seca 115

Instructions for use
for Physicians
and Assistants

seca
Precision for health

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1. SYSTEM DESCRIPTION

1.1 Congratulations!

With the **seca 115** seca software you have acquired a product from the **seca 360° wireless** system that assists you with the analysis and interpretation of weight, height and bioimpedance measurements.

For more than 170 years, seca has used its experience in the service of health care and, as a market leader, it has always set standards in many countries of the world with innovative developments for weighing and measuring.

1.2 Intended use

The **seca 115** software is used according to the national regulations, primarily in hospitals, physicians' practices, and inpatient care institutions.

The **seca 115** software is used to manage weight, height and bioelectric impedance measurements as well as for the automatic calculation of parameters derived from such measurements, e.g. FMI (fat mass index). Results are displayed graphically and assist the treating doctor with the following medical aspects:

- Monitoring of growth processes and weight changes
- Determination of the energy expenditure and energy reserves for the assessment of weight changes, the course of illnesses and the provision of advice about diet
- Estimation of the cardiometabolic risk
- Assessment of metabolic activity and the degree of success for a training programme, e.g. in the framework of rehabilitation or physiotherapy.
- Determination of the fluids status of a patient and the observation of changes in fluids as the result of medical treatment.
- Determination of the patient's general state of health or, in the case of a known disease, assessment of its severity.

The **seca 115** software is **not** diagnostic software.

1.3 User qualification

The **seca 115** software may only be used by people with sufficient professional knowledge.

1.4 Data transmission measuring devices

The seca medical body composition analyzer (mbca) allows data to be transmitted wirelessly to the PC. The **seca 360° wireless USB adapter 456** included in the mbca's scope of supply is required for this purpose. Alternatively, data can be transmitted to the PC via an Ethernet network connection (recommended for fast data transmission) or using a USB flash memory stick.

Weight and length measuring devices from the **seca 360° wireless** system can transmit measured results wirelessly to the PC. As an accessory, the **seca 360° wireless USB adapter 456** is required for this.

seca scales and height measuring equipment with RS232 interface can transmit measurements to the PC through a wire.

2. SAFETY INFORMATION

2.1 Basic safety information

Handling of the software

- Note the warnings in the instructions for use.
- Keep these instructions for use and the declaration of conformity that they contain in a safe place.
- The **seca 115** software is **not** diagnostic software. The software assists the treating doctor with creating a diagnosis. For the creation of a precise diagnosis and for the initiation of therapies, in addition to the use of the **seca 115** software, careful examinations must be conducted by the treating doctor and the results of these taken into consideration. The responsibility for diagnoses and the therapies derived from them lies with the treating doctor.
- Use **seca 115** only for the prescribed purpose.
- Use only scales and length measuring devices from seca together with the **seca 115** software.
- Keep HF devices such as mobile telephones and TVs at least 1 meter away in order to prevent mistaken measurements and disturbances during the wireless transmission.

Handling measured results

- Before you save and re-use measured values in the **seca 115** software (e.g. in a hospital information system), make sure that the measured values are plausible and that they correspond to the display on the measuring device.
- If measured values have been transmitted from the **seca 115** software to a hospital information system, make sure before re-use that the measured values are plausible and assigned to the correct patient.

2.2 Safety information in these instructions for use

DANGER!
Indicates an exceptionally dangerous situation. If you do not heed this warning, severe irreversible or life-threatening injuries may result.

WARNING!
Indicates an exceptionally dangerous situation. If you do not heed this warning, severe irreversible or life-threatening injuries may result.

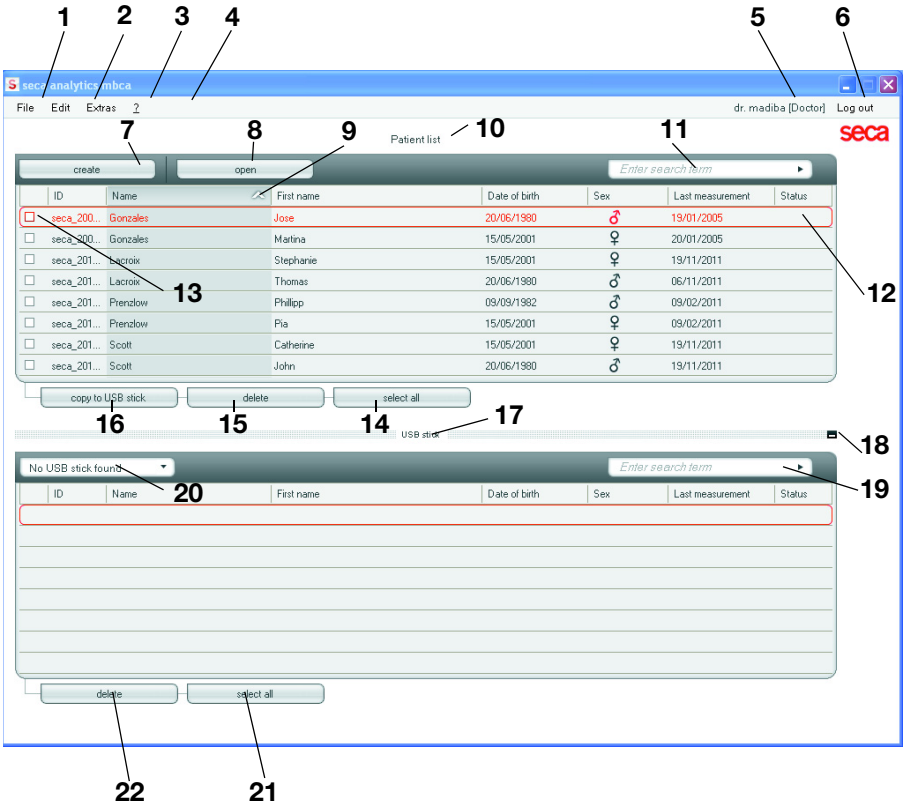
CAUTION!
Indicates a dangerous situation. If you do not heed this warning, slight to medium injuries may result.

WARNING!
Indicates a possible mistaken operation of the product. If you do not heed this warning, device damage or incorrect measured results may result.

NOTE:
Contains additional information about the application of this product.

3. OVERVIEW

3.1 Patient list

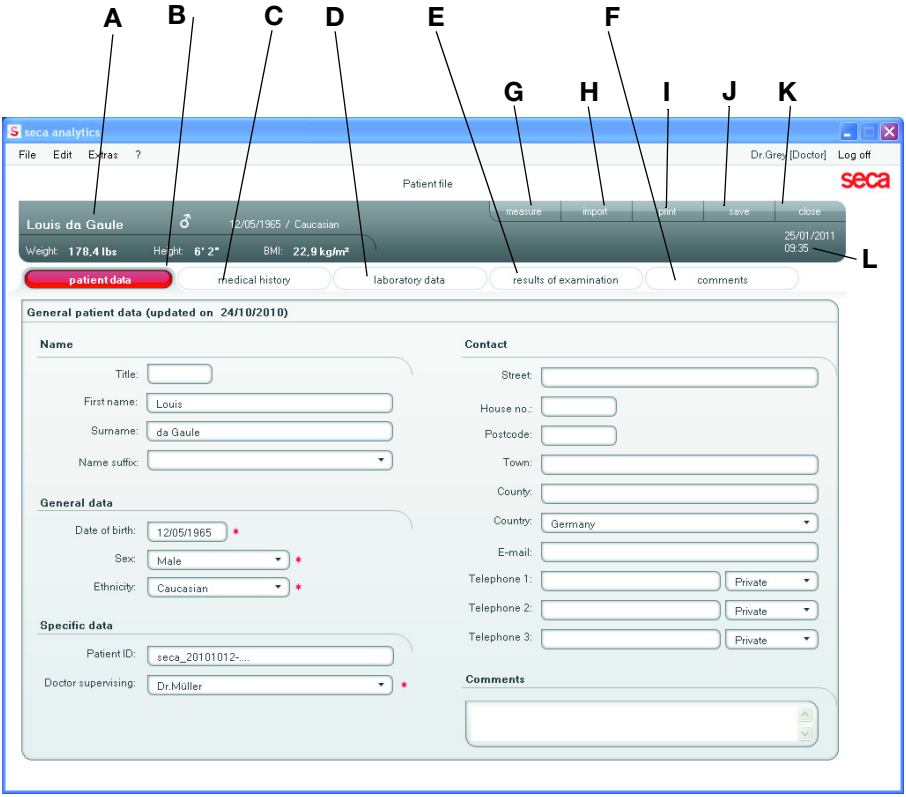


No.	Operating element	Function
1	**File**	The following functions can be accessed using this menu element: • **CSV export** • **Exit**
2	**Edit**	The following functions can be accessed using this menu element (only with an open patient file): • **Cut** • **Copy** • **Paste** Also as a context menu via right mouse-click

No.	Operating element	Function
3	**Extras**	The following functions can be accessed using this menu element: • **References** • **User-specific modules** • **Measuring device administration**
4	**?**	The following functions can be accessed using this menu element: • **Product information** • **Instructions for use** • **Administrator manual**
5	Registered user [role]	The following roles are provided in the software: • **Administrator** • **Doctor** • **Assistant**
6	**Log off**	• Open the login dialog (input the user name and password) in order to log in another user
7	**Create**	Create a new patient file
8	**Open**	Open an existing patient file in the main patient list
9	Column sorting	• Up arrow: ascending sorting • Down arrow: descending sorting
10	Main patient list	Displays patient files: • Data created in the main patient list • Data imported from the USB stick
11	Search window	Search for patient files in the main patient list. • "Asterisk search," e.g. "Mi*" for Miller possible • Back to the complete list with empty search
12	Selection bar	Indicates which patient file is currently selected.
13	Checkbox	Activate a patient file. Clicking buttons in the patient list affects all "activated" patient files.
14	**Select all** **Unselect all**	• Select all patient files in the main patient list to perform actions for all of them. • Unselect all patient files in the main patient list when an action was performed for all of them or when an action is to be omitted.
15	**Delete**	Delete patient file (patient files can be restored by users with the role **Administrator**.)
16	**Copy to USB stick**	Copy patient files selected in the main patient list to a USB stick, e.g. for use on an mbca.
17	Patient list, USB stick	Displays patient files: • Data copied from the main patient list to the USB stick • Data created on the USB stick

No.	Operating element	Function
18	Show/hide patient list on USB stick	• Any patient list stored on the USB stick is automatically displayed when the system starts up. • Lists can be hidden to display more entries in the main patient list.
19	Search window	Search patient files on USB stick. • 'wildcard' search (with asterisk), e.g. "Sa*" for Sampleman • Back to complete list if search unsuccessful
20	Drive selection window	Used to select USB stick.
21	**Select all** **Unselect all**	• Select all patient files on the USB stick to perform actions for all of them. • Unselect all patient files on the USB stick when an action was performed for all of them or when an action is to be omitted.
22	**Delete**	Delete patient file on USB stick (Patient file cannot be restored on USB stick)

3.2 Patient file



	Symbol	Meaning
A	Patient info	Summary of the most important patient data
B	**Patient data**	Enter, edit, and view the patient's main data
C	**Medical history**	Enter, edit, and view the patient's medical history
D	**Laboratory data**	Enter, edit, and view the patient's laboratory data Data can be imported if an interface to the hospital information system is programmed.
E	**Results of examination**	View results of examination.
F	**Comments**	Add and view comments about the patient file
G	**Measure**	Start measurement procedure
H	**Import**	Import patient data **Note:** Configuration or programming of an interface to the patient data management system (PDMS) required
I	**Print**	Print patient data or save as PDF

	Symbol	Meaning
J	**Save**	Save changes and additions to the patient file
K	**Close**	Close the patient file and return to the patient list
L	Date/time	Settings are taken over from the operating system

3.3 Identification on the packaging

Text/symbol	Meaning
Model	Model number
Ser. no.	Serial number
	Heed instructions for use
CE	Product conforms to the standards and guidelines of the EC

4. INSTALLATION

The **seca 115** software may only be installed by experienced PC administrators.

For information about installation and configuration options, check the menu bar of the software under "**?➔Administrator manual**". In case of questions and requests for changes to the system currently installed on your PC, please contact your administrator.

ATTENTION!
Data loss
The improper installation of or improper changes to the installation can cause data loss and, as a result, misdiagnoses.

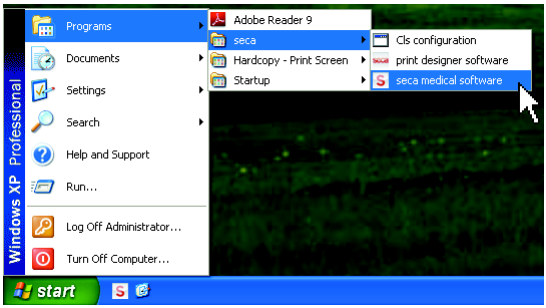
– Have the installation or changes to the installation made by an experienced PC administrator.

5. OPERATION

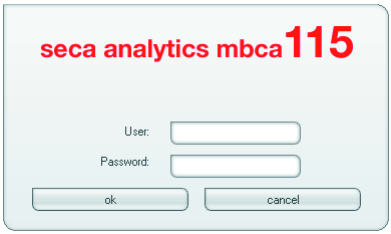
5.1 Starting/exiting the program

Opening the program

1. Click "Start➔Programs➔seca➔seca medical software.



The login dialog is opened.



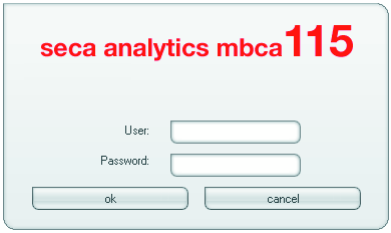
2. Enter your user name.
3. Enter your password.

   NOTE:
   User name and password are created by the administrator. If you want to change the user name or password, please contact your administrator.

4. Confirm your entries with **OK**.
   The patient list is opened.

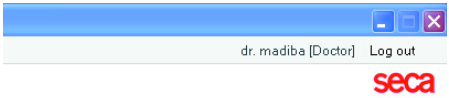
Logging off/changing the user

♦ Click on **Log off**.
The login dialog is opened.
Another user can log on.



Exiting the program

♦ Click the "x" symbol.
The program exits.



5.2 "Extras" menu

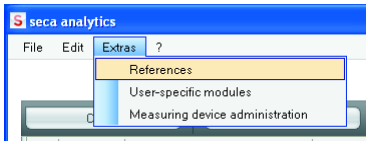
Changing references

The **seca 115** software evaluates measured results using references. During the installation and configuration of the software, your administrator sets in which country you are operating your software. With this setting, the references that are normally used in your country are pre-set automatically.

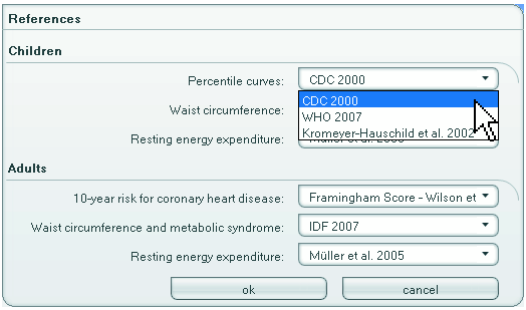
According to the regulations that apply in your institution and your personal preferences, you can change the pre-set references. To do this, proceed as follows:

NOTE:
This section describes the handling of the software. For basic information about the medical content, see chapter “Medical basis” starting on page 51.

1. From the **Extras** menu, select the **References** element.



The **References** dialog window opens.



2. Click on the arrow of the parameter for which you want to select the reference.
   A pull-down menu with all selection possibilities for the reference opens.
3. Click the desired reference.
   The pull-down menu closes.
   The selected reference appears in the selection field.
4. Repeat the steps 2. and 3. for all parameters whose references you would like to change.
5. In order to save the settings, click **OK**.
   The dialog window closes.

   NOTE:
   If you click on "**Cancel**," the settings are not saved.

Creating user-specific modules

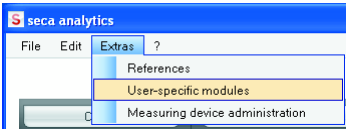
A number of evaluation modules have already been created to evaluate your patient's state of health (see “Evaluation modules” on page 51).

On the **User-specific modules** dialog, you can compile two additional modules. You can view and evaluate these in the patient file under **Results of examination**, just like the pre-set evaluation modules.

