

ascom

On Line Mobile User Manual

Version 6.0

2023-09-22

Contents

On Line Mobile	3
1. Introduction	3
2. Data display.....	3
3. Data acquisition	3
4. On Line Mobile start-up	4
5. Patients List Page	5
6. Pages List Screen.....	6
7. Online Pages.....	7
7.1. Charts	7
7.1.1. Chart description.....	8
7.1.2. The Bottom Navigation Bar	10
7.2. Grid.....	10
7.2.1. Grid description.....	12
7.2.2. The Bottom Navigation Bar	13
7.3. Microbiology	15
7.3.1. Heading	15
7.3.2. Filters	16
7.3.3. Data Grid	17
7.4. Laboratory	18
7.4.1. Laboratory - Data grid	19

On Line Mobile



For general and detailed information about the Product environment and the instructions for use of the Mobile Launcher software, see the specific documents of the Product. The knowledge and understanding of these documents is mandatory for an appropriate and safe use of the On Line Mobile, described in this document.



The features and functionalities of the On Line Mobile module are fully available after user log in. A popup message informs the user accessing the application if log in is required.

1. Introduction

On Line Mobile is an application that displays the incoming data from the medical devices connected to the patient (for example: monitor, ventilator, laboratory etc.). The raw collected data can be integrated and validated by the user to create an accurate and readable user documentation.

The application can also be configured to connect to other Digistat® modules and display their data (for example Digistat® Diary, Digistat® Connect).

2. Data display

Data can be viewed in charts. The way data is displayed is widely customizable. Refer to the system administrators for customization options. The figures included in this manual show a configuration example.

3. Data acquisition

Data can be either automatically acquired or manually entered by users.

Automatic acquisition is for parameters transmitted by interfaceable medical equipment (for example: ventilators, patient monitors), or by a laboratory (for example: exams results).

Manual editing enables users to check and validate data, to eliminate artifacts and redundant data, to insert values whenever, for any reason, automatic acquisition is unavailable.

4. On Line Mobile start-up

To launch the On Line Mobile module:

- Touch the corresponding row on the handheld device screen (Fig 1).

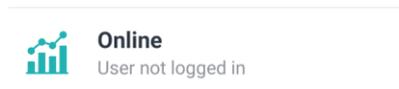


Fig 1

The On Line Mobile Patient List page opens (Fig 2):

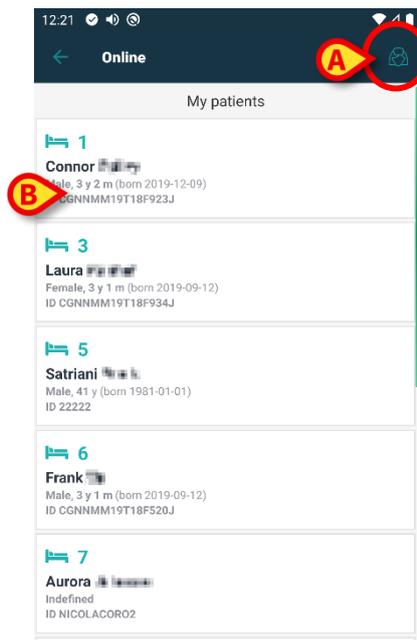


Fig 2

On Line Mobile requires patient selection. If no patient is currently selected, an empty screen is displayed, reminding that "This module requires a patient". See section 5.

5. Patients List Page

The On Line Mobile Patients List page (Fig 2) displays the list of patients included in the “MyPatients” list. Read the document *USR ENG Mobile Launcher* for more information about the “MyPatients” list.

- Touch the “MyPatients” button (Fig 2 **A**) to manage the “MyPatients” list.

Each patient is represented by a tile (Fig 3).

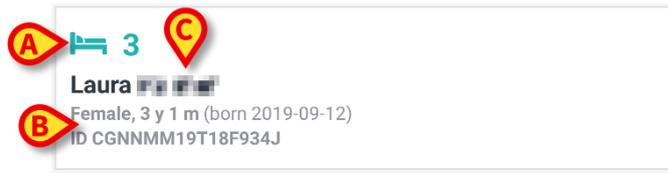


Fig 3

In the tile, the following information is displayed (customizable):

- Bed number (if available - Fig 3 **A**);
 - Patient data (sex, age, date of birth, patient ID - Fig 3 **B**);
 - Name of patient on that bed (Fig 3 **C**).
- Touch the patient tile (e.g. Fig 2 **B**) to access the Pages List Screen and manage the related On Line Pages. See section 6.

