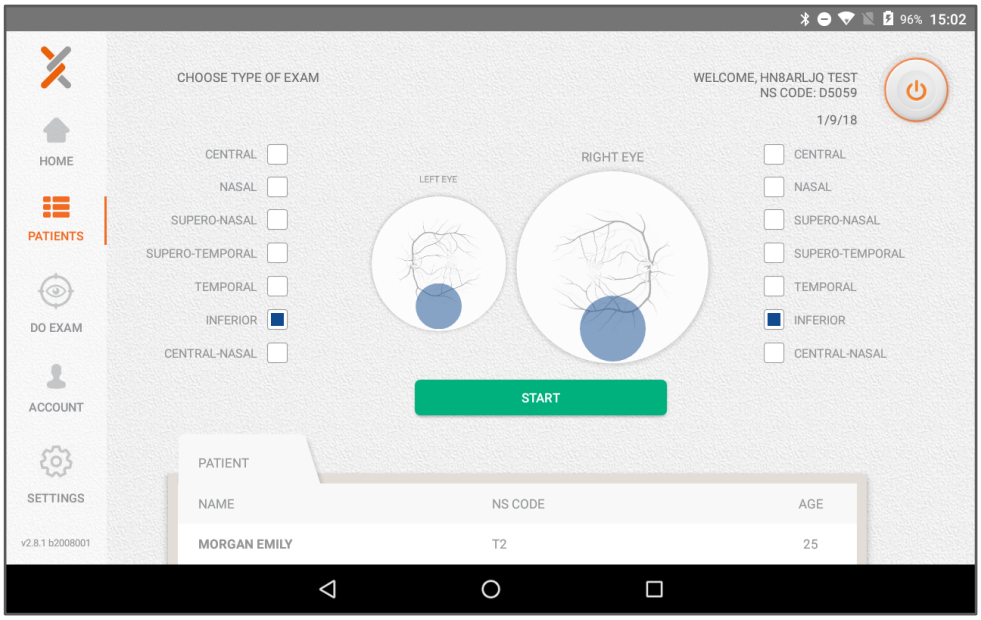
4. Select the **Superotemporal** fields for the right eye and the left eye as illustrated and click the START button



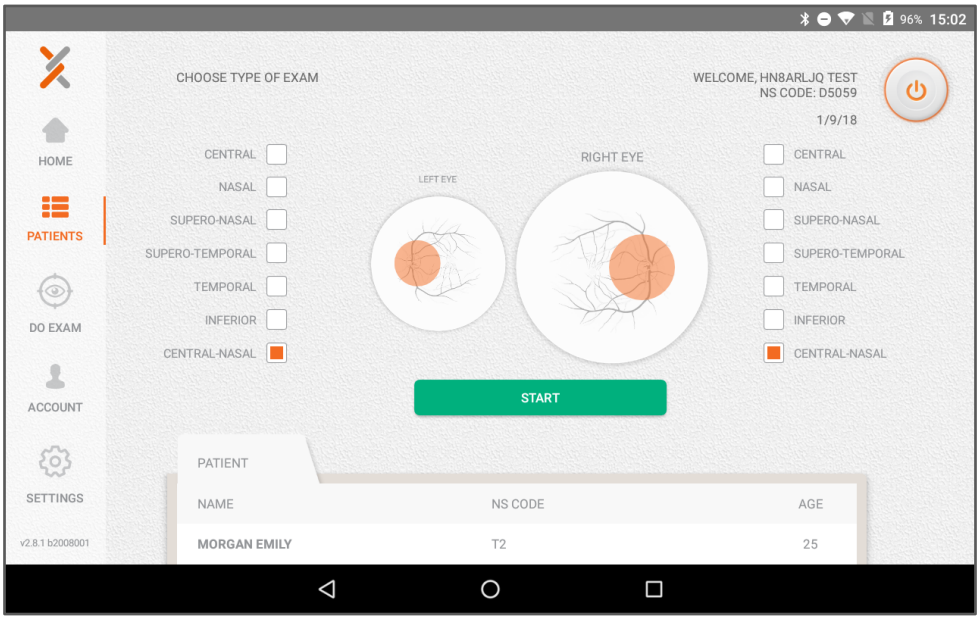
5. Select the **Temporal** fields for the right eye and the left eye as illustrated and click the START button



6. Select the **Inferior** fields for the right eye and the left eye as illustrated and click the START button



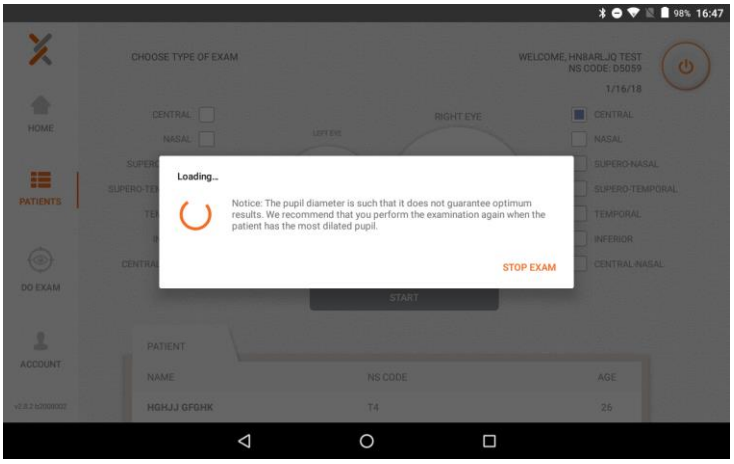
7. Select the **Central Nasal** fields for the right eye and the left eye as illustrated and click the START button



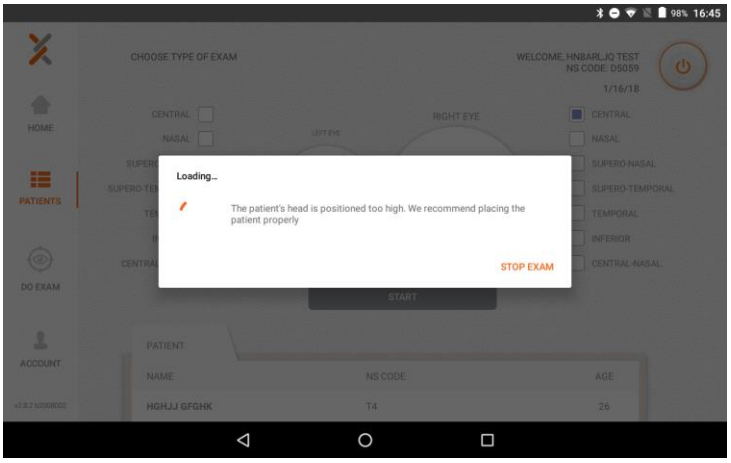
Select the **All** fields for the right eye and the left eye as illustrated and click the START button
Capture all 7 fixations is useful to have a widefield view of the retina, however the process should take a long time and each eye must be flashed 7 times.

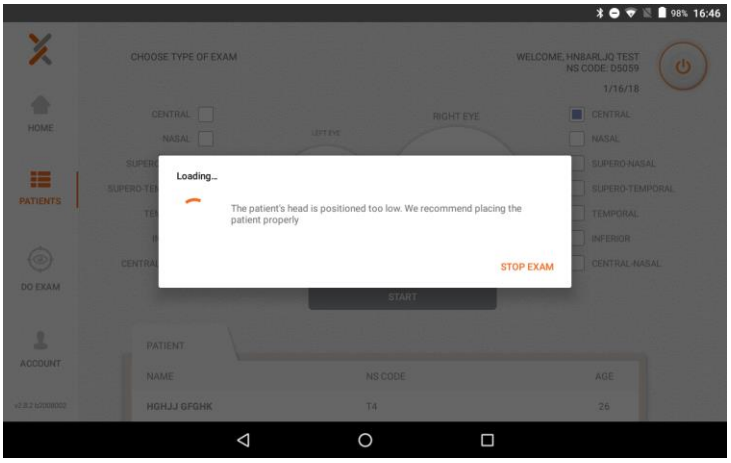
Warning messages

If the pupil diameter is too small, you'll get this message

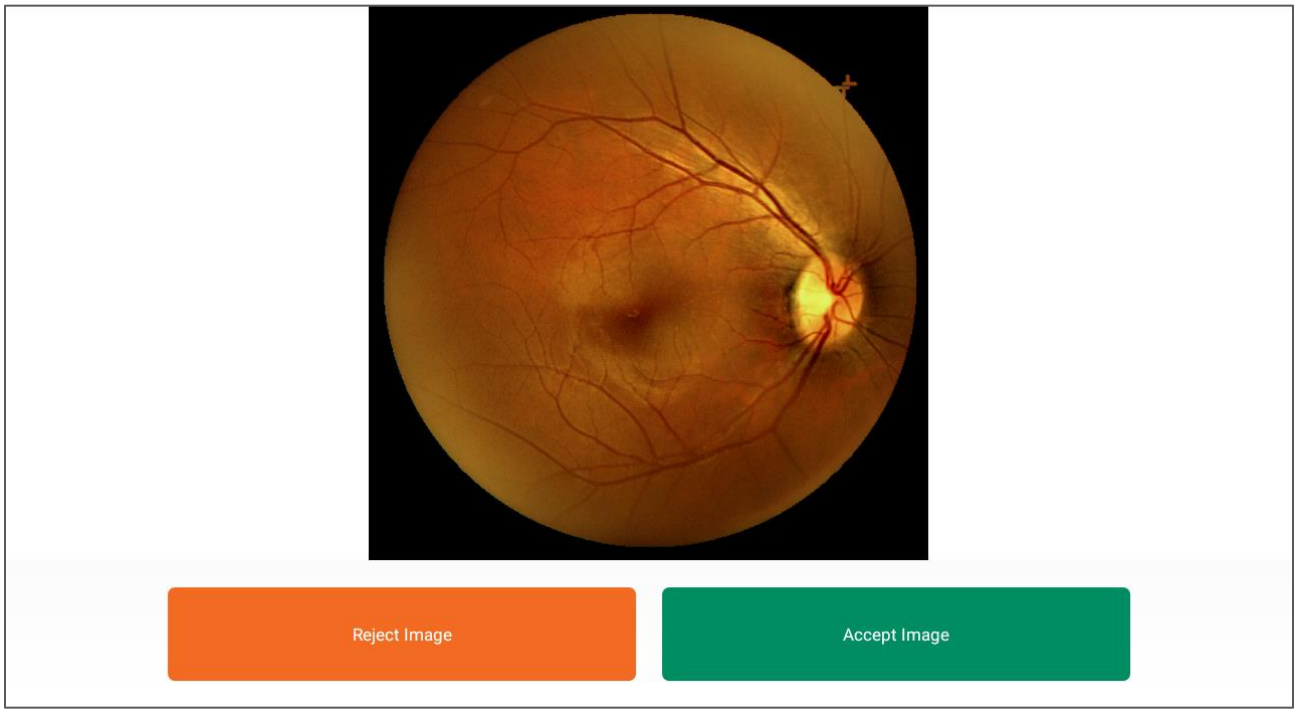


If the patient is not well positioned (too high or too low) you'll get this message