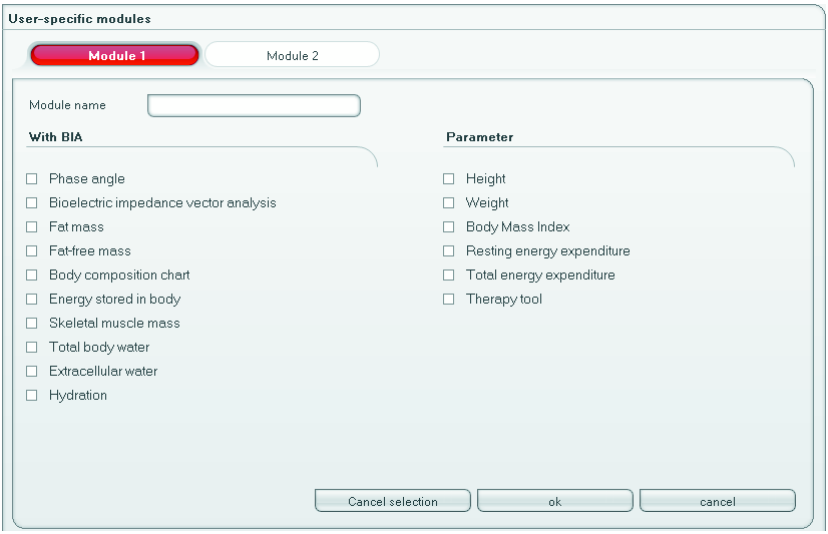
NOTE:
This section describes the handling of the software. For basic information about the medical content, see chapter “Medical basis” starting on page 51.

In order to compile a user-specific module, proceed as follows:

1. Click in the **Extras** menu on **User-specific modules**.



The **User-specific modules** dialog window appears.
The **Module 1** is pre-selected.



2. In the **Module name** field, enter the name that you want to assign the module.
3. Click a maximum of 4 parameters that you want to display in your module.

4. Click on **OK**.
   The user-specific module is saved.

   NOTE:
   - With **Cancel selection** you can de-select all selected points with a mouse-click.
   - With **Cancel** you can exit the dialog window without saving settings.
   - In order to delete a saved module, click on **Cancel selection**, delete the module name in the **Module name** field, and click on **OK**.

5. If desired, repeat the process for the **Module 2**.

Viewing measuring device administration

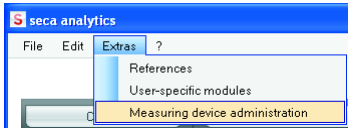
You can see which scales and length measuring devices are connected to your PC.

The following information is displayed for each connected measuring device:

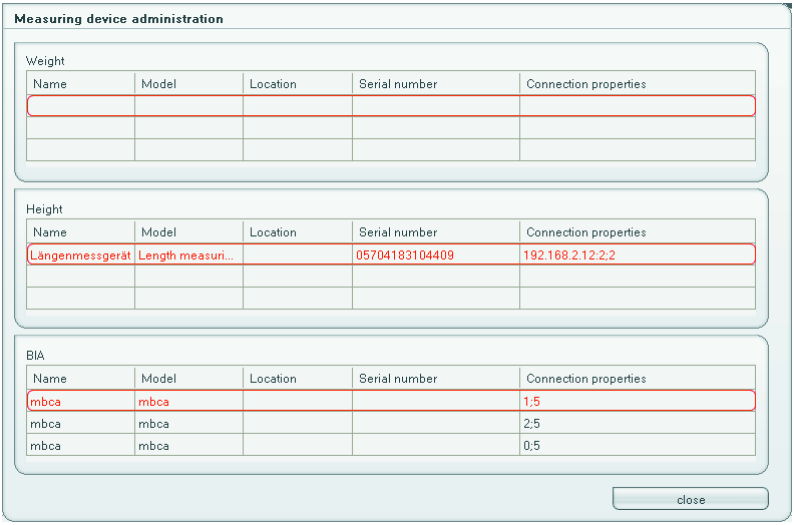
- Device name if entered by the administrator (recommended)
- Model
- Setup location if entered by the administrator (recommended)
- Serial number
- Connection properties:
  - **seca 360° wireless**: [PC name : channel; device type]
  - RS232 devices: [PC name : COM port]

In order to display the measuring device configuration, proceed as follows:

1. From the **Extras** menu, select the **Measuring device administration** element.



The **Measuring device administration** window appears.



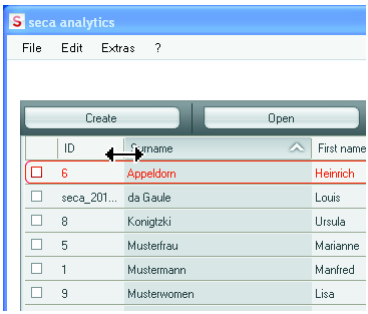
NOTE:
You cannot make any changes on this window. If changes should be made, please contact your administrator.

2. In order to exit the **Measuring device administration** window, click on **Close**.

5.3 Working with the patient list

Setting the column width

1. Position the mouse pointer in the title line on the line between two columns.

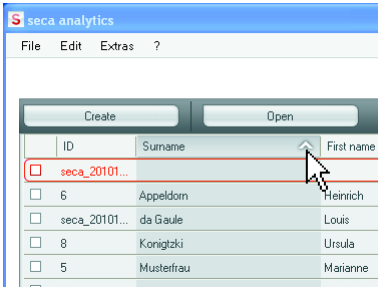


The mouse pointer becomes a double arrow.

2. Hold the left mouse button down and drag the column wider or narrower with the mouse.
3. Release the left mouse button when the desired column width has been reached.

Sorting the column content in ascending or descending order

1. Click in the title line of the desired column.

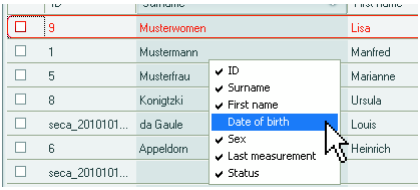


An arrow appears next to the column title, which shows the current sorting direction.

2. Click the arrow in order to re-sort the column content.
3. In order to reverse the sorting direction, click the arrow again.

Showing and hiding columns

1. Position the mouse pointer in the patient list.
2. Click the right mouse button.
   A context menu with the titles of all columns appears.



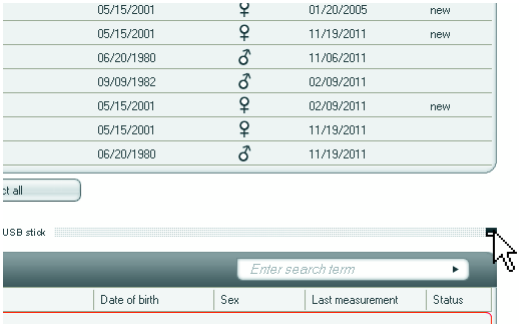
3. Click on the title of the column that you want to hide.
   The checkmark in front of the column title is no longer displayed.
   The corresponding column is hidden in the patient list.

4. Click on the title of the column again in order to show it.
   The checkmark in front of the column title is displayed again.
   The corresponding column is shown in the patient list again.

Showing/hiding patient list on USB stick

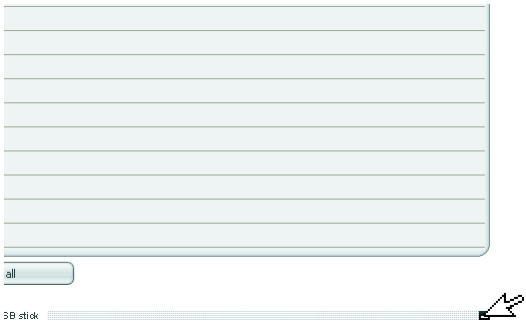
The patient list of the USB stick is displayed whenever the program starts. You can hide the patient list to obtain more space for the entries in the main patient list.

1. Click on the "-" symbol above the patient list of the USB stick.



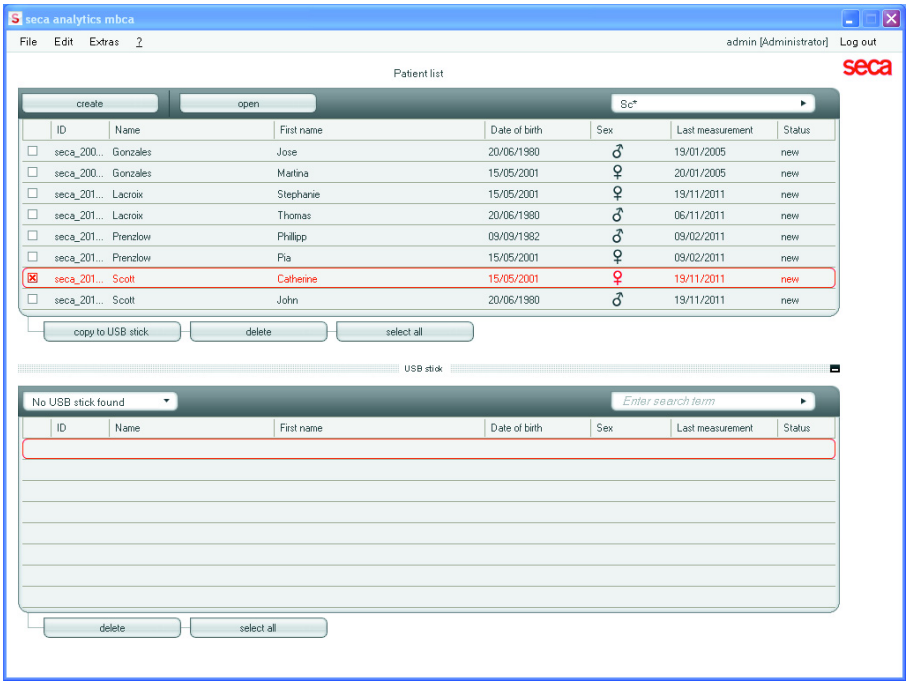
   The patient list of the USB stick is no longer displayed.

2. To display the patient list of the USB stick, click on the "-" symbol again.



Searching a patient file

1. Enter a search term in the search field.



NOTE:
If you do not know exactly how to write a name, you can carry out a so-called "asterisk search," e.g. "Mi*" for "Miller."

2. Click the arrow next to the search field.
   The search procedure starts.
   The search results are displayed.
3. In order to return to the complete patient list, delete the search term in the search field.
4. Click the arrow next to the search field.
   The complete patient list is shown again.

Creating a patient file

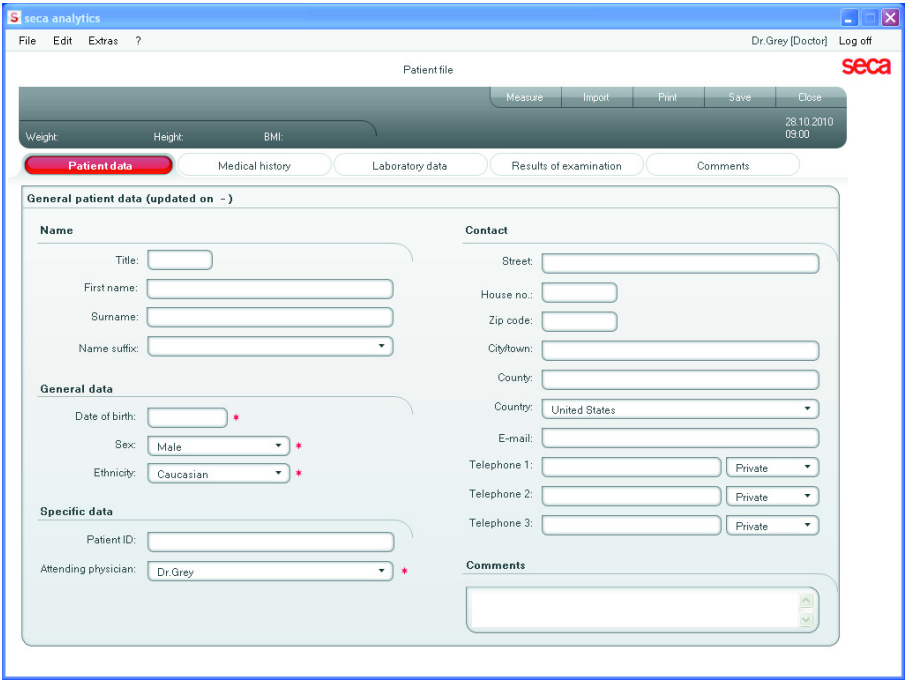
If you create a new patient file, you must fill out at least the following fields (in the file, each marked with "*"):

- Date of birth
- Gender
- Ethnicity
- Doctor supervising treatment (if the current user is a doctor, this field is filled out automatically)

If the patient ID must fulfill a prescribed structure in your institution, you can enter it manually. If you do not enter a "manual" ID, then an ID is assigned automatically when the patient file is saved.

1. Click on **Create**.

An empty patient file appears.
The **Patient data** tab is active.



2. Enter the patient data:

   NOTE:
   If you are logged in as a doctor, you are entered automatically in the **Doctor supervising** field. The field can be edited.

3. Click on **Save**.
   If no manual ID was assigned, the ID created automatically by the software is displayed.

WARNING!

Data loss due to incomplete saving

If you do not close a patient file after saving it and you enter another patient file, the data of the first patient will be overwritten.

– Close a newly-created patient file before you create another patient file.

4. Click on **Close**.
   The patient list is shown again.
   Additional patient files can be created.

Copying patient files to a USB stick

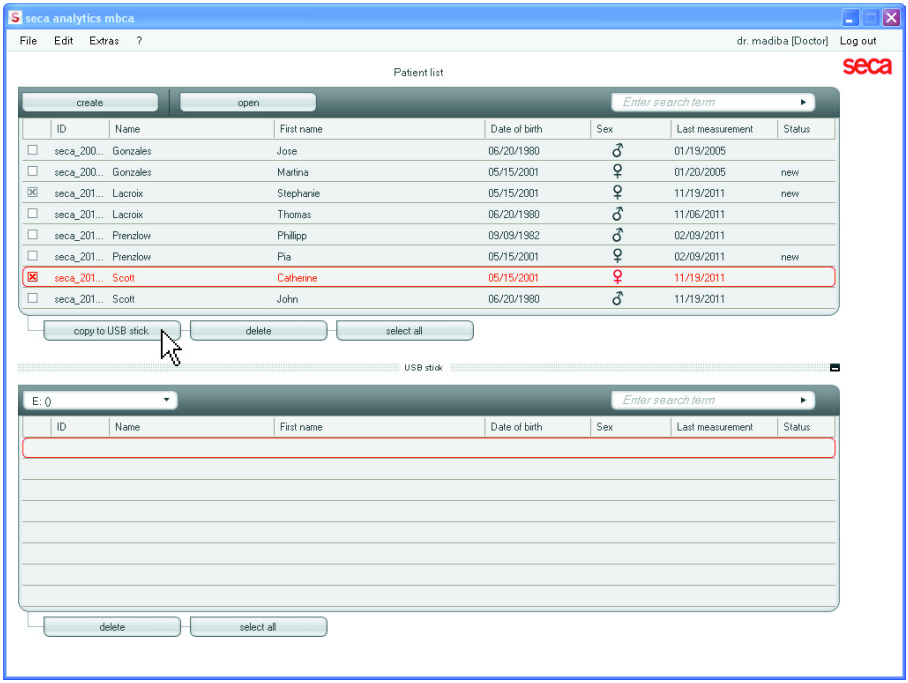
If you wish to work with patient files on a seca mbca and there is no wireless or Ethernet connection to this device, you can use an initialised USB flash memory stick.