6. Pages List Screen

The Pages List Screen lists all the On Line Mobile Pages, each one displaying, in charts, the data available for the selected patient.

Different On Line Mobile Pages can be configured for the same patient, each one focusing on a subset of parameters. Different icons can be associated during configuration to symbolize the kind of data contained in the page.



The icons referring to the pages, placed on the left of the page name, can be associated on the On Line Web configuration tool. Refer to the document CFG ENG Online Validation for the existing configuration options.

The Pages List Screen is formed of two areas: a heading area displaying the patient main data (Fig 4 A) and the list of On Line Pages configured for the patient (Fig 4 B).

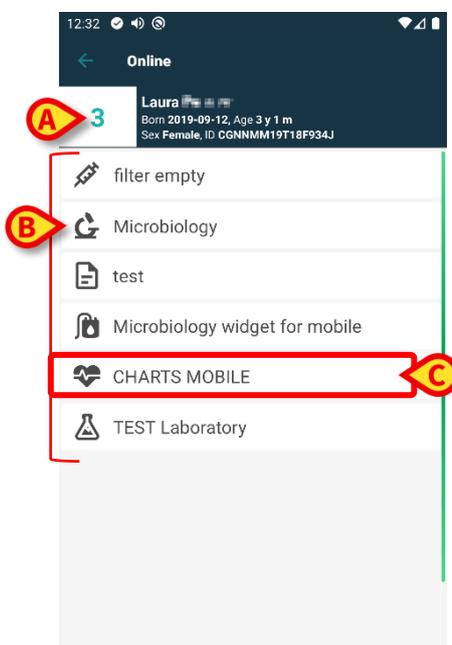


Fig 4

The heading area (Fig 4 A) contains the same information displayed in the patient tile on the Patient List screen (described in section 5).

- Touch the row corresponding to the required On Line Page (e.g. Fig 4 C) to access it (Fig 5). Read section 7.

7. Online Pages

There are four possible page types:

- 1 - "Chart" shows data from the configured patient devices in charts.
- 2 - "Grid" shows data from the configured patient devices in grids.
- 3 - "Microbiology" shows the microbiology exam history.
- 4 - "Laboratory", shows laboratory exam results.

7.1. Charts

A "Chart" page (Fig 5) displays in charts the data available for the selected patient.



Fig 5

- Bed number and patient name are displayed on top (Fig 5 A).
- The Charts are displayed in the page body (Fig 5 B). Charts are described in section 7.1.1.
- A Bottom Navigation Bar (Fig 5 C) allows to navigate the charts back and forth in time. The Navigation Bar is described in section 7.1.2.
- the  icon indicated in Fig 5 D makes it possible to share the available data. To do that:

- Tap the  icon. The following window opens (Fig 6):

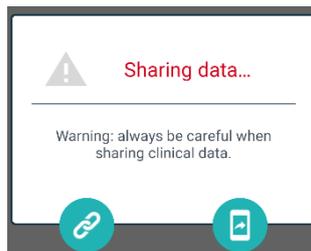


Fig 6

The  button copies the Digistat Mobile link to the current page to the clipboard and allows to share it through the apps available on the handheld device.

The  button allows to share the current page screenshot.



The "Share" functionality can be enabled depending on the local configuration. Refer to the system administrators for the available configuration options.

- Tap the **Back** button (Fig 5 E) to return to the Pages List Screen (Fig 4).

A message informs the user if no Charts are configured for the selected patient.

A message informs the user when the time switches from standard time to daylight saving time and vice versa.

7.1.1. Chart description

The trends of the configured parameters are displayed in Charts (Fig 7).



Fig 7

The Chart name is on top (Fig 7 E).

The horizontal axis (Fig 7 A) represents time.

The vertical axes (Fig 7 B) indicate the value of the represented parameters. Two scales of values can be used: one on the left; one on the right.

The names of the represented parameters are displayed above the chart (Fig 7 C). The colour of the font corresponds to the color used in the chart to draw the trend of the parameter.

- Tap the Chart to dynamically display the values corresponding to the indicated position. A pop-up window opens (Fig 8).

