

Original user manual

Software

ΕN

FotoFinder aesthetics

Original user manual

Please read these original operating instructions carefully before using the device and always keep it easily accessible!



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1 About these operating instructions

1.1 Introduction

Please note the following points when using the product and this user manual:

- The product can only be used, operated and maintained properly and safely with the help of this user manual.
- This user manual refers only to the product indicated on the cover sheet.
- We reserve the right to change this user manual due to further technical developments.
- The operator must ensure that the user manual is read and understood by all persons concerned prior to work.
- The chapter on *Safety* (cf. chapter 4 Safety) provides an overview of all important safety aspects for the protection of personnel and the safe operation of the product.
- The manufacturer is not liable for any damage resulting from non-compliance with this user manual.
- Reprints, translations and reproductions in any form, including excerpts, require the written consent of the publisher.
- Copyright belongs to the manufacturer.
- Safety incidents occurring in connection with the product must be reported to the manufacturer and the competent authority of the respective country in which the operator is established.

The development and production of all products of FotoFinder Systems GmbH is carried out in accordance with the current ISO 13485 standards.

1.2 Related documents

The following associated documents are relevant for the use of the product and these operating instructions:

- EU Declaration of Conformity
- Hardware instructions for use
- Additional software instructions for use (FotoFinder Universe)

1.3 Presentation of warning labels

- In the operating instructions, warnings are marked with a signal word panel.
- Warnings are introduced with signal words expressing the extent of the hazard.
- Observe all warnings to avoid accidents, personal injury and damages.
- The following signal words and symbols are used in the operating instructions:



This is the general hazard sign. It warns you of dangers to life and limb. All actions marked with this symbol indicate a personal danger. Follow these warnings implicitly to avoid injury or death.

A DANGER

Death or severe injuries will occur if appropriate cautionary measures are not taken.

A WARNING

Death or severe injuries may occur if appropriate cautionary measures are not taken.

A CAUTION

Indicates a possible hazardous situation, which may lead to minor injuries if not avoided.

ATTENTION

The signal word Attention indicates possible material damage. Non-compliance may lead to damages to the device.

(NOTE

Notes indicate important information that the user must consider when executing an instruction. Notes provide the user with more detailed information on a particular subject.



1.4 Explanation of the symbols



Symbols in the software: Country of origin / Date of manufacture



Product updates available until



Model number



Medical device



Unique Device Identification



Observe User Manual



CE Mark

Manufacturer



Displays the Swiss authorized representative: Johner Medical Schweiz GmbH, Tafelstattstrasse 13a, 6415 Arth, Schweiz

2 Installation, updates and uninstalling

The Software must be installed by a trained person or a representative of FotoFinder Systems GmbH. This is also applicable for updates, maintenance and deinstallation of the software.

(NOTE

For more information, please contact FotoFinder support: support@fotofinder.de.

2.1 System requirements

In order to use FotoFinder aesthetics, certain system requirements must be met. Please refer to the separate FotoFinder Universe instructions for use.

A WARNING

Malfunction of the application

Correct execution of the application can only be ensured if the system requirements are met.

Please pay attention to the system requirements!

2.2 Use in a network

It is possible to operate the system in a network with several FotoFinder Universe clients.

(NOTE

For more information, please contact FotoFinder support: support@fotofinder.de.



3 Compatible FotoFinder hardware

You can use the hardware listed in this chapter to capture images for FotoFinder aesthetics.

€NOTE

Some of the software described in this manual can also be used with predecessor systems of FotoFinder Systems GmbH.

Please ask your local consultant for more information.

(NOTE

If contained in your system configuration, you can use the following system components in the immediately vicinity of and in contact with the patient:

- medicam
- Positioning mat
- Chin rest and head stand

3.1 FotoFinder ATBM DX



Fig. 1: FotoFinder ATBM DX

FotoFinder ATBM DX is configured specifically for the requirements of FotoFinder aesthetics. With the DX version for "Dermsthetics" and the FotoFinder aesthetics software, the ATBM technology can be used in aesthetics. Be it for consultation, planning or photo documentation, face, body or vein treatments. The automated capturing process in combination with FotoFinder Guided Photography delivers standardised before-and-after photos from head to toe which visualise treatment progress and success. This increases patient satisfaction and compliance.

FotoFinder ATBM DX is available as a standalone solution or can be added as an option for FotoFinder bodystudio ATBM master.

Aesthetics positioning mat

The aesthetic floor mat, together with the Laser Liner, enables the exact positioning of the patient and thus ensures optimal comparability of Baseline and Follow-up images.



3.2 FotoFinder studio



Fig. 2: FotoFinder studio

The FotoFinder studio is a turnkey imaging system for face and hair imaging with an electrically height-adjustable workstation. It enables standardized and comparable patient images in the following areas:

- Dermatoscopy
- Aesthetics and
- Trichoscopy

3.3 FotoFinder Bodystation (manual tower)

FotoFinder Bodystation is an aesthetics imaging system for standardised total body photography (special stand with laser positioning system, digital camera, laptop, printer). Unlike FotoFinder ATBM, the camera carriage is not computer-controlled but is positioned manually (manual tower).



Fig. 3: FotoFinder Bodystation



3.4 FotoFinder Zoom Ring

FotoFinder aesthetics in conjunction with

- FotoFinder studio
- FotoFinder Bodystation

is supplied with a Canon camera with 18 - 55 mm lens as standard.

The FotoFinder Zoom Ring is installed between the camera and the lens. It can be rotated and has five latching positions with coloured markings. These mark the following focal lengths:

Green: 18 mm (large visible area, e.g. complete body captures)

Blue: 24 mm Red: 31 mm Light blue: 35 mm

Yellow: 55 mm (close-up zoom of small areas, e.g. head)



When capturing images with FotoFinder Guided Photography, you are guided by the system so that you know which zoom position you have to select by turning the FotoFinder Zoom Rings. When capturing follow-up images, you are also referred to the same setting as used for the initial capture, even if you have generated it without Guided Photography. That way, you always generate comparable captures.

3.5 meesma

meesma is a portable aesthetics imaging solution used to generate standardised photos of face and body treatments. With the installed app and cloud or database integration, meesma allows you to document your treatments. Using WLAN, you can transfer captures from meesma to FotoFinder Universe and therefore to FotoFinder aesthetics.



Fig. 4: meesma



4 Safety

4.1 Adherence to the operating instructions

ATTENTION

This manual including the safety instructions refer exclusively to the software. The additional safety instructions described in the separate manuals for FotoFinder systems (hardware and software) are essential and must be followed!

(NOTE

Every person assigned to work with the system must have read and understood these operating instructions and particularly the chapter on *Safety*.

- The knowledge and observation of the applicable contents is a prerequisite for protecting users and patients from hazards and to prevent user errors.

 It is therefore imperative that all safety guidelines are followed to ensure your safety.
- These operating instructions are a component of the system and must always be available near the product. These operating instructions must be read and understood by the personnel and observed during any work with the system. Please contact the manufacturer immediately if contents of these operating instructions are unclear or if you have any questions.
- Apart from the safety guidelines in these operating instructions, please observe the following regulations and provisions:
 - Intended use
 - Appropriate accident prevention regulations
 - Occupational health regulations
 - Generally recognized safety-related regulations
 - Country-specific regulations
 - Attached documentation from third-party manufacturers
- In addition to these user instructions additional safety regulations of your institution or company may have to be observed.
- Additional training is required besides reading these user instructions. The training must be administered by qualified training personnel only.
- The safety instructions of the manufacturer are provided in addition to the general safety regulations of your institution or company. The provided instructions shall not invalidate existing regulations.

4.2 Intended use

FotoFinder aesthetics is used for photo documentation of skin-surface treatments for aesthetic purposes. The image capture is performed using compatible hardware devices. The images can then be saved and managed in the software. A combination with further FotoFinder software products is possible.

4.3 User groups

User group	Demographic data	Expected / Intended qualification, job experience, skills
Dermatologists and general physicians (Primary user group)	 Typical job title: Dermatologist, General physician, Doctor/Physician in training Age: in average between 24 and 65 Sex: all sexes Sensory abilities: normal abilities required to fulfil job Cognitive abilities, including memory: normal abilities required to fulfil job 	 Professional qualification as physician (or in training of such) Trained in diagnosing skin disease Experience with IT 2 x 4 h training by FotoFinder employee or distribution company employee
Practice personnel (Primary user group)	 Typical job title: Medical assistant, Nurse Age: in average between 18 and 65 Sex: all sexes Sensory abilities: normal abilities required to fulfil job Cognitive abilities, including memory: normal abilities required to fulfil job 	 Trained and instructed and professionally qualified through a completed apprenticeship in specialized medicine Experience with IT 2 x 4 h training by FotoFinder employee or distribution company employee
Service and Hospital technicians (Secondary user group)	 Typical job title: Service technician, Hospital technician Age: in average between 18 and 65 Sex: all sexes Sensory abilities: normal abilities required to fulfil job Cognitive abilities, including memory: normal abilities required to fulfil job 	 At least 3 years of professional experience in the medical technological sector Experience with IT 2 x 4 h training by FotoFinder employee or distribution company employee
FotoFinder employees (Secondary user group)	■ Typical job title: Manager or employees in Sales, Support and IT, Management of company	Experience with the product/softwareExperience with IT



	 Age: in average between 18 and 65 Sex: all sexes Sensory abilities: normal abilities required to fulfil job Cognitive abilities, including memory: normal abilities required to fulfil job 	■ Briefing and training by supervising FotoFinder employees
External distribution company employees (Secondary user group)	 Typical job title: Manager or employees in Sales, Support and IT, Management of distribution company Age: in average between 18 and 65 Sex: all sexes Sensory abilities: normal abilities required to fulfil job Cognitive abilities, including memory: normal abilities 	 Experience with the product/software Experience with IT Briefing and training by supervising FotoFinder employees

4.4 Use environment

- The product is intended for use in a professional medical environment (e.g. clinic, hospital) by the users described in the chapter on *User groups* (cf. chapter 4.3 User groups).
- The product is intended for use and operation in a patient environment as per EN 60601-1 only.
- Refer to the respective chapter (cf. chapter 2.1 System requirements) for requirements regarding the physical and technical environment of use.
- There are no additional requirements for the social or clinical environment of use.
- The product is not intended for use by laypersons.

4.5 Requirements to the workstation

The workstation should be set up in a way that medical information is easily visible.

The following conditions should be avoided:

- Direct sunlight
- Reflections on the screen
- Insufficient contrast
- Insufficient screen brightness
- Incorrect color settings

A CAUTION

In order to run the application correctly, FotoFinder Universe must be operated on a workstation with a mouse, keyboard and monitor. The monitor must be set to landscape format. Running the application on a monitor set to portrait format is not supported.

4.6 Operator duties

- The instructions for use are an essential part of the product.
- The user must ensure that the instructions for use are read by all persons working with the software. Only trained personnel who have been instructed in the operation of the software are allowed to work with the software.
- The instructions for use must be kept accessible at the operating site of the product at all times.
- The manufacturer is not liable for damage caused by non-compliance with the documentation accompanying the product.



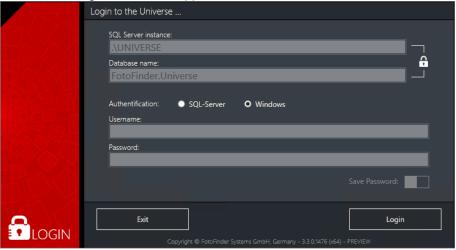
5 Starting the System

5.1 Database login



1. To start the FotoFinder Universe software, simply double click on the desktop shortcut.

The database login window will appear:



2. Establish the connection to the database by clicking on *Login*. If you are working with the optionally available user management, you must first enter the username and password before clicking on *Login*.

The dashboard will appear (cf. 5.2).

5.1.1 View-Only access

Alternatively, the database connection can also be established through a *View-Only access*. This is designed to

- to view / manage / edit the images and
- to review the findings.

In this mode no new images can be captured.



- 1. To start FotoFinder Universe as a *View-Only*, double click on the respective icon on the desktop.
- 2. Add the login credentials as seen above if necessary and click on *Login*.

5.1.2 QuickLogin

Alternatively to the above mentioned starting method, the software can also be started through *QuickLogin*. In this case the login window will be skipped and you will be directed to the dashboard.

(NOTE

The *QuickLogin* function cannot be enabled if the optional User Management is activated (cf. chapter 6 User management (optional)) in Universe.

The QuickLogin can be activated as follows:

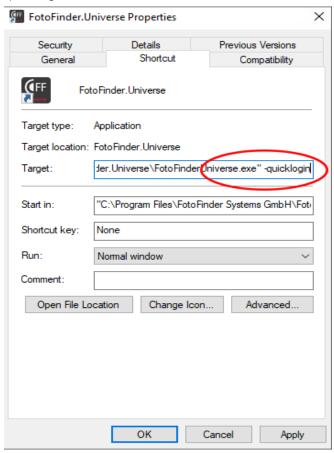
FotoFinder.Universe

1. Right mouse click on the *FotoFinder.Universe* icon on the desktop. A context menu will appear.

2. Click on Properties.

The subsequent Properties window will appear.

3. In the *Target* field go to the end of the text and add the following extension: (*space*)–quicklogin

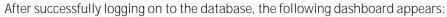


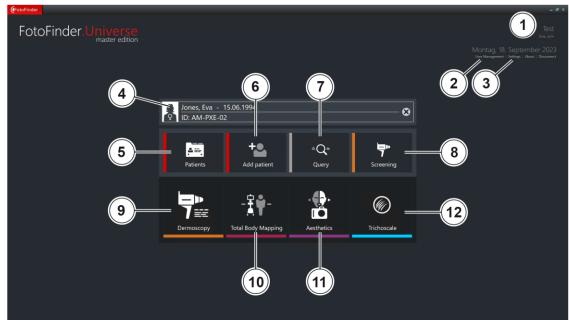
4. Click on Apply and then on OK.

Afterwards when Universe is started, the login window will be skipped and you will be directed to the dashboard (cf. 5.2).



5.2 Dashboard





This displays the following modules and functions enabled as per your programme license:

1	Software information section ((cf. 5.2.1))
---	--------------------------------	-------------	---

- 2 User management (optional) (cf. 6)
- 3 Settings (cf. 7)
- 4 Patient selection field (cf. 5.2.2)
- 5 Patient Management (cf. 8)
- 6 Add Patient (cf. 8.1)

- 7 Research (cf. 11)
- 8 Screening
- 9 Dermoscopy
- 10 Total Body Mapping
- 11 Aesthetics (cf. 9)
- 12 Trichoscale
- Patient Management, Add Patient, Research and Screening can be used immediately once the programme has been started.
- To start Dermoscopy, Total Body Mapping or Aesthetics, you first have to select a patient. These buttons are initially disabled.
- Using Trichoscale DX requires the purchase of a separate license.

5.2.1 The About section

On the dashboard in the upper right corner is the additional About section.



Fig. 5: The About section

Next to the *User management* (2) (cf. 6.1) and the *Settings* (3) options (cf. 7) the *About section* can be accessed:

Logged in user account (1)

If you are working with the optional *user management*, you can see at this point which user is currently logged in. Otherwise, this area will stay empty.

Date

About (4)

By clicking on *About* you will get information about the program version used, contact details of the manufacturer and other information.

Disconnect (5)

You can log out from the database by clicking *Disconnect* without having to close or restart the application.

5.2.2 Patient search field

1. Type the last name or first name, date of birth or patient ID into the input field. The matching patients will be displayed in a drop-down list as you type.



Fig. 6: Example of a patient query

2. Select the desired patient directly from the drop-down list by mouse click.

The selected patient is now displayed with name, date of birth and patient ID in the patient selection field. This is however different if the option to anonymize patient data is activated in *Settings* (cf. 8.2.2). In this case, only the initials of the patient and the patient ID appears in the drop-down list.

3. By clicking on the X on the right side of the input field the selected profile can be cleared.

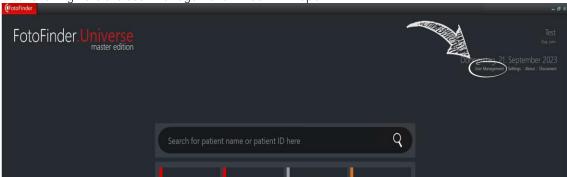


6 User management (optional)

6.1 Starting User Management

The user management can be started from the FotoFinder Universe dashboard. The corresponding button is located in the upper right corner.

After clicking here the user management window will open.



To control access to data and functions in FotoFinder Universe, user accounts can be set up and permissions assigned. When the user management is enabled, the software can only be started with user name and password.

