Fluid Balance Web User Manual

Version 6.0

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Contents

Fluid Balance

For information about the Product environment, precautions, warnings and intended use see USR ENG Digistat Care and/or USR ENG Digistat Docs (depending on the modules installed - for the Digistat Suite EU) or USR ENG Digistat Suite NA (for Digistat Suite NA). The knowledge and understanding of the appropriate document are mandatory for a correct and safe use of Fluid Balance Web, described in this document.

1. Introduction

Fluid Balance Web allows to document the patient's fluid balance by recording daily fluid input and output. The administered volumes can either be acquired automatically from the configured infusion devices or inserted manually by the clinical staff. The system calculates both partial and total balances. The "in" and "out" items are configurable according to the department's needs.

2. Module selection

To select the Fluid Balance Web module

- Click the corresponding icon -  - on the lateral bar.

If no patient is selected the module's functionalities are not available. A specific notification is provided in this case: "Fluid Balance Web requires a patient selected". When a patient is selected the screen displays the selected patient's data.

3. Patient selection

To select a patient,

- Click the **Select Patient** button on the Control Bar (Fig 1 **A**).

Fig 1

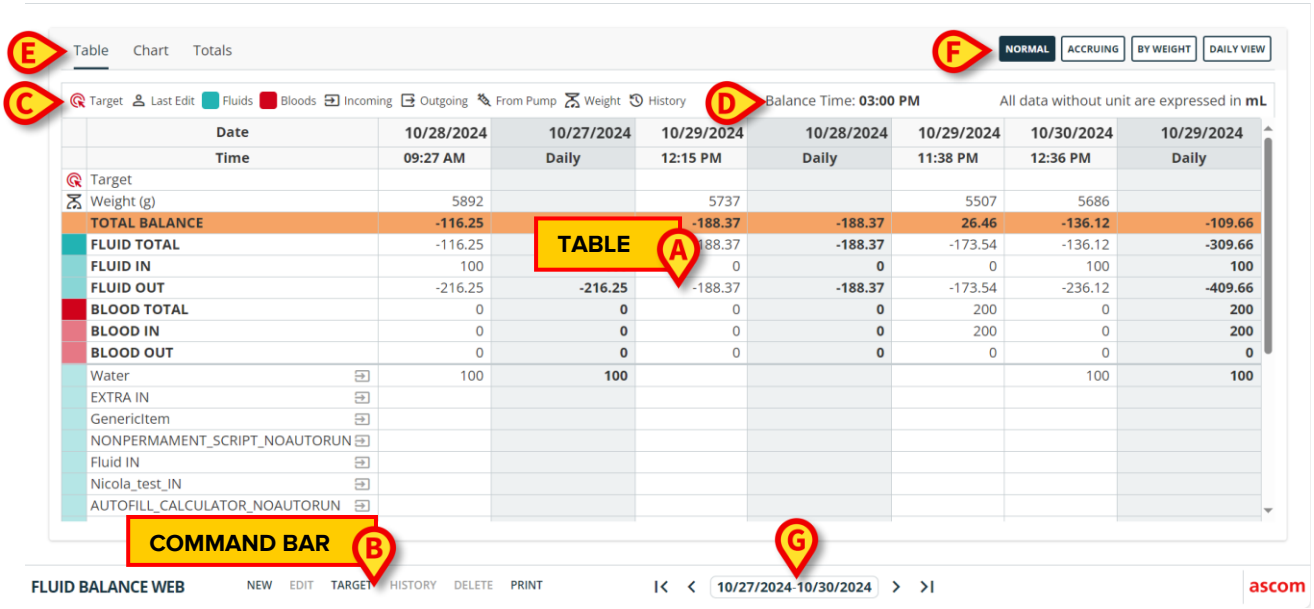
The Patient Explorer Web module opens. See the Patient Explorer Web user manual (*USR ENG Patient Explorer Web*) for instructions.

Other modules can be configured for the patient selection in place of Patient Explorer Web, depending on the configuration of the Digistat Web Suite. If this is the case, see the specific documentation for instructions.

When a patient is selected, the data displayed on the screen refers to the selected patient (see Fig 2 for an instance).

4. Main screen

The Fluid Balance main screen is a table (Fig 2 **A** - see section 5 for the description) displaying all the “in” and “out” values of the fluids to and from the patient, providing at the same time total and partial fluid balances.
A command bar, indicated in Fig 2 **B**, allows to trigger different procedures, described in section 8.