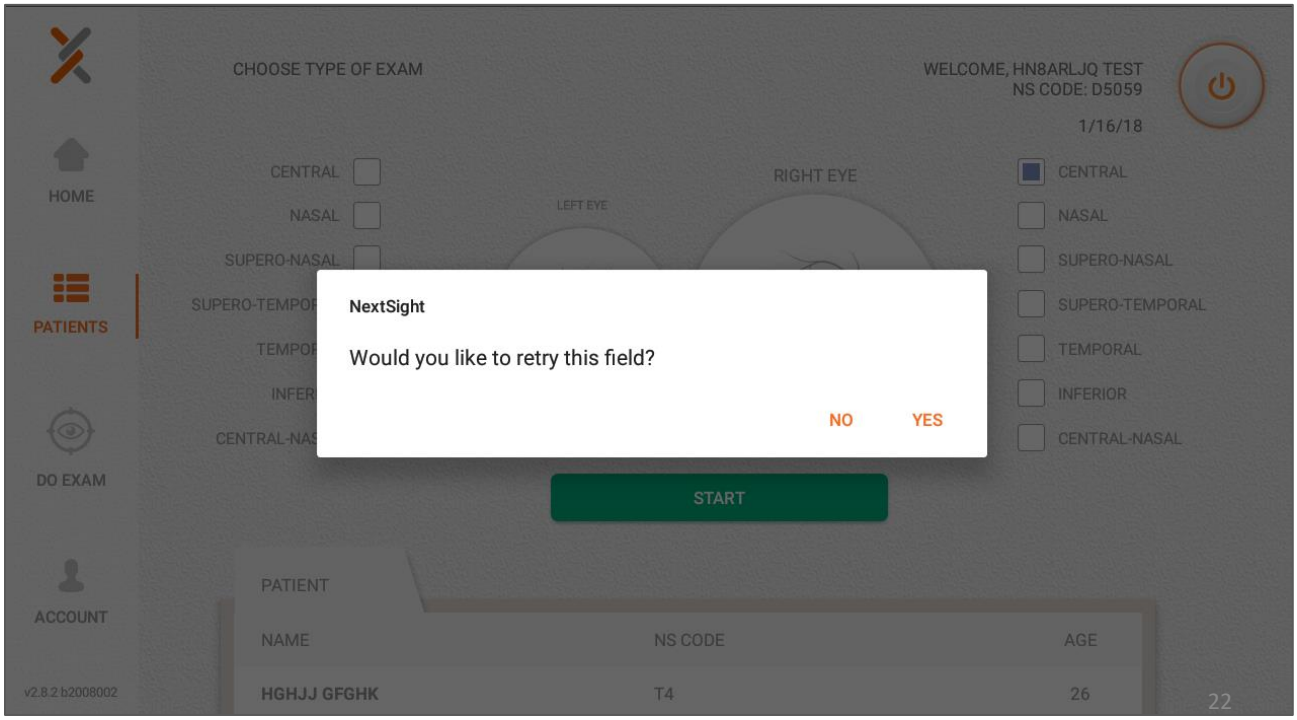




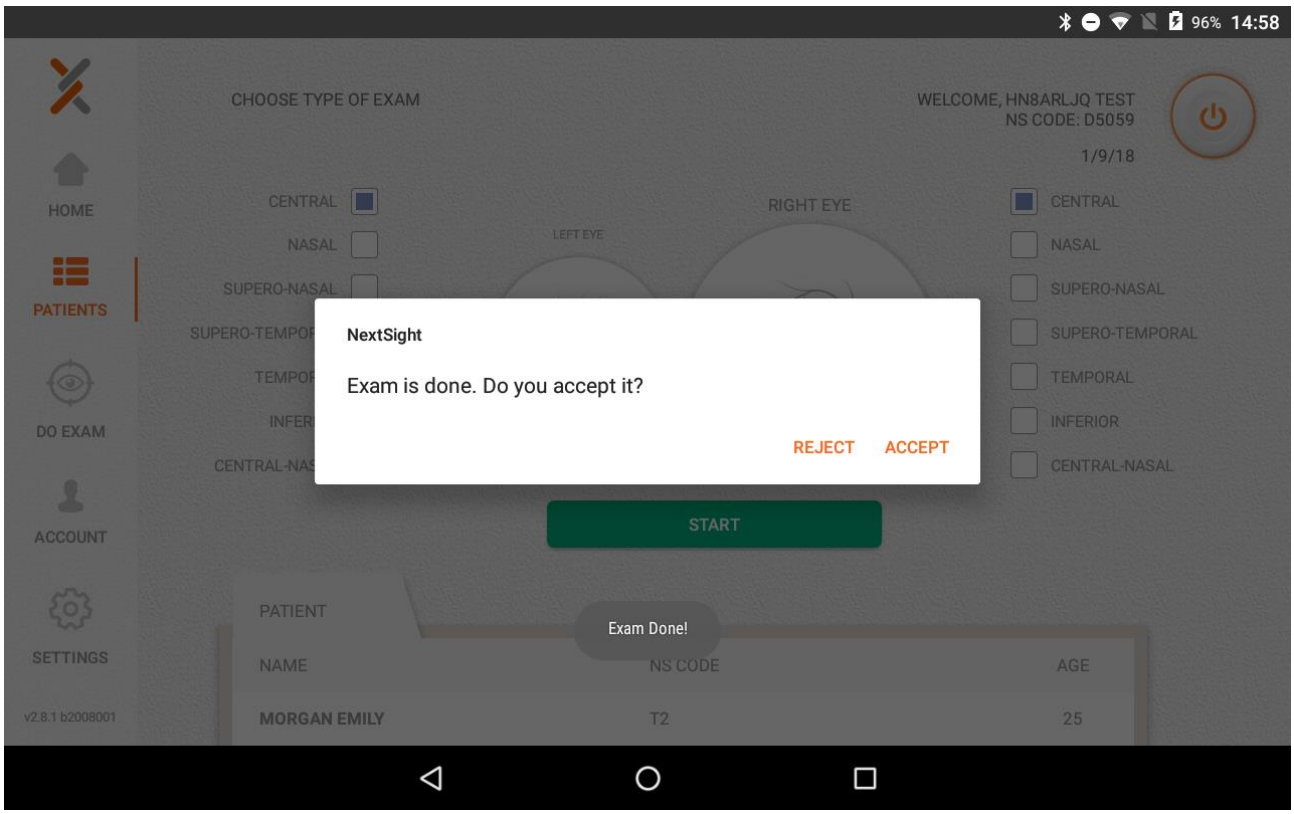
When the exam is finished (after about 20 seconds), the image of the retina will be transferred via Bluetooth to the tablet and will be shown on the tablet as in the figure below and you will be asked to confirm the image or, if you reject, you will be asked to retry the exam.



In the case of the image is rejected this screen will appear



In case the image is accepted, this screen will appear

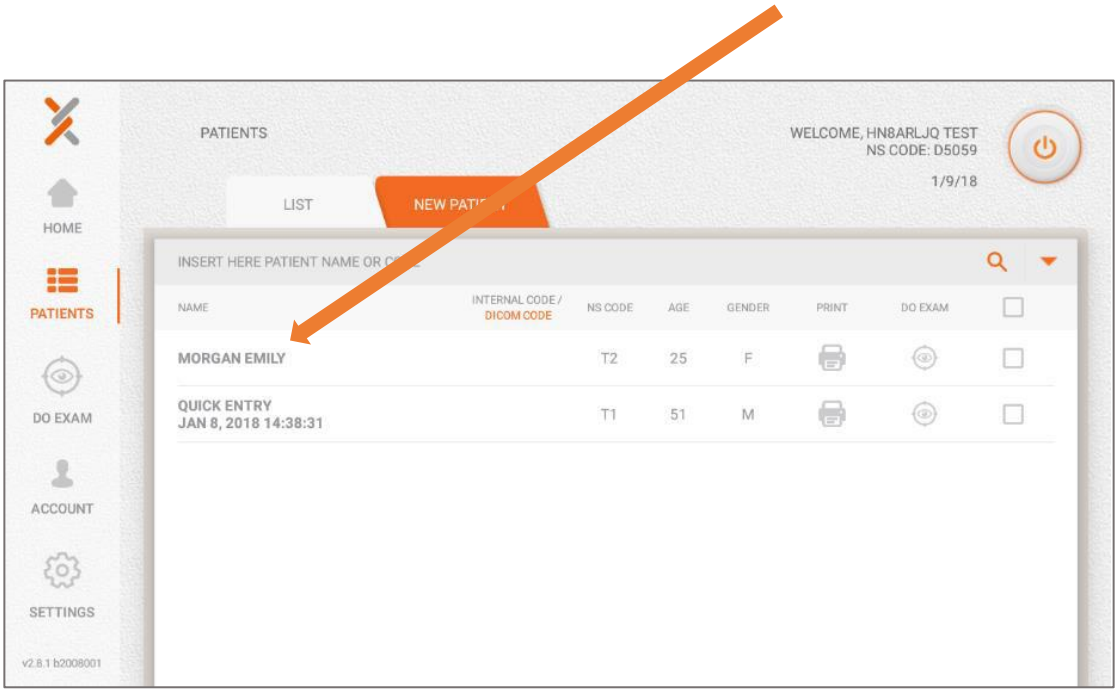


You can proceed to acquire the next eye. The procedure will be the same.

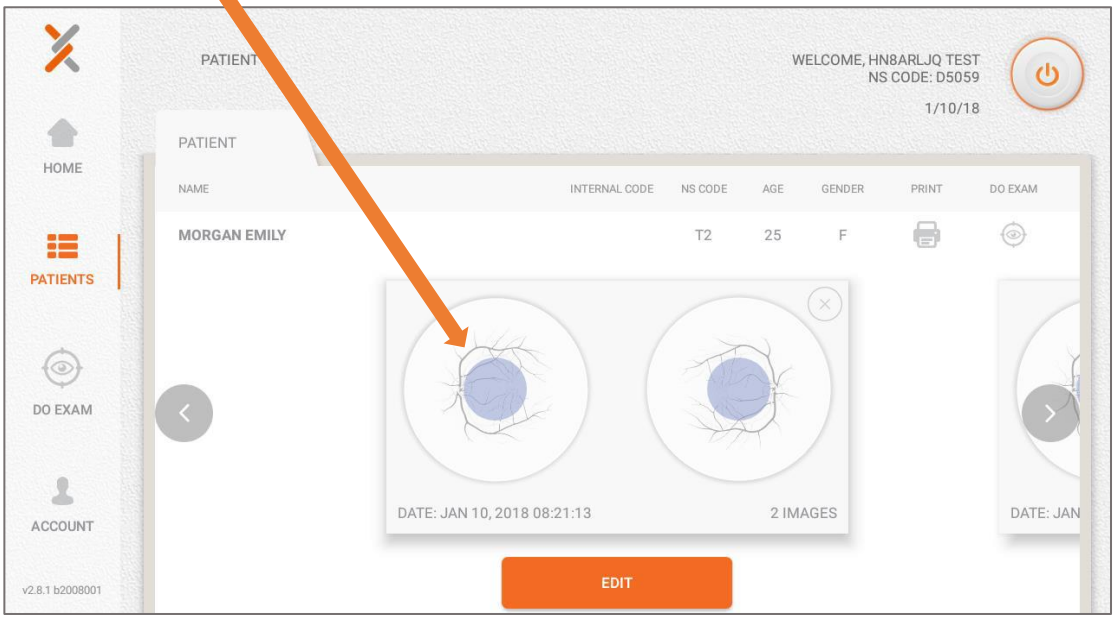
Extract data analysis

•If you want to consult the data of patient already checked please proceed in the following way:

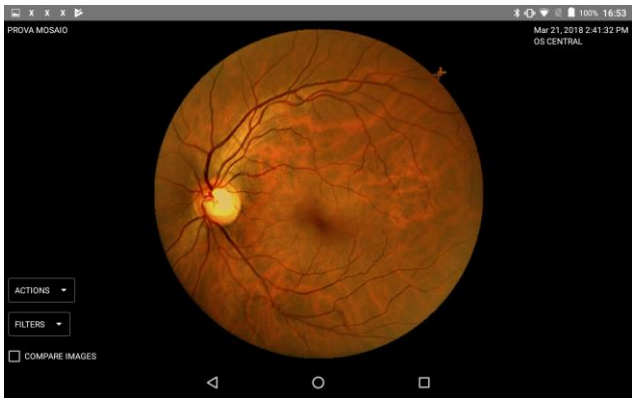
Search the patient's name in patients' list and click on it



Choose the images you want to consult

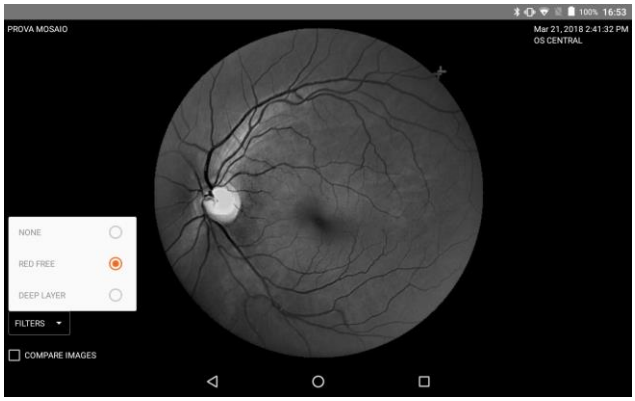


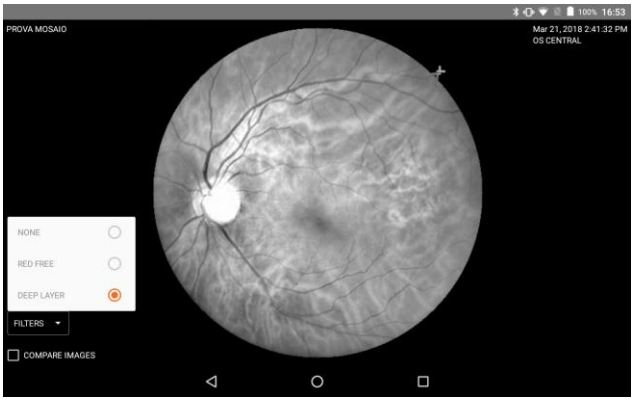
The image or images will appear on the screen



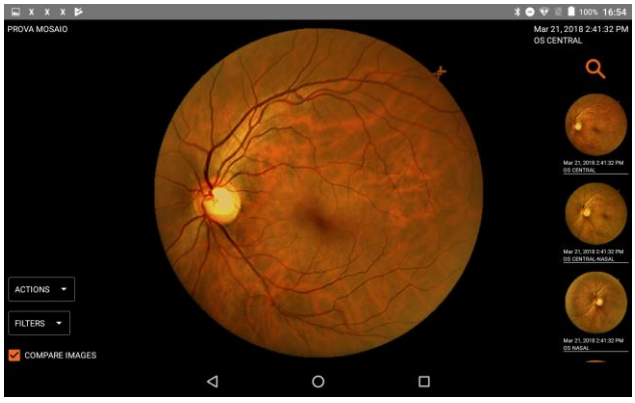
You can see in full screen mode each retina of each fixation selected for the visit and use the zoom in and zoom out gestures to better analyze the retina.

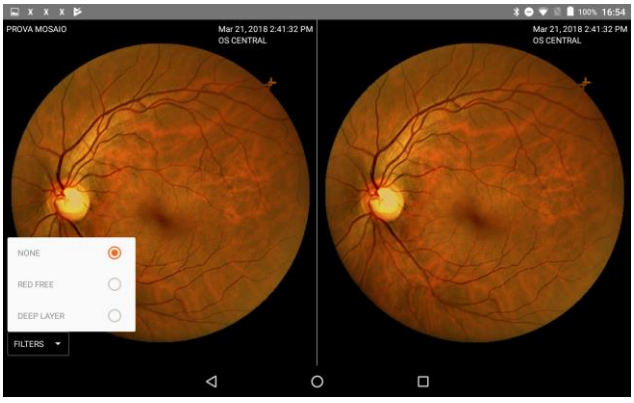
There is a Red Free and Deep Layer Filter features, which if enabled, produces the following result.