NOTE:

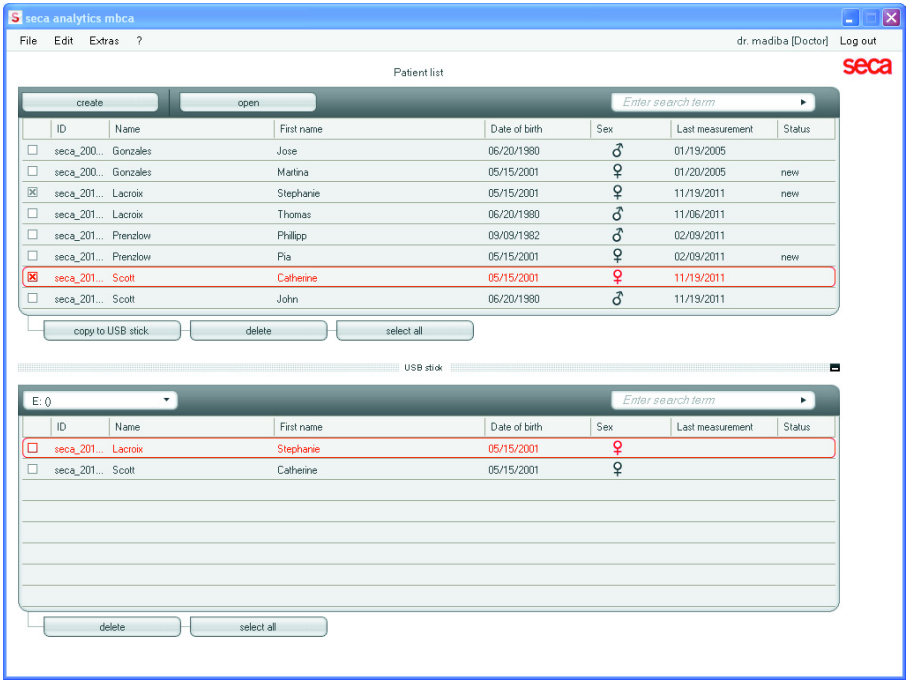
If you are not sure whether the available USB stick has been initialised, contact your administrator.

To copy data to a USB stick, proceed as follows:

1. Plug the USB stick into a free USB port on your PC.
   The message **USB stick detected** will appear.
2. Click **OK**.
   The dialog window closes.
3. In the main patient list select the patient files you wish to copy to the USB stick.



4. Click **Copy to USB stick**.
   The entries copied are displayed in the patient list of the USB stick.



5. Select the USB stick for ejection as provided by your PC's operating system.
6. Remove the USB stick from the USB port of your PC.

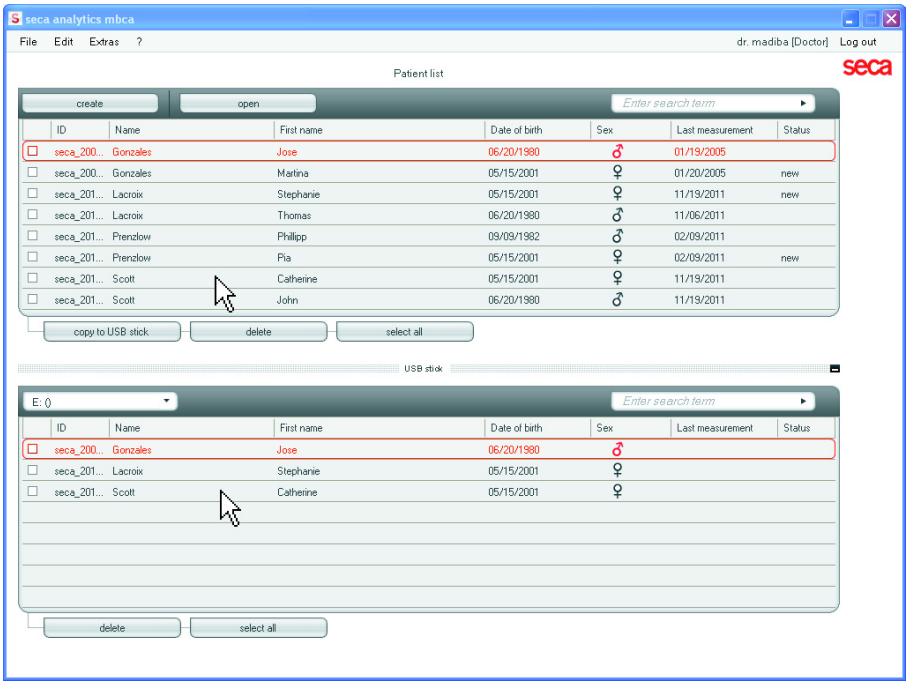
NOTE:
To access patient files on a seca mbca, you will require your user PIN (generated automatically when your administrator creates your user account for the PC software) or the USB PIN (generated when your administrator initialises the USB stick). If you have none of the PINs to hand, contact your administrator.

Importing patient files from the USB stick

If you have created or updated patient files on a USB stick, e.g. during measurement on a seca mbca, you can import this data to the patient database of the software. To do so, proceed as follows:

1. Plug the USB stick into a free USB port on your PC. The message **USB stick detected** will appear.

2. Click **OK**.
   The dialog window closes.
   The patient files available on the USB stick are displayed in the patient list of the USB stick.



Import of the data starts automatically.
Imported entries are displayed in the main patient list.

NOTE:
If you have accidently assigned a patient ID which already exists in the PC software, the relevant patient file is copied from the USB stick to the temporary patient buffer of the PC software. Your administrator can allocate a unique ID to the patient file and transfer it to the main patient list.

3. Select the USB stick for ejection as provided by your PC's operating system.
4. Remove the USB stick from the USB port of your PC.

Exporting patient files in CSV format

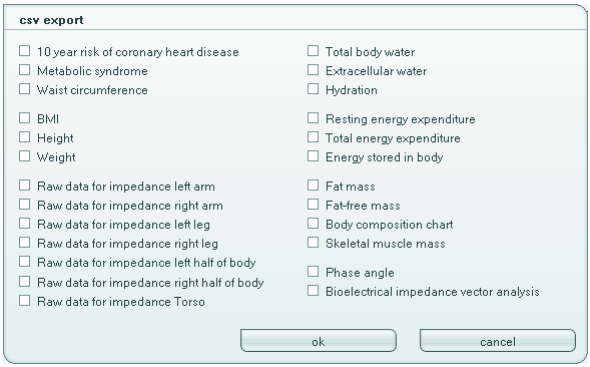
If you would like to re-use results of examinations of a patient outside of this program, you can export them in the .csv format. This data format can be imported into common spreadsheet programs.

NOTE:
Person-related data such as name and address of the patient will not be exported.

1. Position the red selection bar on the patient file that should be exported.
2. Click the appropriate checkbox
   A cross appears in the checkbox.
   The patient file is selected.
3. Repeat the steps 1. and 2. for all patient files that should be exported.

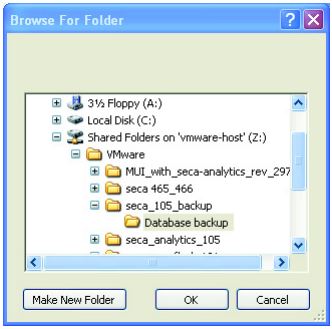
NOTE:
If you want to export all patient files, use the **Select all** function.

4. Click in the "**File**" menu on "**Export**."
   The export window appears.



5. Select the parameters that you want to export.

6. In order to confirm the settings, click **OK**.
   The **Save as** dialog window appears.



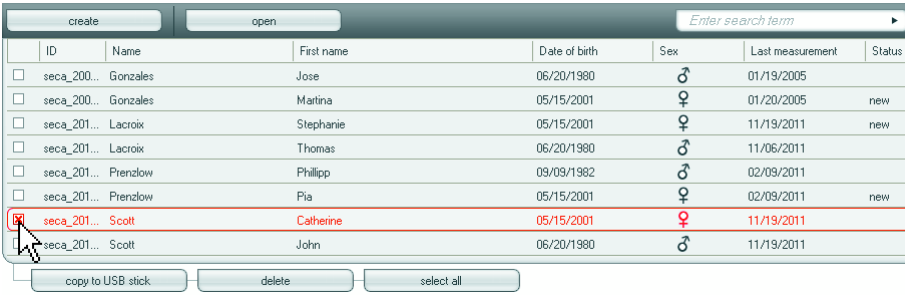
7. Select the directory into which you want to export the patient data.
8. Click on **Save**.
   The data is exported.

NOTE:
If an interface to your PDMS is configured, weight and height, as well as a PDF document with all measured results and evaluations are exported automatically into the PDMS. If you are uncertain of whether an interface has been configured, please contact your administrator.

Deleting individual patient files

You can delete patient files in both the main patient list and the patient list of the USB stick. To do so, proceed as follows:

1. Select the patient file that should be deleted (here: in main patient list).



2. Click the appropriate checkbox
   A cross appears in the checkbox.
   The patient file is selected.
3. Repeat the steps 1. and 2. for all patient files that should be deleted.
4. Click on **Delete**.
   The patient file is deleted.

ATTENTION!

Loss of data

If you delete data from the USB stick, it cannot be restored.

– Before deleting data from the USB stick, check that the data has been imported to the main patient list (see “Importing patient files from the USB stick” on page 26).

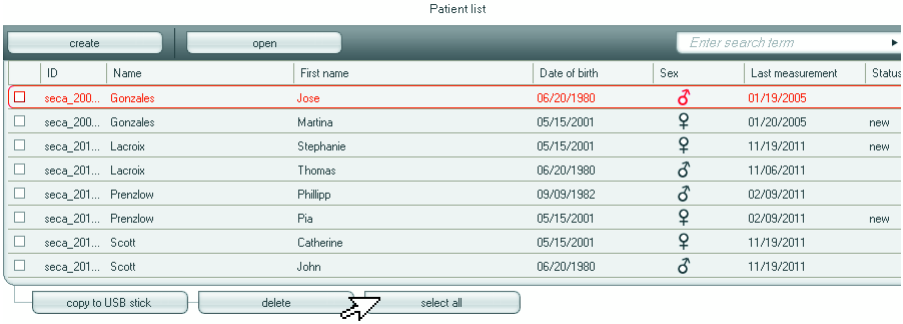
NOTE:

Should you unintentionally delete data in the main patient list, your administrator can restore the data with the function **Restore patient data**. The entire patient data record will be restored. Entries and measurements that were not saved are lost.

Deleting all patient files

You can delete patient files in both the main patient list and the patient list of the USB stick. To do so, proceed as follows:

1. Click on **Select all** (here: in main patient list).



NOTE:
If you want to undo the selection, click on **Unselect all**.

2. Click on **Delete**.
   All patient files are deleted.

ATTENTION!
Loss of data
If you delete data from the USB stick, it cannot be restored.

– Before deleting data from the USB stick, check that the data has been imported to the main patient list (see “Importing patient files from the USB stick” on page 26).

NOTE:
Should you unintentionally delete data in the main patient list, your administrator can restore the data with the function **Restore patient data**. The entire patient data record will be restored. Entries and measurements that were not saved are lost.

5.4 Working with the patient file

Opening the patient file

1. Click on the checkbox of the patient file that you want to open.
   A cross appears in the checkbox.
   The patient file is selected.

2. Click on **Open** or double-click on the entries in the patient list.
   The patient file is opened.

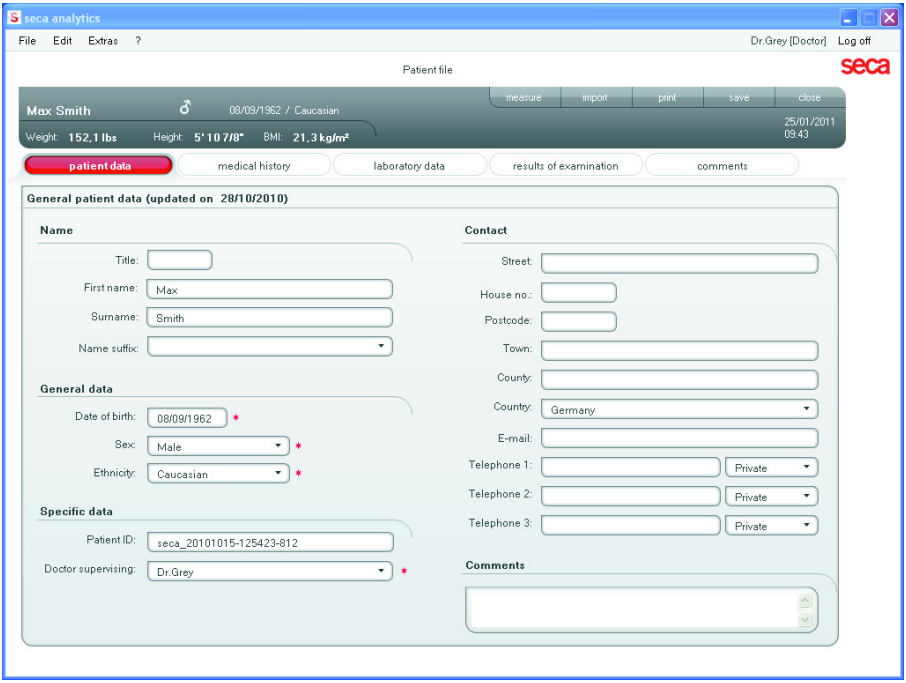
Editing patient data

If you have opened an existing patient file, the following fields are usually filled out:

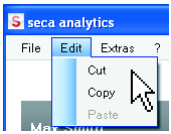
- Date of birth
- Gender
- Ethnicity
- Patient ID
- Doctor supervising treatment

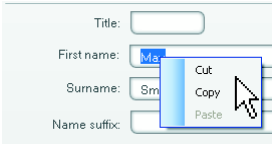
You can change and add to patient data at any time.

1. Open a patient file (see “Opening the patient file” on page 32).
   The **Patient data** tab is active.
2. Select the tab on which you would like to change data.



3. Change or add to the patient data insofar as necessary:
   - Add data manually
   - Mark the entries and use the functions **Cut**, **Copy**, and **Paste**. These functions are accessible via the **Edit** menu element or via the context menu with a right mouse-click.



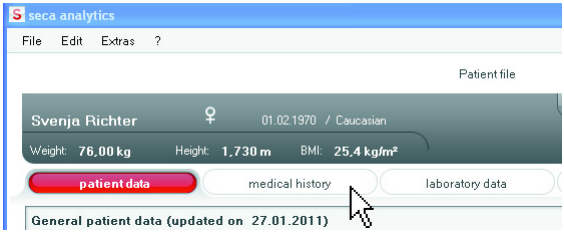


4. Click on **Save**.
5. In order to close the patient file, click **Close**. The patient list is shown again.

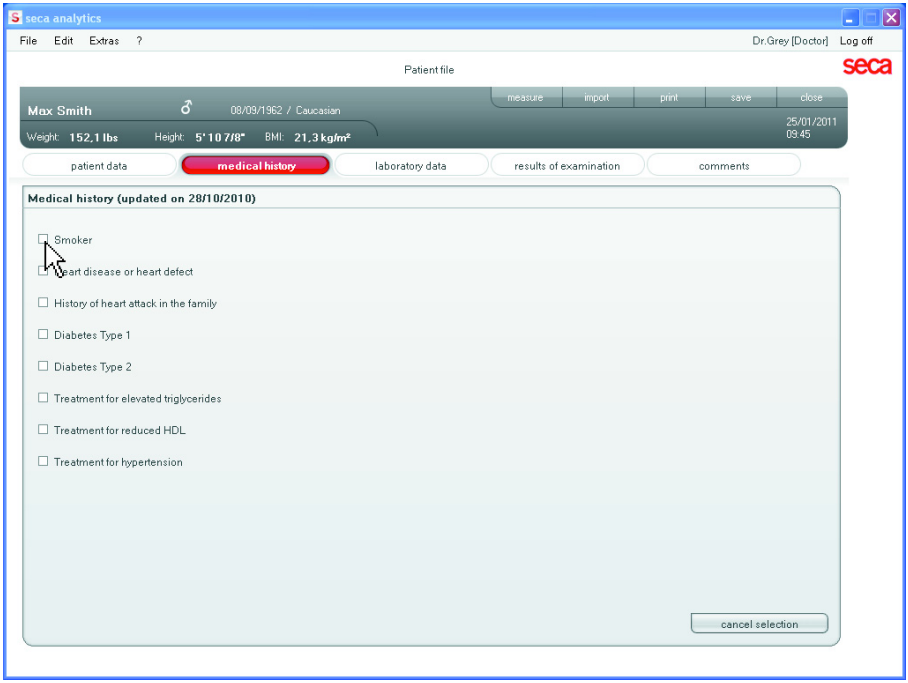
Entering a medical history

On this tab you can enter previous illnesses or therapies already started. This information flows into the evaluation of the measured results (see “Evaluating results” on page 40).

1. Click on **Medical history**.
   The **Medical history** tab is active.



2. Click on the checkboxes for the relevant previous illnesses and therapies.
   A cross appears in the corresponding checkboxes.