ATTENTION

The configuration of the user management is at your own risk. Please keep your administrator password and the recovery key (displayed during the configuration) of the user management safe. FotoFinder has no way to restore access to the database or the images if you loose your Administrator password and recovery key! Your photos are encrypted and could not be accessed anymore!

In user management the following actions are available:

- Extensive permission management for individual users and user groups
- Create, edit or delete user groups and user profiles
- Creating and editing USB keys

Generally the following applies:

- All users access the same patient database.
- The requested password strength that is set during initial login applies to all users.
- All actions the individual users can perform in the user management depends on the settings in the permission management (cf. chapter 6.8 Permission management).

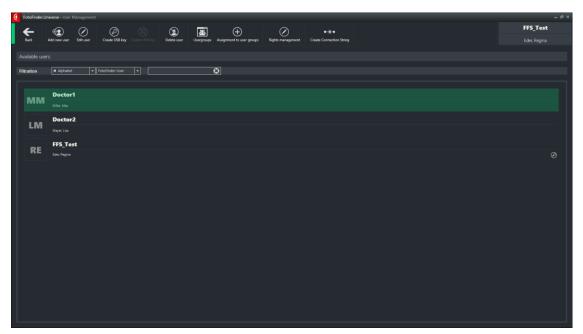


Fig. 7: Example view for the User management

6.2 Concept/Best-Practice

We recommend the following procedure:

The following information must be available:

- Administrator password
- Recovery key (printed out / safely stored)
- List of users for whom a user account should be created

Steps:

- 1. Create the accounts for the users (cf. chapter 6.4 Creating a new user)
- 2. Assign the users to a predefined user group (cf. chapter 6.7.1 Adding a user to a user group). The following user groups are preinstalled and available:

Standard user: Full access to patient data, can change its own password Doctor: Just like the standard user, however cannot change its own

account/password

Nurse: Just like the doctor account it cannot change any software settings,

and additionally cannot delete any patients

View Only user: Like the nurse account, but with only read permissions for the

patient data

IT technician: No access to the patient / user data, however it can change the

software settings

IT admin user: Like the IT technician, and additionally it can make changes to the

users

The permissions of the predefined groups should normally be sufficient. If further restrictions are required, permissions can be withdrawn via the permission management (cf. chapter 6.8 Permission management).

(NOTE

Permissions that are directly assigned to a user have priority over permissions that may be denied to the user via an assigned group.



6.3 Filtering and sorting tools in user management

Alphabet
 Alphabet
 Alphabet
 Alphabet
 Last Modification
 Last Modification

For a better overview, various filters and sorting tools are available in the user management: Sorting tools

You can sort the list of users and user groups (ascending or descending) by

- Alphabetical order or
- Time of Last Changed.

Filtering tools

The filtering tools are available for both users and user groups.



FotoFinder-Usergroups LDAP-Usergroups

No filter No filter

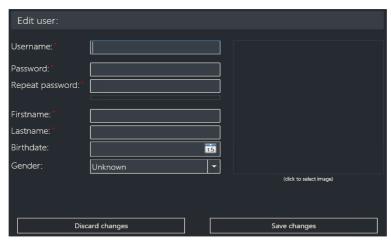
- The *FotoFinder user (groups)* shows all users (groups) that are created in the FotoFinder Universe software. This includes the preinstalled users (groups) as well.
- The *LDAP user (groups)* shows all users (groups) that were imported in Universe through the LDAP import.
- The *Changed users (groups)* shows all the already modified users and groups.

6.4 Creating a new user



1. Click on Add new user.

The *Edit user* window will appear:



- 2. Fill in all the necessary informations. The fields marked with an asterix are mandatory, the user picture is optional.
- 3. With the *Discard changes* button you can erase the added data.
- 4. With clicking on *Save changes* the new user will be saved and now listed at the Available users.

6.5 Editing a user



1. Click on *Edit user* to make changes on the selected user. The same editing window will appear as when creating a new user.

- 2. Make the necessary changes.
- 3. After clicking on Save changes the new data will be saved.

6.6 Deleting a user

To delete a user from the user management follow these steps:

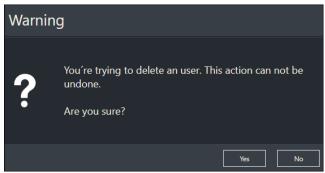
1. Click on the user you wish to delete.

This user will be now highlighted.



2. Click on *Delete user* in the menu bar.

The following dialog box will appear that the action cannot be revoked:



3. Confirm with *Yes*, or click on *No* to cancel this action.



6.7 User groups

The *User groups* allow to have the same permissions set for a group of users.

Please refer to our recommendation for this in the beginning of this chapter (cf. chapter 6.2 Concept / Best-Practice).

Generally the following applies:

- In *Patient management* there are already preinstalled *User groups* available. The already set permissions can be adjusted or deleted here.
- It is also possible to create a new user group with specific permissions.
- Every user can be added to one or more user groups.

6.7.1 Adding a user to a user group

One user can belong to several user groups. You can adjust the individual assignments as follows:

. Click on Assignment to user groups in the menu bar.

The following menu will open:



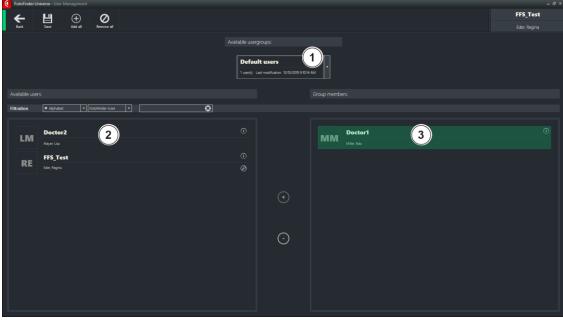


Fig. 8: Example view for the user assignment menu

To change a user assignment:

- 2. Open the drop down menu in the middle at *Available user groups* (1).
- 3. Select here the group where you want to add the user.

On the right side at *Group members* (3) all the already assigned users will be visible. On the left side at *Available users* all users will be shown (2) that are not members of this selected group yet.

4. Click on the user you want to add or remove from the selected group.

The selected user will be highlighted.

5. A user can be added or removed with the and buttons between the two columns. With a click on the plus sign the user will be added to the selected group. With a click on the minus sign the user will be removed from the selected group.



Add or remove all users at once

With the Add all and Remove all buttons all the users of the selected group can be added or removed.





6. Confirm your selection with Save.

6.7.2 Adding and editing a new user group

Typically the preinstalled user groups should be sufficient. In case an additional user group is required, with the following steps can a new group be created:



Click on the *User groups* icon in the menu bar to open the editing window:

6.7.2.1 Adding a new group



I. Click on Add new group.

On the right side a new window will appear where you can add the name of the group.

2. Add the group name and save it.

The new group will be now visible in the list.

6.7.2.2 Deleting a user group

1. Mark the user group you wish to delete.

The group will be highlighted.



- 2. Click on the *Delete group* icon in the menu bar.
- 3. Confirm the following message with *Yes*.

The group will be deleted.

6.7.2.3 Editing a user group

1. Mark the desired user group you wish to edit.

The group will be highlighted.



- 2. Click on *Edit group* icon in the menu bar.
- 3. On the right side the editing window will open where you can make the required changes.
- 4. Confirm your changes with Save.



6.8 Permission management

In the permission management you will have a full overview over all active permissions. You can also control here all individual user and user group permissions.



Click on the *Permission management* icon.

The following window will appear:

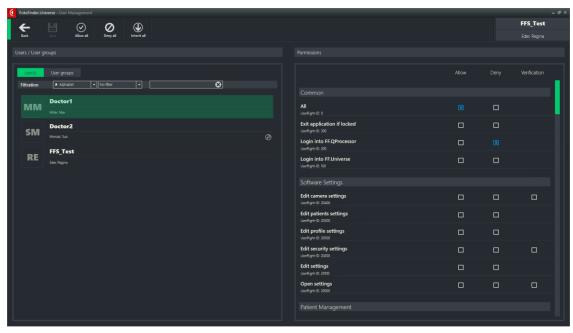
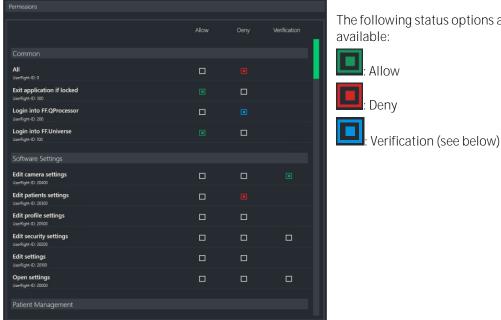


Fig. 9: Example view of the permission management

- Select on the left side if you want to work on individual (user) or group permissions.
- From the list below select the user/group you wish to edit.

The selected user/group will be highlighted.

On the right side of the screen the list of rights / permissions will be displayed:



Adjust the permissions as required.

The following status options are

6 User management (optional)



The following buttons are also available for quick changes:

With clicking on *Allow all*, all points will be set to allowed. You still can set the permissions individually.



With clicking on *Deny all*, all points will be denied. You still can set the permissions individually.



With clicking on *Inherit all*, all the permissions will be copied from the other users of the same group. These permissions are displayed with blue on the right side.

Allowed permissions will only be the ones that have the allowed status.



5. Confirm your changes with *Save*.

Generally the following applies:

- If a user is in more groups added, it will only have the permissions that are in every group allowed for the user.
- If any permissions are denied for a group, the same permission can still be allowed for any individual users in the same group.



Any permission that is allowed for a user has priority over permissions that are set for the group where the user is.



6.9 USB Key

With a USB Key you can log in safe and fast without always having to type in a Password. Your login data will be stored on a USB Stick or SD Card. To set this please follow these steps:

(NOTE

Only the active user can set a USB Key. It is not possible to set this for another user.

(NOTE

Please keep your administrator password and recovery key safe at all times.
FotoFinder has no way to restore access to the database or images if all access data is lost. If the key is lost, you won't be able to access the data again!

6.9.1 Creating a USB Key



- 1. Plug in a USB stick or SD card.
- 2. Click on Create USB Key.
- 3. In the appearing window select the drive you wish to use.
- 4. Confirm your selection with clicking on OK.



The USB Key will be created on the drive and can immediately be used to log in to the database. In the user management a small key symbol will be shown at any user where a USB Key is created.

6.9.2 Deleting a USB Key



Every user can also delete their own USB Key as well. In addition, users within the *Administrators* group can also delete other users USB keys.

1. Click on *Delete USB Key*.

This user now will only be able to log in with typing in the password.

7 Settings

You can adjust the settings of your program on the Dashboard (cf. chapter 5.2.1 The About section) itself. The *Settings* button is located in the upper right corner.

Clicking on it will open a menu in which you can manage various settings. The most important ones are described in the following sections.

7.1 General

In the General section, you can make the following settings (mark the checkboxes at the corresponding functions):

7.1.1 Customer data

This section is described separately (cf. chapter 7.8 Adjust user information).

7.1.2 Patient List

- The software can for example, automatically assign a new ID when creating a new patient.
- Anonymizing patient data: In the Patient List and when searching on the dashboard, the Software will only be display the initials of your patients. The full name is still displayed when the application is open.
- Specify the unit system with which you want to measure (cm/inch).

7.1.3 Safety

Lock settings with a password: To ensure that selected settings are not changed inadvertently you can enter a password under Security. Settings can then only be changed by entering this password. For additional information, please contact FotoFinder Support at support@fotofinder.de

7.2 Image Capture Devices

In the section *Capture devices*, you can control different parameters for the connected cameras, for example the white balance.



Please note that changes to the camera settings can have a negative effect on the comparability of new images with the images already available.

7.2.1 General

Here you can adjust the settings for the image display:

- If required, enable or disable the 4: 3 mode for new capturings.
- By default the micro images are set to start in polarized mode. Disable this here if necessary.

Device names

If you used the renaming option you can reset the device name here.



7.3 Data Interfaces

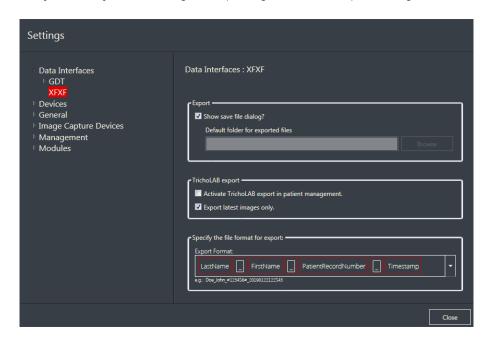
7.3.1 GDT

Here you can adjust the settings for the GDT connection. For this you will need the data of your GDT system.

Please contact FotoFinder Support for individual consultation and integration.

7.3.2 XFXF

Here you can adjust the settings for exporting data (for example, setting a default storage folder).



Export

You can skip the save dialog for XFXF exports by removing the check mark in the dialog box for entering the storage path. Exports are then directly saved in the storage folder you selected here. If you leave the checkmark here, the last used storage location will be suggested. The system remembers this and also differentiates according to the individual export functions, such as Image Export, FXF Export, etc. The location can be changed each time you save / export.

TrichoLAB Export

The TrichoLAB Export provides you with an export function for hair analysis via TrichoLAB. Please note that this requires the installation of the TrichoLAB sync Software.

Please adjust the following settings:

- 1. Remove the tick for *Show save file dialog*.
- 2. Tick Activate TrichoLAB export in patient management.
- 3. Optional tick: Export latest images only

Do not enter a password during the TrichoLab export process.

Specify the file format for export

Here you can specify how file names are recommended by the Software for export. The file name is comprised of various data fields.



- 1. If you want to add a certain field, click on the arrow on the far right and select the required field from the displayed drop-down list.
- 2. Click and hold the left mouse button to change the order of fields in the selection.
- 3. You can delete the field again by right-clicking on a field and then selecting *Delete*.
- 4. The field *Customize* provides a text field for free text. If you click into the field, a cursor appears and you can enter your text.

A sample is displayed below the field selection and shows the current order of your fields.



7.4 Devices

7.4.1 Automatic Tower

You can find some functional settings for the ATBM Tower under *Devices*.

- Camera profile: Here you can preselect a camera profile as default, e.g. *PolFlash XE*. The selected camera profile is preset in the capturing process, but can be changed at any time.
- Countdown: Before starting a Total Body Mapping or Body Photography, there is a countdown rate before the camera starts moving for safety reasons. By default, this countdown lasts for 3 seconds. This countdown can be changed or deactivated completely by setting it to 0.
- Service position: The service position describes one of three possible positions of the camera slide on the tower (top, middle, bottom).

The service position is used for better accessibility of the camera slide including the devices mounted on it (e.g. camera, PolFlash XE, cable) for maintenance. Select the desired service position from the drop-down list.

You have two options for moving the camera slide to the service position:

- Through the *Settings*. Click on the *Service position* icon on the right side of the drop-down list.

Or:



service position

- Enable in the *Settings* the option *Show service position in live view.* As a result, the corresponding button will also be displayed in the Total Body Mapping module in live image. Click on the Service Position button to move to this position.
- Parking position: The digital camera can automatically go to a parking position at eye height when the program is closed. This prevents the camera from sliding down and possibly causing damage in the camera. To set this check the appropriate checkbox. When you exit the program, a window will appear which must be confirmed. Afterwards, the camera will automatically move to the parking position.

7.5 Modules

7.5.1 Aesthetics

Here you can adjust the standard settings of the aesthetics module.

7.5.1.1 General

- Check *Activate marker function* and the Marker button will appear in the menu bar of the user interface.
- You can also set the *Tolerance limits* for the focal length during baseline and follow-up imaging. These are set to 1 mm by default.
- The *Initial tower position for baseline* is set to 2500 by default. This can also be changed (0 = camera position at the very bottom, 4440 = camera position at the very top).

7.5.1.2 Image Viewer

- Here you can activate or deactivate the possibility to attach file attachments for images (cf. chapter 9.1.4 Saving file attachments).
- Select if the Zoom percentage should be displayed in the Image Viewer or not

7.5.1.3 Reports

- Check *Extended printer options* and the extended printer menu will appear when creating the report.
- Check *Print overlay graphics* in order to display these in the reports as well.
- Select the preferred default report target: PDF, Preview or Printer. This will be then always the default option when printing a report. This can be also changed in the extended printer options.
- With clicking on *Browse* the default path for saving the reports can be added.
- If desired, you can define the file name and format for exports and reports from this module (cf. chapter 0 Specify the file format for export).

7.5.1.4 Screenshots

Here you can specify whether additional meta data are included with the function Copy to clipboard when comparing images.

- Check *Render meta data to screenshot* and the following data are also issued:
 - Template
 - Baseline or Follow up and
 - Time of capture
- Check *Use extended meta data* and these data will also be issued:
 - Patient information
 - Time of screenshot creation
 - Image ID
 - Image size
 - Date of capture
 - File name
 - File path



7.5.1.5 Videos

Here are the settings available for the Video recordings:

- Recording
- Export
- Watermarks

7.5.2 Query

7.5.2.1 Reporting

If desired, you can define the file name and format for exports and reports from this module (cf. chapter 7.3 Data Interfaces).