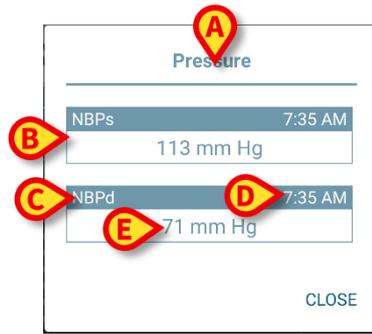


Fig 8

The title of the pop-up window (Fig 8 A) is the same of the Chart.

For each parameter a box is displayed (Fig 8 B), reporting the parameter name (Fig 8 C), the timestamp of the measure (Fig 8 D), the parameter value (Fig 8 E). The unit of measure of each parameter is displayed beside the parameter value.

- Touch the **Close** button to close the pop-up.
- Touch the Chart and drag it left or right to draw a vertical cursor-bar (Fig 9 A).

The values acquired at the same time are highlighted in the other Charts on the page. A notification window on the bottom (Fig 9 B) displays the values corresponding to the selected time-

- Touch the **Close** button (Fig 9 C) to close the notification window.
- Touch the **Info** button (Fig 9 D) to open the pop-up window detailing the parameters information (Fig 8).



Fig 9

- Touch the up-arrow button (Fig 7 D) to collapse the Chart.



Refer to the document CFG ENG On Line Validation to customize font and colors of the Charts in the On Line Mobile module.

Alternative theme

During configuration, a different theme (white background) can be chosen for the On Line Mobile charts. See Fig 10 for an example. Refer to the system administrators for this option.



Fig 10

7.1.2. The Bottom Navigation Bar

The On Line Mobile Navigation Bar (Fig 11) contains tools making it possible to navigate the Charts.

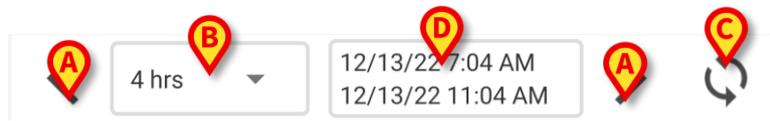


Fig 11

- Use the arrow buttons (Fig 11 A) to scroll the screen contents left and right.
- Select in the interval menu (Fig 11 B) the time span to be displayed. The interval menu is shown in Fig 12.

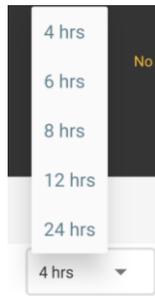


Fig 12

- Touch the **Reload now** button (Fig 11 C) to reload the screen contents.

The time range box (Fig 11 D) indicates the time range currently displayed on the chart.

7.2. Grid

A "Grid" page (Fig 13) displays in grids the data available for the selected patient.



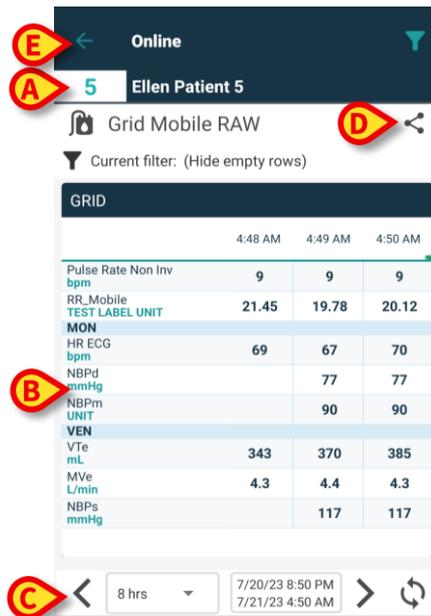


Fig 13

- Bed number and patient name are displayed on top (Fig 13 A).
- The grids are displayed in the page body (Fig 13 B - Grids are described in section 7.2.1.).
- A Bottom Navigation Bar (Fig 13 C) allows to navigate the grids back and forth in time. The Navigation Bar is described in section 7.2.2.
- the  icon indicated in Fig 13 D allows to share the available data. To do that:
 - Tap the  icon. The following window opens (Fig 14):

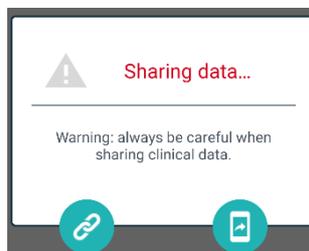


Fig 14

The  button copies the Digistat Mobile link to the current page to the clipboard and allows to share it through the apps available on the handheld device.

The  button allows to share the current page screenshot.