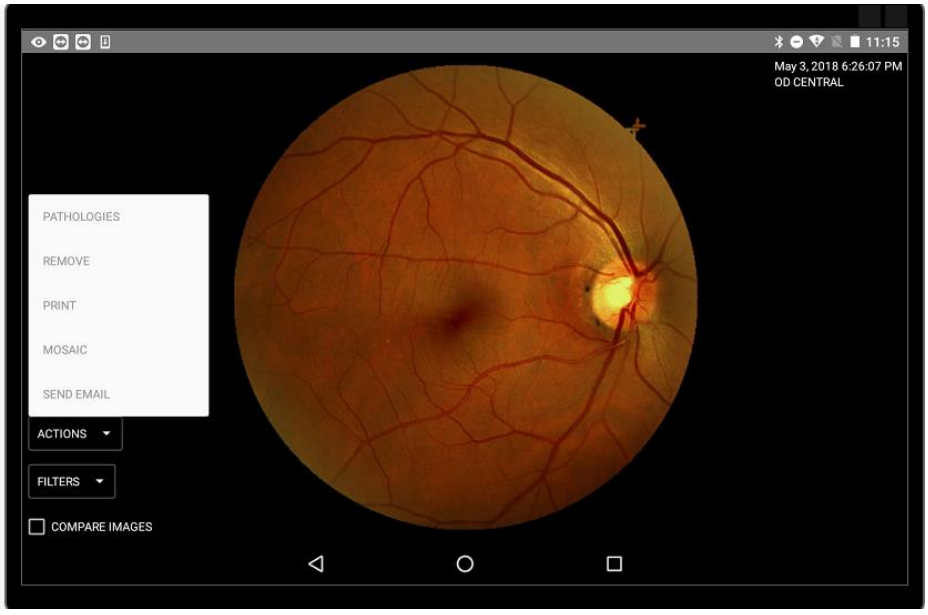
Another useful feature is the Compare Images. You can tap on one of the images in that vertical list and you will see a comparison between 2 image



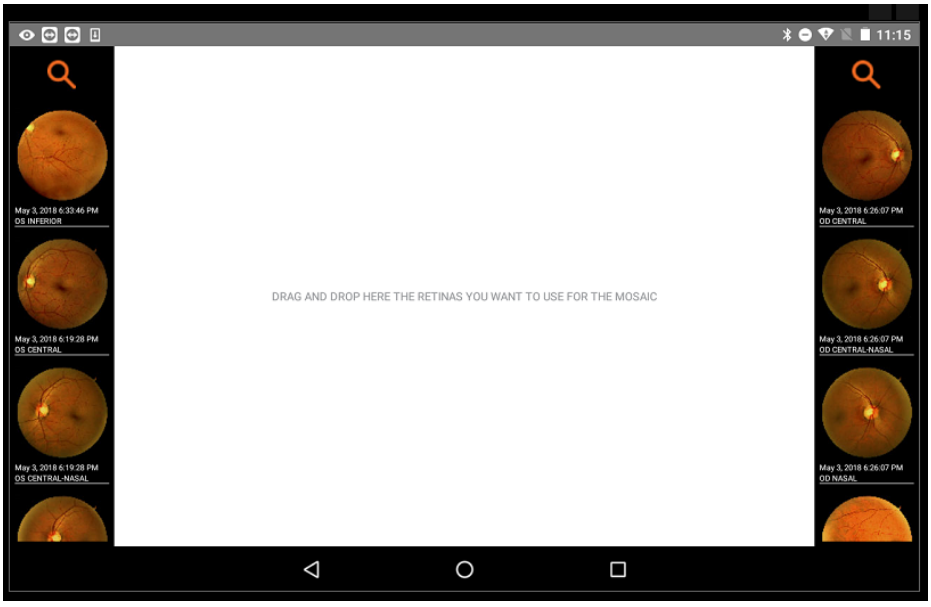


Mosaic

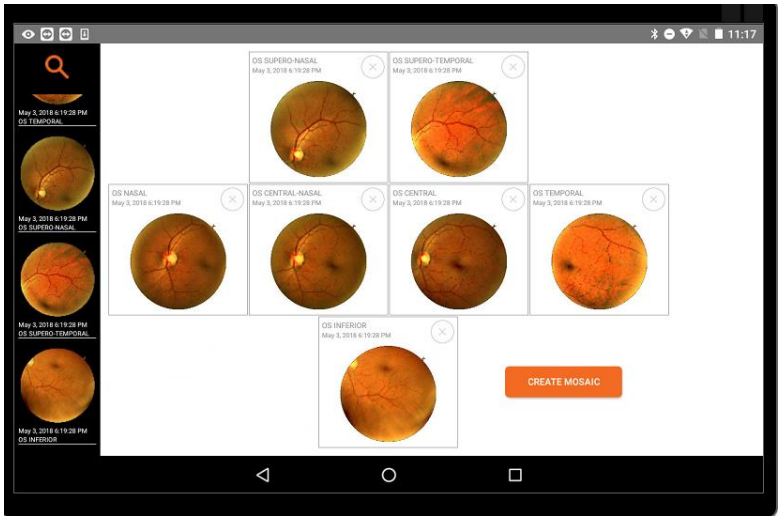
You can use the Mosaic feature in order to have a single retina image with a larger field of view.



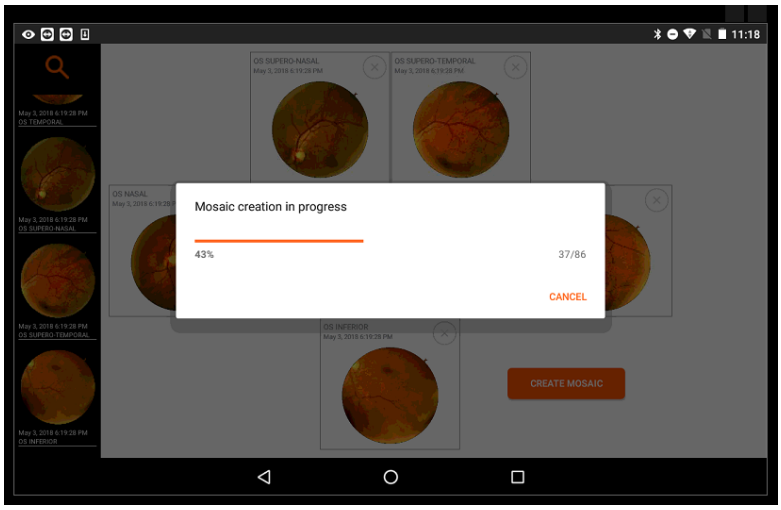
Select Mosaic on the Action menu



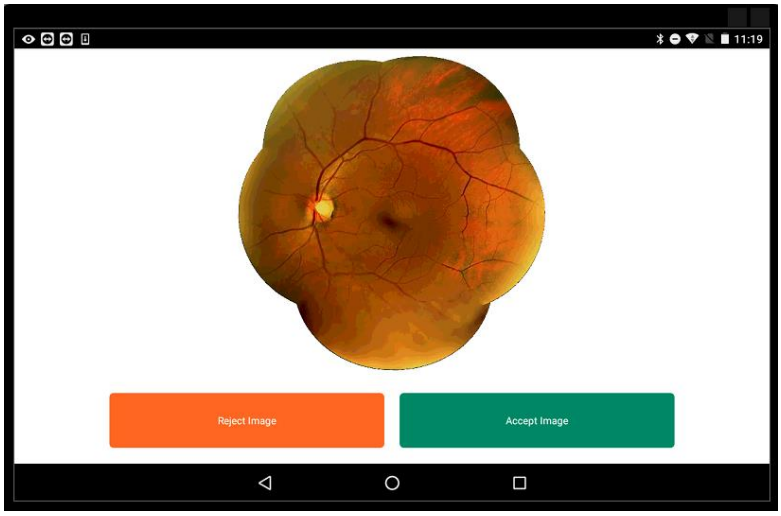
This screen will appear



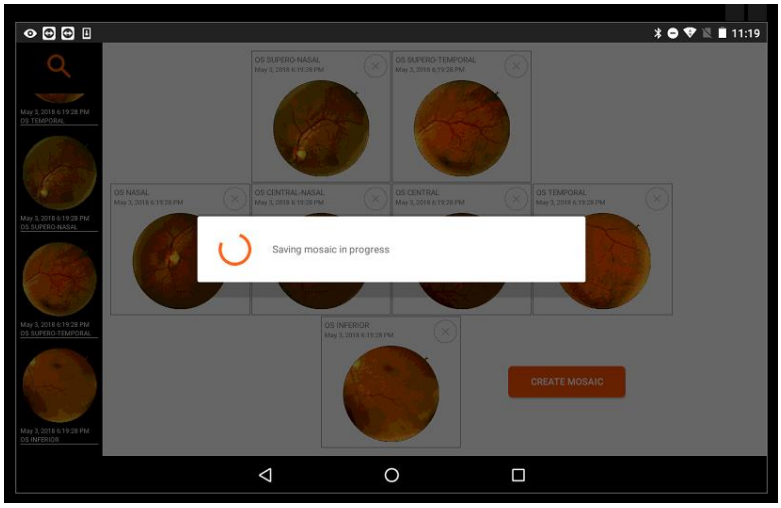
Drag and drop the images you want to use for the mosaic.
The mosaic could be done with 2 or more images.
The images will automatically fill the grid.



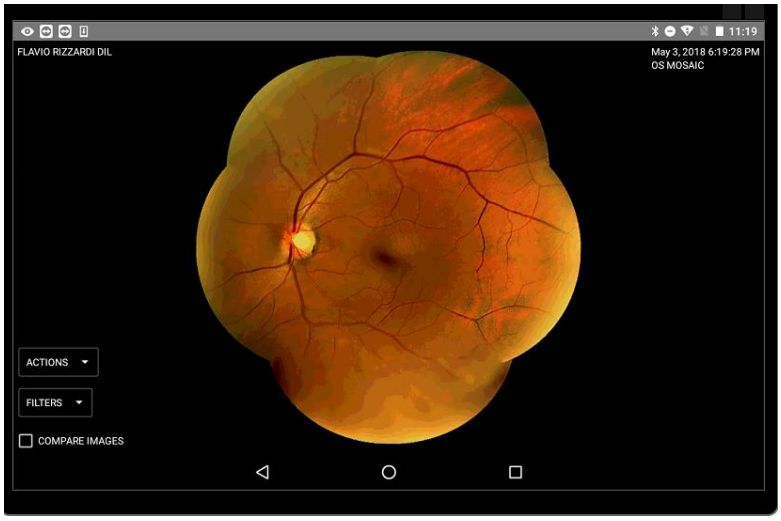
Click on Create Mosaic



At this point you can decide if accept or reject the mosaic image



Wait while mosaic images is being saved



Mosaic image saved

NEXY ACCOUNTS

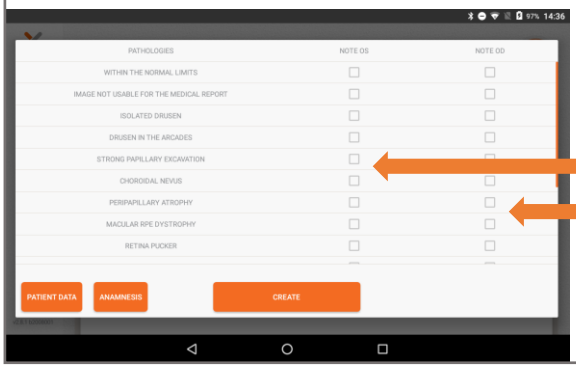
Nexy System allows the creation of 3 different types of account according on the requests of the Ditridutor or of the end user.
It is not possible to turn an account from a type to another.

1. A-Type Account – allowed to take retina images.
2. B-Type Account – allowed to take retina images and do directly referrals on them.
3. C-Type Account – only web based, connected to A-Type accounts and allowed to do remote referrals on A-Type account images.

1. A-Type Account – allowed to detect retina images.
The features of A-Type accounts are already explained on the previous part of this guide.

2. B-Type Account – allowed to detect retina images and do direct evalautions.
3. A-Type accounts + the availability of doing referrals.

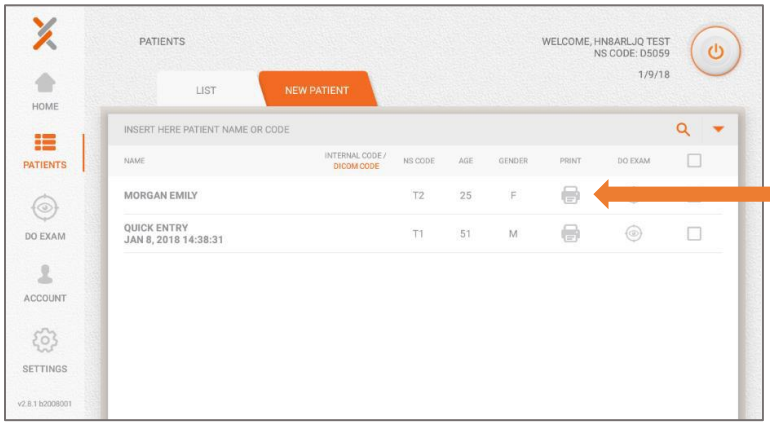
2. Click on Pathologies button



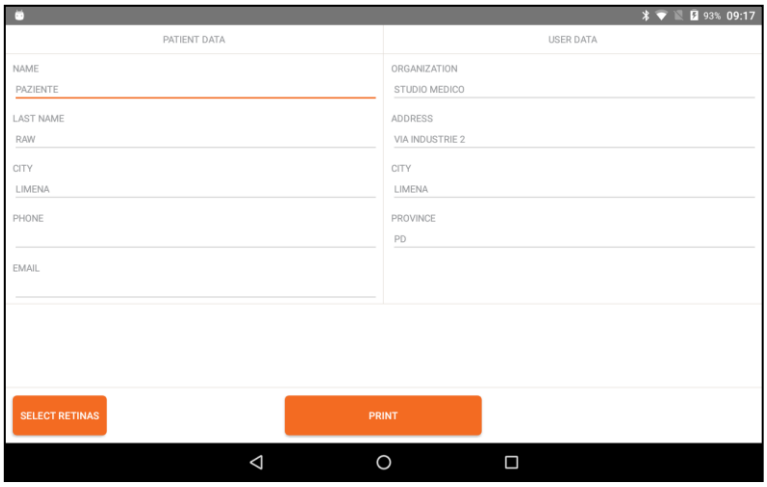
2. Choose at maximum 2 pathologies for each eye

2. C-Type Account – Explained in Telemedicine Section of this guide

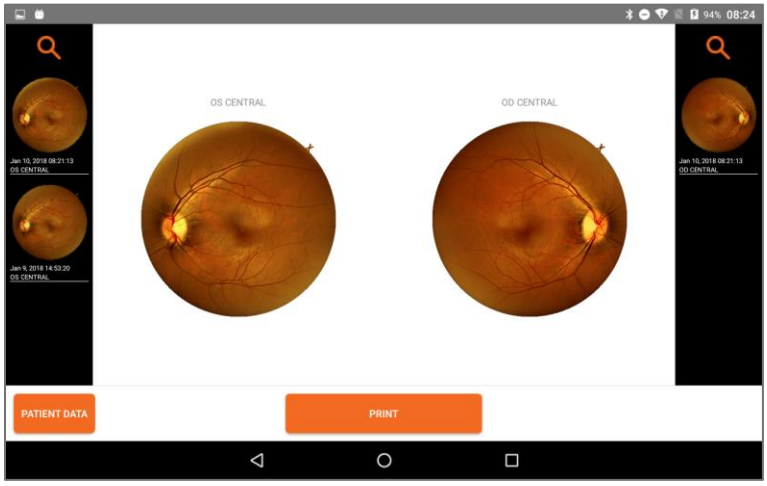
IMAGE PRINTING



Tap on printer icon



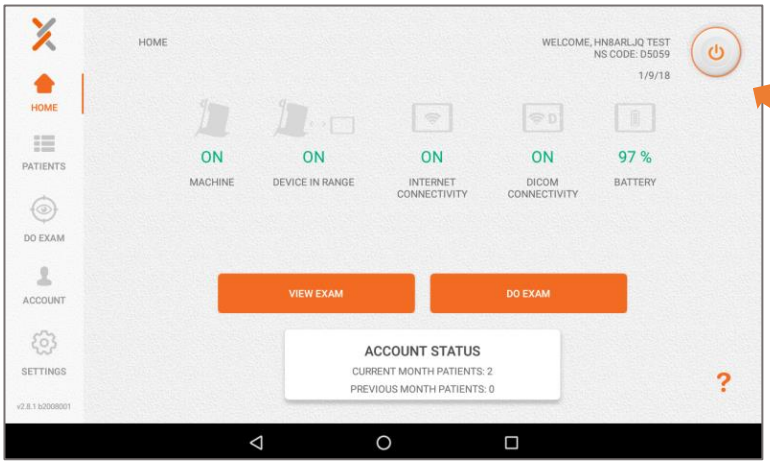
Check the patient data and click on Select Retinas