7.6 Management

On the Administration tab, you can manage a list of possible treatments, diagnoses and studies and change the associated settings for the dermoscope and aesthetics modules.

The list will then appear as a drop-down menu with the image data on the user interface.

- You can add more entries by clicking on *New*.
- You can deactivate individual list entries by using the mouse to uncheck behind the appropriate name. By clicking the mouse again, you can check it again and reactivate the entry.
- After clicking on a previously stored entry, you can change the name with *Rename*. Please note that this change will also affect existing images in which this entry was already used.

(NOTE

If you want to combine several (up to five simultaneous) existing entries, e.g. because the same treatment was created with different spelling, you can easily combine them as follows:

1. Select the appropriate entries by clicking the mouse and holding the Ctrl button.

The selected lines are highlighted in red.

- 2. Click on *Rename* and allocate a name.
- 3. Confirm by clicking on OK.

The entries are now combined.

Confirm all changes with Save.

Click on Close to return to the Dashboard.

7.6.1 Treatments

(Treatments only relevant for the aesthetics module)

Checking *Editable list of recommended treatments in Aesthetics* will result in the following: You can either choose a treatment from the previously created list or freely enter a treatment directly in the user interface. New entries are automatically moved to the treatment drop-down menu.

7.6.2 Diagnoses

You can import a saved csv file by using the CSV Import button.

Leaving the checkbox empty at *Use fixed templates for diagnoses in Dermoscopy/Aesthetics* will result in the following for the specific module: You can either choose a diagnosis to tag a photo from the previously created list or freely enter a diagnosis directly in the user interface. New entries are automatically moved to the diagnosis drop-down menu. The system does not suggest any diagnosis.

7.6.3 Studies

Leaving the checkbox empty at *Use fixed templates for studies in Dermoscopy/Aesthetics* will result in the following for the specific module: You can either choose a study from the previously created list or freely enter a study directly in the user interface. New entries are automatically moved to the study drop-down menu.

7.7 Audit Control

Since Universe Software Version 2.0.35.0 it is possible to record changes and procedures by each user. This record is activated by default.

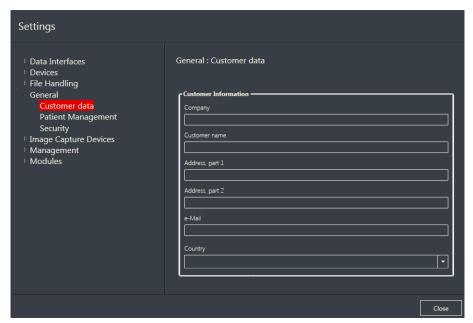
Please get in touch with your local FotoFinder contact person if you need further information.

7.8 Adjust user information

During the installation process you filled in your user information for the print layout. This data is now displayed in the header.

You can edit these data as follows:

- 1. Click on *Settings* at the top right of the start screen.
- 2. Open the menu *General Customer Data* and edit your data there.



3. Exit the menu by clicking on *Close*.

Your data are now edited.

Alternatively, you can edit the company name, address and email as follows:

- 1. Press the Windows key.
- 2. Enter SetCustomerInfo.
- 3. Confirm with Enter,

which opens a window in which you can update the data.

4. Save the data and exit the program with Accept.



When creating a report, these data will now be inserted automatically



8 Module Patient administration



You can perform the following actions in the Patient List module:

- create new patient profiles
- edit or delete existing patient profiles
- export or import patient data with all associated images (cf. chapter 12.1 Import and Export from FXF/XFXF Data)

8.1 Add patient



1. To create a new patient profile, click on the button *Add Patient* on the left in the patient management section or



on the button Add Patient on the dashboard.

This opens the input mask:

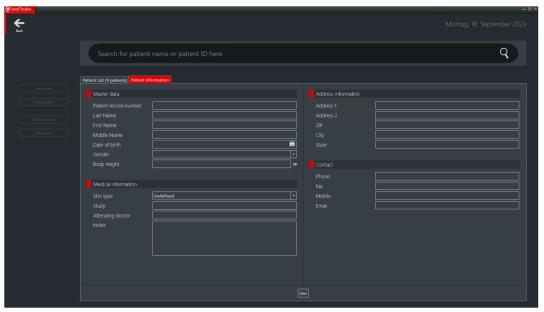


Fig. 10: Add Patient input mask

2. Enter the required patient data. Mandatory and optional fields are available for this purpose.

(NOTE

- Fields marked with an asterisk are mandatory!
- Body height is not a mandatory field in the master data. However, its specification is mandatory for Automatic Total Body Mapping. If you do not specify anything here, the software will ask for the patient's height as soon as you start the creation process for the first time.
- The format of the patient number is not specified. It can be individually created by the user. Both numbers and letters or a combination of both are allowed. Under Settings → General you can set up automatic creation of the patient number by selecting the field Generate new patient IDs automatically (cf. chapter 7.1 General).



3. To confirm the data, click on *Save*.

A new patient was added to the database and you are returned to the dashboard.

8.2 Editing Patient Records

8.2.1 Opening a Patient Profile

You can select an existing patient profile by either searching in the search mask on the Dashboard itself, or by searching in the Patient List module.

(NOTE

The most recently selected patient record remains active in the search field of the Dashboard. Click on the closing symbol X on the right side to clear this selection and to start a new search.

8.2.1.1 Searching with a search option

1. Insert at least the first character of the patient record number, the last name or the first name or the complete date of birth into the search field on the upper edge of the screen.

During the input of the characters, possible results will already be displayed in the hit list:



2. Click to select the required patient profile from the hit list.

8.2.1.2 Searching for first names and surnames

You can also search for surnames and first names simultaneously:

1. Enter these in the search field. The first characters suffice.



2. Click to select the required patient profile from the hit list.

8.2.1.3 Feature for patients with several first names or surnames

Please note the following when entering a search for a patient has several first names or surnames (e.g. "Tina Mary"):

For instance, when entering "Tina Mary", the Software will only recognize the patient if you also add a comma (,). The Software can then detect that the search refers to one and the same field (in this case; the first name).

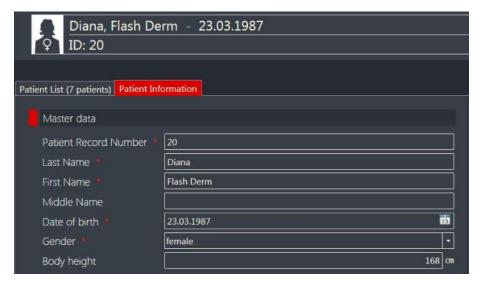


8.2.2 Anonymizing the Patient Data

The patient names are by default anonymized so that it is not displayed while treating a third party. However, you can still select anonymized patient names via the search field. You can turn anonymizing off in Settings (cf. chapter 7.1 General).

8.2.3 Updating and Deleting Patient Information

- 1. Select the required patient profile.
- 2. Click on the Patient data tab.
- 3. Edit or complete the patient data and contact details.
- 4. Click on Save.



Delete patient

If you want to delete a profile, select the appropriate profile from the database first and then click on *Delete Patient*.





After confirmation, the patient profile and all related images will be removed irrevocably!

9 Module aesthetics

Aesthetics is a module used to create images and standardized follow-up images for medical and aesthetic purposes.

1. Create a new patient profile or select an existing one in the Patient List.



2. Click on *Aesthetics* on the Dashboard.

9.1 The Desktop

The user interface of this module consists of seven sections:



Fig. 11

- 1 Menu Bar
- 2 Patient Data Field
- 3 Preview window with image display tools
- 4 Image information

- 5 Filter functions
- 6 SmartGallery with sorting function
- 7 Expert systems (partly optional)



9.1.1 Menu Bar

Back

Baseline

Follow up

Compare

Import

Export & Report

You can see the Menu Bar on the upper edge of the screen. The individual functions are described in the chapters below.

Back: you are returned to the previous screen. When you click this button in the overview, you will leave the module and return to the Dashboard.

Baseline: this starts the capturing process of images for a patient without reference images.

Follow Up: this starts the capturing process of images for a patient with reference images.

The Compare function: You can compare images from one position and from different sessions directly next to each other (cf. chapter 9.3.2 Compare).

Delete: You delete the selected image.

Report: You create a document in PDF format. The print design is specifically aligned to aesthetics.

Import: You can import images (cf. chapter 9.8 Importing images).

Export & Report: You can export and print out selected images (cf. chapter 9.6 Export & Report:).

Imaging tools: You can use a measurement tool and an effective anonymization function. You can also mark selections (cf. chapter 9.3 Working with the images).

Marker. Use this function to mark positions on overview images. This button only appears when you have activated it in settings (cf. chapter 7.5.1 Aesthetics)..

Videoeditor. Here you can edit your videos (cf. chapter 9.4.1 The Video editor).

9.1.2 Patient Data Field



The Patient Data Field is displayed on the right side of the screen with the name and patient number of the current patient.

9.1.3 Preview window with imaging tools

The preview window displays the image of the currently selected capture session, or the live image during the capturing process.

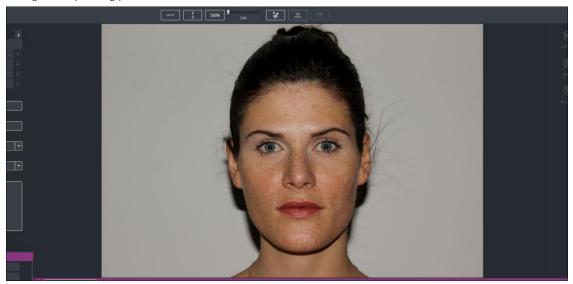


Fig. 12

Magnification functions

■ Magnification function for the entire image:

To enlarge the image, move the cursor into the image and rotate the mouse wheel upwards or downwards to reduce. In enlarged view, you can move the image section by pressing and holding the left mouse button.

■ Magnification function in sections:

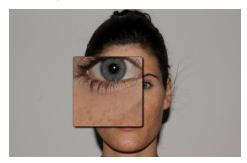


Fig. 13

Click and hold the right mouse button in the displayed preview window. A mobile magnifying glass appears to magnify a section of the image. You can therefore view sections in more detail. If you turn the mouse wheel simultaneously, you can adjust the size of the magnifying glass.



Imaging Tools

At the top of the screen you see the following menu bar:





With this button you can enlarge the image to the width of the preview window.

With this button you can adapt the image to the height of the preview window.

With this button you can display every pixel of the image with exactly one pixel of the screen.

With the help of the slider bar or by turning the mouse wheel the enlargement of the image display can be set individually. You can change the displayed section by clicking and holding the left mouse button to shift the image.



With this button you can fade inserted image markings (e.g. Marker) in and out.

With this button you can fade inserted measurement tools in and out.

Use this button to fade in a scale in the preview window (not possible for uncalibrated images).



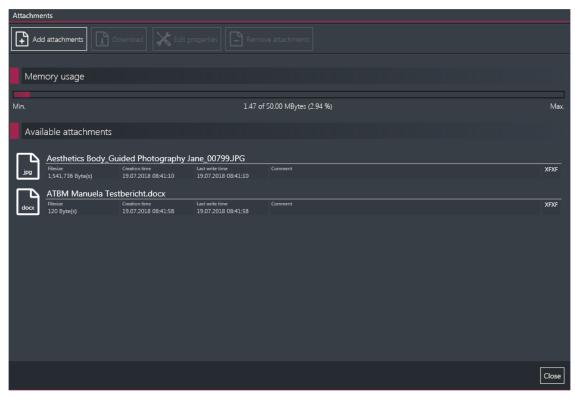
9.1.4 Saving file attachments

You can save file attachments for every photo.

This function can be activated and deactivated in the settings (modules / ... / image viewer) (cf. chapter 7.5.1.2 Image Viewer).



1. Click on the paperclip icon in the upper left corner of the preview window. The Add attachments window will open.



2. Via Add Attachments you can select files that you want to save as an attachment here.

Once you selected an existing attachment, you can also perform the following actions here:

- Download: The attachment can also be stored outside of Universe.
- Edit properties: You can change the files name, enter a comment and choose whether to include the attachment in an XFXF export.
- Remove selection: The file can be removed again as an attachment.
- 3. With Close this menu and window will be closed.

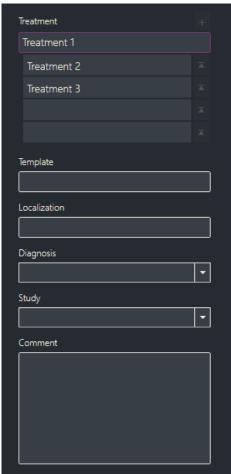


You can see if there is any attachment if the paper clip is colored. This color variates depending on which module are you using (Dermoscopy, Total Body Mapping or Aesthetics).



9.1.5 Image information

You can save information on every image. This is especially helpful during later searches.



Treatment/ Diagnosis/ Study:

You can save lists with possible contents for each of the fields *Treatment*, *Diagnosis* and *Study* (cf. chapter 7.6 Management). When entering the image data, you can then easily select from these data. To open the list, click on the small triangle on the right of the input field. If you want the additional option of entering a new text, you can also specify this in the settings. These new entires are then included in the future drop-down menu. Template:

If you created your images with a defined template (Guided Photography), the name of the template you used is displayed here (cf. chapter 9.2.3.1 Template Manager).

Localization:

Here you can enter localizations. This occurs automatically in Guided Photography.

Comment:

Here you can enter additional information as free text.

9.1.6 Filter functions

Aesthetics offers the option of filtering the images displayed in the SmartGallery.



You can find the filter functions on the bottom left of the user interface. Here you can specify the criteria an image needs to fulfill in order to be displayed in the SmartGallery.

You can filter according to *Primary Treatment* and *Visit*.

1. In this case, click on the arrows on the left next to these headings.

This will open a drop-down menu with possible criteria. You can combine criteria from both areas.

2. When clicking on *No Grouping*, your selected filters will be discarded to display all images.

9.1.7 SmartGallery with sorting function

The SmartGallery is located on the bottom edge of the user interface. Here you can see thumbnails of all the current patient's images. There is also a sorting function available.



- If you select one of the images in the SmartGallery, it is marked with a purple frame and displayed in the preview window.
- The thumbnails are displayed with differently colored frames. These colors provide you with the following information:
 - Dark blue: Baseline image
 - Turquoise: Follow-up image
 - Orange: Edited images (images with inserted markings or images created with the function "In new file" in image comparison)
- With the left and right arrows you can scroll through the images in both directions.

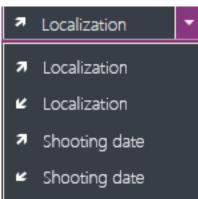
 Alternatively, you can use the mouse wheel to do so. In this case, the mouse cursor must be in the SmartGallery.
- The images are sorted according to date and time of baseline capture. Associated follow-up images follow behind.
- Capture information on the currently selected image is displayed in the purple bar above the thumbnails. This contains
 - The day and time of capture
 - Image type: Baseline or Follow Up
 - Image size in pixel
 - Applied camera profile



By clicking on the button on the right of the purple bar, you can change over to a multiline view of the thumbnails. The SmartGallery is then enlarged upward and provides a better overview for a larger number of images.

Sorting Images

By default, all overview images of a patient are displayed in the gallery sorted by localization. To maintain an overview of numerous images, the SmartGallery offers additional options for sorting images.



With the help of the drop-down-menu above the overview images you can sort the images by localization or capturing date in ascending or descending order.



9.2 Creating images

The CamControl technology permanently connects the camera with the computer and is controlled via the software. This permits the standardized capture of digital, high-resolution images.

- 1. Ensure that the camera is connected correctly.
- 2. Switch the camera to ON.

If the camera is not connected correctly, you will receive an error message.



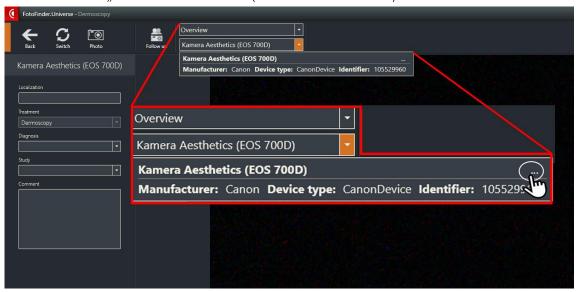
With the CamControl function, all settings such as lighting, flash etc, are automatically saved in the profile and optimized for the respective use.

3. Also verify that the camera wheel is on M("manual") before switching to the imaging mode. Otherwise you will receive an error message.