 *The "Share" functionality can be enabled depending on the local configuration. Refer to the system administrators for the available configuration options.*

- Tap the  icon (Fig 13 F) to filter the screen contents. See section 7.3.2 for the filters description.
- Tap the **Back** button (Fig 5 E) to return to the Pages List Screen (Fig 4).

A message informs the user if there are no grids configured for the selected patient.

A message informs the user when the time switches from standard time to daylight saving time and vice versa.

7.2.1. Grid description

The values of the configured parameters are displayed in grids (Fig 15).

Current filter: (Hide empty rows)

GRID			
	4:48 AM	4:49 AM	4:50 AM
Pulse Rate Non Inv bpm	9	9	9
RR_Mobile TEST LABEL UNIT	21.45	19.78	20.12
MON			
HR ECG bpm	69	67	70
NBPd mmHg		77	77
NBPm UNIT		90	90
VEN			
VTe mL	343	370	385
MVe L/min	4.3	4.4	4.3
NBPs mmHg		117	117

Fig 15

The grid name is on top (Fig 15 **A**). The first column displays the name of the parameters (Fig 16 **A**) and, on the same row, the corresponding unit of measure (Fig 16 **B**).

	4:48 AM
Pulse Rate Non Inv bpm	9
RR_Mobile TEST LABEL UNIT	21.45
MON	
HR ECG bpm	69
NBPd mmHg	

Fig 16

The following columns correspond to the acquisition of a set of parameters. Acquisition rate is commonly one minute (configurable). The date and time at which the set of data is acquired are displayed on top of the column (Fig 17 **A**). Therefore, each column contains the values of all the parameters acquired at a certain time.

C Current filter: (Hide empty rows)

GRID			
	A 4:48 AM	4:49 AM	4:50 AM
Pulse Rate Non Inv bpm	9	9	9
RR_Mobile TEST LABEL UNIT	21.45	19.78	20.12
MON			
HR ECG bpm	B 69	67	70
NBPd mmHg		77	77
NBPm UNIT		90	90
VEN			
VTe mL	343	370	385
MVe L/min	4.3	4.4	4.3
NBPs mmHg		117	117

Fig 17

The values of a parameter can be read on the corresponding row. Therefore, each row shows the parameter changes in time. In Fig 17 **B**, for example, the HR ECG values are circled.

During configuration, parameters can be grouped to facilitate reading. The names of groups can be read on rows colored differently (Fig 18 **A** - in the example here shown MON is for Monitor, VEN is for Ventilator).

A MON			
HR ECG bpm	69	67	70
NBPd mmHg		77	77
NBPm UNIT		90	90
A VEN			
VTe mL	343	370	385
MVe L/min	4.3	4.4	4.3
NBPs mmHg		117	117

Fig 18

If a filter is active, the text placed alongside the  icon indicates the current filter (Fig 17 **C**).

7.2.2. The Bottom Navigation Bar

The Navigation Bar on the bottom (Fig 19) contains tools making it possible to navigate the grids.

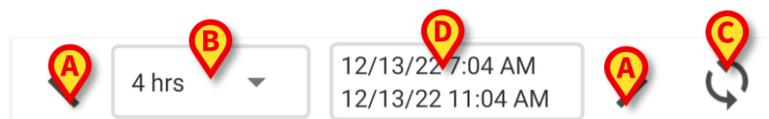


Fig 19

- Use the arrow buttons (Fig 19 **A**) to scroll the screen contents left and right.

- Select in the interval menu (Fig 19 B) the time span to be displayed. The interval menu is shown in Fig 20.



Fig 20

- Touch the **Reload** button (Fig 19 C) to update the screen contents.

The time range box (Fig 19 D) indicates the time range currently displayed on the grid.

7.3. Microbiology

The microbiology data is displayed in a dedicated type of page. Fig 21 shows an example.