3. Click on **Save**.

NOTE:
With **Cancel selection** you can undo the entire selection. Then click on **Save** again.

Entering laboratory data

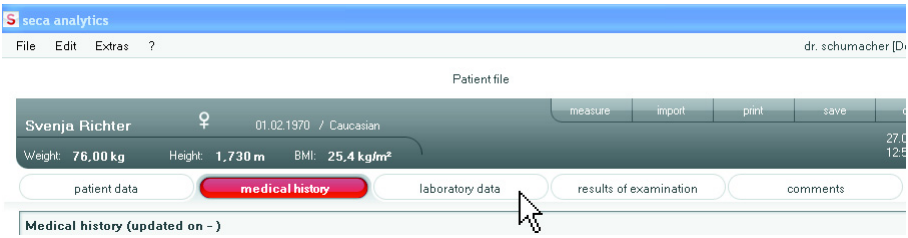
In the **Laboratory data** tab, you can enter the patient's current laboratory data and waist circumference and track the history.

If for this program an interface to your patient data management system (PDMS) has been configured, patient and laboratory data can be transferred from the PDMS.

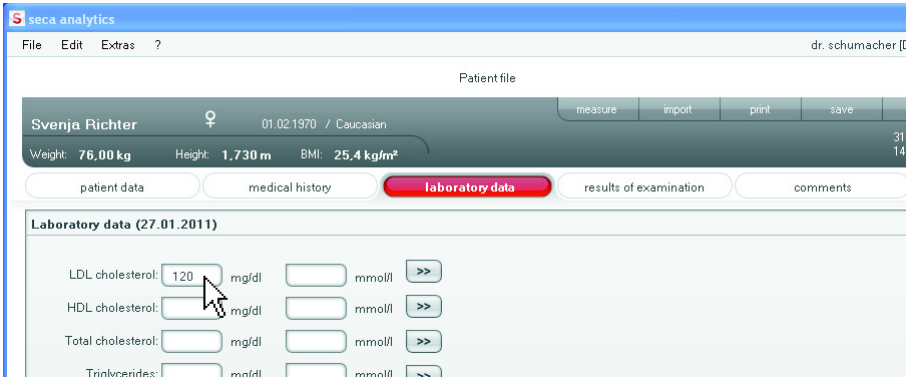
NOTE:
If you are uncertain of whether an interface has been configured, please contact your administrator.

In order to enter laboratory data manually, proceed as follows:

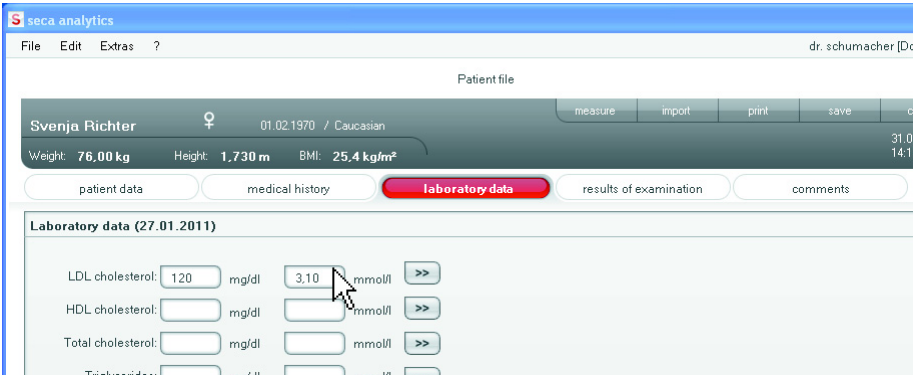
1. Click on **Laboratory data**.
   The **Laboratory data** tab is active



2. Click in a value field.
3. Enter the value.



NOTE:
You can specify the value in mg/dl or in mmol/l. The conversion into the other value takes place automatically as soon as you click on the empty field.

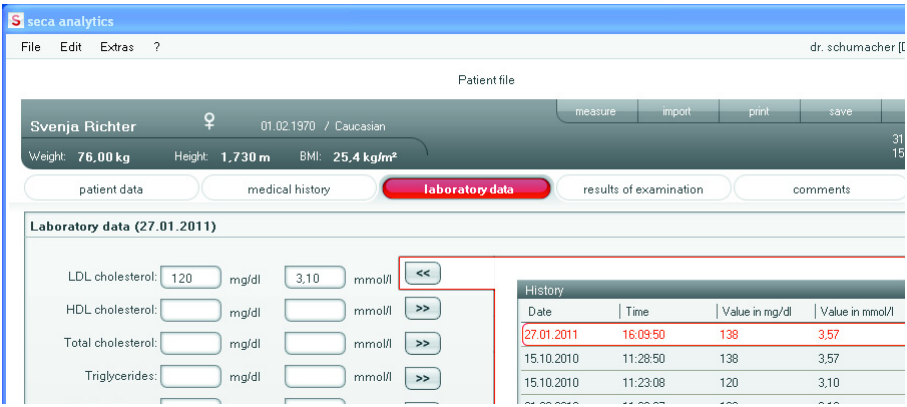


4. Repeat the steps 2. and 3. for all values that you want to enter.
5. Click on **Save**.

View history for individual values

You can view the history for individual values. To do so, proceed as follows:

1. Click on the » symbol next to the desired value.

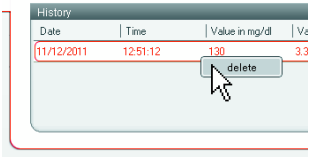


The history field for that value is opened.

2. To close the history view, click «.
3. To return to the patient list, click **Close**.

Delete values in the history field

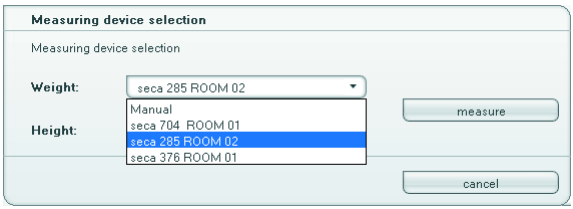
You can delete individual values in the history field. To do so, proceed as follows:



1. Click the right mouse button on the value you want to delete.
   The **Delete** button appears.
2. Click the left mouse button on the **Delete** button.
   The value is deleted.
3. To return to the patient list, click **Close**.

Measuring

1. Open the patient file (see “Opening the patient file” on page 32) or create a patient file if necessary (see “Creating a patient file” on page 22).
2. Click on **Measure**.
   The **Measuring device selection** dialog window appears.



3. Select the devices with which you want to determine the patient's weight and height.

WARNING!

Mistaken measurements with incorrect device selection

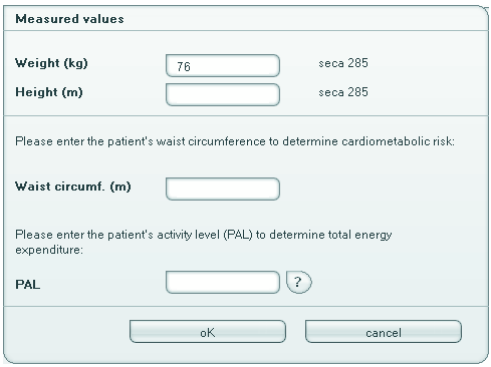
In case of incorrect device selection, it can happen that measured results are assigned to the incorrect patients or no measurement at all is performed.

- Use the device names to ensure that you have selected the correct devices.
- For the selection of devices that are connected to the same USB adapter: Make sure that the selected measuring device is logged onto the same wireless group.
- If devices on the network must be renamed or the composition of wireless groups must be changed, please contact your administrator.

NOTE:

- Select the **Manual** setting if your scales and length measuring devices are not networked with the PC. On the next dialog window, you can enter the measurement values directly.
- You cannot use the PC software to start BIA measurements on a seca mbca. Start BIA measurements from the device itself and transmit the measured results to the PC software either wirelessly, via Ethernet or using a USB stick.

4. Click on **Measure**.
   The **Measured values** dialog window opens.
   The selected measuring devices are displayed next to the corresponding value windows.



5. Perform the measurements on the patient.
6. Make sure that the measured value is entered on the **Measured values** dialog window:
   – If you are working with **seca 360° wireless** devices for which the automatic data transmission is activated, the measured values will be transmitted automatically to the PC.
   – If you are working with **seca 360° wireless** devices for which the automatic data transmission is **not** activated, press the

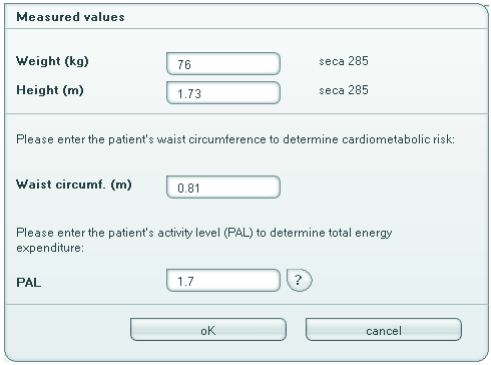
(**send/print**) Enter key on the measuring devices in order to transmit the measured values to the PC.

– If your scales and length measuring devices are not networked with the PC, enter the measured values manually.
– If you are working with scales that are connected to the PC via RS232 interface, the measured values are transmitted automatically to the PC.

NOTE:

- If you are uncertain whether the automatic data transmission is activated for your **seca 360° wireless** devices, please contact your administrator.
- Regardless of the setting on the measuring devices, measured values will be displayed in the units pre-set for the software.

7. If you want to assess the patient's cardiometabolic risk, enter the **Waist circumference:** in the **Measured values** dialog window.



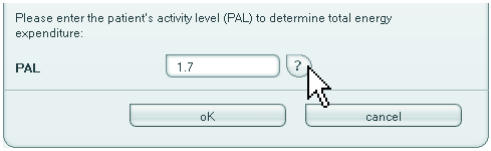
8. If you want to determine the patient's total energy expenditure, enter the patient's **Physical Activity Level (PAL)** in the **Measured values** dialog window.

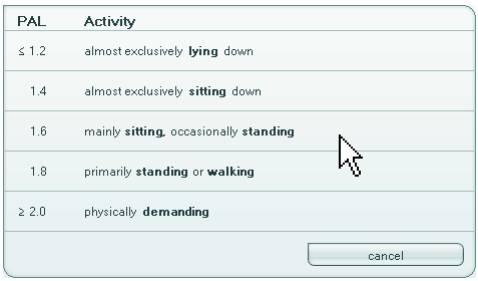
NOTE:

- If you do not enter waist circumference and PAL, the following modules will not be displayed on the **Results of examination** tab: **Cardiometabolic risk**, **Energy**.
- If waist circumference is not yet available, you have the option of entering waist circumference in the **Laboratory data** tab

later. This must be done the same day as the weight and height measurement (see “Entering laboratory data” on page 35).

- If you click on the question mark next to the **Physical Activity Level (PAL)** line, a table appears with PAL values. If you click a value, it is taken over into the **Measured values** window.





9. On the measured values window, click on **OK**.
   The measurement procedure is complete.
   The **Results of examination** tab is active.
   The results of the examination can be evaluated.

Evaluating results

On this tab, you can view the evaluations of all measurements performed for the patient. In addition to the measured values for weight and height, waist circumference and physical activity level, as well as medical history and the laboratory data also flow into the evaluation. The results are displayed in evaluation modules.

NOTE:
This section describes the handling of the software. For basic information about the medical content of the evaluation modules, see chapter “Medical basis” starting on page 51.

The following evaluation modules can be viewed if weight, height, PAL and waist circumference are available for a patient.

- **Cardiometabolic risk**
- **Development / growth**
- **Energy**

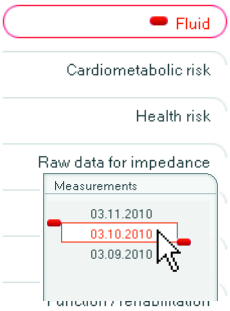
The following evaluation modules can also be viewed if data from a bioelectric impedance analysis (BIA) is available:

- **Function/rehabilitation**
- **Fluid**
- **Health risk**
- **Raw data for impedance**

The principles of bioelectric impedance analysis are described in the chapter "Medical basis" in the user manual of the seca mbca.

On the **Results of examination** tab you can view the results for **User-specific modules**.

Display conventions

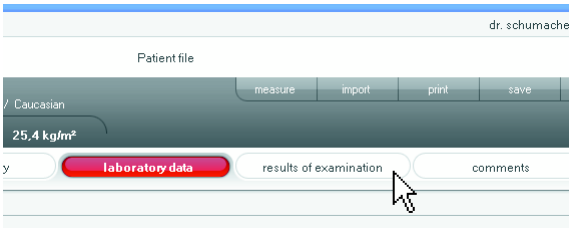


- Bold:
  - module: new, not-yet-regarded measurements/evaluations present
  - measurement: new, not yet regarded
- Red border:
  - module is active
  - details are displayed
- Grayed out (modules only):
  - module cannot be displayed since not all parameters are present

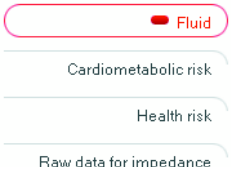
Viewing results of examination

In order to view the evaluation modules, proceed as follows:

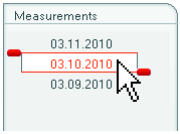
1. Click on **Results of examination**.
   The **Results of examination** tab is active.



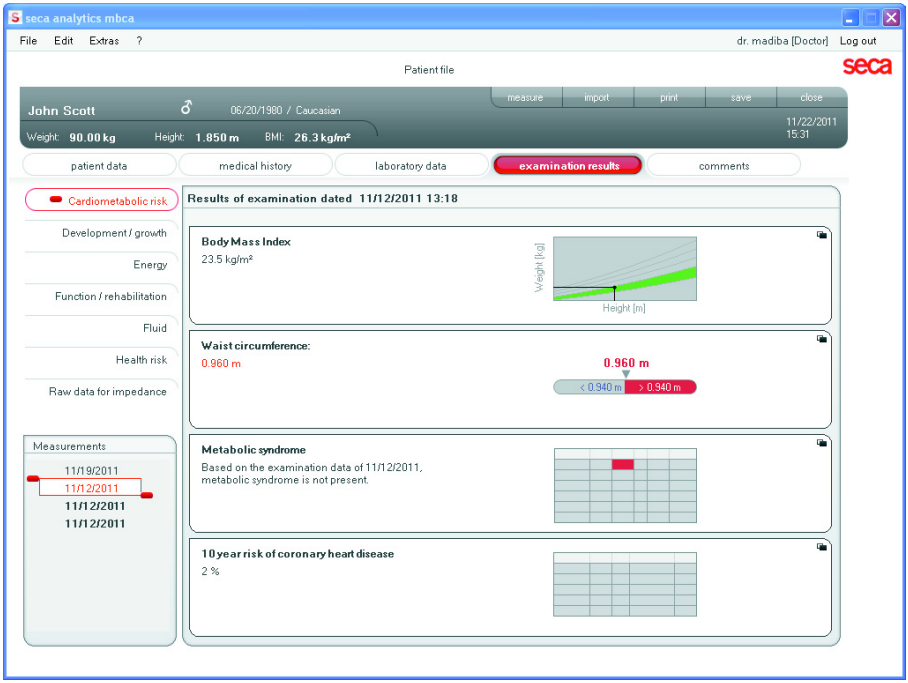
2. Click on the module that you want to display.



3. Click on the measurement that you want to display.



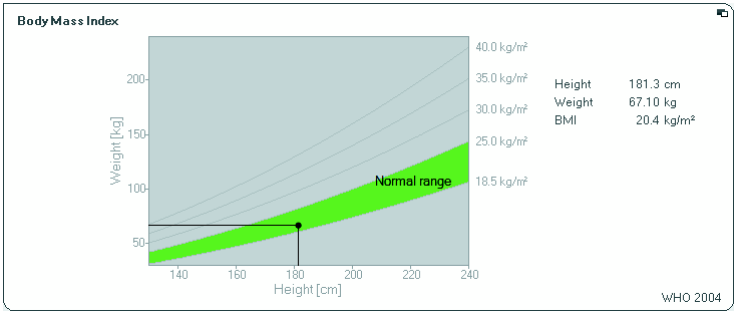
The evaluation of the measurements is displayed. For some evaluations, a graphic display is provided.