9.2.1.1 Renaming connected digital cameras

Several different digital cameras can be connected to your system. As a user to be able to differentiate between these cameras during the capturing process, these cameras can be individually renamed.

- 1. Start the capturing process.
- 2. Open the camera selection drop down menu.
- 3. Click on the "..." at the end of the row (see on screenshot below)



4. A cursor appears behind the current camera name. Overwrite this as desired and confirm with *Enter*.

Reset camera names

You can reset the camera names to the original if you follow these steps:

- 1. From the main Dashboard go to Settings | Image Capture Devices | general settings.
- 2. Click on Reset at Reset all custom device names.
- 3. Quit the *Settings* with clicking on *Close*.



9.2.2 Image capturing without the Guided Photography

9.2.2.1 Baseline



1. Click on *Baseline* in the aesthetics module.



2. In the appearing window click on *Skip on-screen instructions*.



Now the *Define Treatment* screen will appear.

Depending on what you added in the *Settings* (cf. chapter 7.6

Management) you can select here from the list, or even add a free text.

- Primary treatment is a mandatory field.
- Secondary treatment is optional only. With the plus symbol you can add additional fields These entries have to be different from the Primary treatment.
- 3. Confirm your entries with OK.

After a short initialization the capturing window will appear.

In this windows you will see the live view. You can immediately see the results of your changes to the capturing settings here.

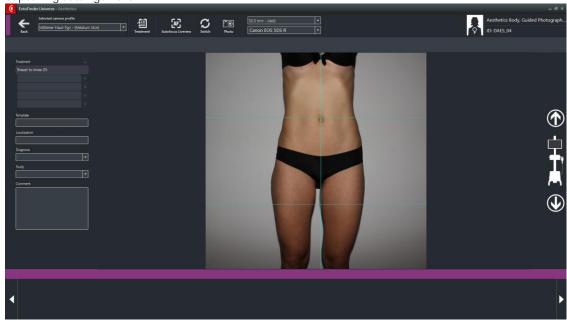


Fig. 14: Example view of a Baseline without a template



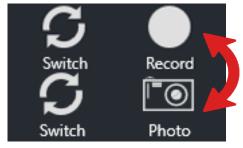
- 4. For the best images you can also adjust the *selected camera profile* based on the patient's skin type. In the aesthetics module the following profiles are available:
 - Medium skin tone (Medium Skin); default profile
 - Light skin tone (Light Skin)
 - Dark skin tone (Dark Skin)

The other distinctions with the endings *cropped 16* or *25* create a portrait image instead of the standard landscape image. 16 is narrower than 25.

If you are working with the PolFlash XE, please select the corresponding profile.

With the *Switch* feature you can change between image and video capturing.

5. Select *Photo* for an image capturing.



- 6. In case there are more SLR cameras connected, these will be listed in the drop down menu in the menu bar.
- 7. The zoom value has to be adjusted.

Depending on your system configuration, there are two possibilities:

Systems with Zoom Motor		Systems with Zoom Ring
\$2.0 mm - (med) \$0.0 mm - (green) 40.0 mm - (green) 40.0 mm - (green) \$2.0 mm - (med) \$2.0 mm - (med) \$7.0 mm - (green) \$2.0 mm - (green) \$2.0 mm - (green)	Select the desired zoom value in the drop down menu in the menu bar. The Zoom Motor will then automatically adjust the lens.	By turning the Zoom Ring you can set the zoom value of the lens (cf. chapter 3.4 FotoFinder Zoom Ring).





If you are working with an automatic tower, you can manually adjust the height of the camera with the arrows on the right side.

€NOTE

If the arrows are not displayed, even though you are working with and automatic tower, the following might be the reason:

Check if in your *Settings* under *Devices / Automatic Tower* the manual tower is active. If yes, unmark this checkbox.

If you are working with a FotoFinder Bodystation you will have to adjust the height of the camera manually:

- 1. Retract the locking lever on the camera slide.
- 2. Move the slide to the required height.
- 3. Release the locking lever.

The lever will lock automatically.



8. Click on Capture.

The captured image will be displayed. The following options are available to control the quality of focus and position:

- Double-clicking on this new image will display it with a 100% zoom value.
- Use the mouse wheel to zoom in and out.
- Click and hold the left mouse button to move the image.

If the quality and capturing position are satisfying, continue with **Save**.

After capture, the *Undo* button becomes active.

9. If you are not satisfied with the first image taken, click on *Undo.*

The image is deleted and you can capture a new image. Otherwise proceed with the next step.

0. If you are satisfied with the image, click on Save.

The image is saved to the SmartGallery. The software returns to the live image preview. You can immediately continue capturing images for the same treatment or continue with one of the next points.



11. Click on *Treatment* if you want to capture images for additional treatments.

The dialog window *Define treatment* reappears. Continue as described above.



By clicking *Back* you are returned to the user interface of the aesthetics module.

9.2.2.2 Baseline as video

If you want your recording to be video, follow steps 1 - 4 as described above, then proceed as follows:



5. Click on *Video* to start the recording. If necessary, you can click on *Switch* to change between Photo and Video recording.

€NOTE

It is also possible to start the baseline capturing already as a video. For this in step 2 instead of *Skip on-screen instructions* click on *Video Capture*.

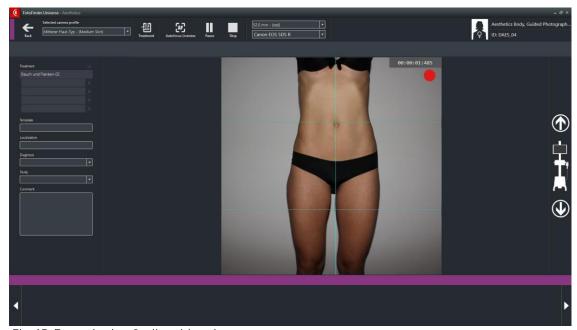


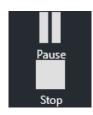
Fig. 15: Example view for live video view



During the recording:



- the length of the recording shows in the upper right corner. The blinking red dot indicates that the recording is in progress.



- the *Pause* and *Stop* buttons are active:

You can pause the recording with the *Break* button. You can restart the recording any time with clicking on *Record* again.

When finished, click on Stop.

You can specify the maximum length of videos in the settings (cf. chapter 7.5.1.5 Videos).

Right after the recording the video will be automatically played back.



After capture, the *Undo* button becomes active.

6. If you are not satisfied with the first image taken, click on *Undo*.

The image is deleted and you can capture a new image. Otherwise proceed with the next step.

7. If you are satisfied with the image, click on **Save**.

The image is saved to the **SmartGallery**. The software returns to the live image preview.

9.2.2.3 Follow up (Image and video recording)

The standardized follow up images allow an exact comparison over time. This way any changes on the patient can be documented and recognized at an early stage.

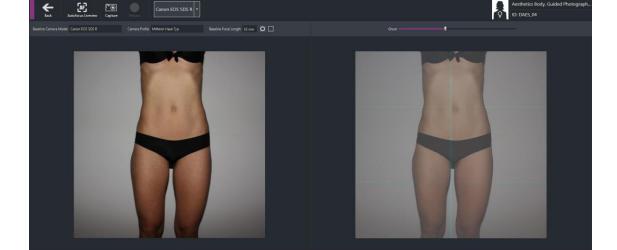
1. Select from the SmartGallery the image you wish to make a follow up for.

This will be highlighted with purple.



2. Start the capturing process by clicking on *Follow up*.

The camera will automatically travel to the same height as the baseline image. The screen will be divided into two sections:



On the left you can see the selected baseline image with the applied settings.

3. The zoom value has to be adjusted. Depending on your system configuration, there are two possibilities:

Systems with Zoom Motor	Systems with Zoom Ring
In case you have a Zoom Motor you do not have to do anything, the system will calibrate itself automatically based on the Baseline settings.	By turning the Zoom Ring you can set the zoom value of the lens (cf. chapter 3.4 FotoFinder Zoom Ring). The corresponding value can be found in the Baseline focal length field above the displayed baseline image on the middle left side. If the value is different, an error message will appear.

On the right side the current live view is displayed. The **Ghost** function places the existing baseline image on top of the live image. This makes it easier to position the patient exactly as on the baseline. All other camera settings are automatically adjusted to the same settings of the baseline image.



- 4. You can adjust the transparency with the slide bar above the preview.
- 5. Click on *Capture* (for images) or on *Record* (for videos) after positioning the patient correctly.

After capturing: The captured image is displayed on the right. Like for the baseline capture, the following options are available to check the focus and position:

- Double-clicking on this new image will display it with a 100% zoom value.
- Use the mouse wheel to change the zoom value.
- Click and hold the left mouse button to move the image around.

If the quality and position matches the baseline image, continue with Save.

After video recording: Right after the recording the video will be automatically played back.



After capture, the *Undo* button becomes active.

6. If you are not satisfied with the first image taken, click on *Undo*.

The image is deleted and you can capture a new image. Otherwise proceed with the next step.

7. If you are satisfied with the image, click on **Save**.

After saving the system will automatically jump to the next image in the SmartGallery.

By clicking on *Back* you will return to the user interface of the **aesthetics** module.



9.2.3 Capturing process with a defined template (Guided Photography)

The templates of the FotoFinder Guided Photography provide step-by-step instructions to help taking face or body images fast and efficiently. Select from a variety of treatment-specific templates and follow the software's instructions. The virtual patient shows the correct pose for each position. The repeatable patient alignment is achieved using the Laser Liner and the Ghost function.

9.2.3.1 Template Manager

In order to use Guided Photography, you first have to make the appropriate settings in Template Manager. This specifically concerns the activation of the templates you require.



1. Open the FotoFinder Template Manager by double-clicking on the icon. This is located on your desktop.

This action will open a window for login into the database.

2. Click on the check above *Connect*.

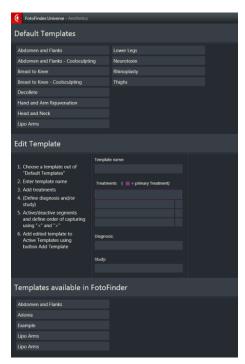
This connects you to the database.

When the program is started for the first time, a window opens for a selection of your FotoFinder device version.

3. Select your hardware by clicking on the image.

You can edit your selection by clicking on the *Change hardware* button at the top right. The currently selected hardware has a purple frame.





You have now accessed the Template Manager. This contains a selection of standard templates. You can edit, activate and assign treatments and studies to the relevant templates. Templates can be activated multiple times

The overview in Template Manager is divided into three sections from the top to the bottom:

- Default templates
- Edit Template
- Templates available in FotoFinder Universe

Activate template

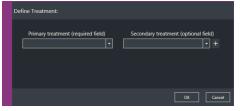
In order to use a defined template for the capturing process, it has to be activated once. If you activate a template, this is also described in the template editor on the left.

1. At the top, click to select the required standard template.

The name of the template is now highlighted in purple and the template editor specifies detailed information on this template.

- 2. In the template editor, give the template a name in the field *Name of template*.
- 3. Click on the plus sign on the right of treatments to save a template.

The dialog window *Define treatment* appears.



- Primary treatment is a mandatory field. The system automatically adopts your specified name for the template as primary treatment. However, you can edit this value.
- Secondary treatment is optional. Using the plus sign, you can view up to two additional input fields.
- 4. Click OK to confirm your entry.

Your treatment information was transferred to the template editor. The primary treatment field now has a purple frame. The secondary treatments are listed below and you can edit their sequence using the arrow keys on the right end of the line.

5. You can also enter values under diagnosis and study (cf. chapter 7.6 Management). During the capturing process, these values are automatically saved for every image captured with this template.

There are recommended capturing segments with information on camera settings listed for every template. By clicking on the appropriate image, you can enlarge the view of the image. All displayed capturing segments are activated by default.

6. Deactivate the capturing segments you do not require by clicking on the *Deactivate* button under the respective image.

Deactivated images are only visible in gray scale.

You can reactivate the segment by clicking on the *Active* button.



7. You can change the sequence of the capturing segments with the arrow keys < and > below the individual images.

The colored segments are then queried in this specified sequence during the subsequent capturing process.

(NOTE

Please always leave the first segment in first position, as it is linked to a certain tower position and could otherwise result in an error.

8. Add the edited template to the active templates by clicking on the *Add template* button. The new template appears in the lower section of the screen *Active templates in FotoFinder Universe*.

Edit active templates

1. Click to select the template you want to edit in the section *Active templates in FotoFinder Universe*.

These are now highlighted in purple and the *Template editor* displays the associated settings.

- 2. Adjust your settings in the *Template editor*.
- 3. Click on the Save changes button.

The template was edited.

Delete active template

- 1. Click to select the appropriate template in the section *Active templates in FotoFinder Universe*. This are now highlighted in purple and the *Template editor* displays the associated settings.
- 2. Click on the *Delete template* button.

The template was deleted but remains in the system. If you have already used this template, this will permit you to create the matching follow-up images.

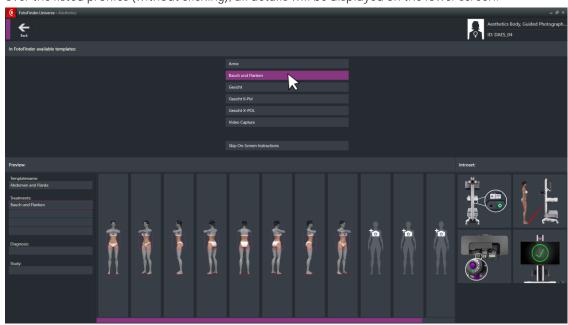
To close Template Manager, click on the X in the top right of the window.

9.2.3.2 Baseline



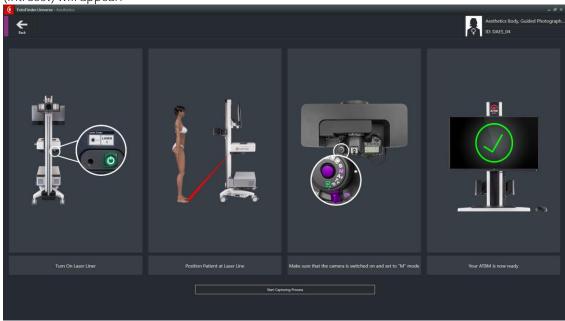
1. Click on *Baseline* in the aesthetics module.

The next window displays all the templates available in FotoFinder, which you previously defined in the Template Manager (cf. chapter 9.2.3.1 Template Manager). If you move your cursor over the listed profiles (without clicking), all details will be displayed on the lower screen:



2. Click to select the required template.

All associated setting instructions for this template and how to position the patient (Introset) will appear:



3. Adjust all settings and position your patient.

Start Capturing Process

4. Click on *Start capturing process* in the center below.

The live preview window is now displayed in the center of the screen. If you are working with an



automatic tower, you can use the arrows on the right side of the preview window to manually adjust the height of the camera position.

5. Continue depending on your system configuration:

Systems with Zoom Motor	Systems with Zoom Ring
If you are working with a Zoom Motor, the	If you are working with a Zoom Ring, on the left
lens will calibrate itself automatically.	side the necessary camera settings will be again
	displayed.

On the lower part of the screen with the help of the virtual patient all capturing positions will be displayed. The current position is highlighted with purple. This is also shown enlarged on the right side of the screen.



- 6. If more than one SLR cameras are connected, the camera selection can be changed in the drop down menu.
- 7. **Select the patient's** skin type.

In the top center you can choose between

- Light skin
- Medium skin
- Dark skin

Capture

8. Click on *Capture* if you have adjusted all settings and positioned your patient.

After the capture, the *Repeat* and *Save options* will be active underneath the virtual patient. The image is displayed in the preview window.

The following options are available to check the focus and position:

- Double-clicking on this new image will display it with a 100% zoom value.
- Use the mouse wheel to change the zoom value.
- Click and hold the left mouse button to move the image around.

If the quality and capturing position matches the baseline image, continue with Save.

Repeat

9. If you are not satisfied with the image, you can delete it with the *Repeat* button and start a new capture.

Save

10. If you are satisfied with the image, click on Save.

The preview window on the bottom left is replaced by a thumbnail and the software automatically jumps to the next capturing position.



Continue accordingly for all capturing positions.

By clicking on *Back* you will be returned to the user interface of the aesthetics module.

9.2.3.3 Follow up

1. Select from the SmartGallery the image / video you wish to make a follow up for. This will be highlighted with purple.



2. Start the capturing process for a patient by clicking on *Follow up*.

The screen will be divided into two sections: On the left you can see the selected baseline image with the applied settings.