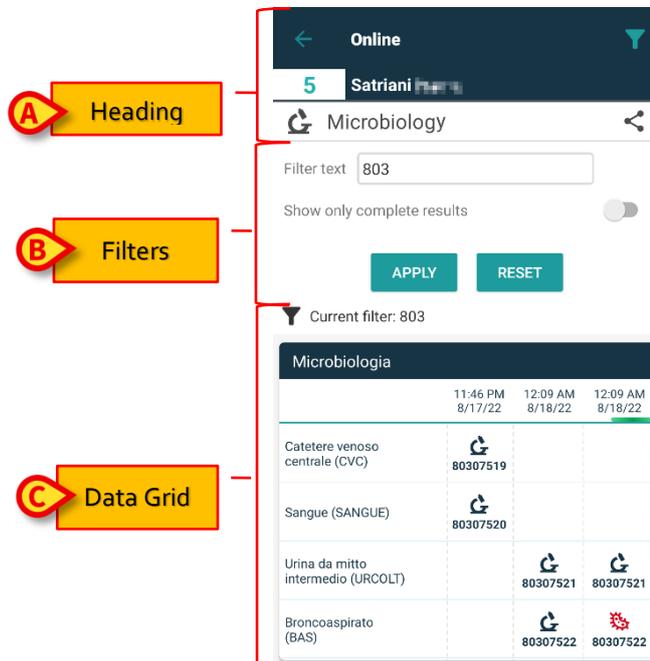


Fig 21

The page is divided into three areas:

- Heading, described in section 7.3.1.
- Filters, described in section 7.3.2. Use the  icon to display the filter area (Fig 22 D). Use the **Reset** button to hide it (Fig 24 D).
- Data grid, described in section 7.3.3.

7.3.1. Heading

Fig 22 shows the heading area.

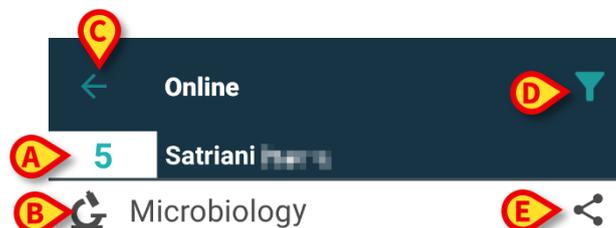


Fig 22

Bed number and patient name are displayed on top (Fig 22 A).

The name of the page is indicated in Fig 22 B.

The **Back** button (Fig 22 C) allows to go back to the Pages List Screen (Fig 4).

The  icon (Fig 22 D) makes it possible to display the filter area.

The  icon indicated in Fig 22 E makes it possible to share the available data.

To do that:

- Tap the  icon. The following window opens (Fig 23):

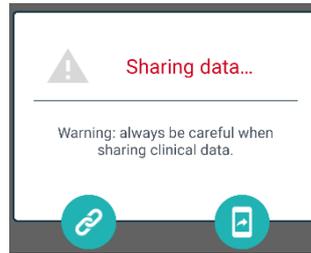


Fig 23

The  button copies the Digistat Mobile link to the current page to the clipboard and allows to share it through the apps available on the handheld device.

The  button allows to share the current page screenshot.



The "Share" functionality can be enabled depending on the local configuration. Refer to the system administrators for the available configuration options.

7.3.2. Filters

Use the  icon to display the filter area (Fig 22 D). Use the **Reset** button to hide it (Fig 24 D). Fig 24 shows the filters area.

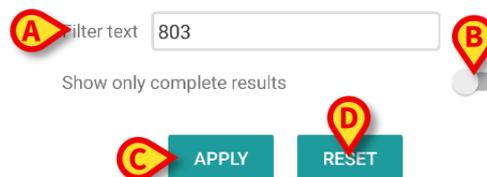


Fig 24

A text filter is available (Fig 24 A). Type here a search string to display only the items whose name contains the specified string ("803" in the figure).

Select the "Show only complete results" switch to display, in the grid, only the exams that were flagged as completed (Fig 24 B).



The data grid also displays results with partial data, referring to ongoing exams. Some exams take time to be completed: for these exams the results are progressively added when available. The "Show only complete results" switch allows to display, in the grid, only the exams that were completed.

Tap the **Apply** button to apply the filter to the data in the grid. Tap the **Reset** button to clear the filters and hide the filters area (Fig 24 C - D).

7.3.3. Data Grid

Fig 25 shows the data area.



Current filter: 803

	11:46 PM 8/17/22	12:09 AM 8/18/22	12:09 AM 8/18/22
Catetere venoso centrale (CVC)	 80307519		
Sangue (SANGUE)	 80307520		
Urina da mitto intermedio (URCOLT)		 80307521	 80307521
Broncoaspirato (BAS)		 80307522	 80307522

Fig 25

The microbiology data is displayed in a grid. The columns indicate the date/time of the sample acquisition. The rows refer to the different types of exams. So, for example, the cell indicated in Fig 25 **A** refers to the available results for a Blood exam acquired at 11:46 PM on the 8/17/22.

