

GlucoLog

*Software for glucose
data management*



Manual



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Fundamentals

Using the mouse

To access the required procedure, click left button of mouse.

Entering information in the display screen fields:

Use the tab key to pass to the next field on the display screen; press the shift + tab keys simultaneously to return to the previous field. Use the mouse also to move directly to the desired field (click on it with the left button).

Dates

For fields containing dates, the required date can be entered in any dd/mm/yyyy format, provided the day – month – year are separated in some way, even with a space. For example 01/01/2008 can be written in any of the following ways: 01-01-2008; 01.01.2008; 01/01/2008; 01\01\2008; 01 01 2008.

Icons

The main icons used in the programme and their relative functions are illustrated below.

Many other icons are present in the application. Their use is illustrated with a brief description that appears when the mouse hovers over the button.

► This icon is present at the beginning of each line of a list of information and allows you to select a line, which is then highlighted in a different colour (green, red, blue) from the others.

🔍 Present at the end of each line of a list of information; if selected, it allows you to consult further information related to that indicated on the selected line.

➕ Enables new information to be entered. For example, in "List of results", information relating to a new glycaemia reading can be entered.

✖ Enables all information relating to the selected line to be deleted.

✖ Associated with a list, it allows you to delete all information in the list.

✎ Present at the end of each line of a list of information, it allows you to edit data relating to that line.

✓ For confirming changes just made to data

⛔ Allows you to delete current operation, with consequent loss of information just entered or edited.

📈 Allows you to view graph relating to the data managed by current function.

📄 Exports results in csv format.

🖨 Prints information managed by current function.

🖨 Prints information managed by the current function.

➕ Present in the configuration area of the application, it allows you to enter new information.

📋➕ Present in pages relating to a patient's data management, it allows you to enter new information on insulin therapy and the periods into which the patient's day is divided.

👤➕ This icon allows you to enter all personal and clinical information relating to a new patient.

✎ It allows you to edit a patient's data.

👤✓ It allows you to confirm the entry or the change in a patient's data.



Associated with glycaemia result, this icon indicates that the result has been entered manually.



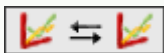
Associated with glycaemia result, it indicates that the result, initially read by an instrument, has subsequently been modified manually one or more times. If selected, it enables the original value to be restored.



Associated with the glycaemia result, it indicates that the result has been imported from a Dialogue file.



Associated with the glycaemia result, it indicates that the result has been imported from a MenaDiab file.



Allows graphic comparison of glycaemia results for two different time periods.



Allows dots on glycaemia results graph to be joined by a broken line.



Gives access to a calendar.



Icon associated with a filter, it allows you to obtain a list of information consistent with the filter settings.



This icon indicates that subsequently listed items are errors made while entering new information



If selected, this icon starts the procedure for importing glycaemia results from the meter connected to the PC.



Imports glycaemia results from file.



Exports glycaemia results to a file

Home Page

The information appearing on the home page regards the selected patient, whose name appears on the top page of the application.



The page is divided into three areas:

Diary

The left part of the page shows a diary displaying glycaemia results for 30 days prior to the last result acquired.

Results with a value above high level are shown in red, while those below low level are shown in blue. Results between high and low levels are shown in white.

Each result may be flanked by one of the following icons:



indicates that the result has been entered manually



indicates that the result has been read by an instrument and subsequently changed manually.



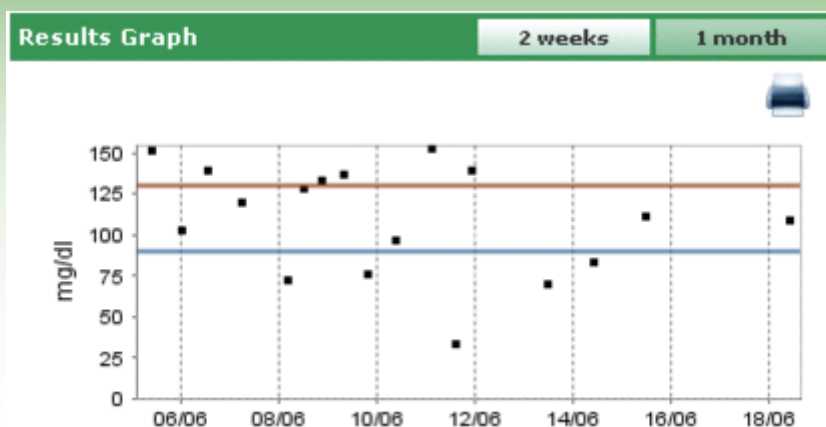
indicates that the result has been imported from a TXT file generated by Dialogue software.



indicates that the result has been imported from a MenaDiab file.

Results graph

The graph at top right of the page displays glycaemia results for the last two weeks or the last month prior to the last result acquired.



Data transfer

The options available in this area allow the user to:

- Acquire data (see Home Page - transfer)
- Print imported data (See Home Page – print-outs)
- Export and import results in file form (See Home Page – import/export)

Data transfer

GLUCOCARD G+

Select other ►

Last download

No reading

START

☒ Print

Report

Connect the meter with the appropriate cable to the serial port of your PC. After switching on, press the START button.

print patient results

Import
Export

The image and the name of the last instrument from which results have been acquired appear on the left. Immediately below appear the words "Select Other", followed by the ► icon. By selecting one of these two, the area changes to display a list of instruments associated with the patient. They appear in a list that scrolls to the right or left by selecting the arrows on the right or left.

Data transfer		
		
	Last use:	
7071203	7071203	2334

Various details are shown for each instrument (serial number and date of last data acquisition from that instrument). By selecting the image or the name of the instrument itself, this area of the page resumes its previous form, displaying the image and name of the instrument now selected.

In the same area, at top right, are displayed the date and time of the last data acquisition from the meter indicated

Data transfer



Select the  icon to begin data acquisition from the instrument. The system controls that the instrument connected to the PC is the same type as that indicated on the immediate left: the type and serial number must coincide. When these controls have been satisfied, data transfer begins, displaying the search made by the serial port to which the instrument is connected and progress of the download of results.

Print-outs

For each acquisition of data from an instrument, a print-out of the imported data is also provided. If the print-out is not required, de-select the "Print" flag, situated below the import icon.

From this area of the page, click the "Report" button further below to print the selected patient's entire glycaemia diary.

Import/Export

Select the  icon to export test results.

Select the icon to display a pop-up menu in which two dates can be indicated to delineate the period of time to which the exported tests must refer.

Select the  icon to begin exporting test results.

Select the  icon to import test results.