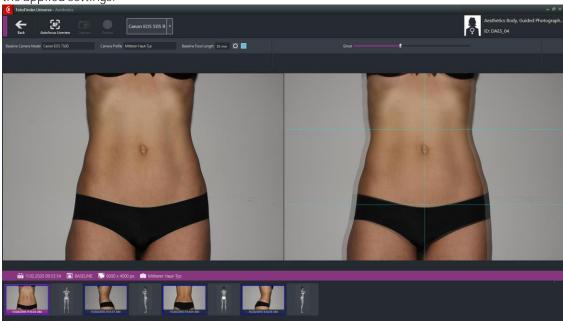


Fig. 16: Example view for a follow up image

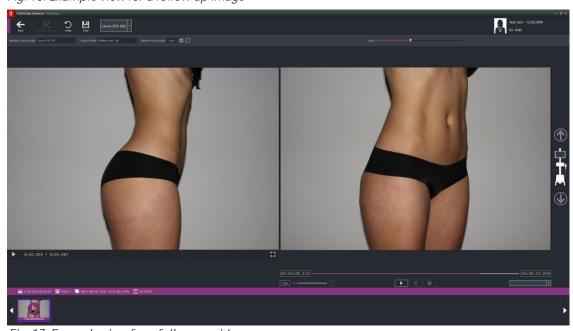


Fig. 17: Example view for a follow up video



3. The focal length has to be adjusted to the baseline settings, there are two possibilities:

Systems mit Zoom Motor	Systeme mit Zoom Ring
If you are working with a Zoom Motor, the	Set the FotoFinder Zoom Ring (cf. 3.4)to fit the
lens will calibrate itself automatically.	Baseline settings.
	The corresponding value can be found in the
	Baseline focal length field above the displayed
	baseline image on the middle left side. If the
	value is different, an error message will appear.



All other camera settings for the follow up images are automatically adjusted to the baseline settings. The *Segment info* button in the menu bar lets you display the required setting and positioning instructions again.

On the right the current live image is displayed. The Ghost function places the existing baseline image on top of the live image. This makes it easier to position the patient exactly as on the baseline. All other camera settings are automatically adjusted to the same settings of the baseline image.

You can adjust the transparency with the slide bar above the preview.

4. Position your patient.





5. Click on *Capture* (for images) or on *Record* (for videos) after positioning the patient correctly.

The captured image will be displayed on the right side.

The following options are available to check the focus and position:

■ Double-clicking on this new image will display it with a 100% zoom value.

If you are not satisfied with the first image taken, click on *Undo*.

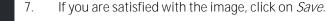
- Use the mouse wheel to change the zoom value.
- Click and hold the left mouse button to move the image around.

If the quality and capturing position matches the baseline image, continue with *Save*. After capture, the *Undo* button becomes active.



6.





The image will be displayed on the lower left screen and the system will jump automatically to the next position.



Continue accordingly for all capturing positions.

By clicking on *Back* you will be returned to the user interface of the aesthetics module.

9.2.4 Polarized images

Apart from normal captures, aesthetics also provides the option of capturing polarized images for facial images with the portrait stand. The system is therefore equipped with PolFlash face and a polarizing filter.

Depending on the treatment, you can select the optimal capture type:

- Cross-polarized images
- Parallel polarized images

Cross-polarized images



Fig. 18

Parallel polarized images

wrinkles are faded. Light reflections are completely hidden.

In these images, reddened skin is highlighted while



Fig. 19

In these images, wrinkles are optimally documented.

(NOTE

Guided Photography provides the appropriate templates. The software guides you through the capturing process and instructs you in how to correctly insert the polarizing filter.



9.3 Working with the images

aesthetics offers various options for working with patient images.

- Imaging tools
- In image comparison

9.3.1 Imaging tools

You have two options to change over to the imaging tools:

■ Double-click on the image in the preview window.

or



■ Click on the *Image tools* button.

Here you can choose between the following actions:

- Draw function for various markings.
- Analyzing the images with various measurement tools.
- Anonymizing the patients with a black bar.
- Using the magnification function like in the preview window.

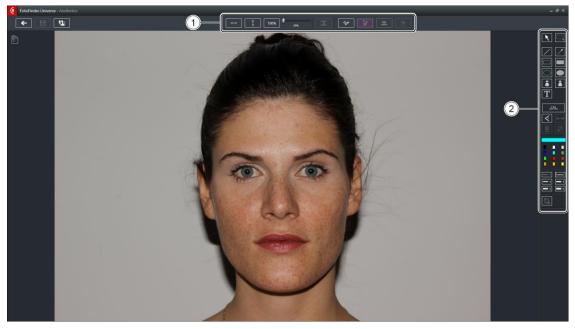


Fig. 20

1 Imaging Tools

2 Selection, drawing and measurement tools



Clicking on the *Back* arrow will return you to the user interface of the aesthetics module. Inserted measurements are automatically saved to the image and be faded in and out in the user interface.



By clicking *Save* you can create a copy of the image and save it to the SmartGallery. In this image, the inserted markings are permanently visible. In the SmartGallery, these edited images have an orange frame.



Clicking the *Clone to new image* button creates a copy of the image and all drawn objects in the SmartGallery. In this copy, the objects can no longer be changed.

9.3.1.1 Imaging Tools

For viewing the images, the imaging tools provide the same functions as those in the preview window (cf. chapter 9.1.3 Preview window with imaging tools).



Additionally, you have a button here to *Switch between the supported image crop modes*. If you use the cropping tool while editing the image, the unselected area is superimposed with a purple shadow. You can fade this in and out using the *Imaging tool* to *Switch between the supported image crop modes*.

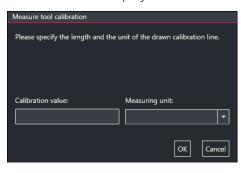
9.3.1.2 Calibration

Before measurements are possible in the displayed image, you first have to calibrate the image.



- 1. Start the calibration process by pressing the *CAL* button in the menu bar on the right of the displayed image.
- 2. Click once to create a starting point in the image and then draw a line with the mouse button pushed down.

A context menu is displayed.



- 3. Add the known length of the line and the appropriate measuring unit.
- 4. Confirm your entry.

Calibration is now complete. Now you can measure distances, surfaces and angles in the image.



9.3.1.3 Drawing and measurement tools



The drawing and measurement tools are located on the right-hand side of the screen.

Edit/Move:

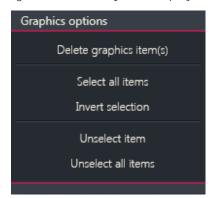


Move the cursor over the object until the arrow turns into a cross-hair. Move the object by pressing and holding the left mouse button.

Changing the size of the inserted objects Click to mark the required object. Small squares now appear along the edges/corner points. Click and hold the left mouse button to move the squares and change the size.

Context menu

Right-click on an object to display a context menu.



Here you can

- Delete graphics item(s)
- Select all graphics items
- Reverse the selection
- Deselect the graphics item
- Deselect all graphics items









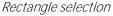












Click and hold the left mouse button to insert a rectangle and mark several draw objects simultaneously to edit them all after changing to the Edit/Move tool.

Click and hold the left mouse button to insert lines.

Click and hold the left mouse button to insert arrows.

Rectangle (empty)

Click and hold the left mouse button to insert an empty rectangle.

Rectangle (filled)

Click and hold the left mouse button to insert a filled rectangle.

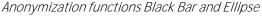
Ellipse (empty)

Click and hold the left mouse button to insert an empty ellipse.

Ellipse (filled)

Click and hold the left mouse button to insert a filled ellipse.





By clicking and holding the left mouse button, you can insert a black bar or ellipse to hide certain areas or to deidentify your patient.

Text tools

After selecting the text tool, left-click on the image. A text input and formatting window will appear.



Use this tool to measure angles between 0 - 180 degrees.

- 1. Click on a point on one side of the angle.
- 2. Click on the apex.
- 3. Click on a point on another side of the angle.



The software calculates the size of the angle.

Measure distance

Use this tool to measure the length of a distance.

- 1. Click and drag the mouse in the required direction.
- 2. Release the cursor once you have reached the end point.

The software calculates the distance between the two points.

Area measurement

Use this tool to measure any area.

- 1. Click on each consecutive corner point on the edge of the area you want to measure.
- 2. Then click on the first set point again.



Use this tool to calculate the diameter of a circular area.

- Click into the center of the required circle. 1.
- Click and hold the mouse button to drag the circle to the required size.

The software calculates the circle's diameter.

Color Selection

The color buttons allow you to select a color in which the new measurement objects are drawn into the image. The current color can be seen in the larger bar above. By left-clicking on this, you can also open an additional menu.



Line thickness

Here you can select the line width for the drawn objects.



Cutting tool

Use the *cutting tool* to insert and select any rectangle.

- to choose between the different display modes of the Use the image display tool section.
- Click on Save to save a copy of the selected rectangle as an individual image.
- Once you leave the imaging tools with the Back arrow, you will be asked whether you want to create a copy of the image. If you select yes, a copy of the section will also be created as an individual image.





9.3.2 Compare

Use the *Compare* function to compare images from different capturing sessions.

1. From the SmartGallery, select an image you want to compare with other images by clicking on it.



2. Click on the *Compare* button in the menu bar.

You can now compare two images. The previously selected image is displayed on the left. The field on the right is initially empty.

3. Click and hold the mouse button (drag&drop) to drag a comparable image from the SmartGallery into the right preview window.

Both preview windows are not occupied. If you want to change your selection, drag another image from the SmartGallery into the required preview window by holding the left mouse button.



The capturing information of the respective image is displayed above the images:

- Primary Treatment
- Baseline or Follow Up
- The day and time of capture

The number of days between the two captures is displayed in the center above the images.

9 Module aesthetics

9.3.2.1 The menu bar in image comparison





By clicking *Back* you are returned to the user interface of the aesthetics module.

Marker. Use this function to mark positions on overview images. This button only appears when you have activated it in *Settings*.

If you have activated the *Zoom Lock* (Smart Zoom) function, it is underlined in purple. This causes both images in the image comparison to be enlarged or reduced and moved in equal proportions. If you click on the function to deactivate it, a second bar with imaging tools appears (see below) and the images can be adjust in the display independently.

Full screen causes the preview windows to become enlarged even more by fading out the image information, filter functions and the SmartGallery.



Overlay causes both compared images to be superimposed (cf. chapter 9.3.2.2 Image Comparison with Overlay).

With the *Copy* function, the compared images are copied to the clipboard as one image and can therefore be pasted into other programs such as PowerPoint or Word.

The *Report* function offers you different printing templates for the creation of PDF files. The print design is specifically aligned to aesthetics.



9.3.2.2 Image Comparison with Overlay



You can accurately display changes and successful treatments with the *Overlay* comparison function. The two images previously selected in image comparison are superimposed.



Fig. 21: Image view in Overlay function

- Use the *Opacity* slide bar to control which of the two images is to be displayed in the foreground and which should be more transparent. The effects on the view become immediately visible on the screen.
- Click and hold the left mouse button to move the more recent of the two images. Use the mouse wheel to change their size.

9.3.2.3 The Copy function



You can use the *Copy* function to save or copy the image view in image comparison and in the Overlay function:

1. Click on Copy.

The Copy image dialog window appears.

- 2. Select where you would like to copy the image to:
 - **■**clipboard

The image can be inserted into other programs such as Word, PowerPoint, etc.

FotoFinder

The image is saved in the SmartGallery of FotoFinder Universe aesthetics.

- 3. By clicking the button, you can select the meta data to be associated with the copied image.
- 4. Confirm with OK.

The image is now created.

9 Module aesthetics

9.3.2.4 Imaging Tools

(cf. chapter 9.1.3 Preview window with imaging tools)

In image comparison, the imaging tools are displayed in the center directly below the menu bar. If Zoom Lock is deactivated, these imaging tools are located separately above each of the two images.



You can use this button to change the behavior of the cursor tool:

By holding the mouse button, you can either move/edit only the enlarged image or the individually clicked image markings.

You can also use the magnification tool.



9.4 Working with Videos

9.4.1 The Video editor

The recorded videos can be edited (e.g. cropped) in the video editor and markers can be here embedded.

1. In the SmartGallery select the desired video.



2. Click on *Video editor* in the menu bar to start the editor.



Fig. 22: Example view for the video editor

In the lower middle section the following buttons are available:



Start

Pause and

Stop.



In the lower right corner underneath the preview window you can find the total length of the video, in the lower left corner the timeline where you are in the video. The orange bar will too indicate where you are in the video.



On the bottom left you can adjust the playback speed of the video, e.g. 1.5 times.

9 Module aesthetics

9.4.1.1 Cropping the videos

In the video editor you have the possibility to crop the video so you only see a selected part. Proceed as follows:



1. Click on the crop icon left from the timeline bar.

2. With the mouse button held down, drag the mouse on the bar from the desired start and end points of the video



When you are dragging with your mouse the orange timeline bar, the corresponding position of the video will be displayed above in the preview window

3. When finished, click again on the crop icon.

Now only the selected part of the video is visible. The cropped off part is inactive but can be redisplayed at any time by clicking the cut icon again and moving the start and end points.

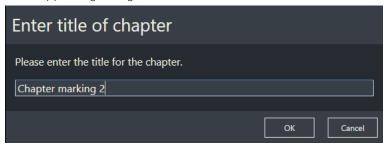
9.4.1.2 Working with chapter Markers

In the Video editor there is an option to insert chapter markers. This way you can jump faster to any desired point in the video. Follow these steps:

I. In the video editor start the video and press pause at the desired point.



- 2. Click on the + symbol on the lower right corner.
- 3. In the appearing dialog window add a name for the marker and confirm it with OK.





4. Now you can jump directly to this point in the video by selecting this marker from the drop-down menu in the lower right corner.



9.4.2 Video Lock



The Video Lock feature is enabled by default (marked with orange) when you are using the image comparison with two videos. With this feature activated both videos will be played simultaneously.

Without the *Video Lock* you can play both videos independently. To deactivate the *Video Lock* just click on this icon once.

9.4.3 Video fusion

You can export videos from the image comparison section out of Universe and save them as one video so that they are displayed in one file next to each other.

1. Open two videos in *Image compare*.



- 2. Click on the *Video Fusion* icon.
- 3. In the following window select a location to save it to and confirm with OK.

The video file (*avi* file format) will be saved. The length of the merged file will be the length of the shorter video. The additional part of the longer video will not be saved here.



Fig. 23: Example view for an exported merged video file.

9.4.4 Inserting watermarks

You can insert a watermark (e.g. practice logo) into videos exported from Universe. Further details can be found in Settings (cf. chapter 7.5.1.5 Videos).

9.5 Marker

9.5.1 Set marker

Use this function to mark conspicuous skin sections for a more detailed examination with reflective light microscopy. Markers set in aesthetics will also be displayed in the Dermoscopy module, where they can be equipped with micro images.

€NOTE

To be able to use this function, you need to have checked *Activate marker function* under *Settings* in the *Aesthetics Module* section (cf. chapter 7.5.1 Aesthetics).

To set a marker, proceed as follows:

Marker

1. Click on the *Marker* button.

This button is located in the aesthetics module in the menu bar of the user interface, in image comparison and in full screen display.

If the marker function is activated, the button is marked purple and the preview image is marked with a purple frame.

- 2. While clicking and holding the left mouse button, draw a line in the image away from the required location.
- 3. Release the mouse button when the line has the required length and alignment.

The line is saved and automatically given a number.

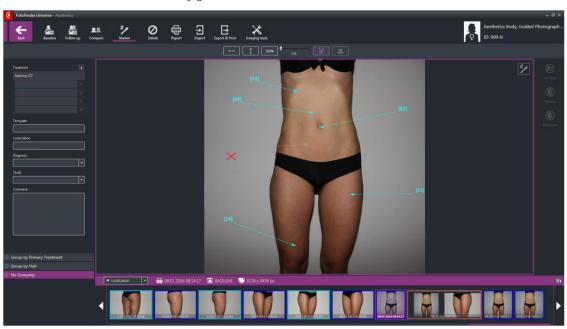


Fig. 24

- 4. Number the entire image in the same manner.
- 5. As soon as all required areas are numbered, switch off the marker function by clicking on the *Marker* button again.

(NOTE

A patient's numbering is consecutive, i.e. each number is awarded only once. This excludes incorrect allocation of the micro image.



9.5.1.1 Classify Marker

You can classify markers using four different marker tags. Depending on the lesion, you can label the markers as follows:

■ Normal (yellow) ■ Highly conspicuous (red)

Conspicuous (orange) To excise (white)

Select the required classification in the appearing context menu.

If a micro image in the Dermoscopy module is displayed in the preview window or in full screen mode, you can classify this position by using the tab menu on the left side of the screen.

In addition, a classification menu is available in the Dermoscopy Micro Image compare menu bar.

9.5.2 Delete marker

You can delete incorrectly placed markers and no longer required micro position labeling.

- 1. In the image, right click on the number of the appropriate marker.
- 2. In the appearing context menu, select *Delete marker*.