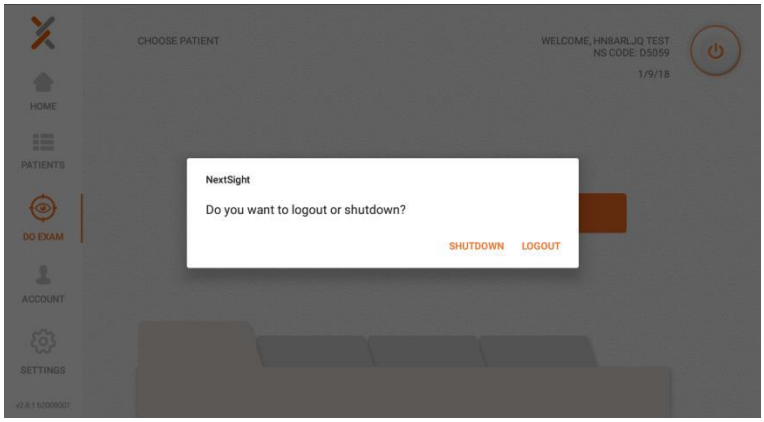
Drag and drop the retinas on the central part of the screen and press Print

If there is an Android compatible printer connected on the same network of the Tablet, the report will be printed

NEXY AND TABLET POWER OFF



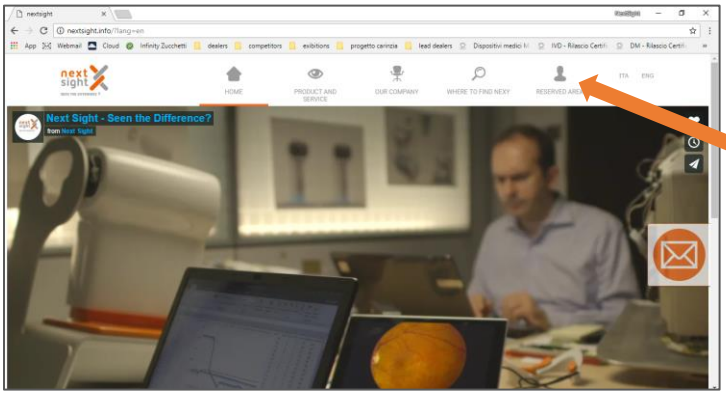
To switch off the Nexy proceed like this and press here



Then choose SHUTDOWN and wait 10 seconds. Nexy will switch off automatically.

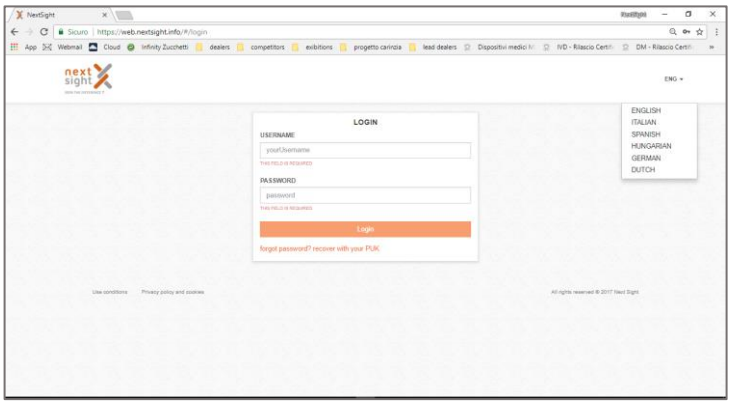
Switch off the Tablet pressing the button on the left side.

NEXY WEB FEATURES

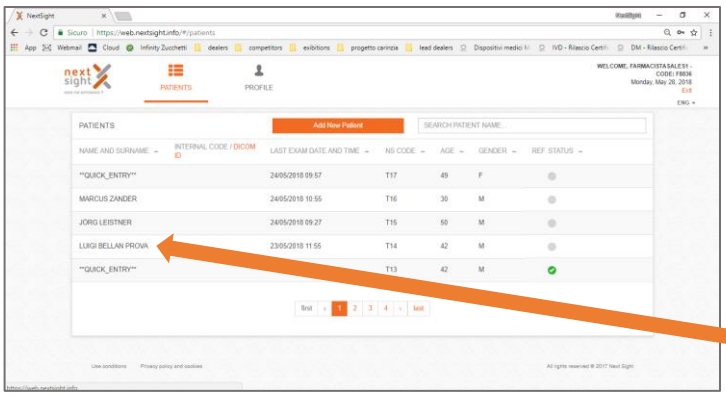


Using your credentials You can enter on the reserved area of our website and see all the activities done with your Nexy.
You can not perform exams from the website.

NEXY WEB FEATURES – A Type Account



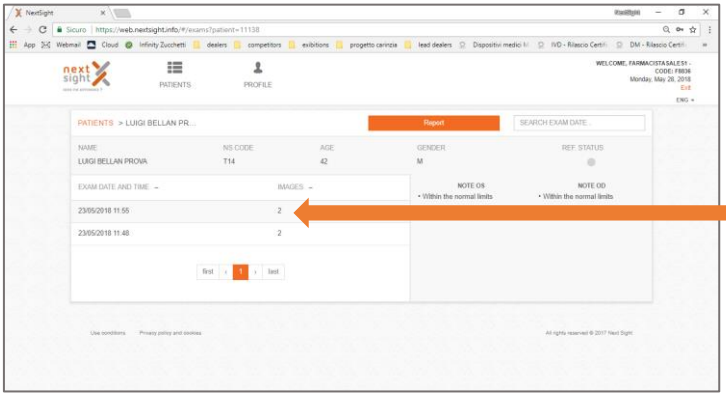
Enter your credentials in https://web.nextsight.info/#/login



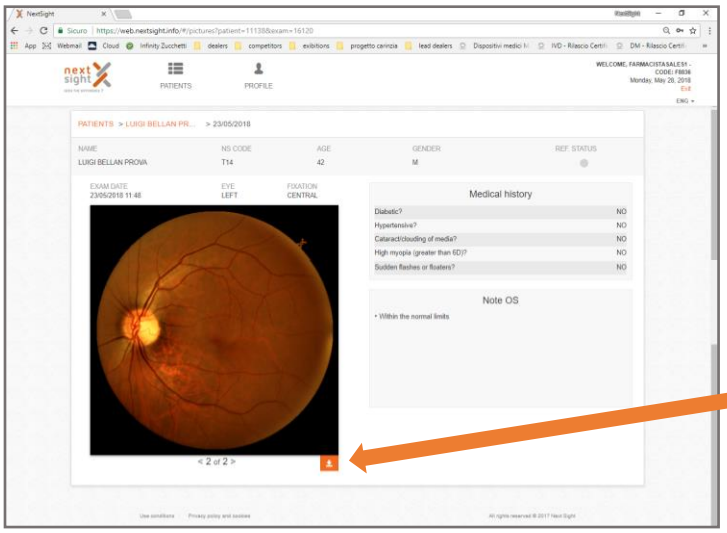
On this screen you can:

- See your patient list
- Enter new patient data
- Change the parameters of your own profile – i.e. the password

If you click on a patient's name you will open the patient folder



Here you will find the list of pictures taken on that patient and you can open the images.

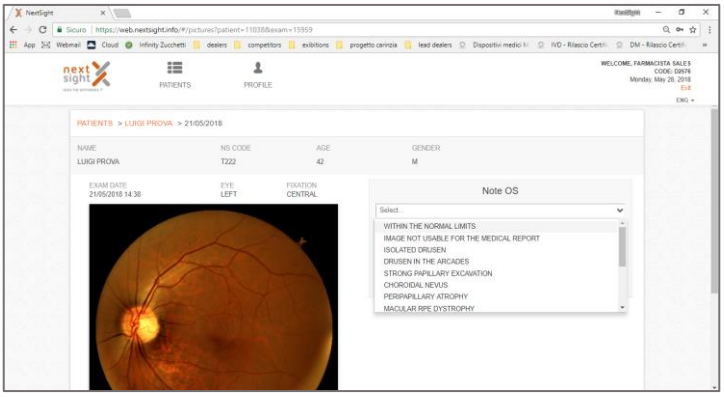


On this screen you can:

- See the patient data
- See the type of fixation
- See the anamnesis – if present
- Download the image by clicking this botton

NEXY WEB FEATURES – B Type Account

In B Type account you will find all the features of A Type account and, in addition, you can make direct evaluations on images



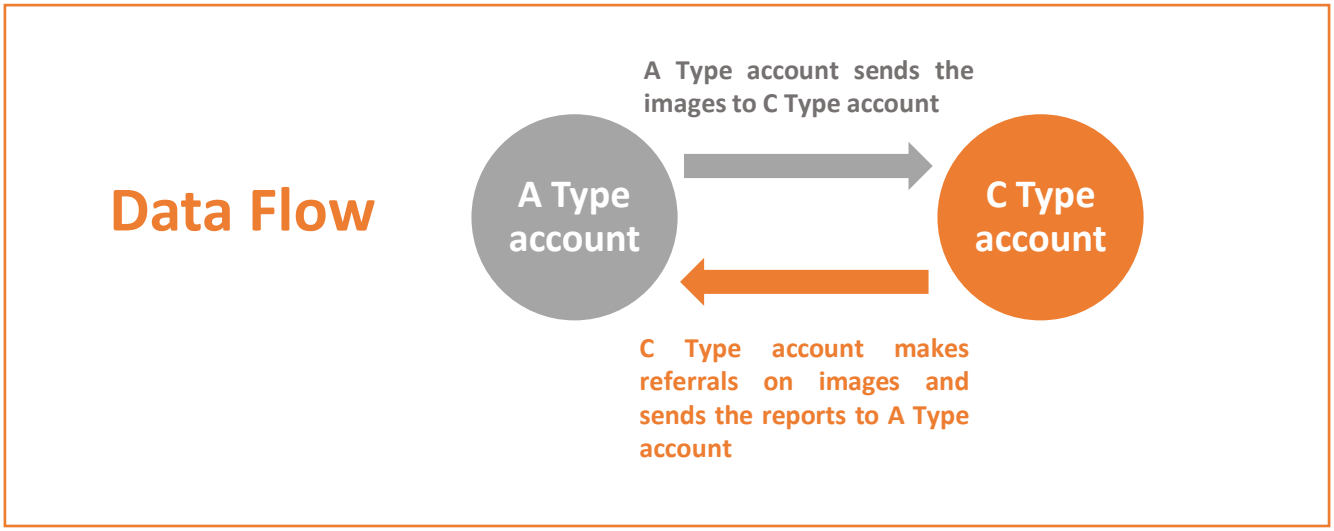
Once you open the patient's folder and you see the image, you will find a list of pathologies on the right.
You can choose maximum of 2 pathologies per eye.
The pathologies will appear on the medical report.

TELEMEDICINE

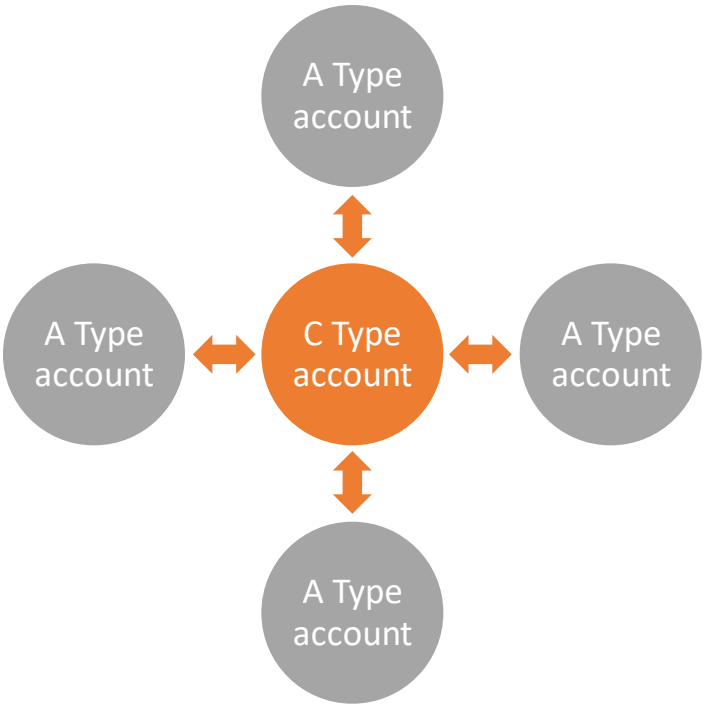
NEXY WEB FEATURES – C Type Account

Nexy provides its own Telemedicine platform.
You can set up a network made of several Nexy units and one Eye Doctor which remotely makes the referrals on images taken with Nexy.

C Type account is a web based account linked to A Type accounts.