Select the icon to display a pop-up menu from which you can select the file from which information is to be acquired, by specifying whether it is a new or old format TXT file. In addition two dates can be specified to delineate the period of time to which the imported tests must refer.

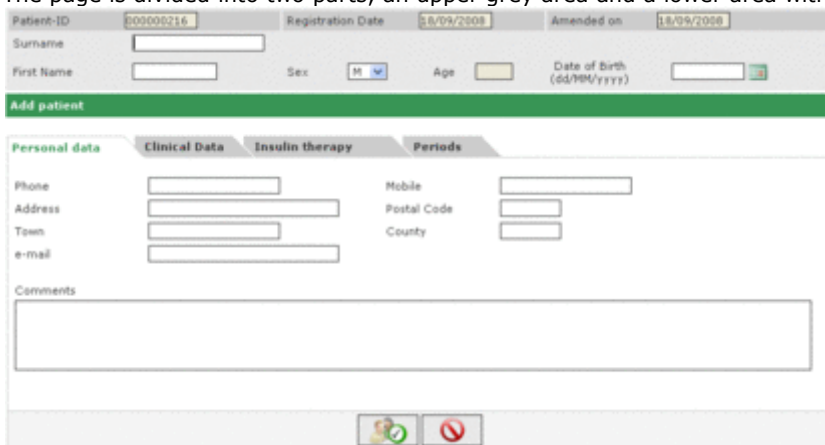
Select the  icon to begin importing results.

Add Patient

This function is accessed from the patient function and serves to register a new patient.

An identical page is used to edit the data of a patient already registered: in this case the information stored in the system will be displayed and the glucometers are managed together with the other information.

The page is divided into two parts, an upper grey area and a lower area with the menu.

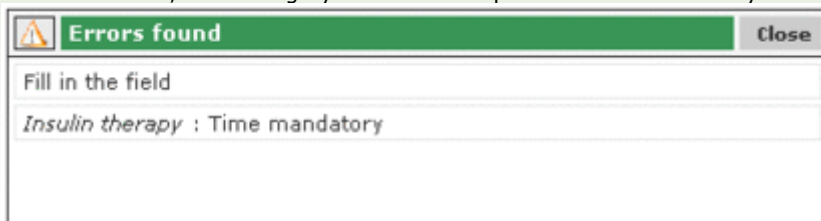


In passing from one item to another in the menu, the information entered is stored but not saved, even when the lower part of the page changes appearance depending on the item (tab) selected.



The information entered is memorized only after the  icon has been selected and no errors have been found in the data entered. Any errors are listed in a box appearing at the top of the window.

The error box is positioned so that it is possible to view the list of errors and at the same time pass from one menu item to another, or to the grey band at the top to make the necessary corrections.



Select the  icon to delete the current operation.

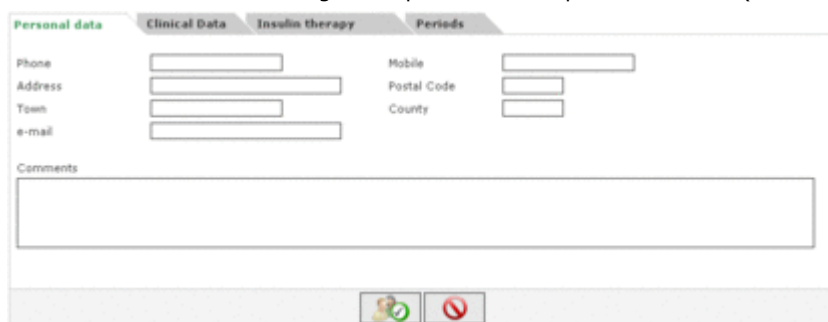
Basic information regarding the patient, e.g. name, surname, date of birth, sex, can be entered in the grey part of the page. Two dates (which cannot be changed) are also displayed and set to the current date; these indicate the date of patient registration and the date of the last change made. While the registration date remains the same over time, each time information regarding the patient is changed, the date of the last change varies to assume the value of the date of change.

The code (patient ID) assigned to each patient is displayed in this part of the page. This information may be indicated by the system (in which case it cannot be modified) or entered by the user. The method of entry and code format depend on the settings specified in configuration – system – parameters.

The menu at the bottom of the page allows all patient information necessary for the system to be entered/edited.

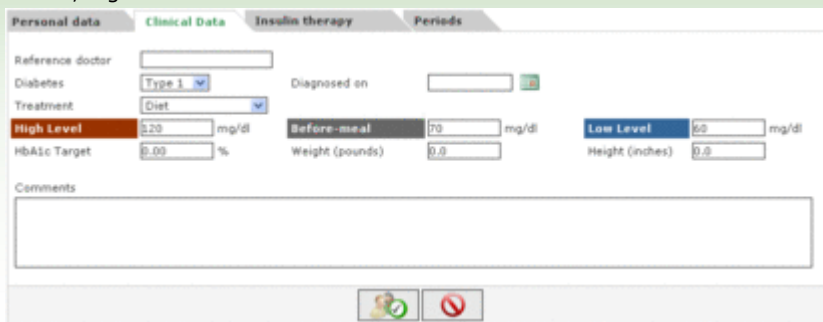
Personal data

This item of the menu manages the patient's main personal details (address, telephone number, etc.).



Clinical data

This item of the menu manages all the patient's clinical details, including type of diabetes, date of diagnosis, reference doctor, high level and low level.



The screenshot shows the 'Clinical Data' tab in a software interface. It contains fields for 'Reference doctor', 'Diabetes' (with a dropdown menu showing 'Type 1'), 'Diagnosed on' (with a date picker), 'Treatment' (with a dropdown menu showing 'Diet'), 'High Level' (with a dropdown menu showing '220 mg/dl'), 'HbA1c Target' (with a dropdown menu showing '0.00 %'), 'Before-meal' (with a dropdown menu showing '70 mg/dl'), 'Low Level' (with a dropdown menu showing '60 mg/dl'), 'Weight (pounds)' (with a dropdown menu showing '0.0'), and 'Height (inches)' (with a dropdown menu showing '0.0'). There is also a 'Comments' text area and a 'Diagnosed on' date picker. At the bottom, there are two icons: a green checkmark and a red 'X'.

Insulin therapy

This option enables the patient's insulin therapy to be specified over a 24 hour period, (time, type and dose of insulin).



The screenshot shows the 'Insulin therapy' tab in a software interface. It contains a table with columns 'Type of Insulin', 'Dose', and 'Time (HH:mm)'. The table has two rows: 'Glargina' with a dose of '0.2' and time '02:30', and 'Mixture 20:80' with a dose of '0.4' and time '08:00'. At the bottom, there are two icons: a green checkmark and a red 'X'.