Displaying results graphics enlarged

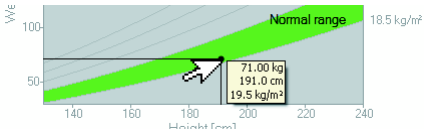
You can display the results graphics enlarged if the window symbol appears in the graphics. The enlarged displays contain additional details that enable you to better assess the state of health of your patient.

1. Click on a graphic in order to display it enlarged and with details (here: BMI).



2. Click on the graphic again in order to shrink it back to its original size.

NOTE:
If you position the mouse pointer on a measurement point in the graphic, the associated measurement values will be displayed.



Viewing the history

You can view a patient's history by selecting several measurements. Measured results and evaluations are then displayed in progression graphs.

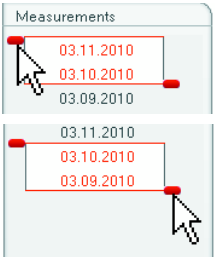
NOTE:
This function is not available in the modules **Cardiometabolic risk** and **Raw data for impedance** since in these modules a progression display is not relevant for assessment of the patient's state of health.

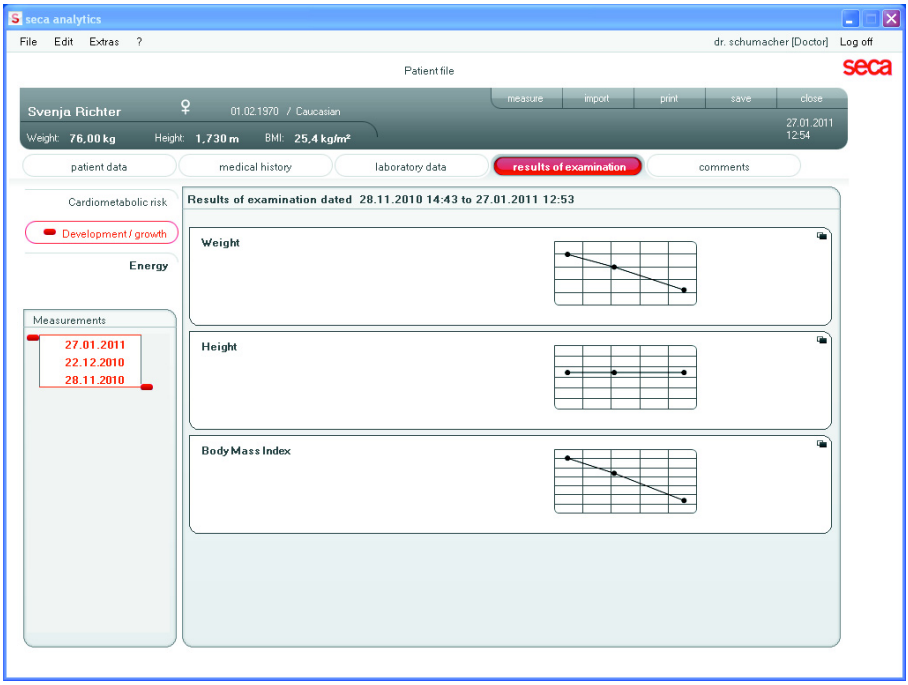
Proceed as follows to select measurements for the history:

1. Click the **Results of examination** tab.
2. Click on the module that you want to display.
   The module is displayed in a selection bar.
3. Click on the one of the measurements you wish to select.
   The measurement is displayed on a selection bar.

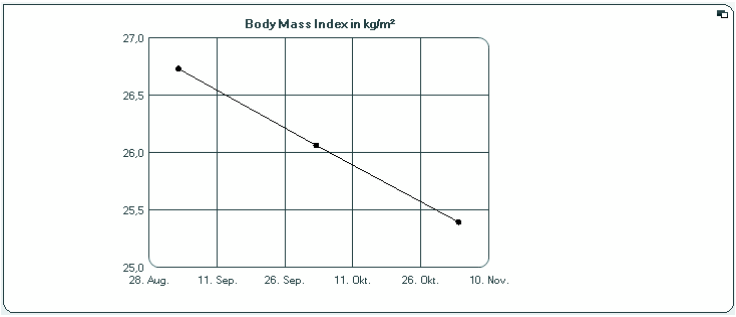
4. While holding down the left mouse button, drag the selection bar across all the other measurements you want to view as a history.
   - Left handle upwards: more recent measurements will be added to the selection.
   - Right handle downwards: older measurements will be added to the selection

The individual parameters of the module will be displayed as progression graphs.





5. Click on a graphic in order to display it enlarged and with details (here: BMI).



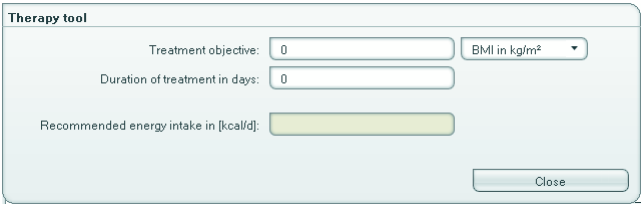
6. Click on the graphic again in order to shrink it back to its original size.

Using the therapy planner (only Energy module)

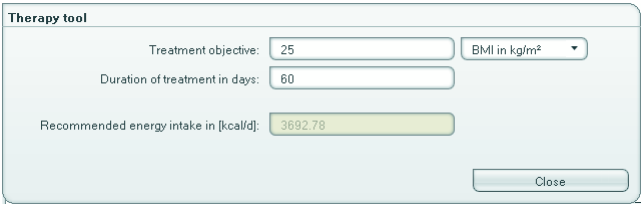
If the patient's resting energy expenditure and total energy expenditure are known, you can also calculate the recommended daily energy intake for the patient in order to achieve a target weight within a defined time (duration of therapy).

The software can calculate the resting energy expenditure (REE) if the following parameters are entered or were measured: age, gender, weight, and height. The total energy expenditure (TEE) can be calculated if the physical activity level (PAL) has also been entered.

1. Click in the **Energy** module on **Therapy tool**.



2. Enter the value and type of the therapeutic goal.
3. Enter the therapy duration in days.
   The recommended daily energy intake is calculated.

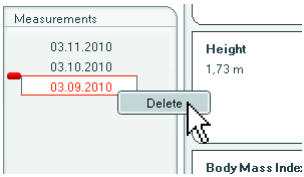


4. In order to save the settings in the **Therapy tool**, click **Close**.

Deleting measurements

You can delete individual measurements. Proceed as follows:

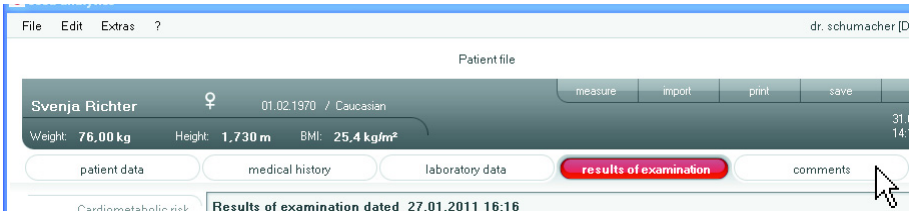
1. Click the right mouse button on the measurement that you want to delete.
   The **Delete** button appears.
2. Click with the left mouse button on the **Delete** button.
   The measurement is deleted.



Writing comments

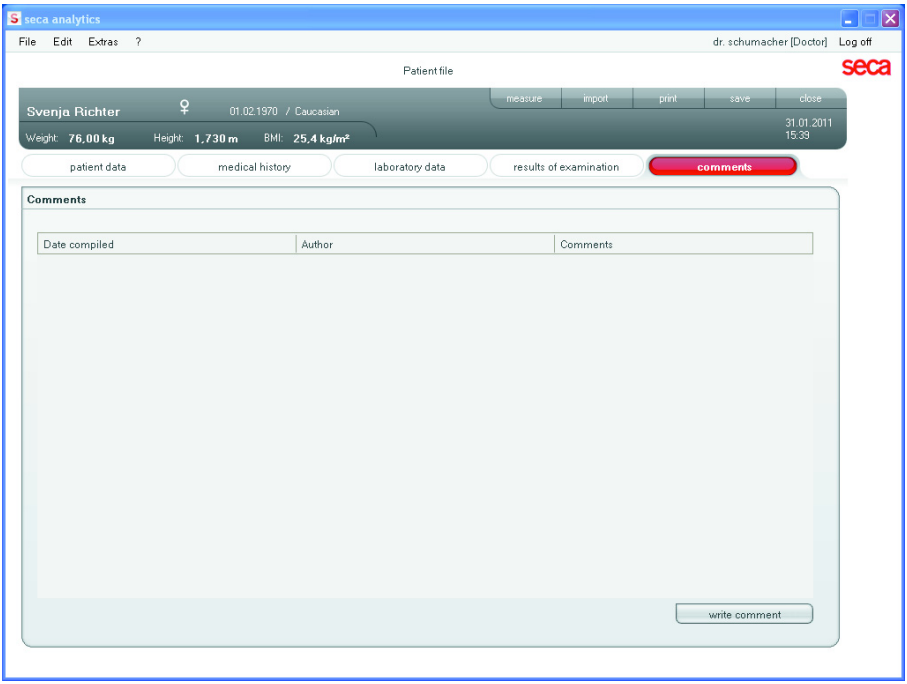
On the **Comments** tab you can add comments about the patient file.

1. Click on **Comments**.
   The **Comments** tab is active.

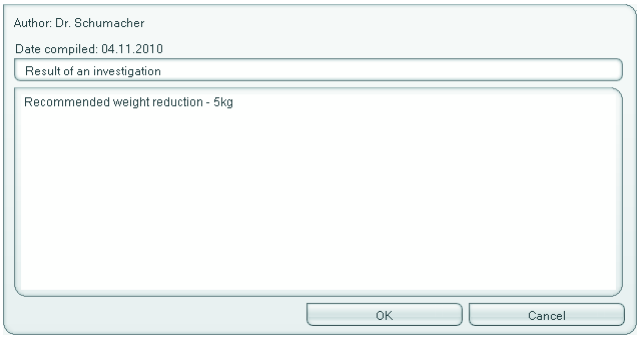


2. Click on **Write comment**.
   The comments window opens.
   The date and time are entered automatically.

   NOTE:
   Comments can be neither deleted nor subsequently edited.



3. Enter a **Subject**.
4. Enter your comment in the comments field.



5. Click in the comment field on **OK**.
   The comment field closes.
   The comment appears as the uppermost entry in the comment list.

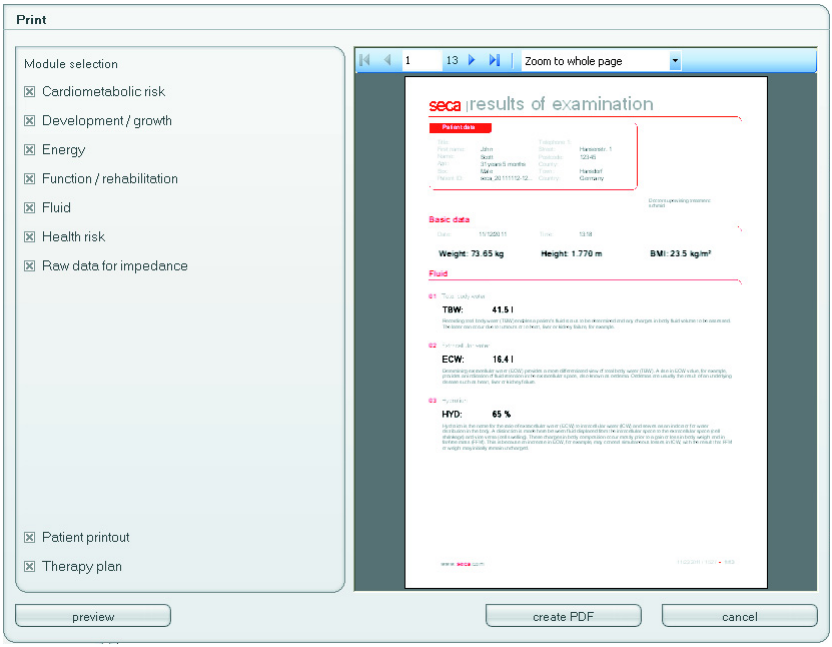
5.5 Managing patient files

Printing patient files

In the **Print** dialogue, you can save all the results of a measurement or just individual evaluation modules in the form of a PDF file. You can print out the PDF file using PDF display software such as Adobe Reader.

NOTE:
If there is no PDF display software installed on your computer, contact your administrator.

1. Open the patient file.
2. Click on **Print** in the patient file.
   The **Print** dialog appears.



3. Select the desired evaluation modules and if present, the therapy plan.
4. Specify whether the printout for the patient (**Patient printout**) should be printed.

NOTE:
The **Patient printout** includes explanations of parameters and measured results.

5. Click on **Create PDF** to save the evaluation as a PDF file.
   The PDF file created is automatically displayed in the PDF display software.

   NOTE:
   Press **Cancel** to exit the Print dialogue of the **seca 115** software without creating a PDF file.
6. Use the Print dialogue of the PDF display software to print out the PDF file.

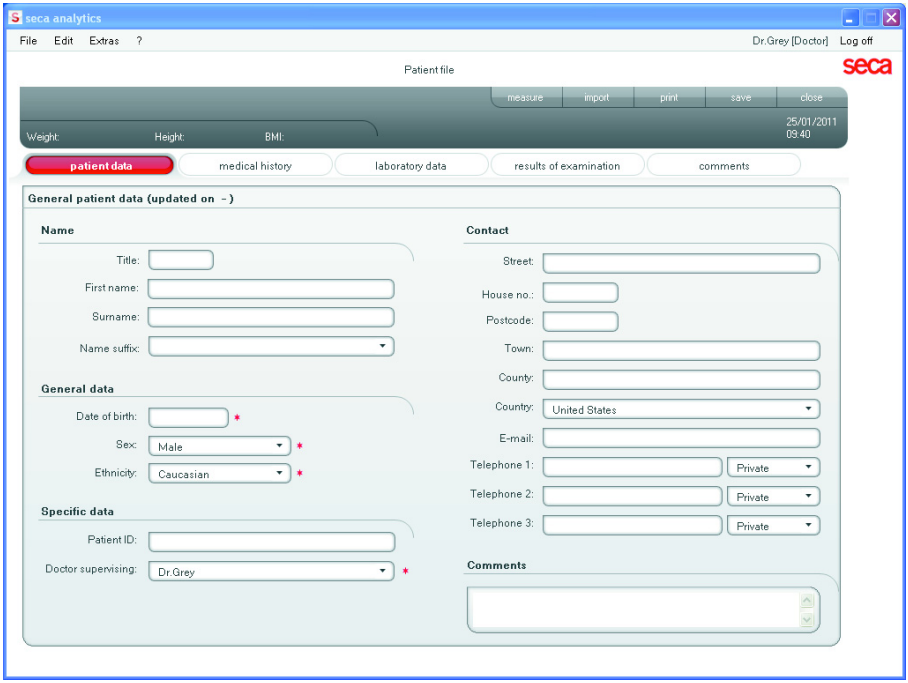
Importing patient files

If for the **seca 115** software an interface to your patient data management system (PDMS) has been configured, you can import patient files from the PDMS.

Depending on the configuration of the interface, the import will function differently. The import can run in exemplary fashion, as described in this section.

NOTE:
- If you are uncertain of whether an interface has been configured and how the import works on your system, please contact your administrator.
- Use the **Preview** button to get a preview of the PDF files. In this case, the printing process takes a little longer.

1. Click in the patient list on **Create**.
   An empty patient file appears.
   The **Patient data** tab is active.



2. In the **Patient ID** field, enter the ID under which the patient file is kept in your PDMS.
3. Click on **Import**.
   The patient data is imported.

6. MEDICAL BASIS

This section describes in short form the contents of the evaluation modules pre-set in this software and their medical goals. The references on which the evaluations rest will also be presented.

For additional information, we refer to the appropriate professional literature.

6.1 Evaluation modules

The evaluation modules described below are pre-set in this software and assist you with assessing your patients' state of health.

For information about how you can access the evaluation modules and navigate within them, see “Evaluating results” starting on page 40.

The following evaluation modules can be viewed if weight, height, PAL and waist circumference are available for a patient.

- **Cardiometabolic risk**
- **Development / growth**
- **Energy**

The following evaluation modules can also be viewed if data from a bioelectric impedance analysis (BIA) is available for the patient:

- **Function/rehabilitation**
- **Fluid**
- **Health risk**
- **Raw data for impedance**

The principles of bioelectric impedance analysis are described in the chapter "Medical basis" in the user manual of the seca mbca.