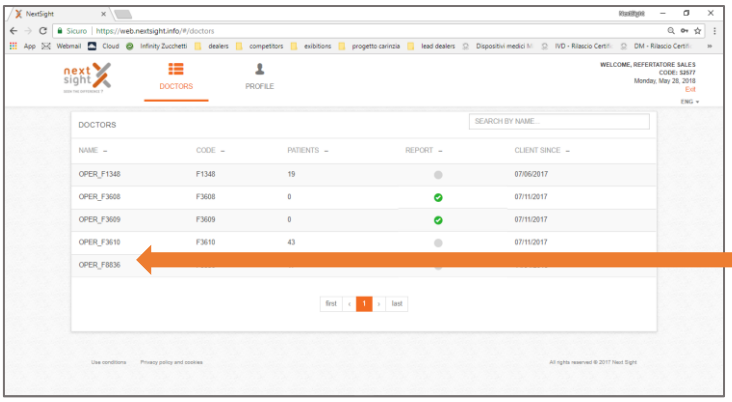


This model can be replied with several A Type accounts and 1 C Type account

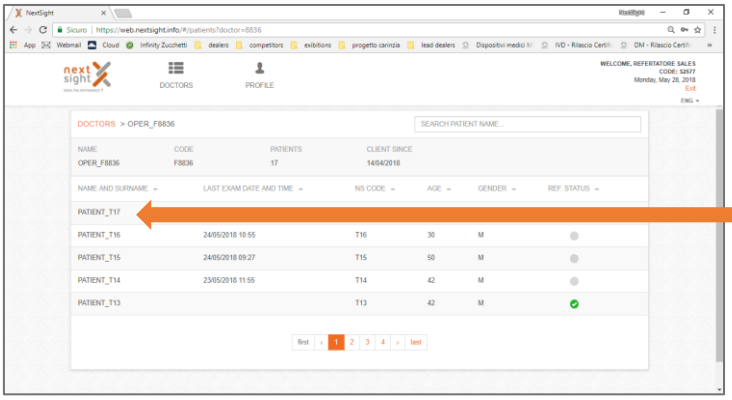


Each A Type account is provided with a Next Sight code – e.g. OPER_F8836
Each patient is provided with a Next Sight code – e.g. T36

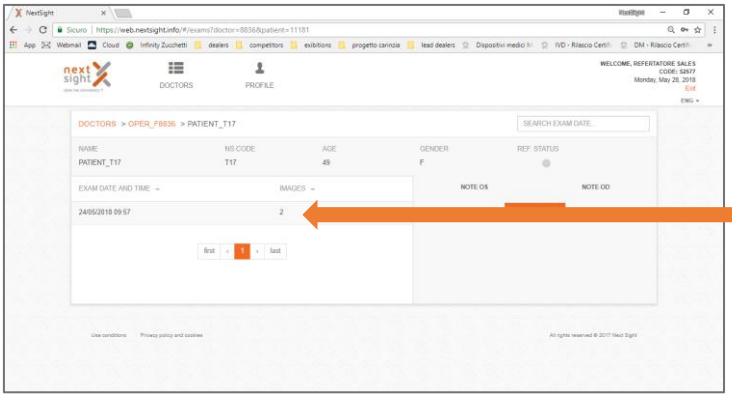
Personal data are encrypted, C Type accounts have no access on them, neither access to A Type account personal data nor the personal data of the patients .



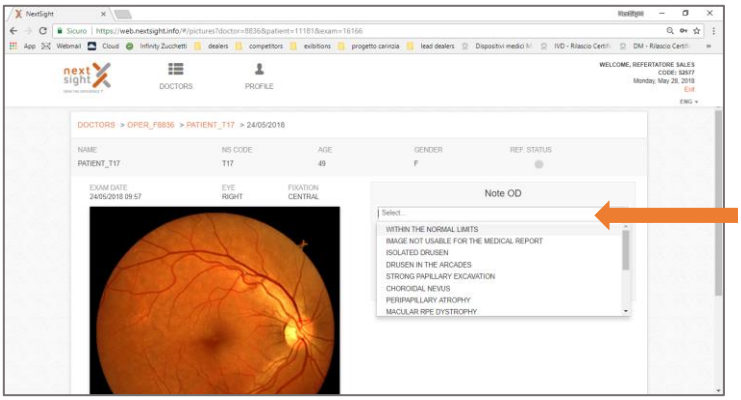
This is the main screen of a C Type account. It can only access the A Type codes



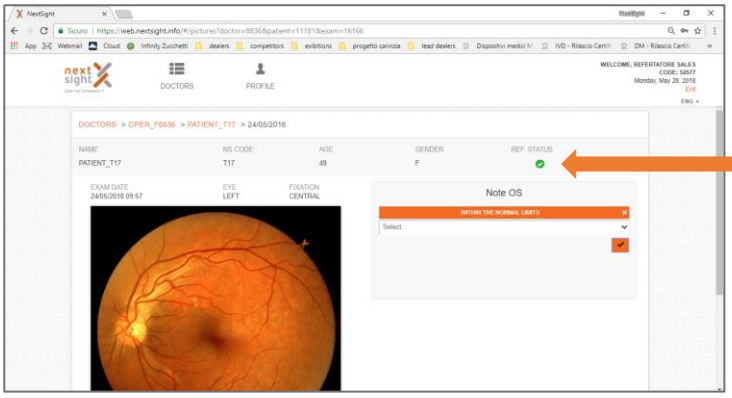
C Type account can see the patients images by clicking on patient's code.



C Type account can open the patients images by clicking here

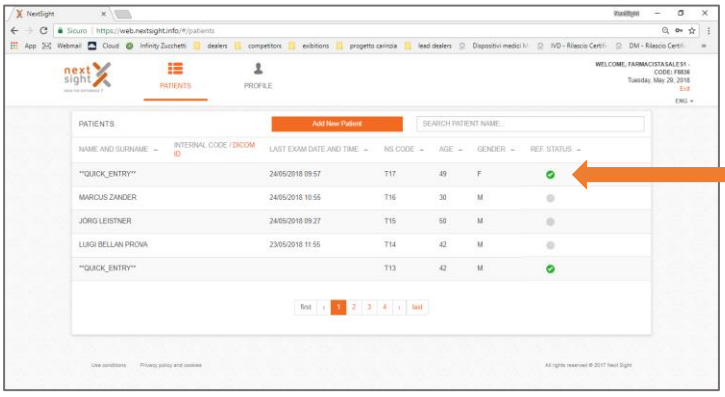


C Type account can choose the pathologies – max 2 per eye and proceed with the other images

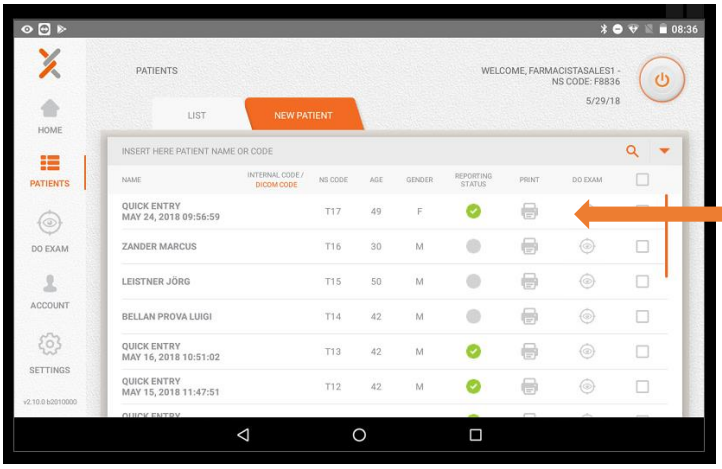


Once the evaluation is done this icon turns from grey to green

A Type Account view



This is the PC screen of A Type account after the evaluation of the images made by C Type account.
If the referral is done the icons on the right turn from grey to green.

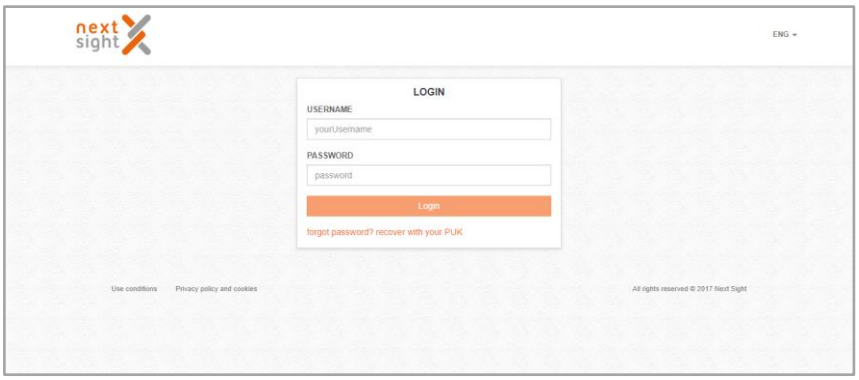


This is the Tablet screen of A Type account after the same evaluation

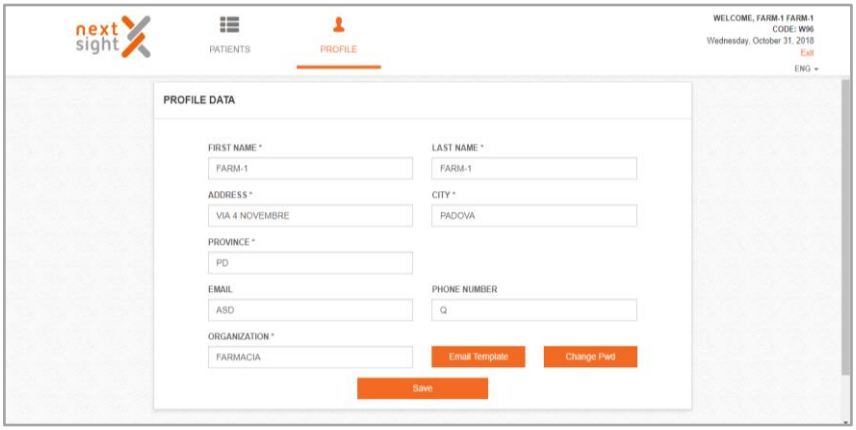
EMAIL SENDING FUNCTIONALITY

To send images by e-mail, proceed as follows:
<u>Step 1:</u> setting the Front End of the Nexy system, by connecting to the reserved area on the site www.nextsight.info

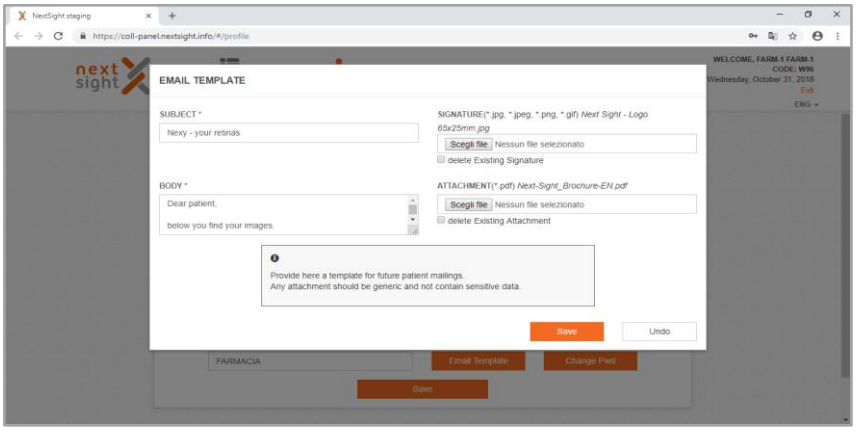
1. Log using your front-end credentials of the Nexy system via the browser



2. Enter on the "Profile" section and select "Email Template"

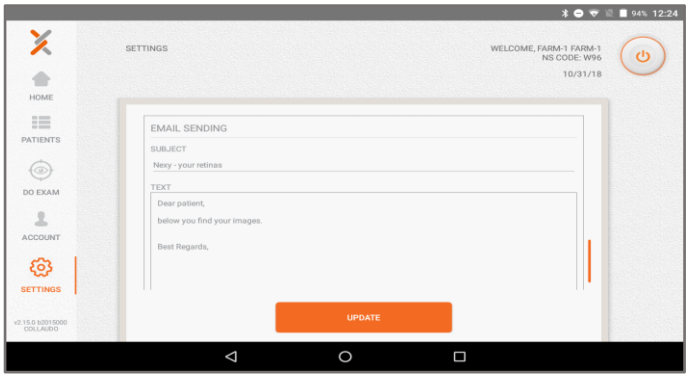


3. A window will open in which you can edit the following fields:
«Subject»: subj. of the email;
«Body»: body of the email;
«Signature»: signature to which you can attach a file of type .jpg .png, .gif;
«Attachment»: file to be attached of the type .pdf.

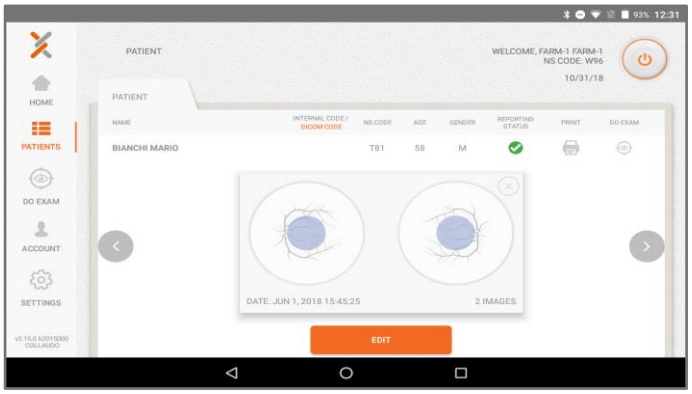


Then click on «Save».

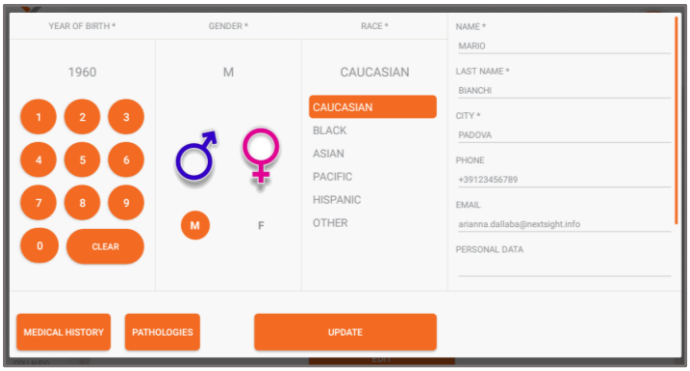
<u>Step 2:</u> setting Nexy App side: after logging in using your credentials, select "Settings", then the "Retina Sharing" section will appear with the "Send Email" field; from here you can edit the subject and text of the e-mail by clicking (once you have made the changes) "UPDATE", as shown in the figures below.



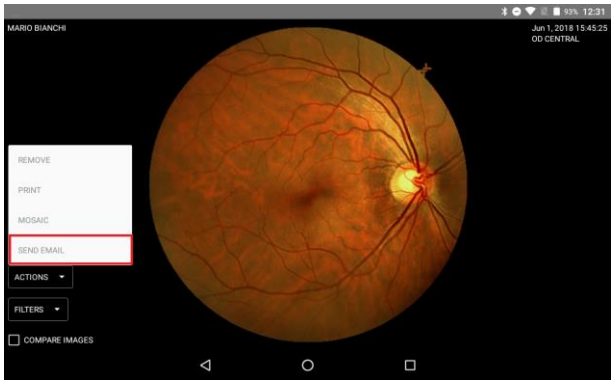
Go to the "Patients" section, then click on a patient and then click "Edit".