Date	10/28/2024	10/27/2024	10/29/2024	10/28/2024	10/29/2024	10/30/2024	10/29/2024
Time	09:27 AM	Daily	12:15 PM	Daily	11:38 PM	12:36 PM	Daily
Target							
Weight (g)	5892		5737		5507	5686	
TOTAL BALANCE	-116.25		-188.37	-188.37	26.46	-136.12	-109.66
FLUID TOTAL	-116.25		-188.37	-188.37	-173.54	-136.12	-309.66
FLUID IN	100		0	0	0	100	100
FLUID OUT	-216.25	-216.25	-188.37	-188.37	-173.54	-236.12	-409.66
BLOOD TOTAL	0	0	0	0	200	0	200
BLOOD IN	0	0	0	0	200	0	200
BLOOD OUT	0	0	0	0	0	0	0
Water	100	100				100	100
EXTRA IN							
GenericItem							
NONPERMAMENT_SCRIPT_NOAUTORUN							
Fluid IN							
Nicola_test_IN							
AUTOFILL_CALCULATOR_NOAUTORUN							

Fig 2

A legend explains the possible icons and the color code used to define the balance items (Fig 2 **C**, section 4.1).

The balance closing time is indicated in Fig 2 **D**. See section 4.2 for the explanation.

For the acquired values, three different views are available for the main page (Fig 2 **E**):
- Table view (Fig 2, described in section 5).
- Chart view (Fig 18, described in section 6).
- Totals view (Fig 51, described in section 10).

Use the selector indicated in Fig 2 **E** to change view.

Four different balance display modes are possible (Fig 2 **F**):
- Normal (Fig 2, described in section 5).
- Accruing (Fig 46 and Fig 47, described in section 9).
- By Weight (described in section 11).
- Daily view (described in section 12).

Use the selector indicated in Fig 2 **F** to change display mode.

The time range selector indicated in Fig 2 **G** allows to select the date range displayed on screen. See section 7 for the description.

4.1. Legend

The legend makes it possible to understand the meaning of the icons and the colors characterizing the various balance items (Fig 2 **C**, Fig 3).

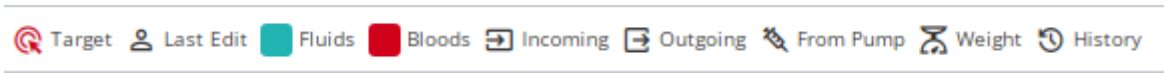


Fig 3

Target – indicates the daily target. See section 13.
Last Edit – indicates the acronym of the user who last edited a fluid balance entry.
Fluids – indicates the items belonging to the "Fluids" class.
Bloods – indicates the items belonging to the "Blood" class.
Incoming – indicates the input items.
Outgoing – indicates the output items.
From Pump - indicates the values automatically acquired from the infusion pumps.
Weight – indicates the weight of the selected patient.
History – indicates that the fluid balance item has been changed and has a history of values entered in the past.

4.2. Balance Time

The balance time is displayed on the main page (Fig 2 **D**, Fig 4).

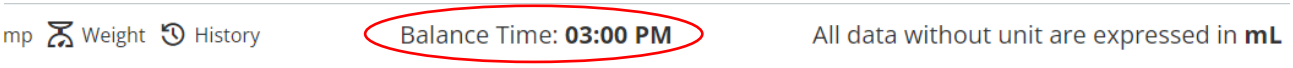


Fig 4

The balance time is the time of the day at which the daily balance is closed (usually once in 24 hours). See section 5.1.1.

4.3. Unit of measure indication

An indication informs that all data not having an explicit unit of measure are expressed in mL (Fig 5).