If two different columns are indicated by the same date and time, it means that they refer to different updates of the same exam. The rightmost column contains the most recent update. Use the "Show only complete results" switch on the filters area to display, in the grid, only the exams that were completed (Fig 24 **B**).

The  icon refers to results not indicating presence of germs. The  icon refers to results indicating presence of germs. The number placed below the icon is the specific exam id.

The "current filter" indication (Fig 25 **B**) tells that the results currently displayed are filtered (that means that only part of the available results is displayed).

- Tap an icon to open a window containing the detailed results (Fig 26).

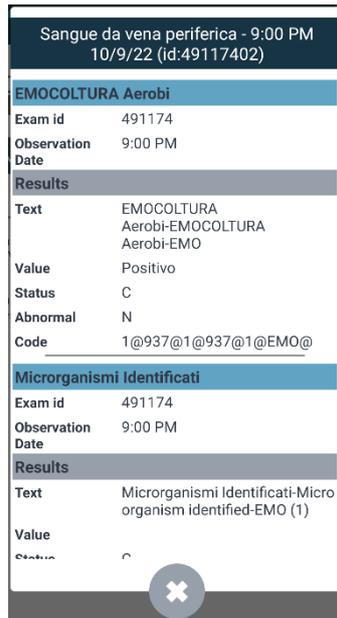


Fig 26

7.4. Laboratory

The laboratory data is displayed in a dedicated type of page. Fig 27 shows an example.

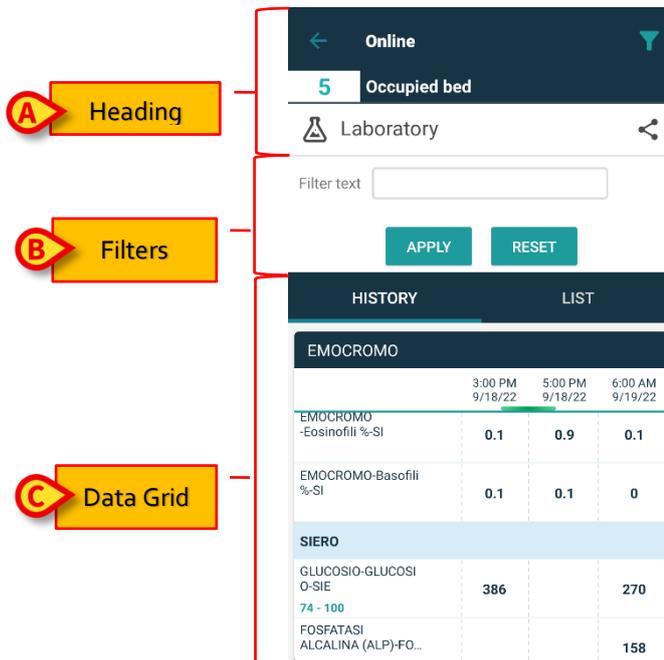


Fig 27

The page is divided into three areas:

- Heading, described in section 7.3.1.
- Filters, described in section 7.3.2. Use the  icon to display the filter area (Fig 22 D). Use the **Reset** button to hide it (Fig 24 D).
- Data grid, described in section 7.4.1.

7.4.1. Laboratory - Data grid

Two display modes are available for laboratory data (Fig 28 A - B):

- History (left), described in section 7.4.1.1.
- List (right), described in section 7.4.1.2.

“History” tab is displayed by default when entering in a Laboratory page type.

- Tap on History or List tab to switch to the related display mode.

EMOCROMO			
	6:00 AM 9/19/22	6:00 AM 9/19/22	6:00 AM 9/19/22
Sangue intero			
EMOCROMO-Neutrofi li-SI 2 - 8	8.37	10.24	15.07
EMOCROMO-Linfociti -SI 1.5 - 4	1.75	0.8	0.76
EMOCROMO-Monocit i-SI 0.1 - 1	1.28	1.04	1.14
EMOCROMO-Eosinofi li-SI 0.1 - 0.5	0.01	0.25	0.24
EMOCROMO-Basofili- SI 0 - 0.2	0	0.05	0.02
EMOCROMO-Mielocit i-SI	?	N V	N V

EMOCROMO 8/19/22 6:00 AM		
PL.Citrato * T. Celeste*		
PTT (TEMPO di TROMBOPLASTINA PARZIALE)-Ratio-COG 0.8 - 1.2	0.91	?
FIBRINOGENO-FIBRINOGENO-COG 150 - 400	621	
PT (TEMPO di PROTROMBINA)-Tempo di protrombina-COG	14.9	
PT (TEMPO di PROTROMBINA)-Tasso di protrombina-COG 70 - 120	63	
PT (TEMPO di PROTROMBINA)-INR-COG	1.38	?
Sangue intero		
EMOCROMO-Neutrofilii-SI 2 - 8	23.97	
EMOCROMO-Linfociti-SI		

Fig 28

7.4.1.1. Data grid - History

Fig 29 shows the “History” mode.