The  icon (top right) enables a new prescription to be entered. Each line of the list ends with an  icon which allows the prescription to be deleted, after confirming.

Periods

A patient's day is divided into time periods. The system proposes a standard sub-division which, through this item of the menu, can be personalised for each individual patient.



The screenshot shows the 'Periods' tab in a software interface. It contains a table with columns 'Start time', 'End time', 'Period', and 'Before-meal'. The table has six rows: '01:00:00' to '08:00:00' with 'Fasting' and 'Before-meal' checked; '08:00:00' to '13:00:00' with 'Morning' and 'Before-meal' checked; '13:00:00' to '16:00:00' with 'Early afternoon' and 'Before-meal' checked; '16:00:00' to '20:00:00' with 'Late Afternoon' and 'Before-meal' checked; '20:00:00' to '23:00:00' with 'Evening' and 'Before-meal' checked; and '23:00:00' to '01:00:00' with 'Night' and 'Before-meal' checked. At the bottom, there are two icons: a green checkmark and a red 'X'. A note on the right states: 'Note: The Start time of a period must coincide with the End time of previous period, and Start time of the first period must coincide with the End time of the last period. Individual periods must be consecutive.'



The  icon (at top right) allows a new period to be entered; it is necessary to indicate start and end time, the period, (a brief description e.g. breakfast), and whether it is a before-meal time band). For the sub-division of the day to be accepted, the time periods must comply with the following conditions:

- The "Start time" of a period must coincide with the "End time" of the previous period.
- The "Start time" of the first period must coincide with the "End time" of the last period.
- The individual periods must be consecutive.



Each line of the list of periods ends with an  icon allowing the period to be deleted, after confirming.

Meters



After selecting the  icon to confirm the data entered, if no errors have been made, the following page appears, allowing one or two meters to be associated with the newly-registered patient.



The right side of the page displays a list of all types of meters managed by the application. To associate a meter with a patient, select the meter by clicking on the word "select" or on the  icon. In this way the selected meter is added to the list of meters on the left side of the page for which serial numbers must be specified. In this list the same type of meter may appear more than once, but should have a different serial number. Each line of the list of meters



associated with a patient ends with an  icon. This allows the meter to be deleted, after confirming. New meters can be added to the list of available meters (list on the right), by choosing "Select", next to the meter generically denominated "new" at the bottom of the list.



Again, select the  icon to make the association definitive: associations become definitive if no errors are found.



To delete the operation select the  icon. The patient will remain registered with all previously entered information, but will have no associated meter.

Functions

The application is structured in 4 distinct sections described below from top to bottom:



Information

To return to Home Page but also to access Help, Info, Contact and Credits.

Top

On the left appears the name of the selected patient to whom all information consultable in the various pages of the application refers. The "Refresh" function on the right updates the Home Page.

Menu

The menu accesses the functions described in this section. When an icon is selected its background becomes white, while the others remain grey.

Work Area

The area where data selected from the Menu section are displayed.

Patient



This function manages information relating to a patient registered in the application.

The page is divided into three areas: the filter (at the top), the list of patients (at the centre) the operations toolbar (at the bottom).

Form fields for patient filtering:

- Patient-ID:
- First Name:
- Surname:
- Diabetes type:
- Treatment:
- Date of Birth:
- Sex:

Patients List

ID	Patient	Sex	Date of Birth	Type of diabetes	Last download
A2	Azzurri Luciano	M	16/08/1945	Type 1	21/03/2008
PROVA0004	BIANCHI VITTORIA	M	12/12/1913	Type 1	
PROVA0002	Bianchi Chiara	F	12/02/1965	Type 1	30/04/2008
Bianchi	Bianchi Ottavio	M	01/09/1943	Type 1	11/06/2008
COD000032	Bianchi Palmiro	M	23/10/1908	Type 1	
DVRAN46	Diveroli Anna	F	25/03/1950	Type 1	
PROVA0004	NERI OTTAVIANO	M	25/04/1996	Type 1	
PROVA0006	Neri Otello	M	12/02/1965	Type 1	
XXXXX004	Rossi Carlo	M	29/02/1988	Type 2	
PROVA0001	Rossi Marco	M	06/02/2003	Type 1	
Prova	Rossi Margherita	M	12/12/1918	Type 2	
rsmr03	Rossi Mario	M	14/09/1952	Other	
SEMG10	Semola Giovanni	M	12/12/1967	Type 1	

The list of patients displays only some information for each patient (I.D., surname, name, date of birth, type of diabetes, therapy, age).

To select a patient in the list, select the  icon at the beginning of the corresponding line, which will then be highlighted in green.

The list of patients depends on the data specified in the filter (grey part at the top of the page): only those patients who conform to all the specified characteristics are entered in the list. Select the  icon to update the list in accordance with pre-set indications.

Print the list of patients by selecting the  icon on the operations toolbar. Select the  icon to delete the selected patient, after confirming.

Select, respectively, the   icons to edit information relating to the selected patient or enter a new patient. Both icons access the same page (See Add Patient).

Patient-ID	ad	Registration Date	01/04/2008	Amended on	01/09/2008
Surname	Azzurri				
First Name	EUGENIO	Sex	M	Age	63
				Date of Birth (dd/MM/yyyy)	16/08/1945

Change Patient

Personal data	Clinical Data	Insulin therapy	Periods	Meters
Phone			Mobile	1234556
Address			Postal Code	123
Town			County	
e-mail				
Comments				




In the event of a change being made on the page, the information stored in the system regarding the selected patient is displayed; In the event of a new patient's data being entered, however, no information is displayed. In either case, two icons are present at the bottom of the page: The  icon confirms the information entered or edited on the page, while the  icon cancels the current operation.

Glycaemia



This function allows you to consult glycaemia information relating to the patient whose name appears on the left, immediately below the function menu.

The page has a sub-menu (on the right of the green band at the top) which accesses information on glycaemia.

List of results

Select this item from the menu to view and manage glycaemia information, displayed as a list of results.

The screenshot shows the 'Glycaemia (mg/dl)' interface. At the top, there are tabs for 'Results Set', 'Results Diary', and 'Quality Control'. Below the tabs, there are input fields for 'High Level' (set to 130) and 'Low Level' (set to 90). The main area displays a table of results with columns for Date, Time, Result, and Event. The results are color-coded: red for values above the high level, blue for values below the low level, and white for values between the low and high levels. The table shows results from 18/06/2008 to 08/06/2008. On the right side, there is a details panel with fields for Date, Time, Period, Result, Event, Ignore, and a Comment box. The details panel is currently showing the details for the result 110 on 18/06/2008 at 10:00:50. At the bottom, there is a toolbar with icons for adding, deleting, and printing results.