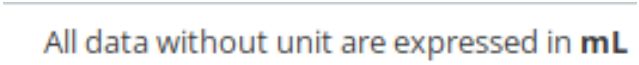
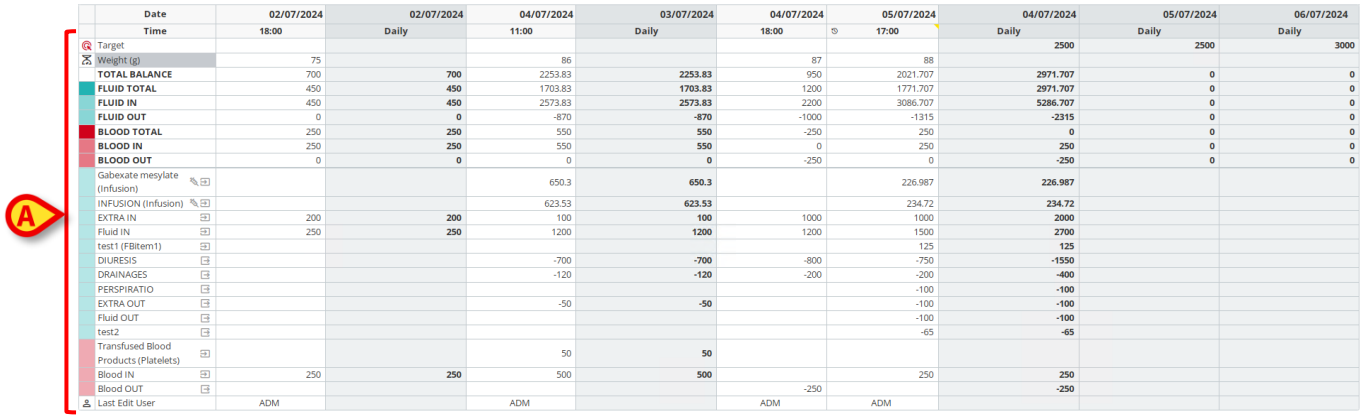


Fig 5

5. Table description

The table (Fig 6) displays all the “in” and “out” values of the fluids to and from the patient, providing at the same time total and partial fluid balances.



	Date	02/07/2024	02/07/2024	04/07/2024	03/07/2024	04/07/2024	05/07/2024	04/07/2024	05/07/2024	06/07/2024
	Time	18:00	Daily	11:00	Daily	18:00	17:00	Daily	Daily	Daily
	Target							2500	2500	3000
	Weight (g)	75		86		87	88			
	TOTAL BALANCE	700	**700**	2253.83	**2253.83**	950	2021.707	**2971.707**	**0**	**0**
	FLUID TOTAL	450	**450**	1703.83	**1703.83**	1200	1771.707	**2971.707**	**0**	**0**
	FLUID IN	450	**450**	2573.83	**2573.83**	2200	3086.707	**5286.707**	**0**	**0**
	FLUID OUT	0	**0**	-870	**-870**	-1000	-1315	**-2315**	**0**	**0**
	BLOOD TOTAL	250	**250**	550	**550**	-250	250	**0**	**0**	**0**
	BLOOD IN	250	**250**	550	**550**	0	250	**250**	**0**	**0**
	BLOOD OUT	0	**0**	0	**0**	-250	0	**-250**	**0**	**0**
	Gabexate mesylate (Infusion)			650.3	**650.3**		226.987	**226.987**		
	INFUSION (Infusion)			623.53	**623.53**		234.72	**234.72**		
	EXTRA IN	200	**200**	100	**100**	1000	1000	**2000**		
	Fluid IN	250	**250**	1200	**1200**	1200	1500	**2700**		
	test1 (FBitem1)						125	**125**		
	DIURESIS			-700	**-700**	-800	-750	**-1550**		
	DRAINAGES			-120	**-120**	-200	-200	**-400**		
	PERSPIRATIO						-100	**-100**		
	EXTRA OUT			-50	**-50**		-100	**-100**		
	Fluid OUT						-100	**-100**		
	test2						-65	**-65**		
	Transfused Blood Products (Platelets)			50	**50**					
	Blood IN	250	**250**	500	**500**		250	**250**		
	Blood OUT					-250		**-250**		
	Last Edit User	ADM		ADM		ADM	ADM			

Fig 6

5.1. How to read the table - Rows

The names of the fluid balance items whose values are specified in the table are on the left (Fig 6 **A**). The first cell of every row either displays an icon indicating the type of information contained in the row or shows the color of the class to which the balance item belongs (see the Legend - section 4.1 - for more information).

5.1.1. Date

The first row indicates the date to which the values on the table refer.

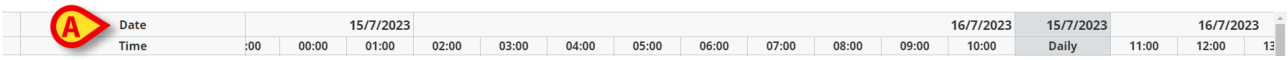


Fig 7

Fluid Balance Web considers a 24-hour period (configurable) as one “clinical day”. If the “clinical day” begins, as in the example here displayed, at 11:00 o’clock (configurable), then all the values recorded during the 24 hours going from 11:00 to 11:00 are assigned to the same daily total balance calculation. i.e.: given this configuration, the balance of a specific day starts at 11:00 a.m. and ends at 11:00 a.m. of the following day. Therefore, for example, a value inserted at 10:48 a.m. participates to the balance of the previous day, while a value inserted at 11:07 is part of the balance of the following day. The values are indicated under the actual date/time at which they are recorded or at the date/time assigned by the user (see section 8.1 for the procedure).