(NOTE

By deleting a marker all micro images in this position are also deleted.

9.5.3 Disable Marker

If a marker position is temporarily irrelevant or an associated treatment is completed, you can deactivate the associated marker without deleting the existing micro images in the position.

- 1. Right click to select the marker.
- 2. Select *Deactivate marker* in the appearing context menu.

The marker number is now crossed out with a red X.

You can activate the marker the same way.

9 Module aesthetics

9.6 Export & Report:



The Export & Report function permits

- exporting select images to the local hard drive or other external devices such as a USB flash drive, CD, external hard drive, etc., or
- printing out a report.
- 1. Click on *Export & Report* in the menu bar on the user interface.

This will open the image selection window.

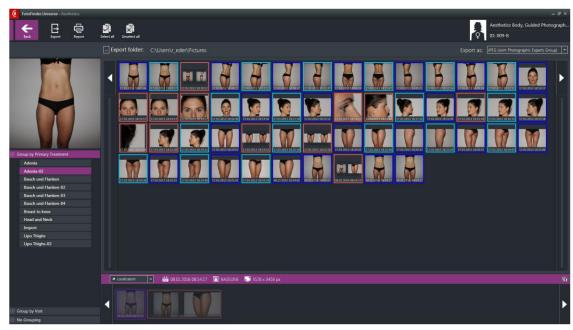


Fig. 25: Image selection for Export & Report

The sorting (cf. chapter 9.1.7 SmartGallery with sorting function) and filtering function (cf. chapter 9.1.6 Filter functions) is also available here.

2. Select the required images from the gallery by left-clicking and holding the mouse to drag them into the selection area in the center of the screen.

Selected images are grayed out in the gallery.



If you click on *Select All*, all images will be moved to the selection area.

You can unselect unwanted images by

- clicking on them individually and then pressing the *Delete* key on the keyboard or
- dragging them back into the gallery by left-clicking and holding the mouse.



If you click on *Unselect All*, all images will be removed from the selection area.



You can also use the menu bar to select whether the

- markers
- overlay graphics and
- measurement range

are to be displayed in the exported images. In this case, use the mouse to click the appropriate box. You can already preset these three items in the *Settings* tab (cf. chapter 7.5.1.3 Reports).

Once you have completed your image selection, you can choose between two options:

- exporting and saving selected images (cf. chapter 9.6.1 Exporting and saving images)
- issuing a report (cf. chapter 9.7 Reports)

9.6.1 Exporting and saving images

After selecting your image for export, proceed as follows:

- 1. Select the destination by clicking on the ... button in front of *Export folder* on the left above the selection frame.
 - The export folder also remains saved for the next export.
- 2. Select the required file format from the drop-down menu at *Export as* on the right above the selection frame.



3. Start the exporting process by clicking on *Export*.

Your selected images are now saved to the export file.

9 Module aesthetics

9.7 Reports

You can create different types of reports.

Under Settings you can specify the folder to where the reports should be saved or activate the extended printing options. If required, select a standard output for your reports: you can select between PDF, Preview or Printer (cf. chapter 7.5.1.3 Reports).



1. Start creating the report by clicking on the Report button.

This button is also available in the *Export & Report* menu. After selecting an image, start creating the report.

Once you have started the report function, a window will appear which offers several printout templates:

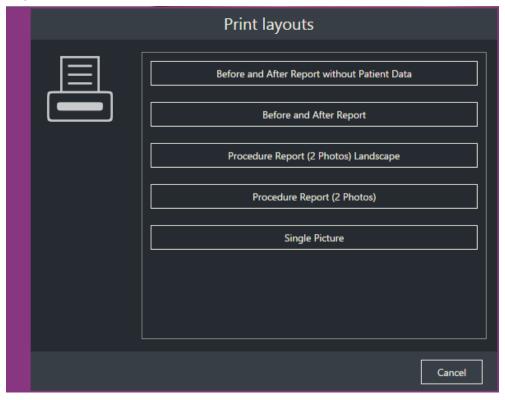


Fig. 26

9.7.1 Image comparison report

Use these report in the *Image comparison* menu in order to compare two images. Before&After reports

- optionally with or without patient data
- capture date is also issued

Progress reports

- optionally in landscape or portrait format
- Image information on treatment, capture date, image type and localization are also issued.

9.7.2 Single image report

You can use this report in both the image preview and in image comparison. In this case, an individual report page is created for every image.



9.8 Importing images



You can import images from the hard drive or an external storage medium.

1. To import, click on *Import* in the menu bar of the aesthetics module.

The image import window appears.

- 2. Select the image you want to import; you can also select multiple images.
- 3. Click Open.
- 4. Define the treatment.
- 5. You have the option of rotating the image (via the arrow keys on the Images).
- 6. Click on *Import selection* (if you have not selected any additional images) or *Add files* (if you have selected additional images).

The imported image will now be shown in the user interface and marked blue as an imported image.

10 Expert systems

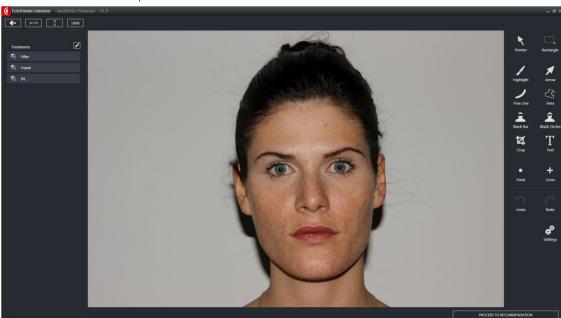
10.1 The Expert system FotoFinder Proposer

Within aesthetics, the FotoFinder Proposer is available as an added feature. This can be used to clearly and concisely present your patients with concrete products and recommended actions. An extensive product and treatment database as well as various drawing and marking tools are also part of the Proposer.



1. Start the Proposer by clicking the corresponding button on the right side of the aesthetics module

The user interface with open:





Clicking on the *Back* arrow will return you to the user interface of the aesthetics module. A dialog field will open. Select here whether you want to delete or save already drawn objects. *Save* will create a copy of the image. The new image in the SmartGallery has a red frame.

10.1.1 Imaging Tools



With this button you can enlarge the image to the width of the preview window.

With this button you can adapt the image to the height of the preview window.

With this button you can display every pixel of the image with exactly one pixel of the screen.



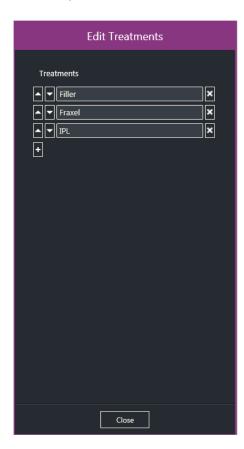
10.1.2 Define treatment

On the left side of the user interface you will find a list of possible treatments. These are text blocks that you can drag and place into your image by clicking and holding the left mouse button. You can change and expand this list as required.



1. Click on the pen above the list.

This will open the *Treatments* window.



Delete treatment:

By clicking on the X at the end of the respective line, you can delete this treatment from the list.

Add treatment:

By clicking on the + below the last line you can add a new line. This is where you enter the new treatment.

Click on Close when you have finished editing.



The list of created treatments is available for all patients.

Enlarging or decreasing font size

Text modules that you have placed in the image can be resized:

1. Left-click on the text in the image.

Red marks will appear at the four corners of the text.

2. By clicking and holding the left mouse button, you can adjust the text size.

10.1.3 Drawing and text tools

A number of tools are located on the right-hand side of the screen. These allow you to create various markings, labels or other highlights in the images. The following applies for all tools:

- Click on the desired tool to use it.
- Clicking the tool icon again will deselect it.
- You can move markings/texts in the image by clicking and holding the left mouse button. In this case, you may have to deselect any previously selected tool.
- You can change or delete markings/text. In this case, you may also have to deselect any previously selected tool.
 - 1. Click on the respective object.

One or several red squares will appear on the object.

- 2. You can change the object by clicking and holding the left mouse button on these squares. Use the *Remove* button on your keyboard to delete the object.
- With the key combination Ctrl + A you can select all objects simultaneously
- With the Ctrl key held down, you can use the left mouse button to select several objects simultaneously.

Image context menu

Right-clicking on an image will open a context menu.



Delete

The currently selected object is deleted.

Copy/Paste

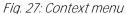
You can copy objects to the clipboard and paste them again.

Select All

This selects all objects.

Invert Selection

This reverses the selection and all previously unselected objects are now selected.





Click on Settings below the drawing tools.

The window *Settings*. *Tools* will open. Here you can activate various settings:

Change

- line size and font size
- size and opacity of the *highlighting* tool.
- character color.
- 1. Click to select the required size/color.
- 2. Click on *Close* when you have finished editing.



Edit/Move:





Move the cursor over the object until the arrow turns into a cross-hair. Move the object by pressing and holding the left mouse button.

Changing the size of the inserted objects

Click to mark the required object. Small squares now appear along the edges/corner points. Click and hold the left mouse button to move the squares and change the size.

Rectangle selection

Click and hold the left mouse button to insert a rectangle and mark several draw objects simultaneously to edit them all after changing to the *Edit/Move* tool.

With the *Highlight* tool, you can draw translucent lines in the image by clicking and holding the left mouse button.

With the *Arrow* tool, you can draw arrows in the image by clicking and holding the left mouse button.

With the *Free Line* tool, you can draw a line in the image by clicking and holding the left mouse button.

With the *Area* tool, you can draw an area outline in the image by clicking and holding the left mouse button. After releasing the mouse button, the two end points of the lines are automatically connected so that a closed area is created.

Anonymization functions *Black Bar* and *Black Circle*

By clicking and holding the left mouse button, you can insert a black bar or circle hide certain areas or to anonymize your patient.

Use the *Crop tool* to insert and select any rectangle. After leaving the Proposer, the selected section is saved as the copy of a separate image. The image in the SmartGallery has a red frame.

Text tools

After selecting the text tool, left-click a position in the image. A text input and formatting window will appear.

You can use the *Point* and *Cross* tools to insert points and crosses as markers, e.g. for planned treatments. You can also draw a key with these tools. A scale is available for this purpose.

1. Select the desired *Point* or *Cross* tool.

A scale will appear in the image:



- 2. Select on the left side whether you want to draw *units* or *m*/in the image.
- 3. Select the desired quantity on the scale.
- 4. Click to set the desired points/crosses in the image.



(NOTE

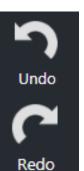
If you do not want to have the key at each marking, set the value on the scale to zero. Then no value is specified.



Click on the *Move menu bar* icon if you want to move the scale to the top/bottom edge of the screen.



Fig. 28: Example with Cross tool



Clicking on *Undo* will reverse your last change. You can also activate this button several times.

Restore restores your edits that you have previously undone using the *Undo* function.

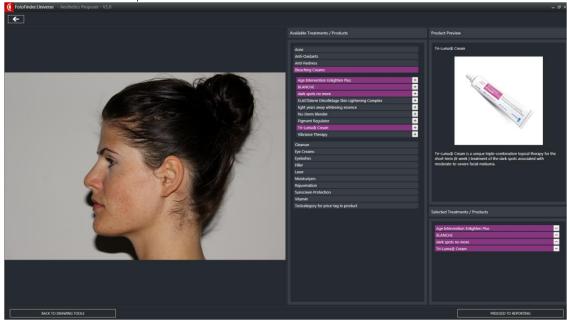


10.1.4 Recommendation page

PROCEED TO RECOMMENDATION

1. To get to the recommendation page, click on PROCEED TO RECOMMENDATION in the lower right corner.

The user interface will open:



2. Click to select the desired category from the list of *Available Treatments / Products*.

A list of all products available for this treatment will open.

You can customize the treatments and products in the Proposer Product Manager (cf. chapter 10.1.5 Proposer Product Manager).

If you click on a product, you will see further information and, if necessary, a picture of it in the *Product Preview* on the right.

3. Select all desired products by clicking on the "+" at the end of the line.

You will see all selected products in the *Selected Treatments / Products* area right below the product preview.

4. If you want to deselect a product, click on the "-" at the end of the line in the *Selected Treatments / Products* section.

This removes the product from your selection.

10.1.5 Proposer Product Manager

The Proposer has an extensive product database at its disposal, which you can adjust and amend with the Product Manager.

1. Open the file AestheticsProposerProductManager.exe (C:\ProgramData\FotoFinder Systems\External\Aesthetics Proposer; in your case, the path may vary.).



To make calling up the Product Manager easier, it is advisable to create an appropriate shortcut on the desktop:

- 1. Right-click on the file AestheticsProposerProductManager.exe in the file manager.
- 2. In the context menu, select the prompt Send to > Desktop (create shortcut).



An icon for the product manager has been created on your desktop. To open, double-click on this icon.

The Product Manager will open:

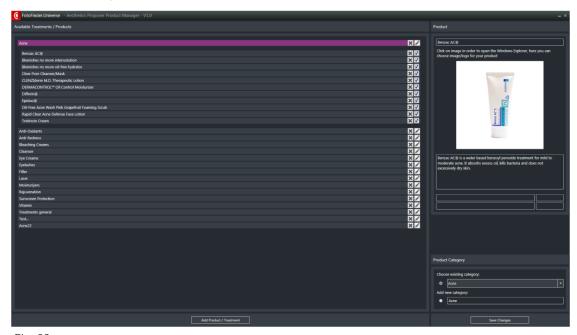


Fig. 29

In the left-hand main window you will find a list of all the product categories and products created so far.

- By clicking on a category, you can open a list of all products already created for this category.
- When clicking on the product, product details appear in the right-hand window.

Editing product categories:

Delete

1. To delete a product category, click on the X at the end of the line.

Deactivate/Activat

- 1. To deactivate a product category, click to remove the check at the end of the line.
- 2. Click again in the empty field to check the box and reactivate the category.

Edit

1. To change a product category, click the pencil icon at the end of the line and change the name in the window that appears. Confirm your change(s).

Create a new product/treatment:

- 1. Click on *Add product/treatment* in the center below.
- 2. Enter the product data in the right of the product window.
- 3. To store a product image, click on the empty product image window and select a saved image.
- 4. You have the option of storing product prices for two different product sizes.
- 5. Select a product category or create a new category to which you want to assign this product.
- 6. Click on the *Save changes* button.



Assigning a product to a different category:

- 1. Click to select the appropriate product.
- 2. Select the desired category from the list of product categories at the bottom right or create a new category.
- 3. Click on the Save changes button.

10.1.6 Reporting



1. Click on CONTINUE TO REPORTING to open the *Print Layout Selection* window. On the right-hand side of the screen, the appropriate window appears:

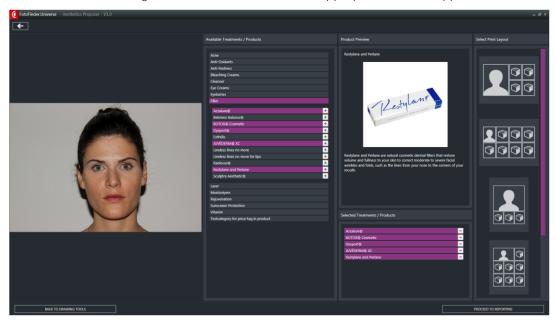


Fig. 30
You can still adapt your product recommendations here.

Reports automatically store your user data from Universe (cf. chapter 7.8 Adjust user information). However, if you want to enter special data and your own logo in the Proposer Reports header, you can define this accordingly.

Specify practice/physician data for reports:

- Open the file UserConfig.ini
 (Path: Computer/ Lokaler Datenträger (C)/ ProgramData/ FotoFinder Systems/ External; in your case, the path may vary.)
- 2. Enter your desired data at *Company, Name, Address1*, *Address2* and *Mail.* For reports, fields that are left blank are filled with the user data from Universe.
- 3. Save and close the file.

Storing a logo for reports:

1. Save the file with your logo in the .png format under the name logo.png in the same storage folder as the above-mentioned file Userconfig.ini.

This stored file will be inserted in your report.

Start report output

1. Select a suitable print layout from the available print layouts on the right.

The output dialog window appears.

2. Choose between Printer, Preview or Adobe pdf format and confirm with Start.

The report is created in the selected layout.

10.2 Optional: The Expert system Adonia

The Adonia expert system analyses and visualises changes in skin tone and the skin surface and any associated skin damage to the face. The software specifies personal values for light and vascular damage and for wrinkles and roughness of the skin. On this basis, Adonia facilitates the preparation of specific treatment plans.

For analysis, you need a capture of the face with cross-polarised and parallel-polarised light. You can generate this type of capture with FotoFinder studio or with a meesma.

10.2.1 Preparing the patient

The following points have to be met in order to achieve the most accurate analysis:

- the patient should not have any make up on
- the whole face should be fully visible and not covered by hair (e.g. hair band)
- it is advised to cleanse the face before the capturing
- with male patients shaving before the capturing is advised.