Date	Time	Result	Event
18/06/2008	10:00:50	110	
15/06/2008	11:38:22	113	
14/06/2008	09:38:22	85	
13/06/2008	11:38:22	72	
11/06/2008	22:38:22	141	
11/06/2008	14:38:22	95	
11/06/2008	02:38:22	155	
10/06/2008	08:38:22	99	
09/06/2008	19:38:22	78	
09/06/2008	07:38:22	139	Lunch
08/06/2008	20:38:22	135	
08/06/2008	11:38:22	138	

The diary on the left of the page displays glycaemia results.

Results showing a value above high level are displayed in red, while those displayed in blue have a value below low level. Results shown in white have a value between low and high level. The value of the two levels is indicated at the top left of the page.

The number of readings present in the list is indicated at the bottom left, below the list of results.

One of the following icons may appear alongside each result:



indicates that the result has been entered manually.



indicates that the result has been read from an instrument and subsequently changed manually.



indicates that the result has been imported from a TXT file generated by Dialogue software.



indicates that the result has been imported from a MenaDiab file.

The details relating to the result selected in the diary are displayed on the right side of the page, highlighted by a coloured line: green if the result comes within low and high level, red if the result is above high level and blue if the result is below low level.

The operations toolbar at the bottom of the page, from left to right, allows you to:



- Confirm variation or entry of data
- Delete the selected result, after confirming.
- Enter a new result
- Export in an Excel file, the results obtained within a specified time interval, indicating the two dates in the pop-up menu displayed on selecting the icon.
- Print the report

Diary of results

This option enables glycaemia information to be displayed and managed in the form of a diary of results, divided according to the time band (period) to which they refer.

High level, low level, standard deviation, average and number of results are displayed at the top of the page. In this part of the page two dates can be set to define the time interval: the results entered in the diary must refer to this interval.

The diary can be displayed in two different modes, depending on whether the "compress" field is selected or not. To display the diary according to settings, select the  icon on the operations toolbar at the bottom of the page.

Select the other icon  to print the diary.

The diary occupies the centre of the page. The first column shows the dates of glycaemia tests. Each of the other six columns refers to a period. Even if the patient's day is divided into more than six periods, only six periods are shown, the others can be viewed by selecting the two icons  , one to the right, the other to the left of the period columns heading.

If the diary is in compressed mode, for each day in the first column and each period the arithmetic mean of all results for that day in that period is displayed.

Date	01.00-08.00 Fasting	08.00-13.00 Morning	13.00-16.00 Early afternoon	16.00-20.00 Late Afternoon	20.00-23.00 Evening	23.00-01.00 Night
18/06/2008		110				
15/06/2008		113				
14/06/2008		85				
13/06/2008		72				
11/06/2008	155		35		141	
10/06/2008		99				
09/06/2008	139			78		

If, however, the diary is in non-compressed mode, the individual results are shown. This means that in the date column the same date may appear more than once.

Date	01.00-08.00 Fasting	08.00-13.00 Morning	13.00-16.00 Early afternoon	16.00-20.00 Late Afternoon	20.00-23.00 Evening	23.00-01.00 Night
18/06/2008		110				
15/06/2008		113				
14/06/2008		85				
13/06/2008		72				
11/06/2008	155		35		141	
11/06/2008						
11/06/2008						

Irrespective of diary mode, standard deviation, average and number of results for each period of the day entered in the diary are displayed at the bottom of the page.

Quality control

Select this item from the menu to view and manage quality control information.

The screenshot shows the 'Glycaemia (mg/dl)' application with the 'Quality Control' tab selected. On the left, there is a list of quality control entries with columns for Date, Time, Result, Meter, F, and Type. The selected entry is highlighted in blue. On the right, a detailed view of the selected entry is shown, including fields for Date, Time, Result, Meter, Serial number, F, Type, Batch, Expiration, Minimum value, and Maximum value. At the bottom, there is an operations toolbar with icons for Confirm, Delete, Delete All, Add, Graph, and Print.

On the left side of the page is a list of the quality controls relating to the selected patient whose name appears on the left immediately below the functions menu.

Quality control values above high level are shown in red, those below low level are shown in blue. Controls with values between low and high level are shown in white. The values of the two levels are indicated on the right of the page, where all details relating to the quality control selected from the list can be consulted. The selected control is highlighted by a coloured line: red if the result is above high level, blue if below low level, green if the result is between low and high level.

The list of controls depends on filter settings (top left), which limit included data solely to those which conform to the required characteristics. For example, the control list can be limited to a particular instrument, by specifying the type and serial number.

The number of results in the list is displayed at bottom left of the page.

Use the operations toolbar at the bottom of the page to (from left to right)



- Confirm current change or entry;
- Delete the selected quality control, after confirming;
- Delete all quality controls in the list, after confirming;
- Enter a new quality control;
- Display the quality control graph. The graph can be constructed only when the quality controls in the list refer to a particular instrument, in other words, when an instrument and a particular serial number have been selected at top left of the page. The graph is displayed as a pop-up.



The two dates in the pop-up define the time interval to which the quality controls considered for the graph must refer. Initially the two dates delineate a time interval corresponding to the last three months. These dates can be changed and a new graph obtained by selecting the  icon at the bottom of the pop-up.

To print the graph select the  icon at top right.

- Print the list of quality controls

Reports

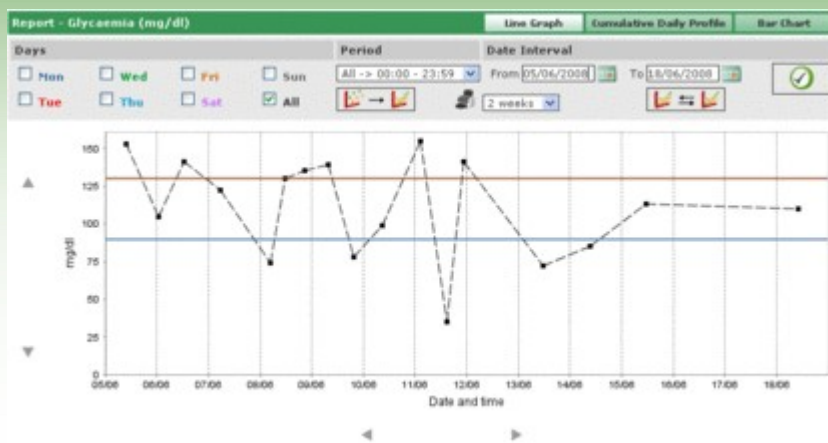


This function creates graphs using glycaemia data relating to the patient whose name appears on the left immediately below the function menu.