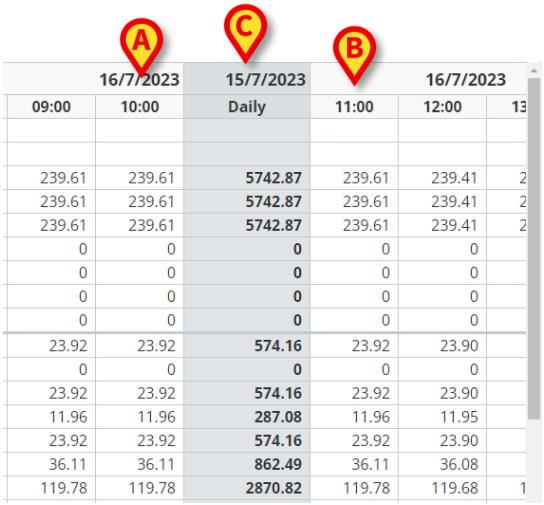


Fig 8

See Fig 8 for another example. The values indicated in Fig 8 **A** were acquired at 10:00 on the 16/7/2023. The values indicated in Fig 8 **B** were acquired at 11:00 on the 16/7/2023. The column indicated in Fig 8 **C** displays the daily total balances of the 15/7/2023 (calculated at 11:00 a.m. of the 16/7). Therefore, the values indicated in Fig 8 **A** and Fig 8 **B** belong to the daily total balance calculations of two different days (Fig 8 **A** is part of the 15/7; Fig 8 **B** is part of the 16/7).

5.1.2. Time

The second row displays the time of every fluid balance entry.

Fig 9

Time is automatically indicated with every fluid balance entry. See section 8.2 for the fluid balance data entry procedure, including the time specification procedures. If a small yellow triangular mark is displayed inside the “Time” cell, it means that there are user notes referring to the balance. The “Time” cell of the column displaying the daily total balances is labelled as “Daily”.

5.1.3. Target

The third row displays the daily target, i.e. the target balance indicated for the patient.

Fig 10 - Target

The daily target can be specified both for the current and for the following day. See paragraph 13 for the daily target setting procedure.

5.1.4. Weight

The fourth row displays the weight of the selected patient, if set at data entry time.

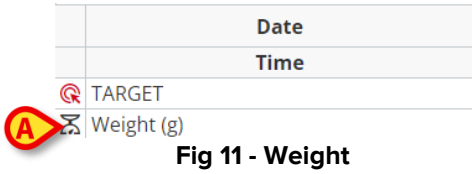


Fig 11 - Weight

See section 8.1 for the patient weight specification procedure.

5.1.5. Total balances

Three rows, characterized by different shades of blue, display the total balances (Fig 12).

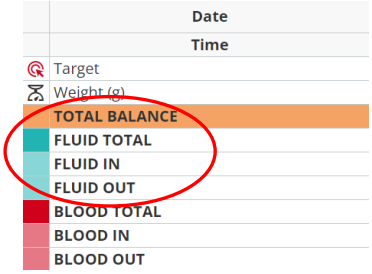


Fig 12 - Total Balances

These are: the total balance (overall total, considering all the in and out items), the fluid total (algebraic sum of FLUID INs and FLUID OUTs), the total “FLUID INs” and the total “FLUID OUTs”.

5.1.6. Blood balance

Three rows, characterized by different shades of red, display the blood balances (Fig 13).

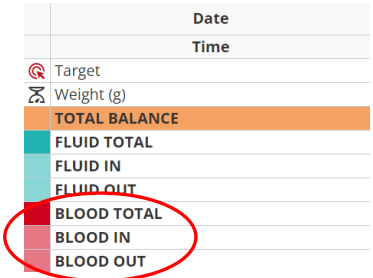


Fig 13 - Blood balance

These are: the blood total (algebraic sum of BLOOD INs and BLOOD OUTs), the total BLOOD INs and the total BLOOD OUTs.