10.2.2 Capturing

For Adonia three shots are necessary (frontal, 45° left, 45° right) with both cross polarized and parallel polarized light. To achieve this, use the FotoFinder Portrait stand with the special polarization filter. Please follow the setup instructions.

In addition, a special template is available as a Guided Photogprahy template. If the template is not offered yet in the list, you can activate this through the *Guided Photography Template Manager* (cf. chapter 9.2.3.1 Template Manager):

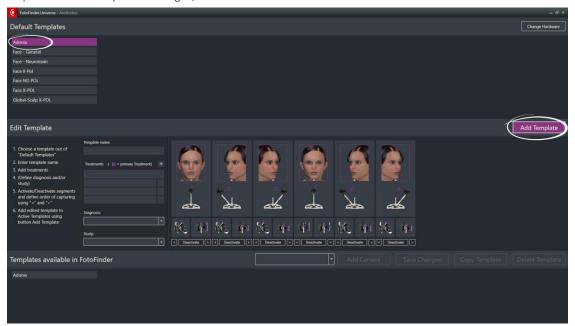


Fig. 31: Guided Photography Template Manager

- 1. Select a patient.
- 2. Open the Aesthetics module.
- 3. Start the capturing by clicking on *Baseline* or *Follow up* (cf. chapter 9.2.3.2 Baseline).
- 4. Select the *Adonia* profile.



You will be guided with instructions on the screen. Start with the frontal images, then the 45° left and then the 45° right. This process has to be done with the "X-Filter" and the "II-Filter" tool. The application will have therefore all together 6 images ready for the Adonia analysis.

After the recording process, you will see the recordings arranged in the Smart Gallery. Three images are cross polarized and three are parallel polarized:



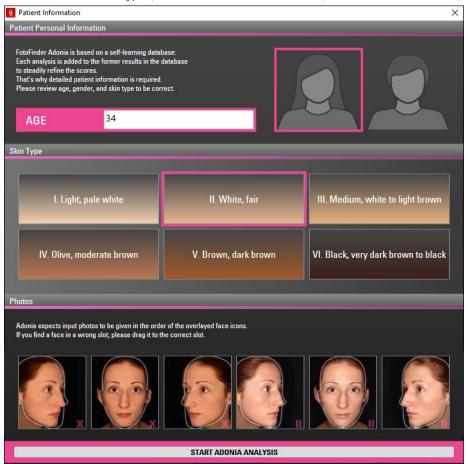
Fig. 32: Adonia images in the Smart Gallery

10.2.3 Analysis with Adonia



- 1. Select the image from the Smart Gallery that you wish to run the Adonia for.

 Adonia will start and show the start screen where you can **define the patient's details.** The age of the patient will be copied from the FotoFinder database.
- 2. Select the skin type (based on the Fitz Patrick Scale).



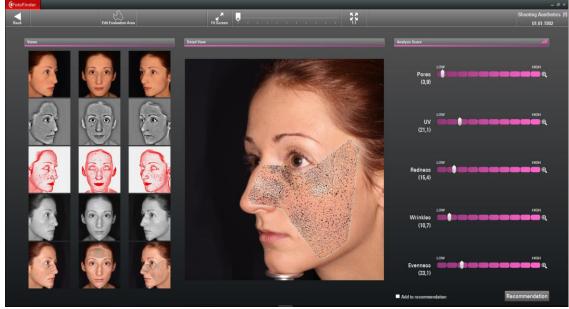
€NOTE

Shots from the wrong perspective can be easily swapped in the lower area by drag and drop. Whether they were created correctly can be seen from the white lines (face outline).

START ADONIA ANALYSIS

3. Afterwards you can start the analysis by clicking on START ADONIA ANALYSIS.

The analysis will run automatically through the 5 points and once finished, show the result.



Each analysis is made for all three views. On the left side you will see the thumbnails for the five types of analysis and three views each. The preview image currently selected is displayed in the middle as the main image.

10.2.4 The menu bar and image display tools



By clicking on *Back* you will be directed back to the main interface of the *Aesthetics* module. Adonia will be closed.

The *Edit evaluation area* makes it possible to adjust the analyzed area the software originally marked.

The *Fit screen* will adjust the image so it fits in width and height to the preview window.

With the help of the slide bar or by turning the mouse wheel you can adjust the magnification of the displayed image. You can change the displayed section by moving the image with the left mouse button held down.

The 1:1 will set the image so it is displayed pixel-by-pixel.



- With a right mouse click the analysis area can be hidden and shown again. When the analysis area is hidden, the image is also displayed in its original state without image processing.
- By double-clicking with the left mouse button, the image is displayed in full screen mode. By double-clicking again or pressing the Esc key, you can return to the normal view.

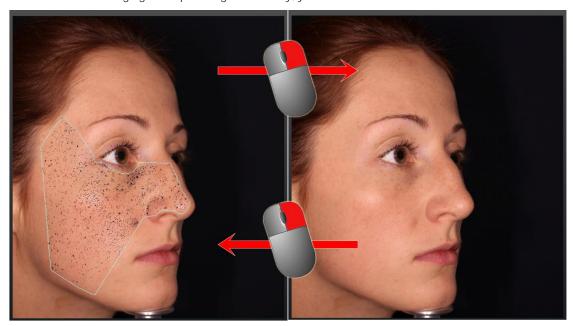


Fig. 33: View change

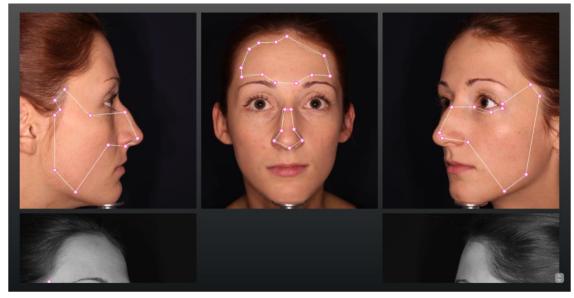
10.2.5 The analysis area

Adonia has an automatic recognition of facial expression characteristics and can therefore determine the analysis area completely by itself.



Edit evaluation area

In case the automatically detected measuring ranges have to be adapted, in the *edit evaluation area* the following changes can be made:



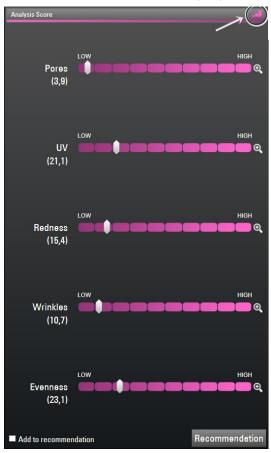
10 Expert systems

For this purpose, the measurement areas are displayed with Bézier curves with control points for all images. Using the arrow at the bottom right, you can scroll up or down for the other images.

- 1. To adjust an area, move the points as required with the left mouse button held down.
- 2. Click on *Back* once you are finished with your adjustments.
- 3. Confirm the following question that appears whether the analysis should be generated again with the adjusted areas.

10.2.6 The results

On the left side the results for Pores, UV, Redness, Wrinkles and Evenness are displayed.



The indicated value is displayed in brackets under the analysis type. This value can be used to detect a change between two examination periods.

This value can be displayed or hidden by clicking on the diagram symbol at the top right (see arrow).



If you click on the magnifying glass next to the result bar, all three images of the respective analysis series will be displayed full-screen next to each other:





Translate the analysis results into recommendations

You can include all or part of the generated analysis results in the recommendations:

✓ Add to recommendation

To accept all analysis results, place a check mark at the bottom at *Add to recommendations*.



To accept only individual analysis results, click on the respective results once. These will be highlighted with purple. A second click deselects these again.

10.2.7 Recommendations

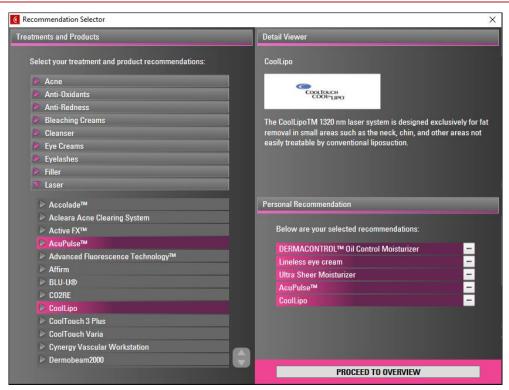
Recommendation

After the results of the analysis you can create a product recommendation.

1. In the lower right corner click on *Recommendation*.

The *Recommendation list* window will open. A selection of products can be added here. On the left side the available products are shown sorted by treatment type.

2. Click on one of the bullet points to open the subsequent list of products for the according treatment. This list can be expanded or reduced based on your personal product recommendations.



3. Click on the product you wish to add as a recommendation.

The selected product will be highlighted with purple and on the right side it will be displayed at *Personal Recommendations*.

This selection can still be revoked:

4. Click on the "-" icon next to the product to delete it from the list of active products. The product will no longer be listed on the right side.

A logo and a short description text for the respective product will appear in the upper right corner. This will also appear later in the recommendation report if desired and can be edited at any time in the Template Manager.

10.2.8 Recommendation report



Once you have selected all the products you wish to recommend, continue with the recommendation report.

1. Click on *Proceed to overview*.

An overview of the selected analysis results and the corresponding product recommendations will now open.

2. Here you can adjust the product selection again by checking/unchecking the checkbox at *Add product*.

The products without this checkmark will not be shown in the report.



In the upper menu bar by clicking on *Recommendation selector* you can return back to the product list and adjust your recommendations again.

3. You can proceed to printing by clicking on *Print personal report*.

Add Comment And Print Personal Report



Optionally you can also add comments to your report. This text will be displayed below the product selection in the report.

1. Click on Add comment and print personal report.

Two comment lines will appear, you can add your text here. This will not be saved and only will be available as long the active Adonia program is not closed.

Print Personal Report

2. Once finished, proceed by clicking on *Print personal report*.

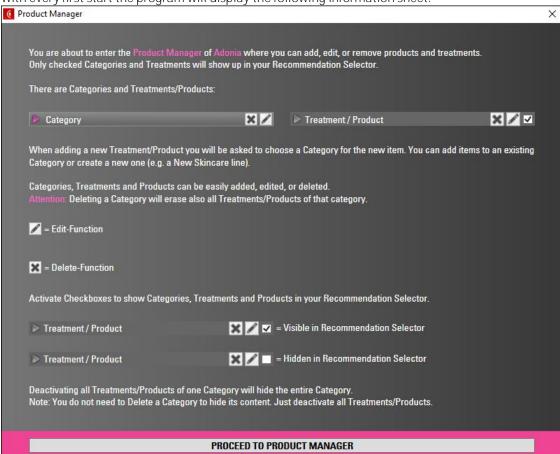
10.2.8.1 The Produkt manager



In the Produkt manager you can edit or delete the available products and can add new ones.

1. Open the *Produkt manager*.

With every first start the program will display the following information sheet:



By clicking on *Proceed to product manager* the interface will open. Make the desired changes as it was in the previous window displayed.

10.2.9 Final analysis overview (Skin report)

Here your patients can see an overview of the entire analysis including product recommendations and if added, personal comments as well as the results. The presentation depends on the analysis performed and the selected product recommendations.

Once you click on *Print personal report*, you can select from the following three options:

- Preview
- Save as PDF
- Print.

Select your choice from the printing window.

10.2.10 Closing Adonia



With clicking on *Back* the Adonia* application will be closed and you will return to the aesthetics module interface.

A window will appear asking if you wish to save the analysis results.



10.3 Optional: Expert system Adonia Compare

The Adonia Compare expert system supports a before and after visual documentation. The program compares the redness and sun damage changes on the skin and indicates the change in percent. This way the Adonia Compare allows a successful presentation of the used treatment.

10.3.1 Image capturing

For the analysis two images are necessary, both taken with cross polarization. To create these images, use the FotoFinder Portrait stand with the special polarization filter. Please follow the instructions.

An additional template for Adonia Compare is available called *Face X-POL* in the Guided Photography Templates. If this is not offered in your list, you can activate this profile in the *Guided Photography Template Manager* (cf. chapter 9.2.3.1 Template Manager):

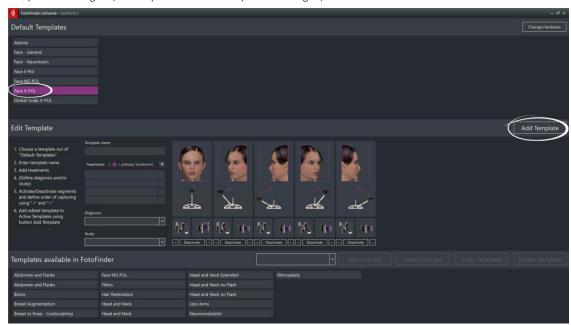


Fig. 34: The Guided Photography Template Manager

- 1. Select a patient.
- 2. Open the Aesthetics module.
- 3. Start your capturing by clicking on *Baseline* or *Follow-up* (cf. chapter 9.2.3.2 Baseline).
- 4. Select the *Face X-POL* template.

You will be guided through the next steps.

10.3.2 Starting the program and the user interface

- 1. Start the Compare mode in aesthetics.
- 2. Choose the desired images from the Smart Gallery. In the Adonia Compare there is no option to select images.



3. Start the Adonia Compare with the according icon in the menu bar.

The expert system will open. The results will only be shown here once the analysis has run through.



- 1 Menu bar and image display tools
- 2 Patient data
- 3 Image information
- 4 Segmentations

- 5 Edit evaluation area
- 6 Preview window
- 7 Analysis results

Some areas are available for both images.



10.3.3 Menu bar and image display tools



By clicking on Quit the Adonia Compare will close and you will be returned back to the aesthetics module.

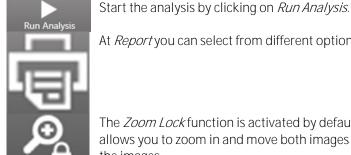
With Set ROI you can set the analysis area to one specific section of the image (ROI = Region of Interest).

- 1. Click on Set ROI.
- 2. Create a rectangle with holding the left mouse button and moving the mouse.
- Click again on Run Analysis.

Now only the selected area is taken into account in the analysis.

With another click on the button deactivates the restriction and the entire image will be again taken into account.

The drawn area of the ROI can be moved individually in each image. This may be necessary if the two images to be compared do not match exactly. Move the corresponding rectangle with the mouse button held down until they cover the same area on both images.



At *Report* you can select from different options (cf. chapter 10.3.6 Report).

The Zoom Lock function is activated by default when you start the image comparison. This function allows you to zoom in and move both images simultaneously. This allows an objective comparison of the images.

Without the Zoom Lock you can zoom in and out and move the two images independently from each other.

Click again on Zoom Lock.

The Zoom Lock is deactivated and a second slide bar for magnification will appear.

The Fit screen will adjust the image so it fits in width and height to the preview window.



Use the slide bars to adjust the magnification of the displayed images individually. You can change the displayed section by pressing and holding down the left mouse button and moving the cursor.

The 1:1 will set the image so it is displayed pixel-by-pixel.

10.3.4 Analyse



1. Start the analysis by clicking on Run Analysis

The software will run the analysis and display the results in the middle of the screen.

- With the right mouse button the analysis area can be hidden and displayed again. When the analysis area is hidden, the image is also displayed in its original state without image processing.
- By double-clicking with the left mouse button, the image is displayed in full-screen mode. By double clicking again, you can return to the normal view.

10.3.4.1 Editing the evaluation area

After the first analysis you can adjust the evaluation area after clicking on Edit evaluation area.



1. To start the adjustments click on *Edit evaluation area*. The following window will appear:



- 2. Select *Skin* (1) from the upper left corner. With the slide bar (2) you can adjust the area to be analyzed (2).
- 3. Now select the desired segmentation from the same menu list (1): *Redness* or *Sun damage*.
- 4. Using the slide bar again (2) you can set the threshold value above for the highlighted segment. Only the skin area that you previously restricted is taken into account.
- 5. Remove the check mark (3) if the changed threshold value should only be applied to the current image.



The following tools (4) are also available:



- Zoom In will enlarge the displayed image. In the zoomed in image you can scroll up and down
 with the mouse wheel.
- Zoom Out will zoom out of the image.
- You can use the *Brush* to draw in additional areas, which are then included in the selected segmentation.
- With the *Eraser* you can delete areas you do not want to be included in the segmentation.
- With the Wand just like with the Brush, you can add additional areas to the selected segmentation. However, this function recognizes the affected area by its color and therefore marks relatively accurately.
- With the *Overlay On/Off* you can hide and display the area highlights.
- 6. When you click on *Close* (5) a dialog box will appear. Select whether or not the analysis should be repeated with the modified evaluation area. You will be then returned to the Adonia Compare user interface.