Select the desired type of graph from the sub-menu on the page (on the right of the green band at the top).

Line graph

Select this item from the menu to consult glycaemia results in line graph form.



The graph always displays two lines, a red one indicating high level and a blue one indicating low level of glycaemia.

By default, the results shown on the graph refer to the thirty days prior to the last result. The period of time to which the data refer can be varied by changing the "from" and "to" dates". The period of time can also be varied by selecting a period of weeks (field below the "from" field).

The selected time period determines the abscissae axis on the graph, in which the dates of the days included in the period are displayed. Conversely, the axis of ordinates is determined by the value of glycaemia results. Both axes on the graph can be translated using the ◀▶ icons below the abscissae axis and the ▲▼ icons on the left of the axis of ordinates.

A sub-set of the results for the selected period can be included in the graphs; for example, only those that refer to a given period in which the day is divided ("period" field).

By default the results are displayed on the graph by a black dot. By positioning the mouse on one of the dots it is possible to read the day and time the result was recorded, in addition to the value and measurement unit used.

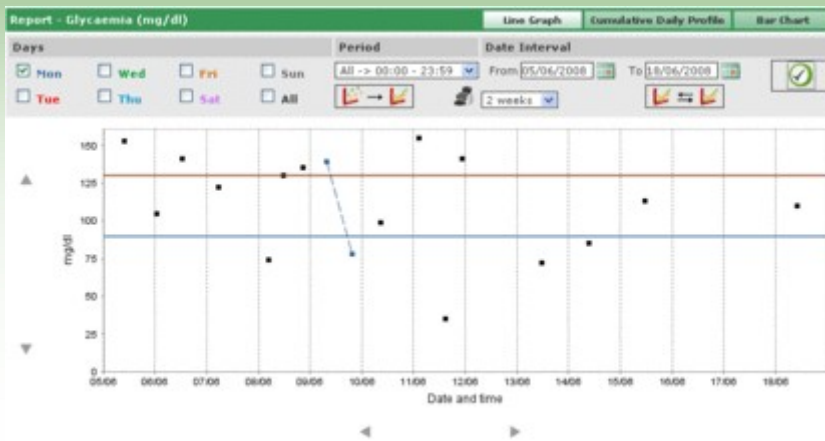
Results referring to a particular day of the week can be highlighted; for example to highlight all results that refer to Monday, just select MON in the grey part.

Report - Glycaemia (mg/dl)

Days

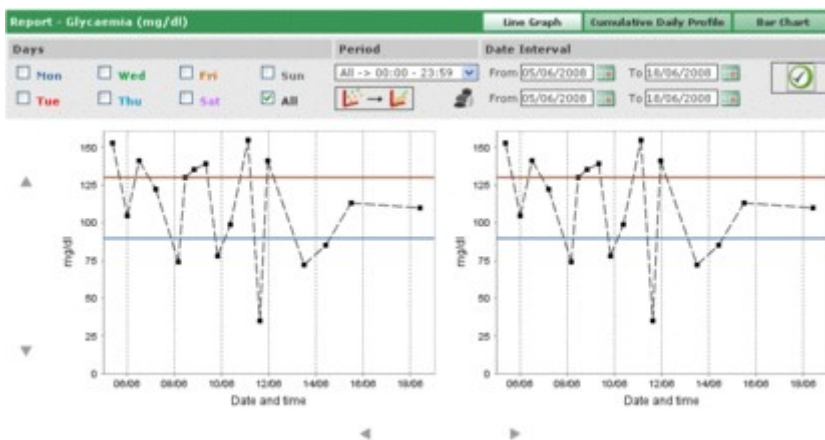
☒ Mon	☐ Wed	☐ Fri	☐ Sun
☐ Tue	☐ Thu	☐ Sat	☐ All

and then select the  icon on the right of the grey band on the page. By way of example, the following graph will be displayed:



With this type of graph, by selecting the  icon it is possible to join up all the dots with a broken line.

Comparison of two line graphs referring to two different time periods is also possible. To obtain the two graphs, select the  icon: on the left of the grey band another two dates will be displayed in place of the period. The second graph refers to the time interval delineated by these two dates. To view and compare the two graphs select the  icon; below is an example of the page that will appear:

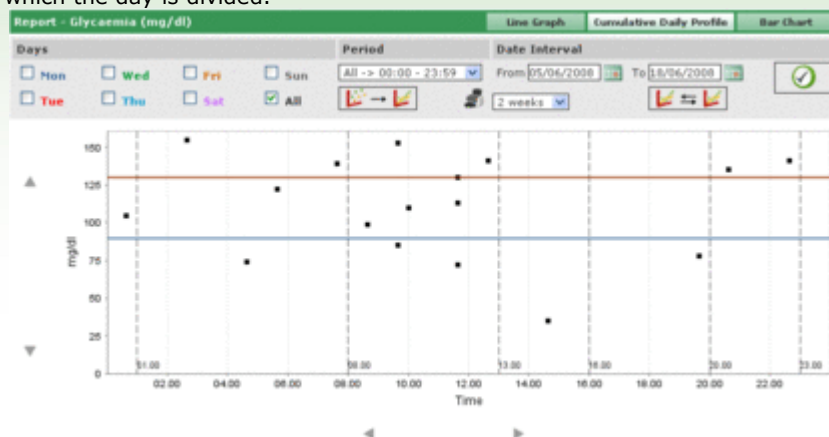


Any other setting selected for the graphs regarding days, time interval, dot joining, will apply to both graphs.

Select the  icon to print the graph or graphs displayed on the page.

Cumulative Daily Profile

Select this item from the menu to consult glycaemia results displayed in a line graph which highlights the periods in which the day is divided.



The graph always displays two lines, a red one indicating high level and a blue one indicating low level of glycaemia.

The abscissae axis indicates the 24-hour period and shows the times that delimit the various periods in which the day is divided. For this reason the graph is divided into vertical bands.

Conversely, the axis of ordinates is determined by the value of the glycaemia results. Select the icons on the left of the axis to translate them

Both axes on the graph can be translated using the icons below the abscissae axis and the icons on the left of the axis of ordinates.

By default, the results recorded on the graphs refer to the thirty days prior to the last result. The period of time to which the data refer can be varied by changing the "from" and "to" dates. The period of time can also be varied by selecting a period in weeks (field below the "from" field).