EMOCROMO			
	6:00 AM 9/19/22	6:00 AM 9/19/22	6:00 AM 9/19/22
Sangue intero			
EMOCROMO-Neutrofi li-SI 2 - 8	8.37	10.24	15.07
EMOCROMO-Linfociti -SI 1.5 - 4	1.75	0.8	0.76
EMOCROMO-Monocit i-SI 0.1 - 1	1.28	1.04	1.14
EMOCROMO-Eosinofi li-SI 0.1 - 0.5	0.01	0.25	0.24
EMOCROMO-Basofili- SI 0 - 0.2	0	0.05	0.02
EMOCROMO-Mielocit i-SI	?	N V	N V

Fig 29

The “History” mode provides an overview, chronologically ordered, of all the results available for the current selected patient in a configured time range.

Each column represents an exam. For example, the column indicated in Fig 29 **A** contains the results obtained at 6:00 AM on the 9/19/22.

Each row refers to an examination item. For example, the row indicated in Fig 29 **B** contains all the results obtained for "Emocromo-Linfociti" (Blood count - Lymphocytes). Below each examination item name, the value range is displayed if this information is available (Fig 29 **C**).

A cell is therefore the value of a certain item in the context of a specific exam, indicated by the results date and time. For example, the value 0.8 indicated in Fig 29 **D** is the value of "Blood count - lymphocytes" in the context of the results obtained at 6:00 AM on the 9/19/22.

The light-blue rows are group headings, naming a group of kindred items. For example: "Sangue intero" (Whole blood) indicated in Fig 29 **E**. All the white rows placed below a light-blue row belong to the same group, whose name is displayed on the light-blue row.



The composition of groups can be configured on the Online Web configuration tool. Refer to the system administrators for the available configuration options. See the document CFG ENG Online Validation for more information.

All the possible items are listed in the "History" view. If an item is not relevant for an exam, then, in the corresponding row, the cell related to that item is empty.

- Tap a cell to display more detailed information for a value (see example in Fig 30):



Fig 30

7.4.1.2. Data grid - List

Fig 31 shows the "List" mode.

Item	Value	Range	Exam
EMOCROMO 8/19/22 6:00 AM			
PL.Citrato * T. Celeste*			
PTT (TEMPO di TROMBOPLASTINA PARZIALE)-Ratio-COG	0.91	0.8 - 1.2	
FIBRINOGENO-FIBRINOGENO-COG	621	150 - 400	
PT (TEMPO di PROTROMBINA)-Tempo di protrombina-COG	14.9		
PT (TEMPO di PROTROMBINA)-Tasso di protrombina-COG	63	70 - 120	
PT (TEMPO di PROTROMBINA)-INR-COG	1.38		?
Sangue intero			
EMOCROMO-Neutrofili-SI	23.97	2 - 8	
EMOCROMO-Linfociti-SI			

Fig 31

The "List" mode displays one exam at a time.

The name and time of the exam are displayed on top (Fig 31 A).

The rows in the table represent the examination items (Fig 31 B).

Below each examination item name, the value range is displayed if this information is available (Fig 31 C).

The light-blue rows are group headings, naming a group of kindred items. For example: "Sangue intero" (Whole blood) indicated in Fig 31 D. All the white rows placed below a light-blue row belong to the same group, whose name is displayed on the light-blue row.



The composition of groups can be configured on the Online Web configuration tool. Refer to the system administrators for the available configuration options. See the document CFG ENG Online Validation for more information.

The light-blue column contains the result values of the examination items (Fig 31 E). Each value refers to the item placed on the same row.

The column indicated in Fig 31 F contains, when available, the units of measure.

When the page is selected, the most recent result is displayed by default.

- Scroll the "List" mode page left and right to display previous and next exams.
- Tap a cell to display more detailed information for a value (see example in Fig 30):



Fig 32