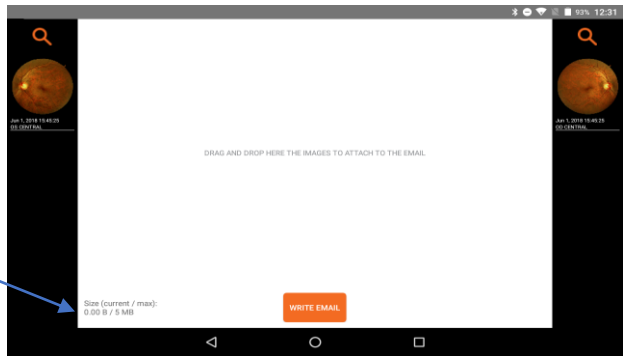
A window will then open showing the user's details.
Within the details, select e-mail and phone number. (it is necessary that both e-mail and phone number are inserted, as they are essential to proceed with the following steps).
Then click on “UPDATE”



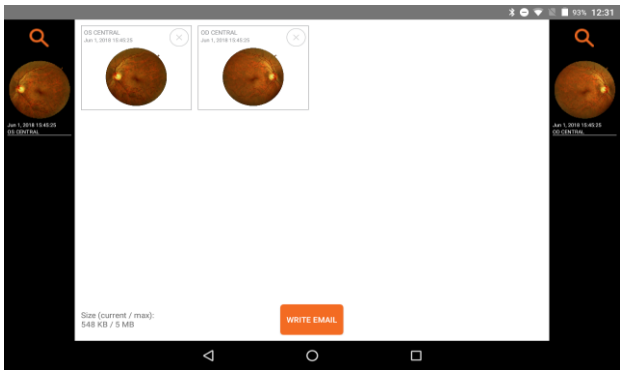
Then select the desired image and then click "Send email”



Insert the images that you want to send by dragging them in the white space shown in the figure (the maximum email size is 5MB, the user can verify the size of email on the bottom left)



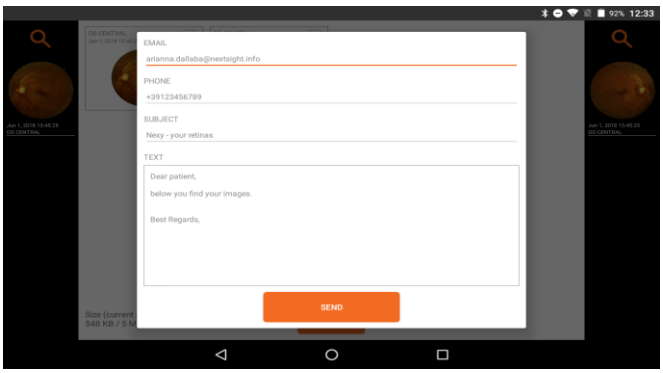
After inserting the desired images, taking care to respect the maximum size of 5MB, click on "write email".



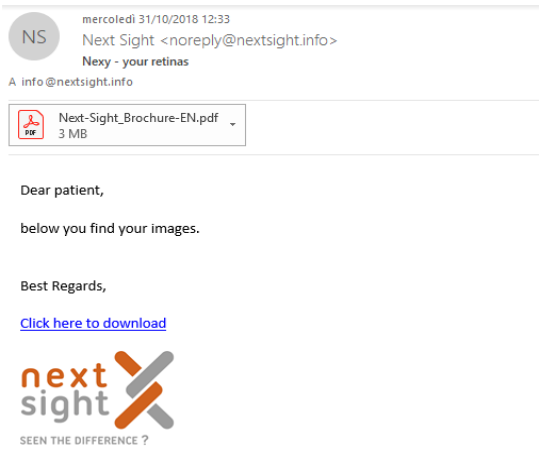
In this phase, as shown in the figure below, it is possible to edit the fields: e-mail, phone, subject and email text.

Automatically appear email, phone, subject and text of the email set in the previous steps described above. The user can still edit them and who will receive the email will find what the user wants to report here, but the default settings described in the previous points will remain unchanged.

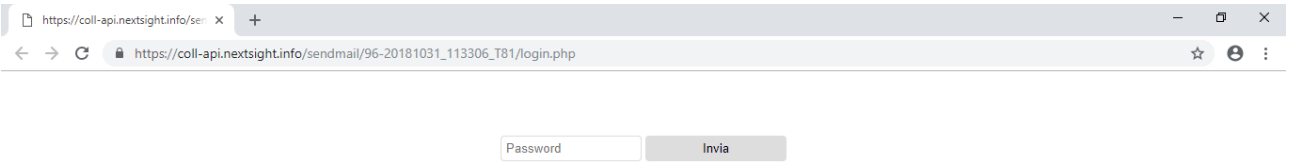
Then click on “SEND”



The user will then receive an e-mail of the type



In order to view and download the images, it is necessary to click on "Click here to download". This will open a default browser window with the password entry request (the password is the phone number entered in the previous step, before clicking "SEND" on the tablet) and then click "Send"

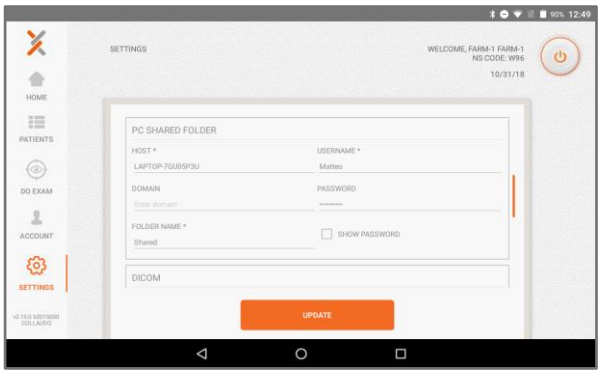


The images obtained are then shown as follows; clicking on them you can download them on your PC.

FUNCTIONALITY OF SHARING IMAGES FOR THIRD-PARTY AI (Artificial Intelligence) SOFTWARE

To perform the correct setting in order to transfer the images on a user PC to be processed by a third-parties software (not supplied by Next Sight), proceed as follows:

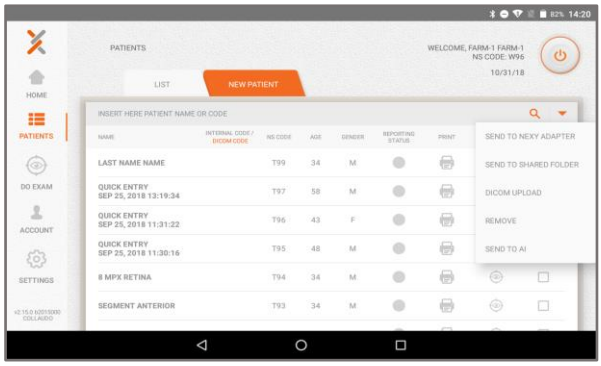
- Select "Settings" and then "Shared folder on PC"



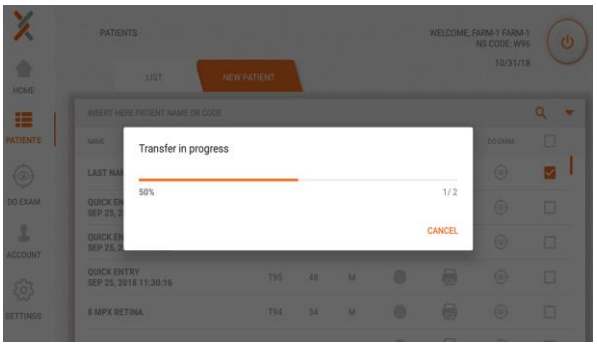
Set the shared folder on PC as it happens for the shared folder functionality (described above), inserting the HOST fields (PC name), Username (of the PC account in which the folder in which the images will be transferred is created) , Password (of the PC account), Folder Name (name of the user's PC folder in the images will be transferred) and then click on "UPDATE."

NOTE: the folder on the PC must have enabled the "Advanced Sharing", "Share Folder" setting to transfer the images.

Then select the desired patients and using the drop-down menu on the right, click on the arrow, select "send to AI"

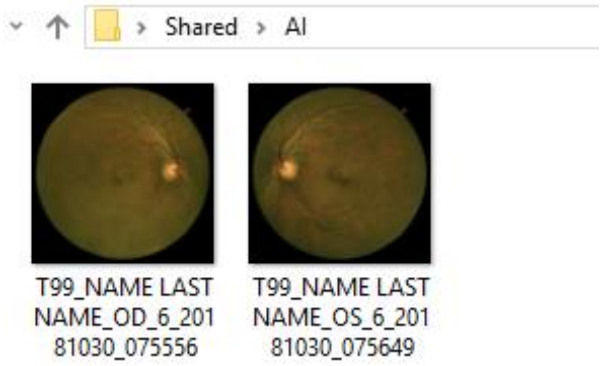


Wait until transfer is completed



The following will appear on your PC folder: on the shared folder (set as shared folder) the AI folder will automatically be created with the images of the selected patients.

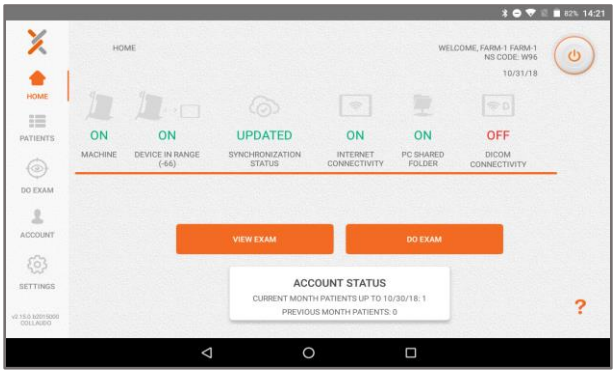
These images may be processed by third-parties software applications not provided by Next Sight.



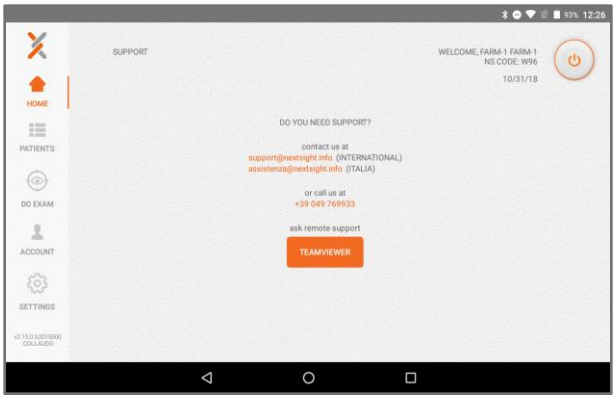
OPTIONAL FUNCTIONALITY OF TEAMVIEWER FOR REMOTE SUPPORT

This feature is used by both Next Sight service personnel and the distributor in case it has been authorized by Next Sight to perform remote support from a tablet. In the event that the distributor takes care of the remote support, he must have purchased the license of TeamViewer necessary to provide this type of support to its customers.

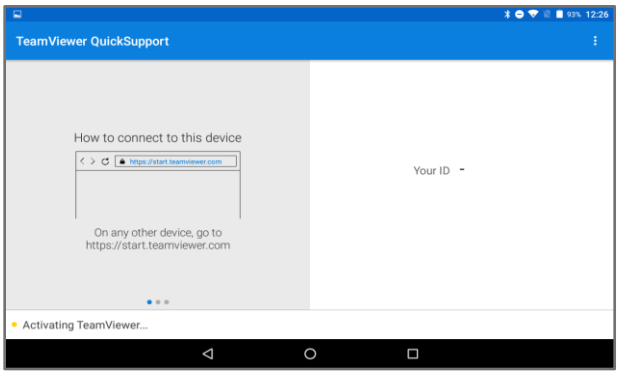
To allow the identification of the problems encountered by the user, the user must click on the icon ?



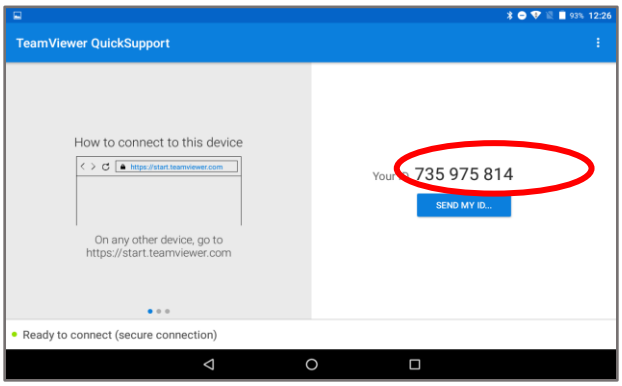
Then, click on the "TEAMVIEWER" icon



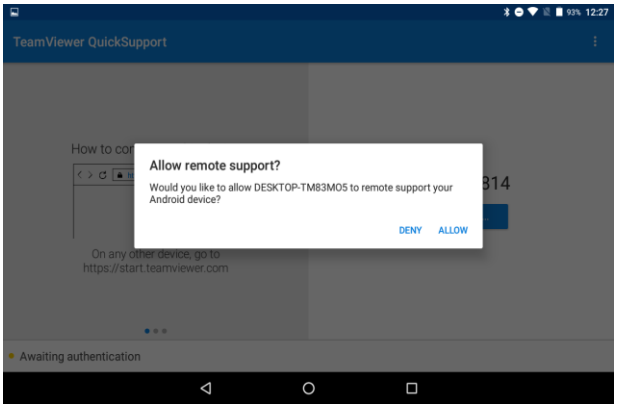
The QuickSupport Team Viewer will then open, and you need to wait for the ID, as shown in the figures here.



The ID circled in red must be communicated to the service personnel.



Then click "ALLOW" to allow remote connection by service personnel



The notification will appear on the tablet that is active sharing the screen between the user and the service staff. The service staff is now able to find the problems encountered by the user.