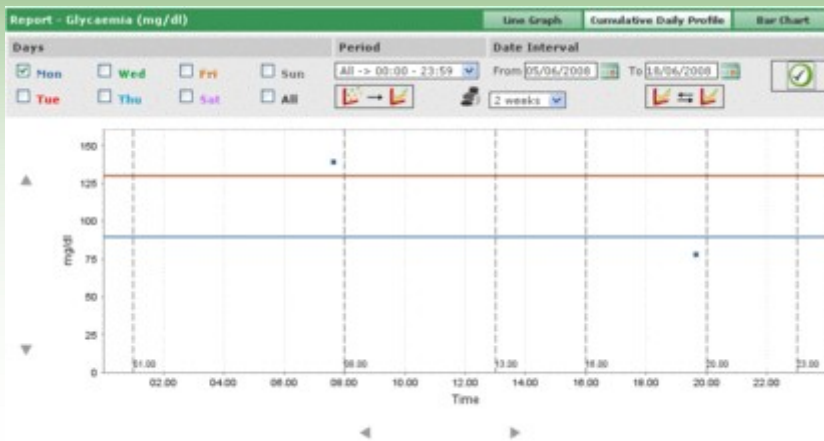
A sub-set of the results for the selected period can be included in the graphs; for example, only those that refer to a given period in which the day is divided ("period" field).

By default the results are displayed on the graph by a black dot. By positioning the mouse on one of the dots it is possible to read the day and time the result was recorded, in addition to the value and measurement unit used.

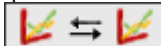
Results referring to a particular day of the week can be highlighted; for example to highlight all results that refer to

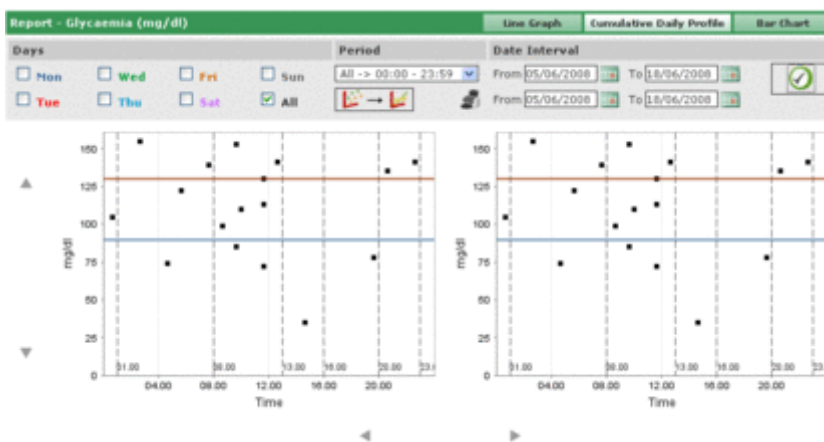
Monday, just select MON in the grey part and then select the icon on the right of the grey band

on the page. You will obtain, for example, a graph that looks like this:



On this type of graph, by selecting the  icon all the dots can be joined up with a broken line.

Comparison of two line graphs referring to two different time periods is also possible. To obtain the two graphs, select the  icon: on the left of the grey band another two dates will be displayed in place of the period. The second graph refers to the time interval delineated by these two dates. To view and compare the two graphs select the  icon; below is an example of the page that will appear:



Any other setting selected for the graphs regarding days, time interval, dot joining, will apply to both graphs.

Select the  icon to print the graph or graphs displayed on the page.

Bar chart

Select this item from the menu to consult glycaemia results in a bar chart, one bar for each day of the week, and in a pie chart.



By default the results shown on the graph refer to the thirty days prior to the last result. The period of time to which the data refer can also be varied by changing the "from" and "to" dates. The period of time can also be varied by selecting a period in weeks (field to the right of the dates).

A sub-set of the results for the selected period can be included in the graphs; for example, only those that refer to a given period in which the day is divided ("period" field). Alternatively, the graphs can be limited solely to results that are above high level, below low level or between minimum and maximum level ("result of" field).

To view the graph in conformity with last settings, select the  icon, also on the right of the grey band

To print the graphs select the  icon, also on the right of the grey band,.

The mean of results and their standard deviation, in addition to the proportion of those included in the graph as opposed to total number are also shown on the grey band.

Other data



This function manages information regarding tests recognized by the application, with the exclusion of glycaemia, relating to a selected patient whose name appears on the left immediately below the functions menu. The application recognizes as data all tests recorded in configuration - tests - tests.

The screenshot shows the 'Other data' window. On the left, there is a table with columns: Date, Acronym, Result, and Measurement Unit. The table contains six rows of data. The first row is highlighted in green. To the right of the table is a form for editing the selected result. The form includes fields for Date, Time, Data (a dropdown menu), Result, High Level, Low Level, Ignore (a dropdown menu), and a Comment text area. At the bottom of the window is a toolbar with several icons.

Date	Acronym	Result	Measurement Unit
11/08/2008	CRE	0.8	mg/dl
11/08/2008	CRE	1.1	mg/dl
11/08/2008	CRE	1.5	mg/dl
11/08/2008	CRE	0.5	mg/dl
11/08/2008	MON	10	%
11/08/2008	MON	4	%

The left of the page is almost fully occupied by the list of test results for each of which only the date, acronym, result and measurement unit are displayed. The results of the various tests may be highlighted in red or blue. Results that are above the high level envisaged are highlighted in red, those below the low level in blue.

The list of controls depends on filter settings (top left), which limit the data included solely to those which conform to the required characteristics. For example, the list of results can be limited to a single type of data, by selecting the appropriate item in the filter data field. In this case, two fields will appear immediately below the data indicating respectively minimum and maximum level of the selected item.

This screenshot shows the 'Other data' window with filter settings applied. In the top left, the 'Data' dropdown is set to 'Creatininaemia'. Below it, 'High Level' is set to 1.2 and 'Low Level' is set to 0.5. The table on the left now only displays results for 'CRE'. The right-hand form is identical to the previous screenshot, showing the details for the selected result (0.8 mg/dl).

Date	Acronym	Result	Measurement Unit
11/08/2008	CRE	0.8	mg/dl
11/08/2008	CRE	1.1	mg/dl
11/08/2008	CRE	1.5	mg/dl
11/08/2008	CRE	0.5	mg/dl

The filter has a second field in which a sequence of characters can be entered. In this case only those tests which have the specified characters in their data acronym will be included in the list.

The number of results in the list is displayed at the bottom left of the page.