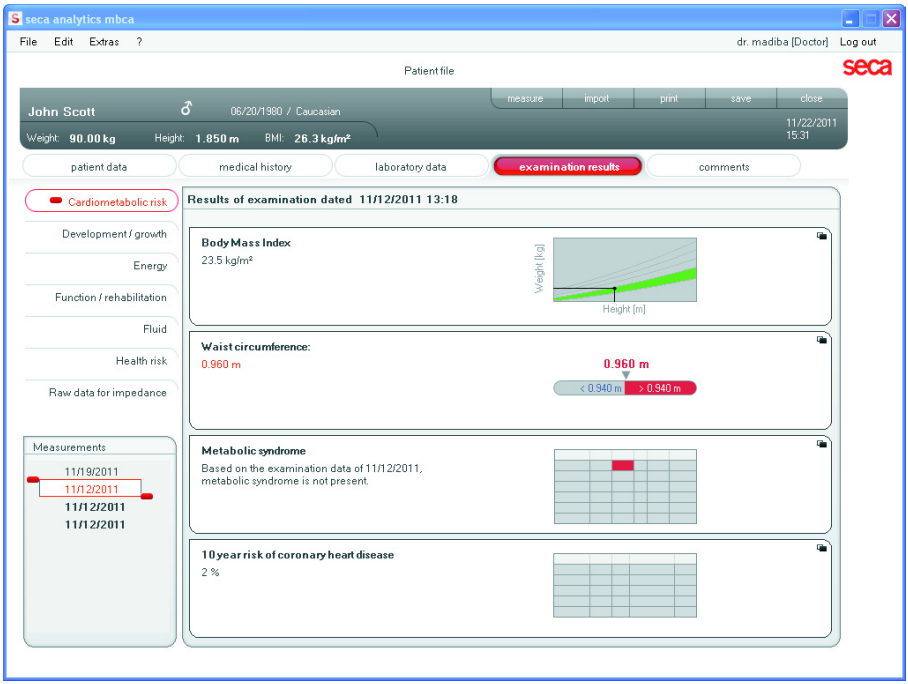
Cardiometabolic risk

The goal of this module is to check whether there is a metabolic syndrome as well as the assessment of the 10-year risk for coronary heart diseases.

NOTE:
The **Cardiometabolic risk** module is only available if a patient file has been created for a patient and the laboratory data and waist circumference have been entered no later than the day that weight and height were entered (see “Entering laboratory data” on page 35).

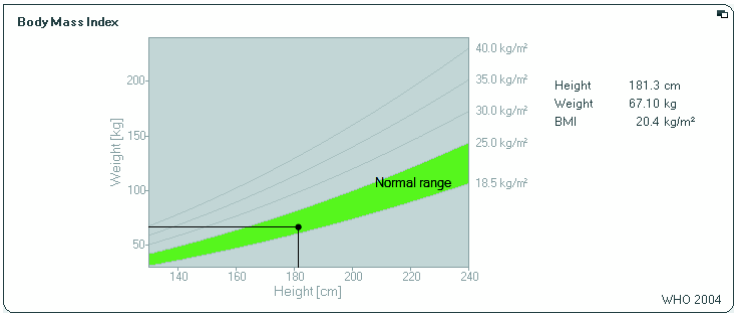
The following parameters are displayed:

- Body Mass Index (BMI)
- Waist circumference (WC)
- Metabolic syndrome (MSX)
- 10-year risk for coronary heart diseases

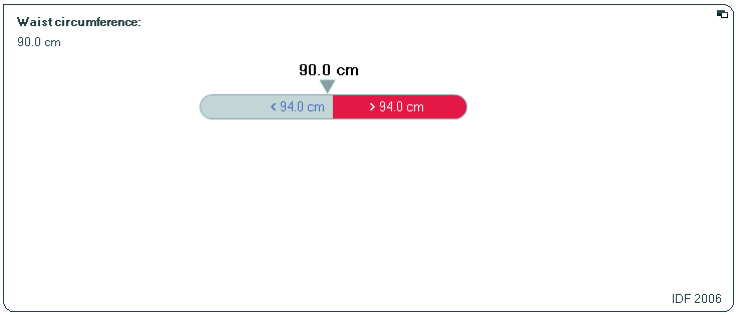


Detailed views are available for the following parameters:

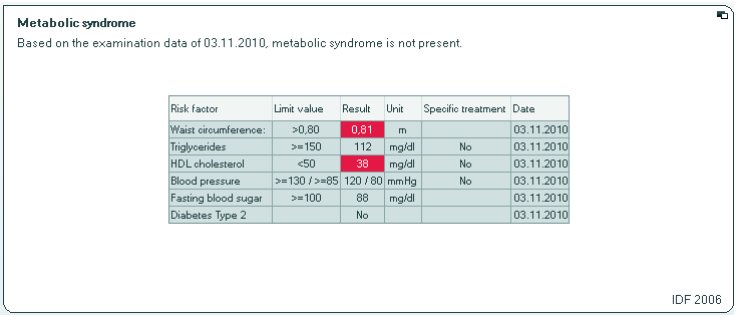
Detail view body mass index



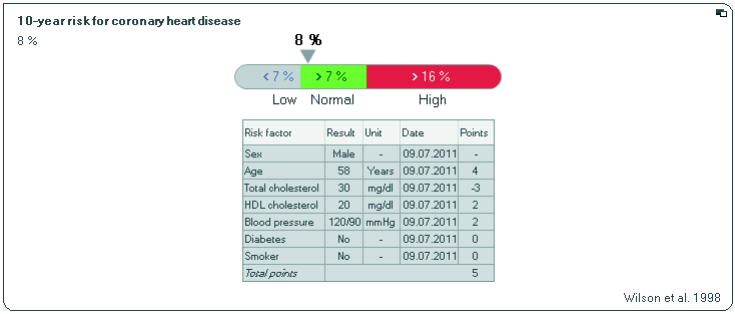
Detail view waist circumference



Detail view metabolic syndrome



Detail view 10-year risk of coronary heart disease for the age group 30-74 years

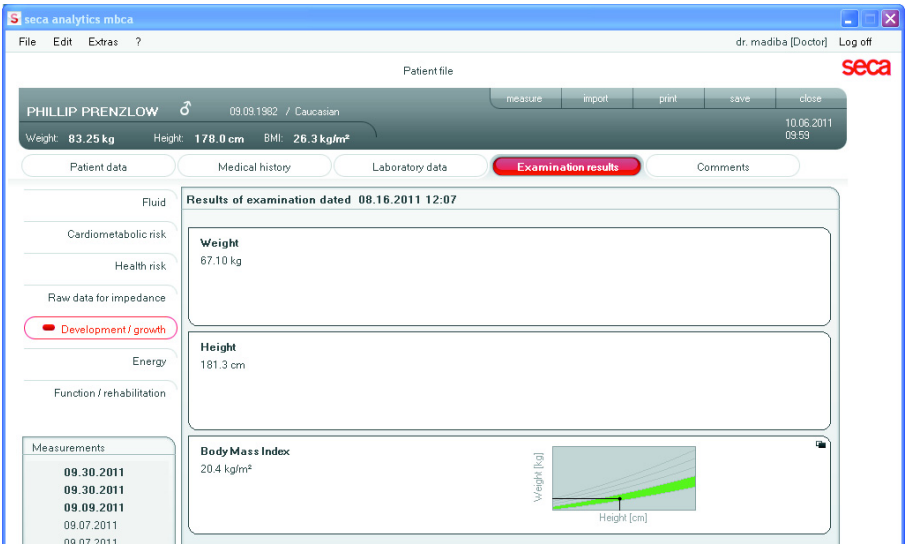


Risk factor	Result	Unit	Date	Points
Sex	Male	-	09.07.2011	-
Age	58	Years	09.07.2011	4
Total cholesterol	30	mg/dl	09.07.2011	-3
HDL cholesterol	20	mg/dl	09.07.2011	2
Blood pressure	120/90	mmHg	09.07.2011	2
Diabetes	No	-	09.07.2011	0
Smoker	No	-	09.07.2011	0
Total points				5

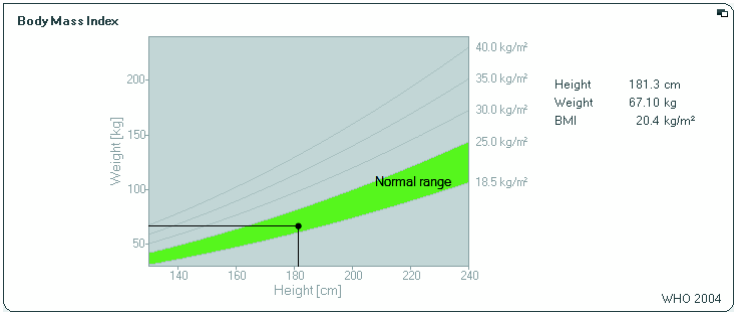
Development / growth

The goal of this module is the monitoring of growth processes and weight changes in the course of a hospital stay or a medical treatment. Especially for children, this module assists with regular control examinations for the assessment of growth and development. The following parameters are displayed:

- Weight
- Height
- Body Mass Index (BMI)



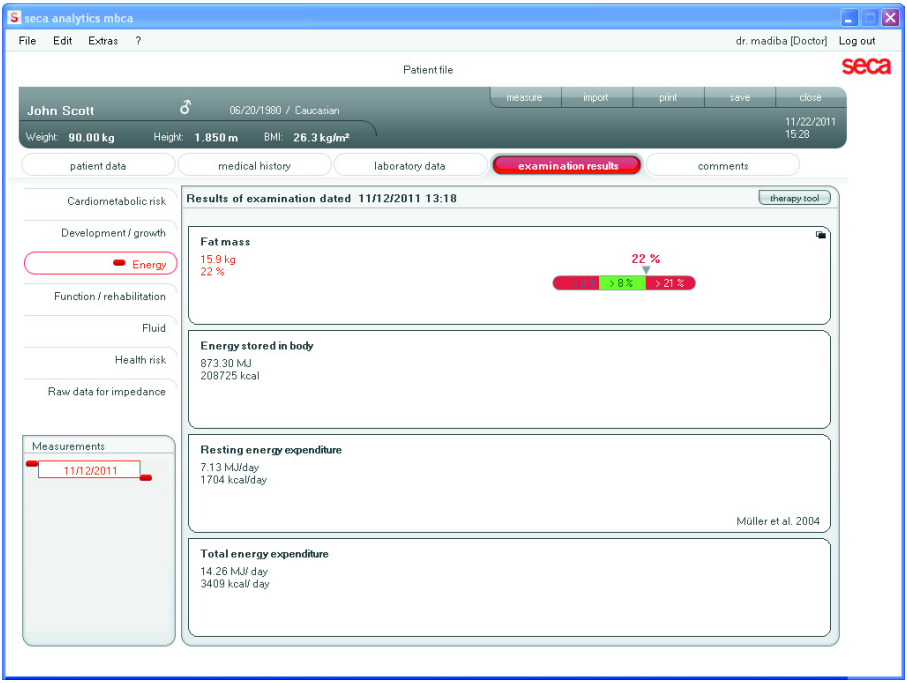
A detail view is available for the BMI:



Energy

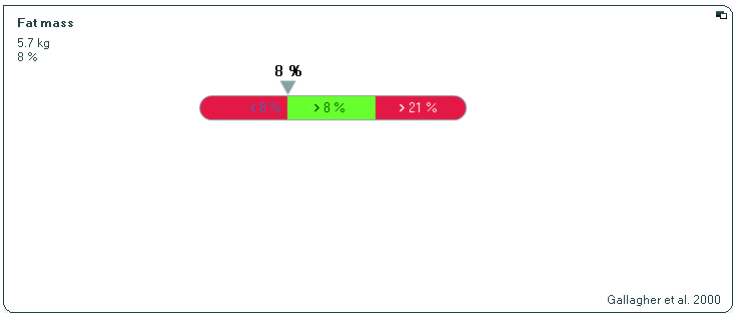
The goal of this module is the quantitative determination of the energy expenditure and energy reserves of the body for the assessment of weight changes, the course of illnesses and the general nutritional state of a patient. The following parameters are displayed:

- Fat mass (FM) in kg
- Fat mass (FM) in %
- Energy stored in body (E_{body})
- Resting energy expenditure (REE)
- Total energy expenditure (TEE)



A detail view and a therapy planner are available for this module:

Fat mass

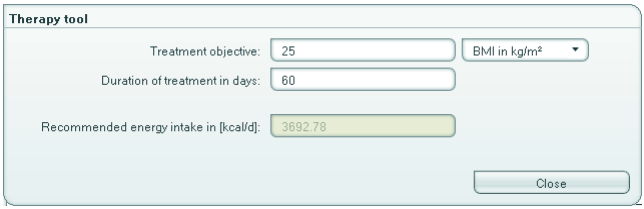


Therapy planner

The energy module serves as the basis of energy advising. Here, the therapy planner of the module assists you. With the therapy planner, you can specify the following values:

- Treatment objective: weight change or BMI change
- Duration of treatment in days

From these values, the therapy planner calculates the recommended daily energy intake.

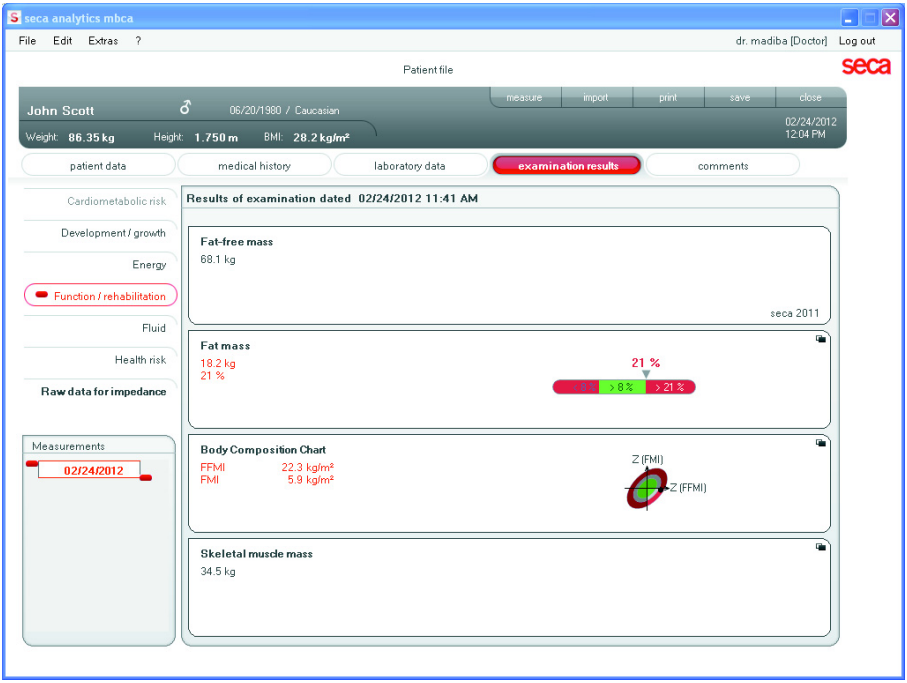


No detail views are available in this module.