10.3.5 Results

Between the two images the evaluation result of the two compared points will be displayed. The individual values for redness and sun damage must be confirmed here by the doctor and adjusted if necessary:

Evaluation Result Redness Total Improvement 100% **BSA** Followup 1 % 0 % <u>Severity</u> 4 0 Sun Damage **Total Improvement** 0% **BSA** 5 % Severity Approve

Fig. 35: Example view for not yet approved results



1. Click on one of the severity values.

A scale will open.

2. Select the correct value or click on *Approve*, if you do not want to change any of these values.

Once the values are changed or approved, they will be highlighted with blue instead of red.
The original values can still be changed (Baseline) just as the following values (Follow up) too.

3. When you are satisfied with the results, click on *Approve*.

Now all results will be highlighted with blue.

 If afterwards more values have to be still changed, click on Reject score and start adjusting the results again.

approved results.



10.3.6 Report



- 1. Make the segmentation selection (redness or sun damage) by clicking on the left or right edge of the screen.
- 2. Click on *Report* and select if you want to save your document as PDF or if you want to print your report.

10.3.7 Closing Adonia Compare



With clicking on *Back* you will be returned to the aesthetics module.

11 Module Query



FotoFinder Universe offers the opportunity to systematically search your database for images with the help of different search criteria.

Start the module from the Dashboard.

Have a look at the following user interface:

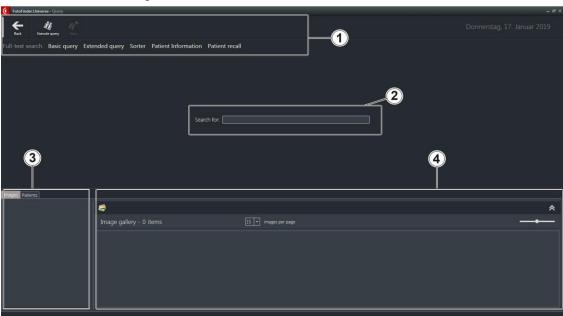


Fig. 37

1 Menu Bar

- 3 Results filter
- 2 Entry Mode for search criteria / sorter
- 4 Results preview section

The upper menu bar contains the following standard functions: *Back*: you are returned to the Dashboard.



Execute query: You start a defined query after you have specified all associated parameters.

New. You start a new query. The previous search will be discarded if it has not been saved.



Fields for various queries are located below the standard functions.

- Full-text search
- Basic query
- Extended query
- 1. Enter your search criteria into the input field.
- 2. Start the query with *Execute query*.

The matching data records appear in the results preview. The results are displayed together with the patient's name, patient ID, image capturing date and localization.



The results filter allows you to use additional criteria to group or filter results. The selection options are displayed as drop-down fields on the *Images* tab.

The *Patients* tab allows you to find more information on the patients visible on the images of the result preview. Use *Print* to make this list available in PDF of xls.

11.1 Full-text search

In the Full-text search you can enter a certain term, e.g. "Manuela" or "melanoma".

- 1. Enter the search term in the search field.
- 2. Click on Execute query.

All images whose data record contains the entered term will be displayed in the results preview.

11.2 Basic query

An input screen is displayed for the Basic query.

Enter all criteria applicable for the images, which are filtered by the software.

If you use the values Date of birth and Capturing date, you can search for images taken *before* or *after* a date or *in-between* two certain points of time.

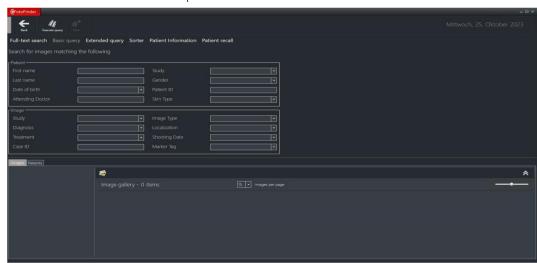


Fig. 38: Basic query



11.3 Extended query

By clicking on *Extended query* several features you can use during the query will be displayed automatically in the upper menu:



This contains a number of possible filter criteria to help you narrow down the results. You can then select the properties you want the researched images to have for every selected parameter.

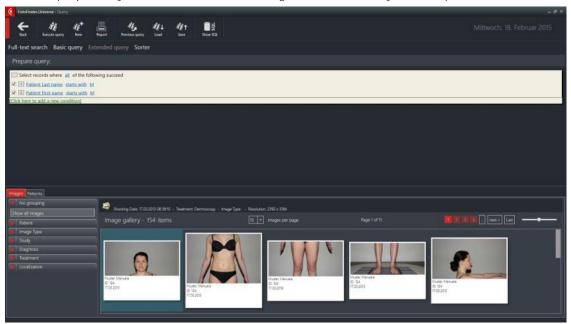


Fig. 39

Sample query:

You are searching for dermoscopic micro images of lesions on the left hands of men younger than 50.

- 1. First, select a new filter. To do so, click on [Click here to add a new filter].
- 2. Now choose a corresponding parameter using the mouse:
 - Patient → Gender is equal to → male
- Narrow down the age with the following steps:
 Patient data → Date of birth is before (precise date) → e.g. 01.12.1965
- Search for the localization with the following steps:
 Image → Localization contains → left hand

€NOTE

At the beginning of each query, you define whether all, at least one or none of the query filters have to be met. The more parameters you add, the higher the hit accuracy is.



The functions of the additional buttons are listed below:

Report: After a completed query, you export the found images to a pdf file. You can also print out the images on a connected printer.

Last query. After several queries, you repeat the one before the current query.

Save: You save your query. The data will be saved as an .ffq file in Universe's query folder.

Load: You access saved queries. A new window will open and you will be able to delete the files using the right mouse button.

Display SQL: You view the SQL code of the query.



11.4 Sort function

- 1. Click on Sort.
- 2. Press and hold the left mouse button to drag the required images up into the Sorter. The system will copy the images.



The buttons for editing the selected images are located on the right side.









Delete sorter: You can delete the images in the Sorter by clicking on this button.

Import: Imports all selected images from the last sorted arrangement in the current sorter.

Export: Exports all current sorted images as single JPEG to the selected storage location.

Print: You can print out the images as pdf files.

11.5 Patient information

After a query has been executed in the Research module, you can call up the respective patient data via the Patient Information tab and also switch between patients there.

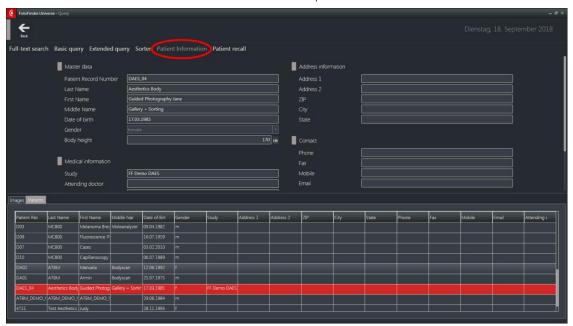


Fig. 40

- 1. Run a query and then click on *Patient Information*.
- 2. Select a patient.

The currently selected patient is highlighted in red in the result list at the bottom and the associated data is displayed at the top.

3. By clicking on another patient or using the arrow keys on your keyboard, you can change your patient selection.



The selected patient remains active when you exit the Query module. This will allow you to subsequently edit the patient data or take images directly by selecting the appropriate modules.

11.6 Patient Recall

Patients who do not have images taken for a certain period of time can be filtered out using the Patient Recall feature.

- 1. Click on Patient Recall in the menu bar.
- 2. The main criterion of the search is the date of the last visit. As a result, only patients whose last images were before or on this date are shown.



12 Import and Export

12.1 Import and Export from FXF/XFXF Data

You can use this function to exchange complete profile data records (patient data and associated images) between different FotoFinder installations and save these to various storage media (CD, USB flash drive, etc.).

Start the import and export of fxf data records from the Patient administration module. Available Data exchange formats:

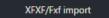
FXF:

- FotoFinder Exchange Format
- used until Universe version 2.0.41

XFXF:

- remodelled FotoFinder Exchange Format
- used from Universe version 3.0.0.0

12.1.1 Import of XFXF- or FXF data records



- 1. Click on XFXF/FXF Import.
- 2. In the appearing window select the location where the file is located.
- 3. Click on Open.



If you chose an encryption for the exported files you have to enter a password now.

The Import Wizard displays a list of all the images contained in the file.

Import Assistant with FXF file:

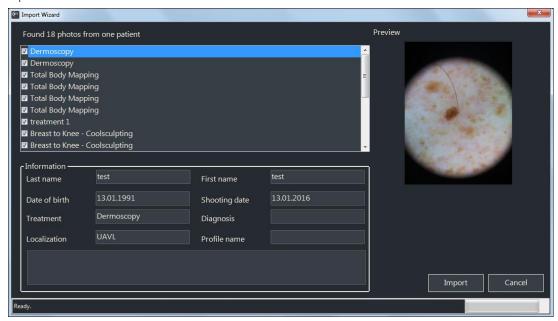


Fig. 41

Import Assistant with XFXF file:

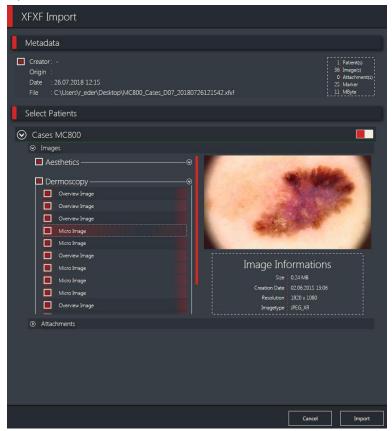


Fig. 42

- 4. Individual images can be removed from the import by removing the checkmark in front of the entry.
- 5. To start the process, click on *Import*.

You will receive a message once the import is finished.



12.1.2 Exporting XFXF files

Select the corresponding patient with a left mouse click in the patient list. You can select multiple patients with holding down the Ctrl key while clicking with the left mouse button. If the desired patients in the list are right after each other, you can click on the first patient and hold down the Shift key and directly click on the last desired patient. All patient profiles in between will be selected.

The selected patients are highlighted with red.

2. Click on the XFXF Export button.

The export wizard opens.



Fig. 43

- 3. Additional options: Select with a mouse click whether
 - the BodyScan results or
 - the attachments

Should be exported.

- 4. Security: Enable this if you wish to encrypt the file. You can decide between
 - Default Encryption or
 - Password
- 5. Content:
 - If desired, you can deselect individual modules (Aesthetics, Dermoscopy, Total Body Mapping), images and attachments for each patient by clicking next to them in the check boxes, if you do not want to export them.

For Total Body Mapping sessions only follow-up sessions can be deselected, no baselines.

- You can also deselect whole patient profiles here by setting the slide bar on the right side from the patient profile name.
- 6. Click on Export.
- 7. In the appearing window select the location where you want to save your file and then click on Save

The export can take a few minutes. Once it's finished a notification will appear. Please confirm this message by clicking on *OK*.

12.2 DICOM Image Export



With DICOM image export and patient data generated with the FotoFinder system get archived and are compatible with other medical imaging systems.

Image data records can be exported on a per-patient basis. Reference test program was the DICOM viewer MicroDicom®.

You can conduct the following functions:

- Export of complete patient records
- Export of Dermoscopy and Total Body Mapping images
- Export of overview and micro images
- Export of markers
- Collocation of data according to capturing sessions
- Localization of the imported images on the virtual patient
- Hierarchical file and folder organization
- Creation of a DICOMDIR directory
- Choice between uncompressed or compressed JPEG images
- Support of image frames

Further functions, not depending on the DICOM standard:

- ZIP compression and storage
- Encryption of exported data
- Configuration of rendering options for markers

(NOTE

The DICOM image export requires a license and is not installed by default.

1. Start DICOM image export from the Patient administration module with the *Export to DICOM* button

This button is only available if you select a patient with associated images from the list. "Empty" patients without previous images cannot be exported.

2. Configure the process with the following dialog:

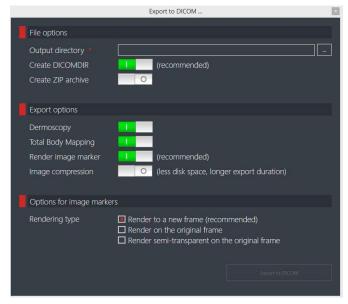


Fig. 44



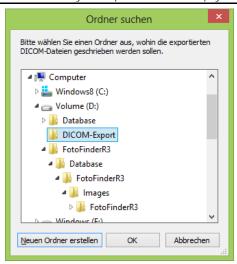
12.2.1 File options

In the file options, you can set the output files and folders. The only mandatory field of the dialog is the output folder.

Output directory

(NOTE

Data can only be exported to an empty folder! You must therefore create a new folder first.



1. Select the output directory by clicking the button [...].

A dialog appears where you select a folder on any random storage medium supported by the operation system. You can also select a network path here.

- 2. Select the newly created folders as target destination.
- 3. Click on OK.

Fig. 45

Create DICOMDIR

DICOMDIR-files contain a hierarchical overview and directory. They can be read by any DICOM-Viewer (external program) that needs to be installed on your computer.

The manufacturer recommends the selection of this option.

Create ZIP archive

If you activate this option, the software will also use the exported files to create a compressed ZIP archive. This is recommendable if you plan on forwarding the data. You can choose from the following additional options:

ZIP options

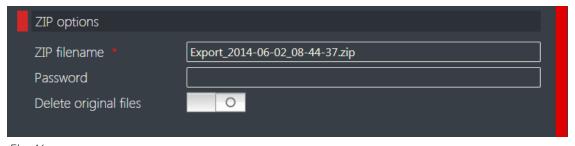


Fig. 46

Specify a file name for the ZIP archive in the text field. The ZIP folder will be created in the Output directory that you have chosen above.

Password

If you enter a password, the created ZIP folder will be encrypted. To unpack the file at a later stage, you need to enter this password again, as otherwise the files will remain illegible. If the text field stays empty, there will be no encryption.

■ Delete original files

When exporting to DICOM with activated ZIP archiving, the data will be duplicated on the target medium:

- the DICOM files
- the ZIP file



The information from the FotoFinder database will not be affected or deleted by this option.

12.2.2 Export options

These options allow you to determine which images and data will be exported from FotoFinder Modules and how.

Dermoscopy

If this option is activated, all images associated with this patient and which have an overview image created in the Dermoscopy module are exported to DICOM.

If this option is not visible, the patient does not have associated images.

Total Body Mapping

If this option is activated, all images associated with this patient and which have an overview image created in the *Total Body Mapping* module are exported to DICOM.

If this option is not visible, the patient does not have associated overview images from this module.



Activate at least one module from which the images are to be exported!

Render image marker

By choosing this option, markers and editions (marker, black bar etc.) can also be exported to DICOM. The system will offer you additional configuration options.

Image compression

If Image compression is active, the requested space for the exported DICOM files is considerably reduced. The time required for export is extended.

Without compression, the image quality is consistent. This could create larger files, depending on the image type and recording device. You will then require several hundred megabytes per DICOM export. The manufacturer recommends activating image compression if you have insufficient memory space, e.g. when sending the files via the Internet or burning them to a CD-R.



12.2.3 Options for image markers

Apart from patient information and captured images, you can also export image markers, e.g. in order to save references to the corresponding micro images. You can define the rendering type with the following selection options.

■ Render to a new frame

In this option you export two different versions of the image. This allows you to fade the markers in and out at a later stage.

■ Render on the original frame

Image markers will be directly rendered in the pixel data of the original. This saves half of the storage space during export. However, markers cannot be turned off in the DICOM Viewer.

Render on the original frame

This mode is basically the same as the option *Render on the original frame.* The difference is that markers will not be rendered with complete opacity but semi-transparently.

12.2.4 Start Export

1. Click on the *Export to DICOM* button at the end of the dialog after you have made all the necessary settings.



The export may take a few minutes. The duration depends on the size and scope of the patient data record and on the selected options. It is influenced by the number and type of the images.

13 Malfunction and troubleshooting

13.1 Error handling

This section contains information on troubleshooting. If the system does not start functioning correctly, then please call the support team on: 0049 8563 97720-45 or send an E-mail to: support@fotofinder.de.

Remote support over the Internet (remote control of your computer) is a great help in this situation. If you wish to use it, please download the Teamviewer software from the following site: www.fotofinder.de/support. Then inform us of your ID and the password shown in the Teamviewer software during the course of the support call. Please also name your system / license holder.

13.2 Problems with the software

13.2.1 Software error: The software is no longer functioning correctly

■ Close the software, restart the computer and run the software again

If the software error persists or the software is still not functioning correctly, please contact the support team.

13.2.2 The emergency STOP in the software has been pressed

■ Close the FotoFinder Universe application and run it again