NEXY ADAPTER - OPTIONAL ACCESSORY (NOT AVAILABLE FOR THE UNITED STATES)

Overview

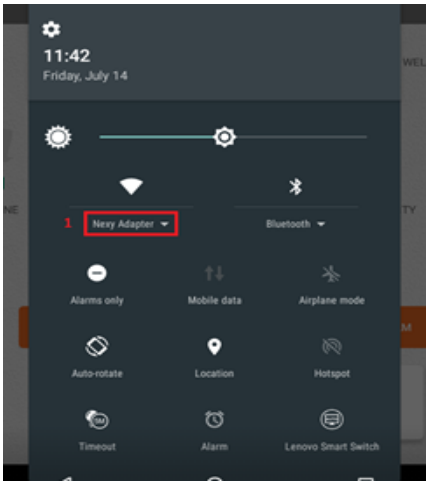
The Nexy Adapter is an optional accessory that allows the user to transfer images captured from a Nexy device to a PC.

The adapter is viewed from the PC as a USB key with a maximum capacity of 7 Gbytes, enough to store around 40,000 images.

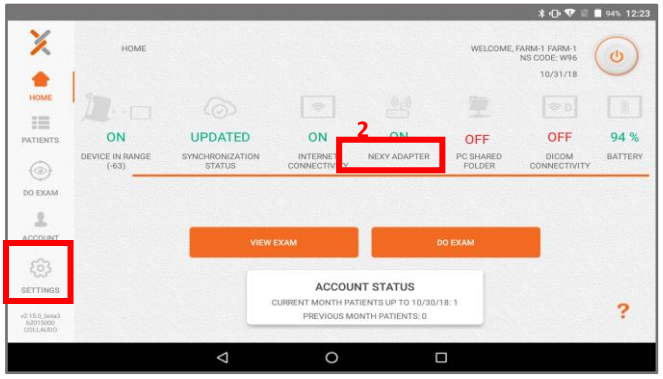
The images are transferred as soon as they are acquired by Nexy, if the tablet and the adapter are within range. If they are too far apart, the images will be put on hold until the two devices are approached; when this happens, the transfer will start automatically.

Initial configuration

Connect the USB cable of the Nexy Adapter to any USB port on the user's PC; if this is the first time you use the Nexy Adapter, wait until the PC loads the appropriate drivers (which happens automatically).
Afterwards, the user will see a new WiFi network called "Nexy Adapter": it is necessary to connect to this network using the "nextsight" password.

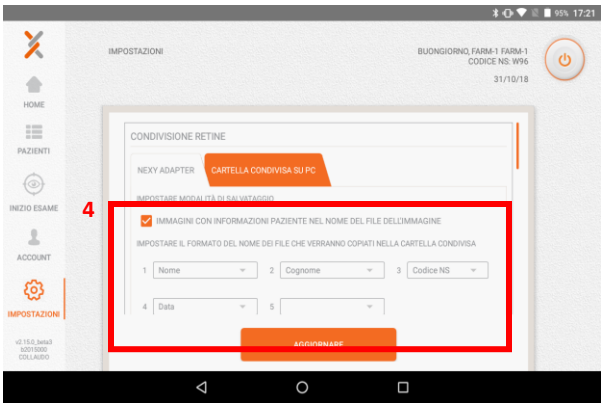


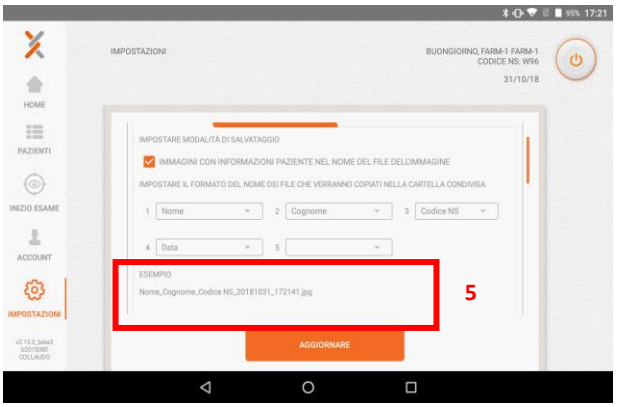
If the tablet is within range of the Nexy Adapter, the corresponding icon on the home page turns green (highlighted as 2 in the figure here).
In case the Nexy Adapter is out of range, the actual image transfer will be put on hold.
The name of the .jpg images is taken from the patient's data; default is:
name + surname + patient code + date of the exam
The user can change it as he wishes, using the "Settings" button on the home page (highlighted as 3 in the figure below).



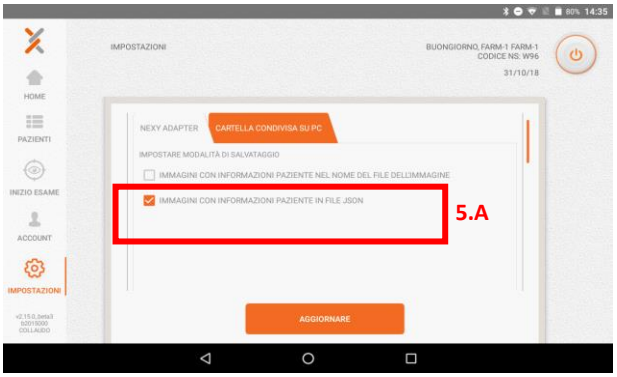
The settings page allows you to choose which data to use and in which order (step 4). The only requirement is that the user must enter the patient's first and last name and date of the exam.

The settings page will also show you an example of the name of the final file (step 5).





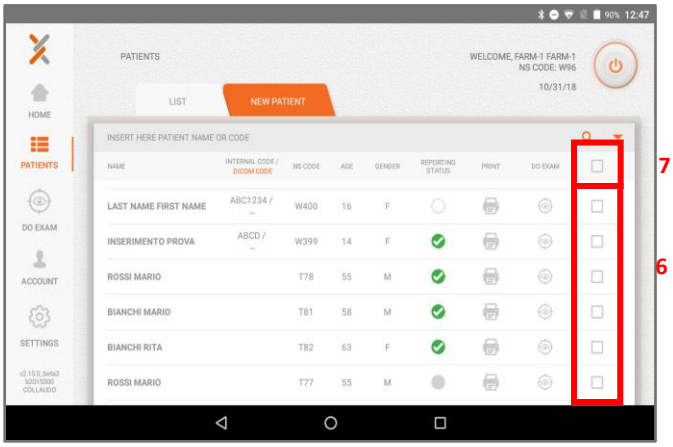
Alternatively, you can share images in json format, by selecting the other option, as shown in the figure below (step 5.A)



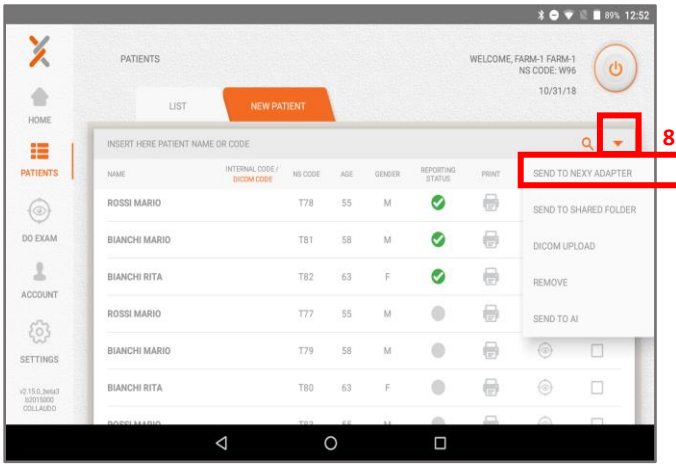
<u>Image transfer</u>

The presence of Nexy Adapter does not change the way Nexy is normally used. Each accepted image will be transferred to the adapter and will be displayed in the USB folder.

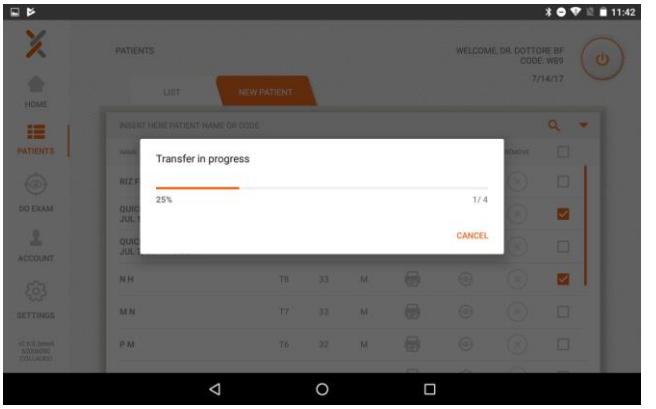
If the user wants to transfer an image again (or images taken earlier), it is necessary to connect to the "Patients" page: in the checkbox column on the right side, select the patients whose images are to be exported. You can choose one or more patients by selecting the appropriate check boxes (step 6) or select all patients (step 7).



When the selection is complete, touch the small orange triangle (step 8) and select "Send to Nexy Adapter" (step 9).



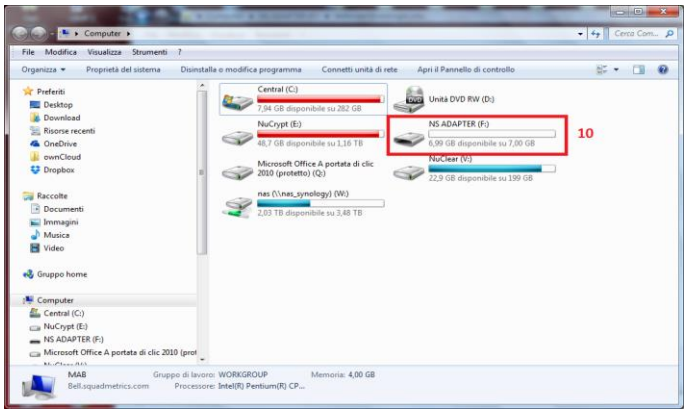
If the Nexy Adapter is within range, the transfer will begin immediately. Wait until transfer is complete.



PC Side

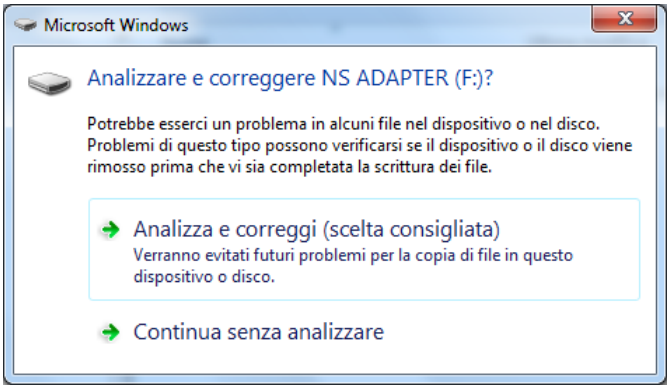
As soon as the image transfer is started, the Nexy Adapter is viewed from the PC as a USB key. The icon to access the images is shown after the images have been transferred.

Depending on the Windows autorun settings, the related window may open automatically; if not, click on Computer and then on the icon highlighted below (point 10)



As soon as the Nexy Adapter is connected to the PC, Windows may display an alert like the one shown below.

The exact wording of the message is related to the specific version of Windows installed on the PC. You can select an option ("Analyze and correct" or "Continue without analyzing"). **You need to copy and paste to a desired folder the images on the Nexy Adapter on your local computer.**



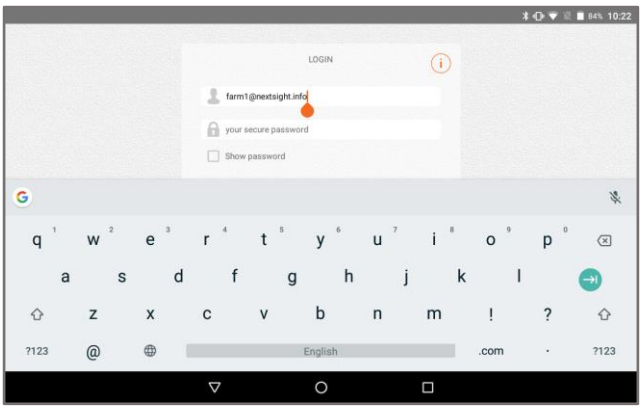
Recommendations

- Always select "Safely Remove Hardware" before disconnecting the Nexy Adapter
- The USB memory of the Nexy Adapter must be considered temporary; Once the transfer from the tablet is complete, you need to move the images to a PC hard disk for security reasons.
- Do not use the Nexy Adapter as a normal USB stick to store personal files or to create new directories.

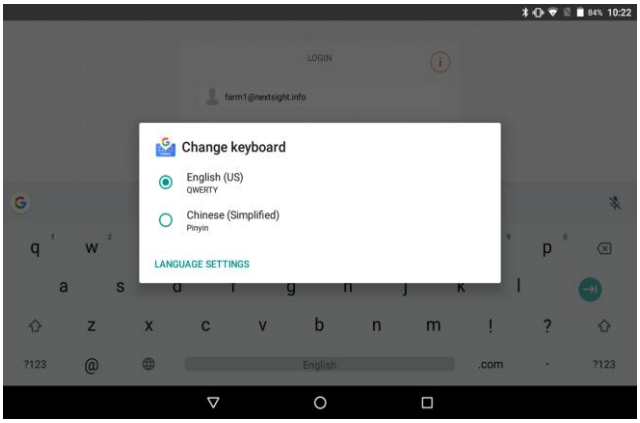
LANGUAGE CHANGE ON THE TABLET KEYBOARD

To change the language of the tablet keyboard, proceed as follows:

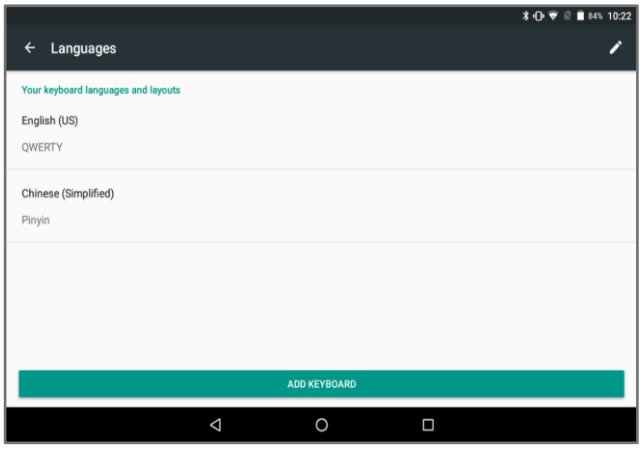
- At login, click either in the username field or in the password field, so that the keyboard is shown