Function/rehabilitation

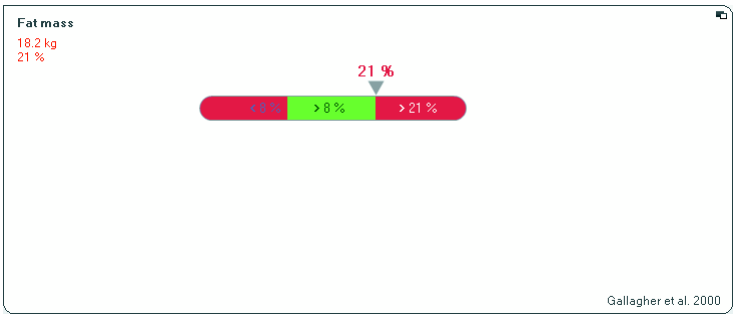
This module is used to determine the fitness level and to assess metabolic activity and the degree of success for a training programme, e.g. in the framework of rehabilitation or physiotherapy. The following parameters are displayed:

- Fat-free mass (FFM)
- Fat mass (FM) in kg
- Fat mass (FM) in %
- Fat mass index (FMI)
- Fat-free mass index (FFMI)
- Skeletal muscle mass (SMM)
- Lean soft tissue (LST)



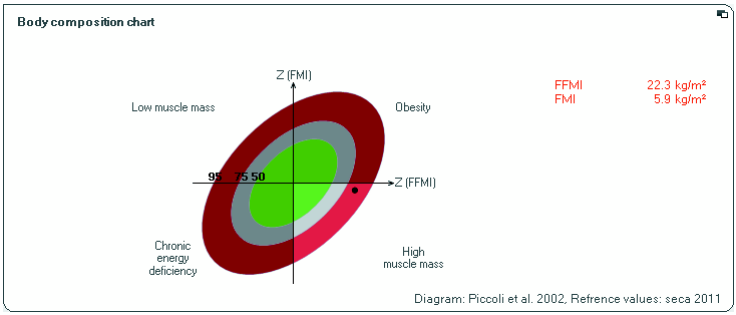
The following detail views are available for this module:

Fat mass



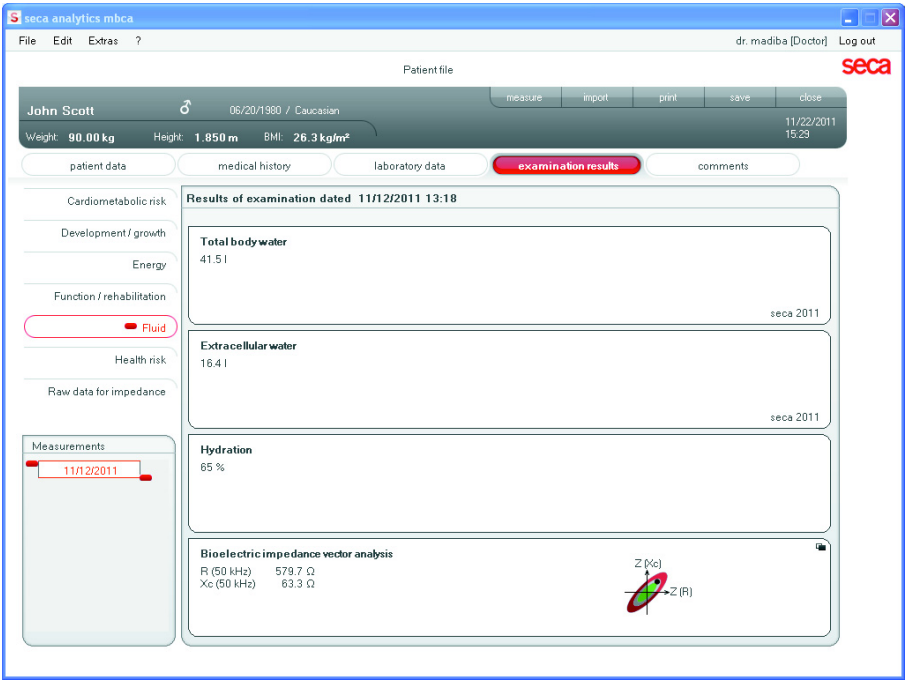
Skeletal muscle mass and Lean soft tissue per extremity

Body composition chart (Fat mass index)



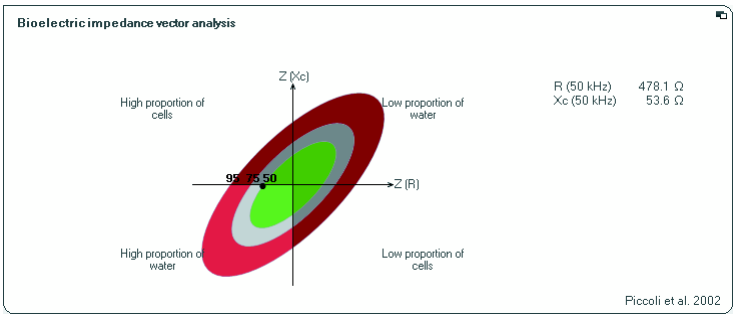
Fluid The Fluid module allows the fluids status of a patient to be determined and to observe changes in fluids as the result of medical treatment. The following parameters are displayed:

- Total body water (TBW)
- Extracellular water (ECW)
- Hydration (HYD)
- Bioelectric impedance vector analysis (BIVA)



The following detail view is available for this module:

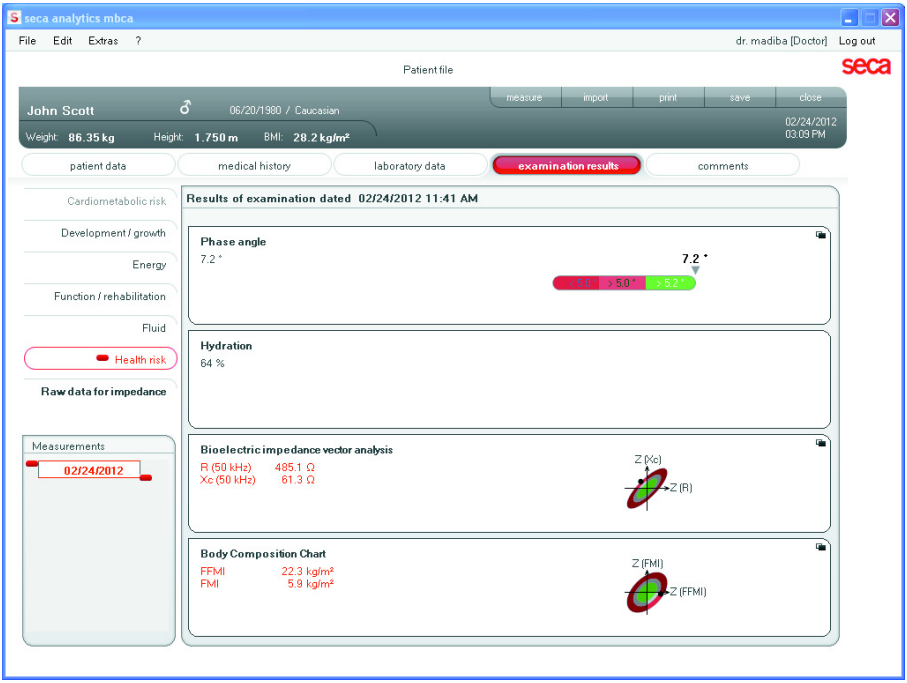
Bioelectric impedance vector analysis



Health risk

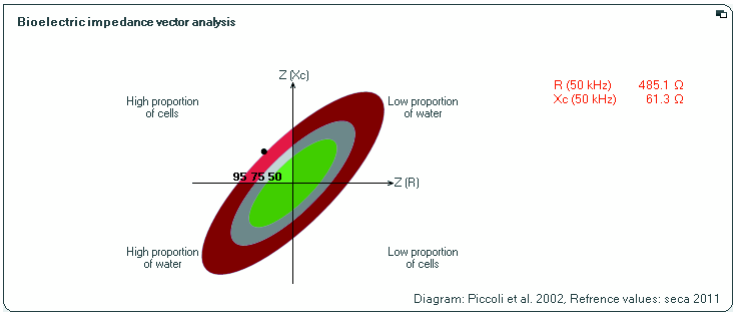
The goal here is to determine the patient's general state of health or, in the case of a known disease, to assess its severity. The following parameters are displayed:

- Phase angle ϕ at 50Hz
- Hydration (HYD)
- Bioelectric impedance vector analysis (BIVA)
- Fat mass index (FMI)
- Fat-free mass index (FFMI)

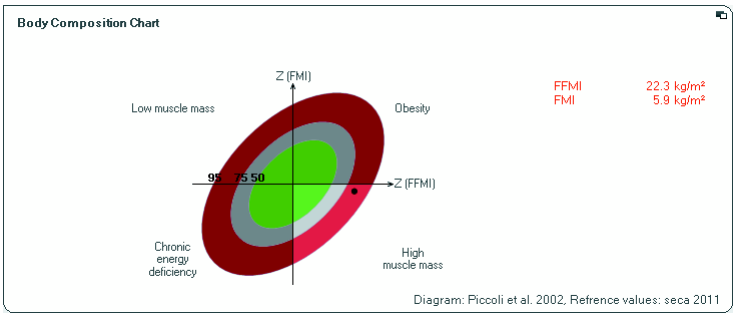


The following detail views are available for this module:

Bioelectric impedance vector analysis



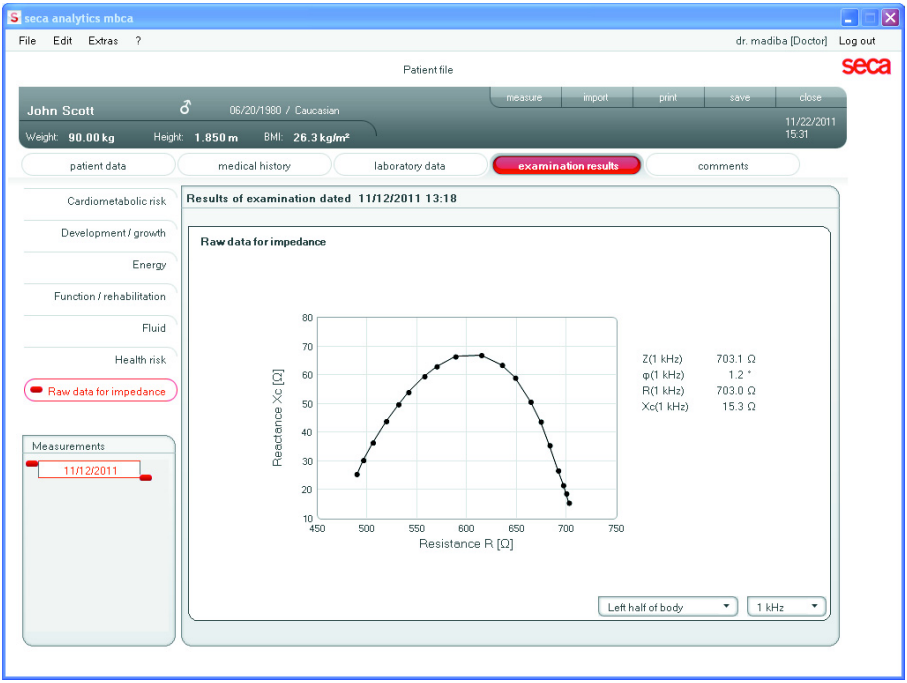
Body composition chart (Fat mass index)



Raw data for impedance

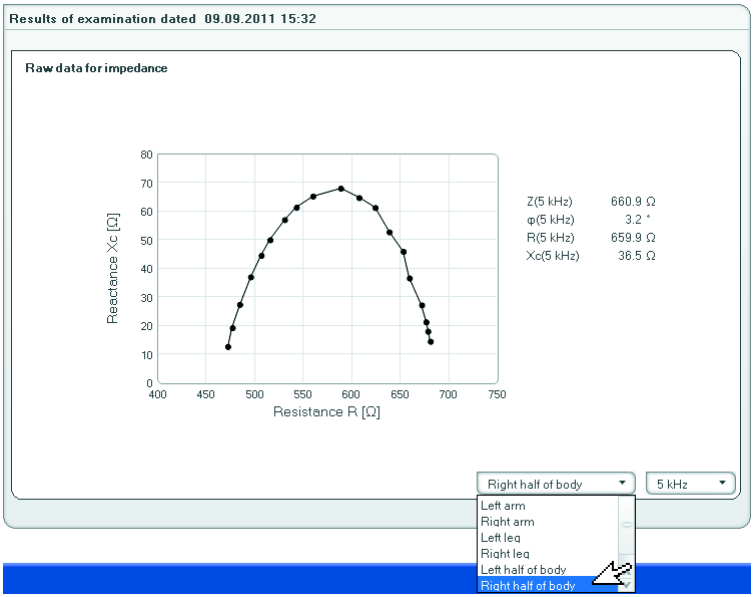
The Bioimpedance module outputs the results of the bioelectric impedance analysis in the form of raw data so it can be used for medical studies.

You can view the impedance (Z) reactance (X_c), resistance (R) and phase angle (ϕ) for the individual parts of the body and frequencies.



Selecting parts of the body

1. Click on the dropdown menu to select a part of the body.

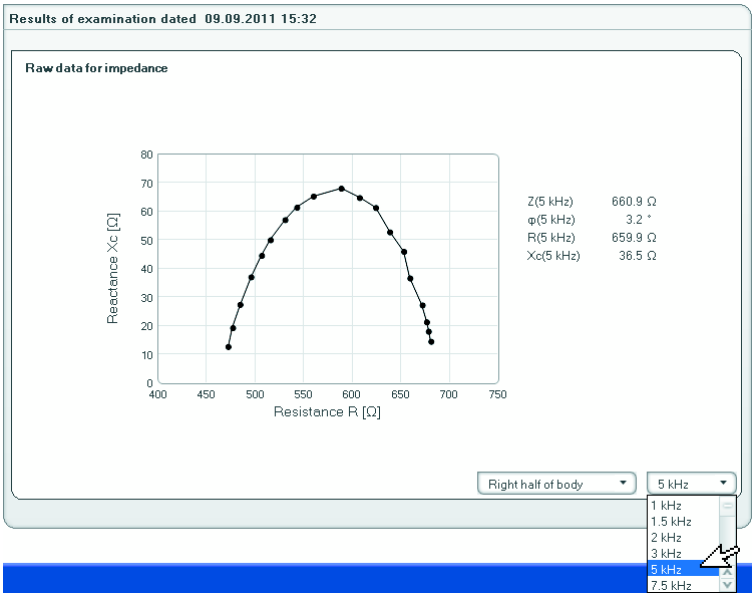


   The dropdown menu opens.

2. Click on the required part of the body.
3. The values for the part of the body selected are displayed.

Selecting the frequency

1. Click on the dropdown menu to select the frequency.



The dropdown menu opens.

2. Click on the required frequency.

   NOTE:
   If the **Raw data for impedance** module was not activated on the mbca, only four frequencies will be available for selection.

3. The values for the frequency selected are displayed.

6.2 References

The references listed below are stored in the software and form the basis for the assessment of the state of health of your patient. Some evaluation modules allow you to select which references you wish to use.

Which references you use depends on the country in which you are active, the regulations that apply in your institution, and your personal preferences.

For information about how you set the references in this software, see “Changing references” starting on page 15.

Percentile curves for children

The following references can be selected:

Reference	Origin
Centers for Disease Control and Prevention (CDC 2000)[a)]	USA
World Health Organisation (WHO 2007)[b)]	International
Kromeyer-Hauschild et al. 2001[c)]	Germany

a) Kuczmarski RJ, Ogden CL, Guo SS, et al. 2000 CDC growth charts for the United States: Methods and development. National Center for Health Statistics. Vital Health Stat 11(246). 2002.

b) De Onis M, Onyango AW, Borghi E, Siyam A, Nishidaa C, Siekmann J. Development of a WHO growth reference for school-aged children and adolescents. Bulletin of the World Health Organization 2007; 85:660–667.

c) Kromeyer- Hauschild K, Wabitsch M, Kunze D, Geller F, Geiß HC, Hesse V, von Hippel A, Jaeger U, Johnsen D, Korte W, Menner K, Müller G, Müller MJ, Niemann- Pilatus A, Remer T, Schaefer F, Wittchen HU, Zabransky S, Zellner K, Ziegler A, Hebebrand. Percentile für den Body- mass- Index für das Kindes- und Jugendalter unter Heranziehung verschiedener deutscher Stichproben. Monatsschr Kinderheilkd 2001; 149:807-818.

Waist circumference for children

The following references can be selected:

Reference	Origin	Characteristics
Fernandez et al. 2004[a)]	USA	For children of the following ethnicities: • Caucasian • African • South and Central American

Reference	Origin	Characteristics
Inokuchi et al. 2007[b)]	Japan	For Asian children

[a)] Fernández JR, Redden DT, Pietrobelli A, Allison DB. Waist circumference percentiles in nationally representative samples of African-American, European-American, and Mexican-American children and adolescents. J Pediatr 2004; 145(4):439-44.

[b)] Inokuchi M, Matsuo N, Anzo M, Takayama Hasegawa T. Age-dependent percentile for waist circumference for Japanese children based on the 1992-1994 cross-sectional national survey data. Eur J Pediatr 2007; 166:655-661.