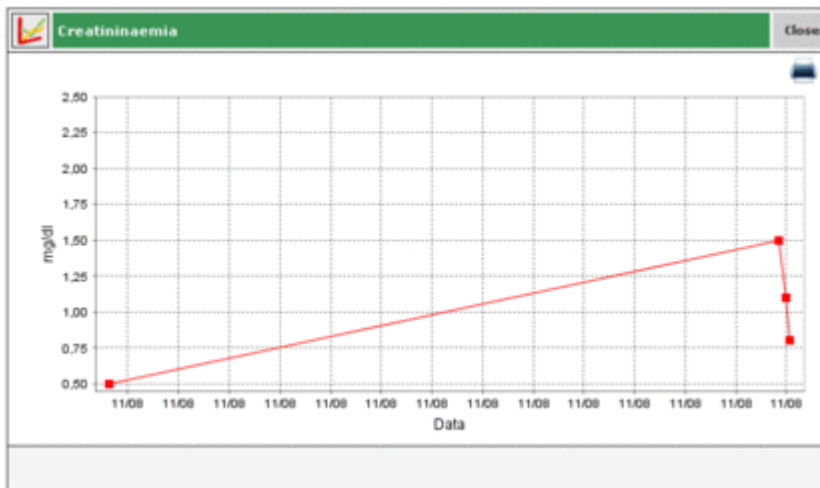
All information relating to the result selected in the list, highlighted by a coloured line, is displayed on the right of the page: red, if the result is above high level, blue if below low level, green if the result is between low and high level.

To select a result, select the ► icon at the beginning of the corresponding line.

The operations toolbar at the bottom of the page, from left to right, allows you to:



- Confirm current change or entry
- Delete the selected result, after confirming
- Delete all results, after confirming;
- View in graph form results referring to the specified time interval, by indicating the two dates in the pop-up that appears on selecting the icon.



The graph can be viewed only if the results of a single type of data are present in the list.

- Print the list of results

Configuration



Configuration is not part of the classic functions; it is an area of the application from which it is possible to manage information that is essential to the correct use and functioning of the functions proper.

The information managed is divided into four groups:

- tests
- patient
- event descriptions
- system

Tests

The 'Tests' section in the configuration area has two menu items "Measurement units" and "Tests".



Measurement Units

'Measurement Units' manages the units of measure in which the results of the various tests are expressed.



Measurement units already registered are shown line by line in a list. There are two buttons beside their description.

Select the  icon to delete, if confirmed, the measurement unit. Select the  icon to change the description of the measurement unit.

Select the icons at the end of the line, respectively to confirm  and delete  the change.

Select the  icon at top right of the page to enter a new measurement unit. Select the icons at the end of the line respectively to confirm or delete.

Of all the units of measure, mg/dl and mmol/l are exceptions and must always be available. They are installed with the application and cannot be changed or deleted.

Tests

The tests to be managed by the application are configured in this section.

Acronym	Description	Measurement Unit
CRE	Creatinaemia	mg/dl
MON	Monocytes	%
EMO	Glycated haemoglobin	%
GLIC	Glycaemia	mg/dl

Acronym	CRE
Description	Creatinaemia
Type of result	Numerical
Measurement Unit	mg/dl
Decimals	0
High Level	0.2
Low Level	0.5
Before-meal	0.0
Edit allowed	Yes
Comment	

The left side of the page is occupied by a list of configured tests for which only some basic information is displayed. A selected test is highlighted by a green line and all related information is displayed on the right of the page.

Select the icon appearing at the beginning of each line of the list for a different test.

The icons at the bottom of the page allow you, respectively, to:



confirm changes or entry of information relating to the selected test;



delete the selected test from the list, after confirming cancellation.



enter a new test

Patient

The "Patient" section in the configuration area displays a menu with three items: "Diabetes", "Type of insulin" and "Therapy".



Diabetes

The various types of diabetes are managed in 'Diabetes'.



The types of diabetes already recorded are shown line by line in a list. There are two buttons beside the description.

Select the  icon to delete, if confirmed, the type of diabetes or the  icon to edit the description of diabetes type.

Select the icons at the end of the line, respectively, to confirm  or cancel  the change.

Select the icon at top right  to enter a new type of diabetes. Select the icons at the end of the line respectively to confirm or cancel.

Type of insulin

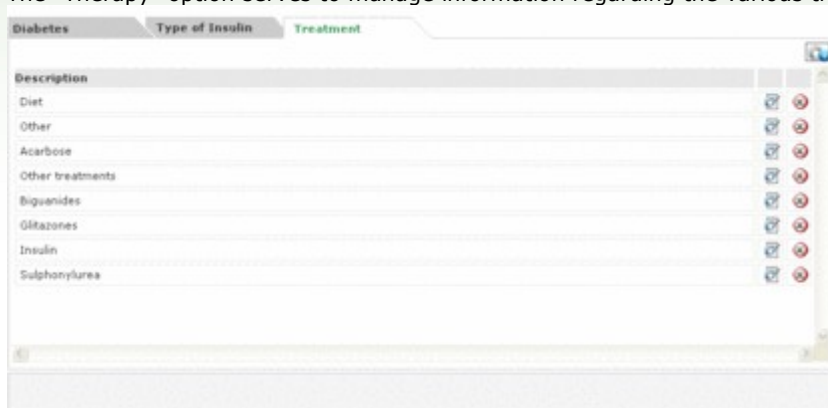
The "Type of insulin" option serves to manage information regarding the various types of insulin.



The page is identical to the "Diabetes" page and should be treated in the same way.

Therapy

The "Therapy" option serves to manage information regarding the various treatments to control diabetes.



The page is identical to the "Diabetes" page and should be treated in the same way.

Event Descriptions

The "Event Descriptions" section in the configuration area has a menu with three items: "Events", "Time Periods" and "Intervals".



Events

The various events that may be associated with a diabetes reading are managed in "Events" .



Events already recorded are displayed line by line in a list. There are two icons beside the description. Select the



icon to delete, if confirmed, the event; select the



to change the description of the event.

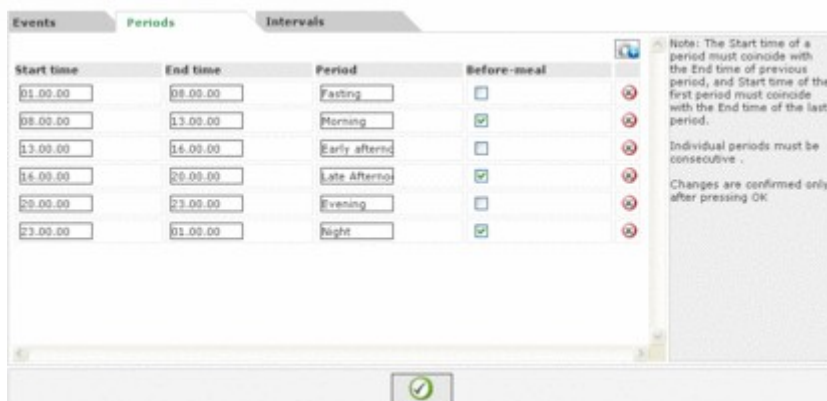
Select the icons at the end of the line, respectively, to confirm  or cancel  the change.