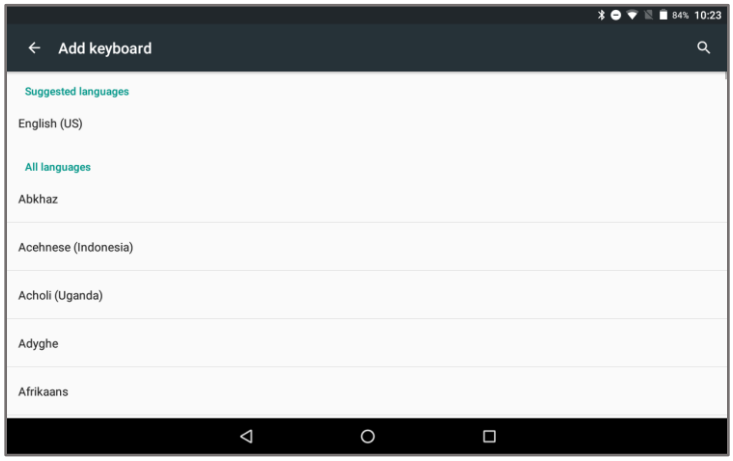
- Holding the icon on the keyboard, the following window will appear



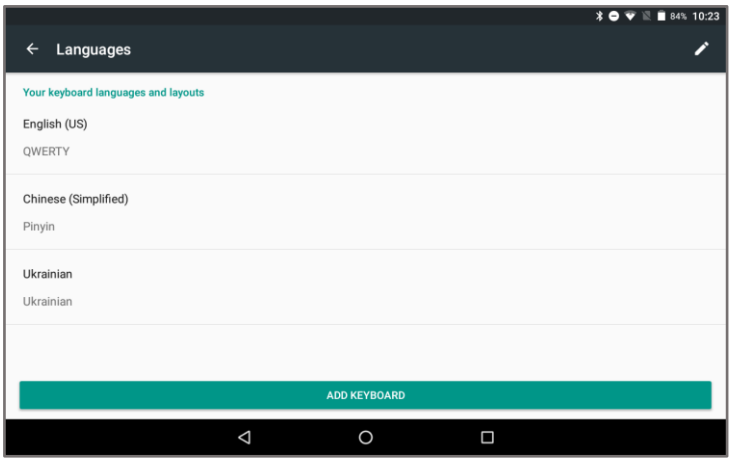
- At the window that appears, then click on "ADD KEYBOARD"



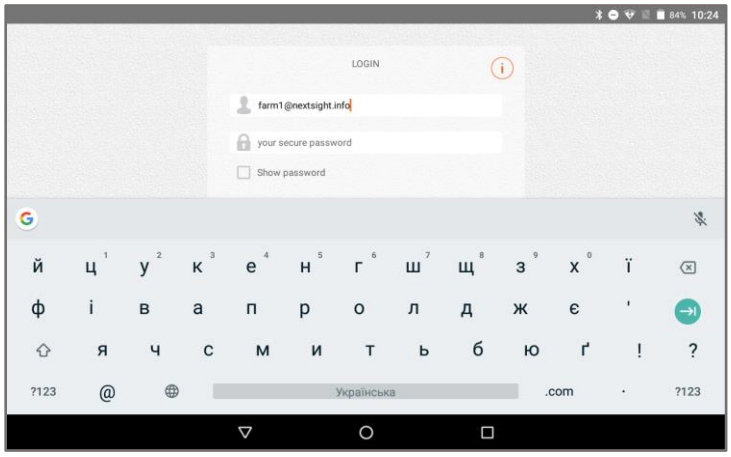
Then select the chosen language



The chosen language will then appear in the list; then click on the icon ◁ to return to the Nexy App screen



Click on the icon on the keyboard and the desired language will be set



In all the screens in which a text field is inserted, the chosen language will be retained.
If you want to change the keyboard language, click on the icon

Once if you want to set a language already on the list, or repeat the procedure described above to add a new language.

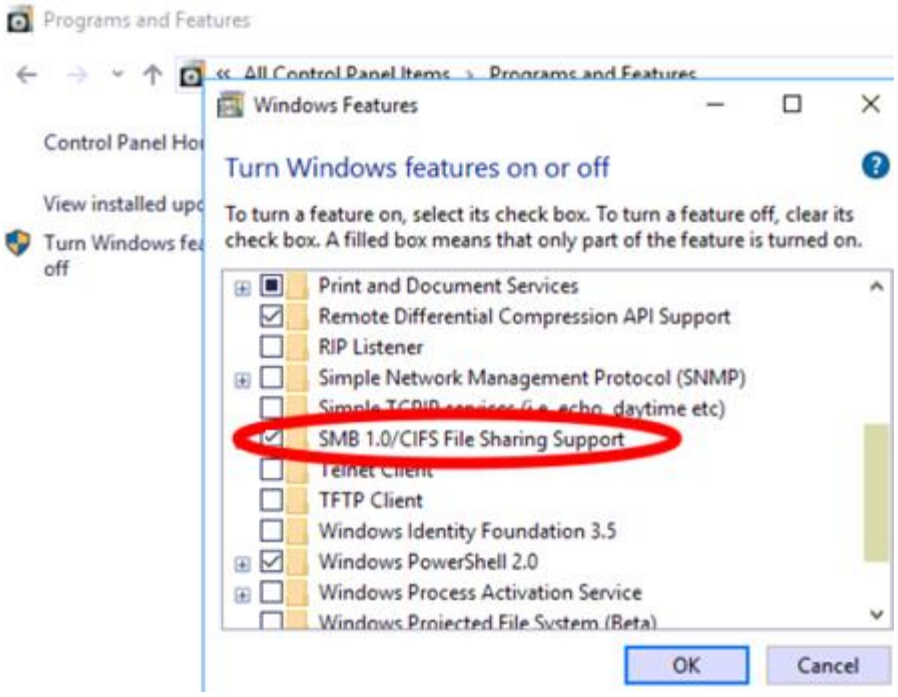
SHARED FOLDER

SETUP INSTRUCTIONS:

1. Create a shared folder on a Windows PC.

On Windows 7, just to make an example, you can create a new folder by right-clicking the mouse where you want the folder to appear and selecting *"new->folder"*. Then right-click on the folder and select *"Share with->specific people…";* choose the username by using the combobox near the "*Add*" button, and press "*Add*".
The selected username should appear on the list under the button; set the permission level to read/write and click "*Share*", then "*Done*".
To check if everything is correct, right-click on the folder and select "*properties->sharing->advanced sharing->permissions*";
Full Control should be allowed (if it isn't, click the "*allow*" checkbox).
You can get more detailed, OS-specific instructions (OS is for Operating System) by googling for "*windows <your windows version> share folder*".

NOTE FOR WINDOWS 10: since the release of version 1709 (April 2018), a critical component has been disabled by default, and must be re-enabled by the user. Go to "Control Panel -> Programs and Features -> Windows Features" and check the item "SMB 1.0 / CIFS File Sharing Support" (see figure below).

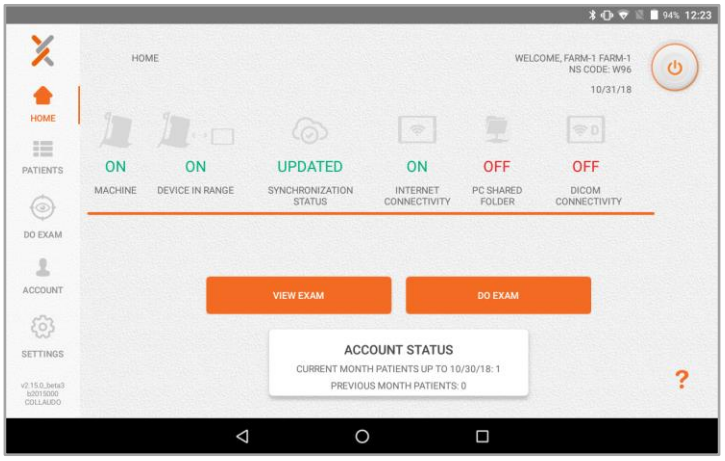


2. Take note of the name of the PC, the name of the shared folder, the username and the password. The password is the same that the user needs to log into Windows.

3. Try accessing the shared folder from another PC (examples: \\192.168.1.100\FolderName or \\JOHNDOE-PC\Test, with username and password chosen during step 1).
4. Try writing/deleting some files in that folder to make sure the remote PC has read/write permissions.

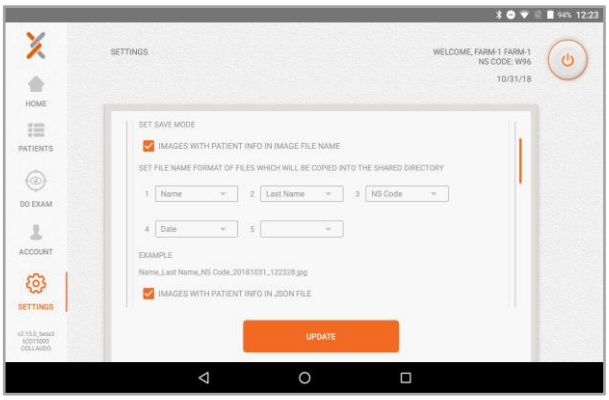
5. Take the tablet, make sure that it's on the same network as the PC with the shared folder, and log in with the personal credentials (user name and password).

6. You should see an icon PC SHARED FOLDER on dashboard. At first the icon will be red (OFF). If there is no icon, try log out and then back in.

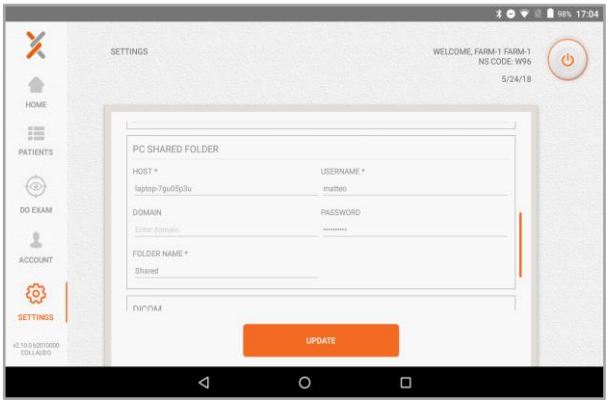


7. Tap on the Settings icon on the lower left corner (see the figure below) and choose what kind of sharing you need: either .jpg images with the patient's info in the file name, or a combination of .jpg and .json files, the latter holding the patient's info.

8. By selecting the “IMAGES WITH PATIENT INFO IN IMAGE FILE NAME”, you also get to choose what kind of information to display, and in what order (see figure below), by using the combo boxes elements. Below the combo boxes you also get an example of the resulting filename. The option “IMAGES WITH PATIENT INFO IN THE JSON FILE” don’t have this kind of option, because all the patient’s info are contained in the .json: it’s up to the program that reads it to pick the information that it needs.



9. By scrolling up a bit (see figure below), you will see a page titled “PC SHARED FOLDER” asking you the HOST, the FOLDER NAME, the USERNAME and the PASSWORD (optionally the DOMAIN). Fill these fields using the data from step 1).

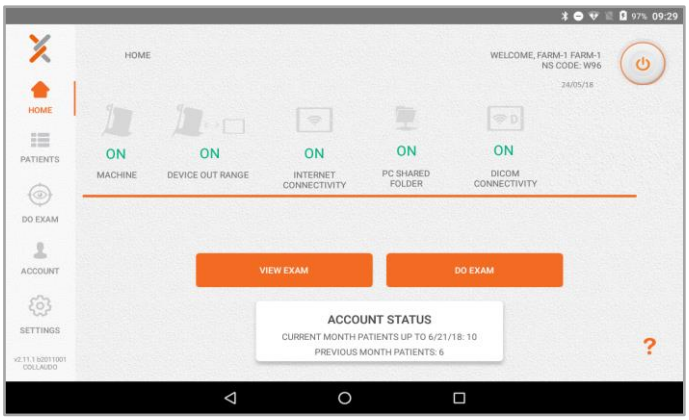


9.1) The HOST is the name or the IP address of the PC that contains the shared folder (i.e. laptopo-7gu05p3u or 192.168.1.100).

9.2) The FOLDER NAME refers to the name of the shared folder (i.e. FolderName or “Shared” in the image above).

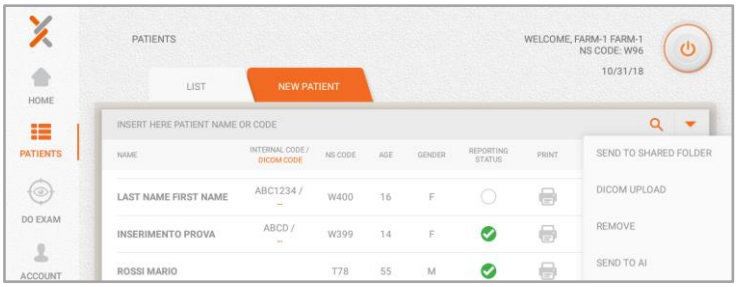
10. Tap on UPDATE and then log out and then log in using your credentials.

11. On the HOME icon (upper left on the tablet); if all goes well the icon SHARED FOLDER should turn green (ON).

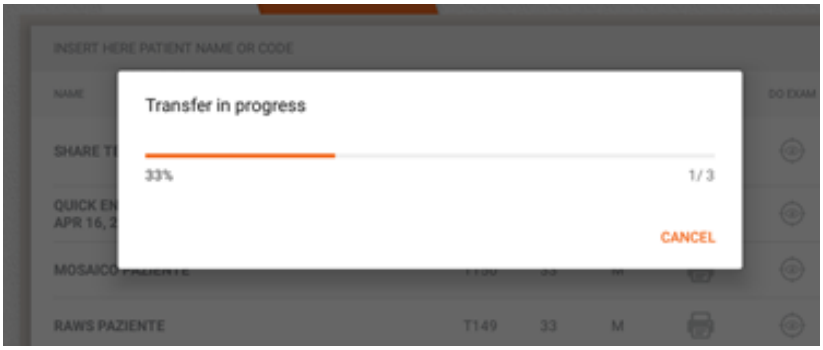


12. From now on, every exam performed using this tablet should create a .jpg file and/or a .json in the shared folder on the PC.

13. If you need to re-send one or more exams, tap the PATIENTS icon on the left; you should see a column of checkboxes on the right - one for every patient (see figure below). Check the patients that you want to re-send, then tap the orange downward-pointing triangle at the top of the column, and choose "SEND TO SHARED FOLDER". The selected patients should appear as a set of .jpg and/or .json files on the shared folder.



Then wait for the transfer to take place.




nexy