Resting energy expenditure children

The following reference is permanently fixed:

Reference	Origin
Müller et al. 2004[a)]	Germany

[a)] Müller MJ, Bosy-Westphal A, Klaus S,Kreymann G, Lührmann PM, Neuhäuser-Berthold M, Noack R, Pirke KM, Platte P, Selberg O, Steininger J. World Health Organization equations have shortcomings for predicting resting energy expenditure in persons from a modern, affluent population: generation of a new reference standard from a retrospective analysis of a German database of resting energy expenditure. AM J Clin Nutr 2004; 80:1379-90.

10-year risk for coronary heart disease

The following references can be selected:

Reference	Origin	Characteristics
Framinghamscore Wilson et al.1998[a)]	USA	Age group: 30-74 years
Prospective Cardiovascular Münster (PROCAM) Assmann et al. 2002[b)]	Germany	Age group: 35-65 years, male
SCORE Conroy et al. 2003[c)]	Europe	• Age group: 18 years and up • Three tables are stored: - Germany - High-risk countries[d)] - Low-risk countries[e)] Depending on the country setting that the administrator uses during installation, the corresponding table is loaded.

[a)] Wilson PWF, D´Agostino RB, Levy D, Belanger AM, Silbershatz H, Kannel WB. Prediction of Coronary Heart Disease Using Risk Factor Categories. Circulation 1998; 97:1837-1847.

[b] Assmann G, Cullen P, Schulte P. Simple Scoring Scheme for Calculating the Risk of Acute Coronary Events Based on the 10-Year Follow-Up of the Prospective Cardiovascular Münster (PROCAM) Study. Circulation 2002; 105:310-315.

[c] Conroy RM, Pyörälä K, Fitzgerald AP, Sans S, Menotti A, De Baquer D, Ducimetière P, Jousilahti P, Keil U, Njølstad I, Oganov RG, Thomson T, Tunstall-Pedoe H, Tverdal A, Wedel H, Whincup P, Wilhelmsen L, Graham IM. Estimation of ten-year risk of fatal cardiovascular disease in Europe: the SCORE project. European Heart Journal 2003; 24:987-1003.

[d] **European high-risk countries:** Albania (AL), Andorra (AND), Armenia (ARM), Azerbaijan (AZ), Bosnia and Herzegovina (BiH), Bulgaria (BG), Denmark (DK), Estonia (EE), Finland (FI), Georgia (GE), Ireland (IE), Iceland (IS), Croatia (HR), Liechtenstein (FL), Latvia (LV), Lithuania (LT), Malta (MT), Macedonia (MK), Moldova (MD), Monaco (MC), Montenegro (MNE), Kingdom of Norway (N) Austria (AT), Romania(RO), Russia (RUS), San Marino (RSM), Serbia (SRB), Slovakia (SK), Slovenia (SI), Czech Republic (CZ), Turkey (TR), Hungary (HU), Republic of Cypress (CY), Ukraine (UA), Vatican (V), United Kingdom (UK), Belarus (BY)

[e] **European low-risk countries:** all European countries not listed under 4)

Resting energy expenditure, adults

The following references can be selected:

Reference	Origin
Müller et. al. 2004[a]	Germany
Liu et al. 1995[b]	China
FAO/WHO/UNU 2004[c]	International

[a] Müller MJ, Bosy-Westphal A, Klaus S,Kreymann G, Lührmann PM, Neuhäuser-Berthold M, Noack R, Pirke KM, Platte P, Selberg O, Steininger J. World Health Organization equations have shortcomings for predicting resting energy expenditure in persons from a modern, affluent population: generation of a new reference standard from a retrospective analysis of a German database of resting energy expenditure. AM J Clin Nutr 2004; 80:1379-90.

[b] Hsiu-Ying Liu, MS; Yi-Fa Lu, Phd; Wei-Jao Chen, MD, MPH. Predictive Equations for basal metabolic rate in Chinese adults: a cross-validation study. J Am Diet Assoc. 1995; 95:1403-1408

[c] FAO Food and Nutrition Technical Report Series 1; Human energy requirements - Report of a Joint FAO/WHO/UNU Expert Consultation; Rome, 2004. http://www.fao.org/docrep/007/y5686e/y5686e00.HTM

Metabolic syndrome

The following references can be selected:

Reference	Origin	Characteristics
IDF 2006	International	Age group: 10-16 years
IDF 2006[a]	International	Age group: 16 years and up
NCEP-ATP III 2001[b]	USA	Age group: 18 years and up

[a] The IDF consensus worldwide definition of the Metabolic Syndrome. International Diabetes Federation 2006.

[b] National Cholesterol Education Program – Adult Treatment Panel III (NCEP – ATP III). Clinical Identification of the Metabolic Syndrome. National Institutes of Health; Publication No. 01-3305, May 2001

Total body water (TBW) The following reference is permanently selected:

Reference	Origin	Characteristics
seca 2011[a]	Germany USA	• Takes 4 ethnicities into account: Caucasian, African, South & Central American, Asian • Age group 18 to 65 years • BMI range 18.5 to 35 kg/m^2

[a] Reference values: seca gmbh & co. kg, Generation of normal ranges to analyze body composition of adults base on Bioelectrical Impedance Analysis (BIA), 2011

Extracellular water (ECW) The following reference is permanently selected:

Reference	Origin	Characteristics
seca 2011[a]	Germany USA	• Takes 4 ethnicities into account: Caucasian, African, South & Central American, Asian • Age group 18 to 65 years • BMI range 18.5 to 35 kg/m^2

[a] Reference values: seca gmbh & co. kg, Generation of normal ranges to analyze body composition of adults base on Bioelectrical Impedance Analysis (BIA), 2011

Fat-free mass (FFM) The following reference is permanently selected:

Reference	Origin	Characteristics
seca 2011[a]	Germany USA	• Takes 4 ethnicities into account: Caucasian, African, South & Central American, Asian • Age group 18 to 65 years • BMI range 18.5 to 35 kg/m^2

[a] Reference values: seca gmbh & co. kg, Generation of normal ranges to analyze body composition of adults base on Bioelectrical Impedance Analysis (BIA), 2011

Bioimpedance vector analysis (BIVA)

The following reference is permanently selected:

Reference	Origin	Characteristics
seca 2011[a) b)]	Germany USA	Reference values for normal range display • Age group: 18 and upwards

[a)] Definition of graphic display: Piccoli A, Rossi B, PillonL, Bucciante G. A new method for monitoring body fluid variation by bioimpedance analysis: the RXc graph. Kidney Int. 1994 Aug;46(2):534-9

[b)] Reference values: seca gmbh & co. kg, Generation of normal ranges to analyze body composition of adults base on Bioelectrical Impedance Analysis (BIA), 2011

Body Compostion Chart (Fat mass indices FMI, FFMI)

The following reference is permanently selected:

Reference	Origin	Characteristics
seca 2011[a) b)]	Germany USA	Reference values for normal range display • Age group: 18 and upwards

[a)] Definition of graphic display: Piccoli A, Rossi B, PillonL, Bucciante G. A new method for monitoring body fluid variation by bioimpedance analysis: the RXc graph. Kidney Int. 1994 Aug;46(2):534-9

[b)] Reference values: seca gmbh & co. kg, Generation of normal ranges to analyze body composition of adults base on Bioelectrical Impedance Analysis (BIA), 2011

Phase angle (ϕ)

The following reference is permanently selected:

Reference	Origin	Characteristics
seca 2011[a)]	Germany USA	Reference values for normal range display • Age group: 18 and upwards

[a)] Reference values: seca gmbh & co. kg, Generation of normal ranges to analyze body composition of adults base on Bioelectrical Impedance Analysis (BIA), 2011

Fat mass (FM) The following reference is permanently selected:

Reference	Origin	Characteristics
Gallagher et al. 2000[a)]	USA	• Takes 3 ethnicities into account: Caucasian, Afro-American, South & Central American, Asian • Age group: 20 and upwards

[a)] Dympna Gallagher, Steven B Heymsfield, Moonseong Heo, Susan A Jebb, Peter R Murgatroyd, and Yoichi Sakamoto, Healthy percentage body fat ranges: an approach for developing guidelines based on body mass index1–3, Accepted for publication January 24, 2000.

Skeletal muscle mass (SMM) The following reference is permanently selected:

Reference	Origin	Characteristics
Kim et al. 2002[a)]	USA	• Age group: 18 and upwards • BMI range: 15.9 to 34.8 kg/m^2

[a)] Kim J, Wang Z, Heymsfield SB, Baumgartner RN, Gallagher D. Total-body skeletal muscle mass: estimation by a new dual-energy X-ray absorptiometry method. Am J Clin Nutr. 2002 Aug;76(2):378-83. SourceObesity Research Center, St Luke's-Roosevelt Hospital and the Institute of Human Nutrition, Columbia University, College of Physicians and Surgeons, New York, NY 10025, USA

7. DISPLAY OF WEIGHTS

Weights are displayed in the software as follows:

Display scale	Setting BW[a)]	Display software
kkk.gg[b)]	kg	kkk.ggg if weight ≤20kg kkk.gg if weight >20kg
kkk.g	kg	kkk.ggg if weight ≤20kg kkk.gg if weight >20kg
kkk.ggg	kg	kkk.ggg if weight ≤20kg kkk.gg if weight >20kg
ppp.p[c)]	kg	kkk.ggg if weight ≤20kg kkk.gg if weight >20kg
ppp	kg	kkk.ggg if weight ≤20kg kkk.gg if weight >20kg
ppp:oo[d)]	kg	kkk.ggg if weight ≤20kg kkk.gg if weight >20kg
ss:pp.p[e)]	kg	kkk.ggg if weight ≤20kg kkk.gg if weight >20kg
pp:oo.o	kg	kkk.ggg if weight ≤20kg kkk.gg if weight >20kg
kkk.gg	lbs	ppp:oo.o if weight ≤20kg ppp.p if weight >20kg
kkk.g	lbs	ppp:oo.o if weight ≤20kg ppp.p if weight >20kg;
kkk.ggg	lbs	ppp:oo.o if weight ≤20kg ppp.p if weight >20kg
ppp.p	lbs	ppp:oo.o if weight ≤20kg ppp.p if weight >20kg
ppp	lbs	ppp:oo.o if weight ≤20kg ppp.p if weight >20kg
ppp:oo	lbs	ppp:oo.o if weight ≤20kg ppp.p if weight >20kg
ss:pp.p	lbs	ppp:oo.o if weight ≤20kg ppp.p if weight >20kg
pp:oo.o	lbs	ppp:oo.o if weight ≤20kg ppp.p if weight >20kg
kkk.gg	sts	s:pp:oo.o if weight ≤20kg ss:pp.p if weight >20kg
kkk.g	sts	s:pp:oo.o if weight ≤20kg ss:pp.p if weight >20kg

Display scale	Setting BW[a)]	Display software
kkk.ggg	sts	s:pp:oo.o if weight ≤20kg ss:pp.p if weight >20kg
ppp.p	sts	s:pp:oo.o if weight ≤20kg ss:pp.p if weight >20kg
ppp	sts	s:pp:oo.o if weight ≤20kg ss:pp.p if weight >20kg
ppp:oo	sts	s:pp:oo.o if weight ≤20kg ss:pp.p if weight >20kg
ss:pp.p	sts	s:pp:oo.o if weight ≤20kg ss:pp.p if weight >20kg
pp:oo.o	sts	s:pp:oo.o if weight ≤20kg ss:pp.p if weight >20kg

a) "kg": kilograms, "lbs": pounds, "sts": stones
b) "k§: figure indicates kilograms, "g": figure indicates grams
c) "p": figure indicates pounds
d) "p": figure indicates pounds, "o": figure indicates ounces
e) "s": figure indicates stones, "p": figure indicates pounds

NOTE:

- For manual entry of measured values, the display takes place exclusively in the format "ppp.p" if the unit "lbs" is set in the software.
- For manual entry of measured values, the display takes place exclusively in the format "ss:pp.p" if the unit "sts" is set in the software.

8. WARRANTY

Please note that warranty limitations which, among other things, can arise from the license, apply to this software. The warranty limitations can be called up at www.seca.com.

CE

Konformitätserklärung
declaration of conformity
Certificat de conformité
Dichiarazione di conformità
Declaratión de conformidad
Overensstemmelsesattest
Försäkran om överensstämmelse
Konformitetserklæring
vaatimuksenmukaisuusvakuutus
Verklaring van overeenkomst
Declaração de conformidade
Δήλωση Συμβατότητας
Prohlášení o shodě
Vastavusdeklaratsioon
Megfelelőségi nyilatkozat
Atitikties patvirtinimas
Atbilstības apliecinājums
Deklarajca zgodoności
Izjava o skladnosti
Vyhlásenie o zhode
Onay belgesi

17-10-01-237/12 G

Die Software
The software
Le logiciel
Il software
El software
Softwaren
Programvaran
Programvaren
Ohjelmisto
De software
O software
Το λογισμικό
Software
Tarkvara
A szoftver
Programinė įranga
Programmatūra
Oprogramowanie
Programska oprema
Softvér
Yazılım

seca 115

D … erfüllt die geltenden Anforderungen folgender Richtlinien:
Richtlinien 93/42/EWG und 2007/47/EG über Medizinprodukte.

GB …complies with the requirements of the following Directives:
Directives 93/42/EEC and 2007/47/EC for medical products.

F …satisfait aux exigences en vigueur figurant dans les directives suivantes :
Directives 93/42/CEE et 2007/47/CE relatives aux dispositifs médicaux

I …risponde ai requisiti prescritti dalle direttive seguenti:
direttive 93/42/CEE e 2007/47/CEE sui dispositivi medici.

E …cumple las exigencias vigentes de las siguientes directivas:
Directivas 93/42/CEE y 2007/47/CE sobre productos sanitarios.

DK ... opfylder de grundlæggende krav fra følgende direktiver:
direktiverne 93/42/EØF og 2007/47/EF om medicinprodukter.

S ...uppfyller gällande krav enligt följande direktiv:
Direktiv 93/42/EEG och 2007/47/EG om medicinska produkter.

N ... oppfyller gjeldende krav i følgende direktiver:
direktiv 93/42/EØF og 2007/47/EF om medisinske produkter.

FIN ... täyttää seuraavien direktiivien voimassa olevat määräykset:
lääkinnällisiä laitteita koskevat direktiivit 93/42/ETY ja 2007/47/EY.

NL ...is in overeenstemming met de geldende eisen van de volgende richtlijnen:
richtlijnen 93/42/EEG en 2007/47/EG betreffende medische hulpmiddelen.

P ... cumpre os requisitos essenciais das seguintes Directivas:
Directivas 93/42/CEE e 2007/47/CE relativas a dispositivos médicos.

GR ... εκπληρώνει τις ισχύουσες απαιτήσεις των ακόλουθων οδηγιών:
Οδηγίες 93/42/ΕΟΚ και 2007/47/ΕΚ περί ιατρικών βοηθημάτων.

CZ …splňuje platné požadavky těchto směrnic:
směrnice 93/42/EHS a 2007/47/ES o zdravotnických prostředcích.

EST ...vastab järgmiste direktiividega kehtestatud nõuetele:
meditsiinitoodete direktiivid 93/42/EMÜ ja 2007/47/EÜs.

HU ...teljesíti a következő irányelvek érvényben lévő követelményeit:
93/42/EGK és 2007/47/EK irányelv az orvostechnikai termékekről.

LT ...atitinka tokias galiojančias direktyvas:
direktyvą 93/42/EEB ir 2007/47/EB dėl medicinos produktų.

LV ... atbilst šādu direktīvu spēkā esošajām prasībām:
direktīvas 93/42/EEK un 2007/47/EK par medicīniskām ierīcēm.

PL ...spełnia obowiązujące wymagania następujących dyrektyw:
dyrektywy 93/42/EWG i 2007/47/WE o wyrobach medycznych.

SLO ...izpolnjuje veljavne zahteve naslednjih direktiv:
direktiv 93/42/EGS in 2007/47/ES o medicinskih pripomočkih.

SK …spĺňa platné požiadavky nasledujúcich smerníc:
smernice 93/42/EHS a 2007/47/ES
o medicínskych výrobkoch.

TR ...aşağıdaki yönergelerin geçerli talimatlarını yerine getirir:
Tıbbi ürünler hakkında 93/42/AET ve 2007/47/AT yönetmeliği.

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