Select the icon at top right  to enter a new event. Select the icons at the end of the line, respectively, to confirm or cancel.

An exception is the sub-set of events which must, always be available. They are configured with the application and cannot be changed or deleted.

Periods

The time bands (periods) in which the whole day is divided are managed in 'Periods'.



Start time	End time	Period	Before-meal
01.00.00	08.00.00	Fasting	☐
08.00.00	13.00.00	Morning	☒
13.00.00	16.00.00	Early afternoon	☐
16.00.00	20.00.00	Late Afternoon	☒
20.00.00	23.00.00	Evening	☐
23.00.00	01.00.00	Night	☒

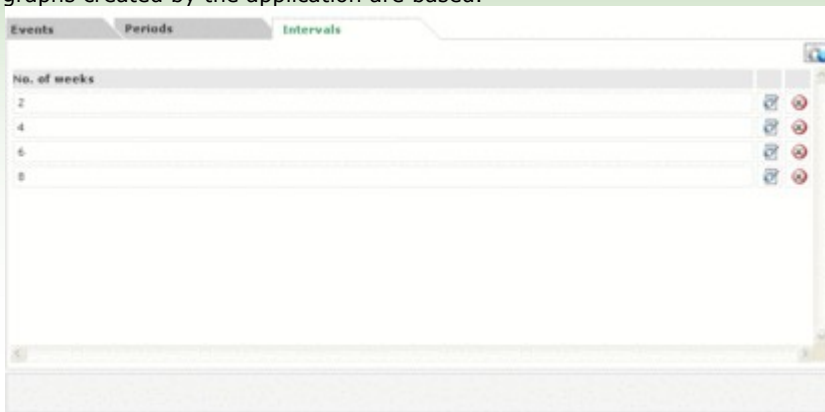
Select the icon  (top right) to enter a new period. It is necessary to indicate start and end times, giving a brief description, and specifying whether or not it is a pre-meal time band. After entering one or more periods, select the  icon at the bottom of the page to confirm. For the sub-division of a day to be accepted, the time bands must comply with the following conditions:

- The "Start time" of a period must coincide with the "End time" of a previous period;
- The "Start time" of the first period must coincide with the "End time" of the last period.
- The individual periods must be consecutive.

Each line of the list of periods terminates with an  icon, allowing the period to be deleted. Cancellation is confirmed only if the  icon is selected and if the new sub-division of the day into periods complies with the above-mentioned conditions:

Intervals

'Intervals' deals with the management of information regarding time intervals, expressed in weeks, on which the graphs created by the application are based.



The screenshot shows a software window with three tabs: 'Events', 'Periods', and 'Intervals'. The 'Intervals' tab is active and highlighted in green. Below the tabs, there is a table with the following structure:

No. of weeks	
2	[icon] [icon]
4	[icon] [icon]
6	[icon] [icon]
8	[icon] [icon]

Each row in the table has a small icon on the left and two small circular icons (one blue, one red) on the right. Below the table is a large empty text area. At the bottom of the window, there is a status bar with the number '5' on the left.

The page is identical to the "Events" page and should be treated in the same way.

System

The "System" section in the configuration area has a menu with three items: "Language", "Parameters", "Print configuration".



Language

To use the application in a language other than that installed, select the required language from the list of those available.



Parameters

This item of the menu displays a list of all parameters that must be set to enable the application to function correctly. An identification code together with the correct value is displayed for each parameter.



All parameters can be changed simultaneously, but are confirmed only after the icon  at the bottom of the page, has been selected.

Print configuration

From this page of the menu it is possible to specify which print-outs to select by default in the print function page.

Language Parameters **Printing Config.**

☒ Glycaemia Results
☐ Other results

☐ Glycaemia Diary
☒ Compact View ☐ Extended View

☐ Line Graph ☐ Day Chart
☐ Bar Chart ☐ Pie Chart

☐ All ☒ Current Patient
☐ List of patients



Print configuration becomes effective only after the  icon, at the bottom of the page, has been selected.

Printing



Graphs or data can be printed from some pages of the application.

The print function allows one or more prints to be obtained simultaneously.

Printing

☒ Glycaemia Results
☐ Other results

☐ Glycaemia Diary
☒ Compact View ☐ Extended View

☐ Line Graph ☐ Day Chart
☐ Bar Chart ☐ Pie Chart

☐ All ☒ Current Patient
☐ List of patients

Days
☐ Mon ☒ Wed ☐ Fri ☐ Sun
☐ Tue ☐ Thu ☐ Sat ☒ All

Hour Intervals
 All -> 00:00 - 23:59

Date Intervals
 From 05/06/2008 To 08/06/2008
 2 weeks



From this page it is possible to print:

- Glycaemia results corresponding to printable data in the list of results in the glycaemia function.
- Other results corresponding to printable data in the other data function
- Glycaemia diary corresponding to printable data in the diary of results in the glycaemia function.

☐ Glycaemia Diary
☒ Compact View ☐ Extended View

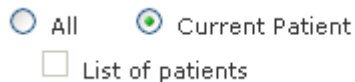
In this case it is possible to choose between compressed view and extended view, corresponding to the diary when selected in compressed mode (default), or extended view.

- Graphs: line graph, cumulative daily profile (day chart), bar chart, pie chart: Graph characteristics can be indicated (see reports) in the grey area at the bottom of the page.



The screenshot shows a filter panel with three sections: 'Days', 'Hour Intervals', and 'Date Intervals'. Under 'Days', there are checkboxes for Mon, Wed, Fri, Sun, Tue, Thu, Sat, and All (which is checked). Under 'Hour Intervals', there is a dropdown menu showing 'All -> 00:00 - 23:59'. Under 'Date Intervals', there are fields for 'From' (14/07/2008) and 'To' (24/07/2008), with a '2 weeks' button below them.

By default, print-outs refer to the selected patient whose name is displayed on the left, immediately below the functions menu. (Note that "Current patient" is selected immediately above the grey area).



The screenshot shows three radio button options: 'All', 'Current Patient' (which is selected), and 'List of patients' (which has an unchecked checkbox next to it).

If print-outs of all patients recorded in the application are required, select "All", as opposed to "Current patient". In the event of selecting "All", it is possible to print the list of patients, if required; in this case select "All" followed by "List of Patients".

Select the  icon at the bottom of the page, for the required print-outs.