5.1.7. Detailed IN and OUT values

The rows marked with the icon display the fluids OUT values (Fig 14 **A**).

The rows marked with the icon display the fluids IN values (Fig 14 **B**).

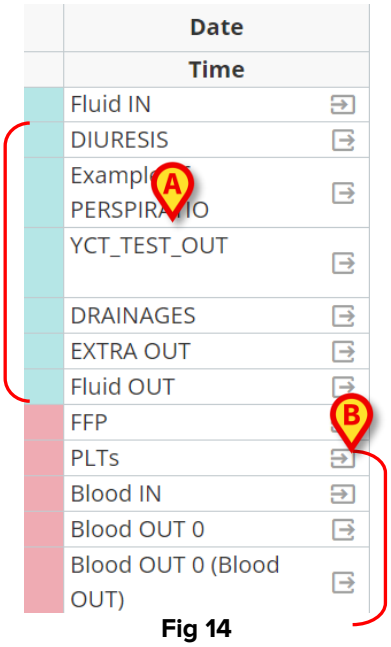


Fig 14

If Infusion pumps are associated and connected to a patient, the values coming from them are automatically acquired and indicated with the  *icon.*

5.1.8. Last edit user

The last row displays the acronym of the last user who edited the fluid balance (the specific column - Fig 15).

Fig 15

5.2. How to read the table - columns

A column is added to the table at each fluid balance entry. That is: every time the procedure triggered by the **New** button is completed, see section 8.2.
The first cell of every column displays, by default, the time the column was added. The time displayed by default, therefore, is the data entry time (Fig 16 **A**). When entering data, it is possible to edit the time of a fluid balance (in case, for example, it was not possible to record a certain value at the actual administration time - see section 5.1.2 for the procedure). In these cases, the first cell displays the time specified by the user. Columns are displayed in chronological order according to the time displayed in the first cell.

Date							8/29/2023	8/28/2023	8/30/2023	8/30/2023
Time	03:30 AM	04:30 AM	05:30 AM	06:30	07:30 AM	08:30 AM	09:30 AM	Daily	11:43 AM	Daily
TARGET										
Weight (g)	87203	97059	74860	82641	76018	85007	70161		23	
TOTAL BALANCE	-3040	-3040	-3040	-3040	-3040	-3040	-3040	**-75900**	454.68	**454.68**
FLUID TOTAL	-3040	-3040	-3040	-3040	-3040	-3040	-3040	**-75900**	454.68	**454.68**
FLUID IN	0	0	0	0	0	0	0	**100**	257	**257**
FLUID OUT	-3040	-3040	-3040	-3040	-3040	-3040	-3040	**-76000**	197.68	**197.68**
BLOOD TOTAL	0	0	0	0	0	0	0	**0**	0	**0**
BLOOD IN	0	0	0	0	0	0	0	**0**	0	**0**
BLOOD OUT	0	0	0	0	0	0	0	**0**	0	**0**
EXTRA IN									23	**23**
EXTRA IN (EXTRA IN 2)										
EXTRA IN (EXTRA IN 3)										
GenericItem									234	**234**
GenericItem (Item)										
GenericItem (Item2)										
GenericItem (Item3)										

Fig 16 - Table

The total fluid values referring to a clinical day are displayed in a specific column, characterized by the grey background color, and indicated as “Daily” in the “time” cell (Fig 16 **B**). This column is automatically added when the clinical day begins and automatically updated during the day with the new values specifications. At daily balance closing time the column is “frozen”, and a new column is created for the new day. The daily balance closing time depends on a configuration parameter. In the configuration explained here the clinical day ends at 11:00. The last column of the table (Fig 16 **C**) displays the total values for the current day updated to the latest data entry.

The first cell of the “Daily” column displays the date to which the total balances refer (Fig 17 **A**); the second cell is marked as “Daily” (Fig 17 **B**); the third column displays, if specified, the daily target (Fig 17 **B**).

A	8/3/2023
B	Daily
C	4001
	995.22
	559.20
	581.20
	-22

Fig 17

5.3. Disable Daily Balance

A configuration option makes it possible to disable the daily balance calculation (i.e. the grey column indicated in Fig 16 **B**).
This display mode is enabled/disabled by the *DisableDailyBalance* system option. Refer to the DSO ENG System Options manual for more information.

6. Chart

The daily balances are also displayed in charts (Fig 18).

➢ Click the **Chart** tab (Fig 18 **A**) to display the fluid balance charts.

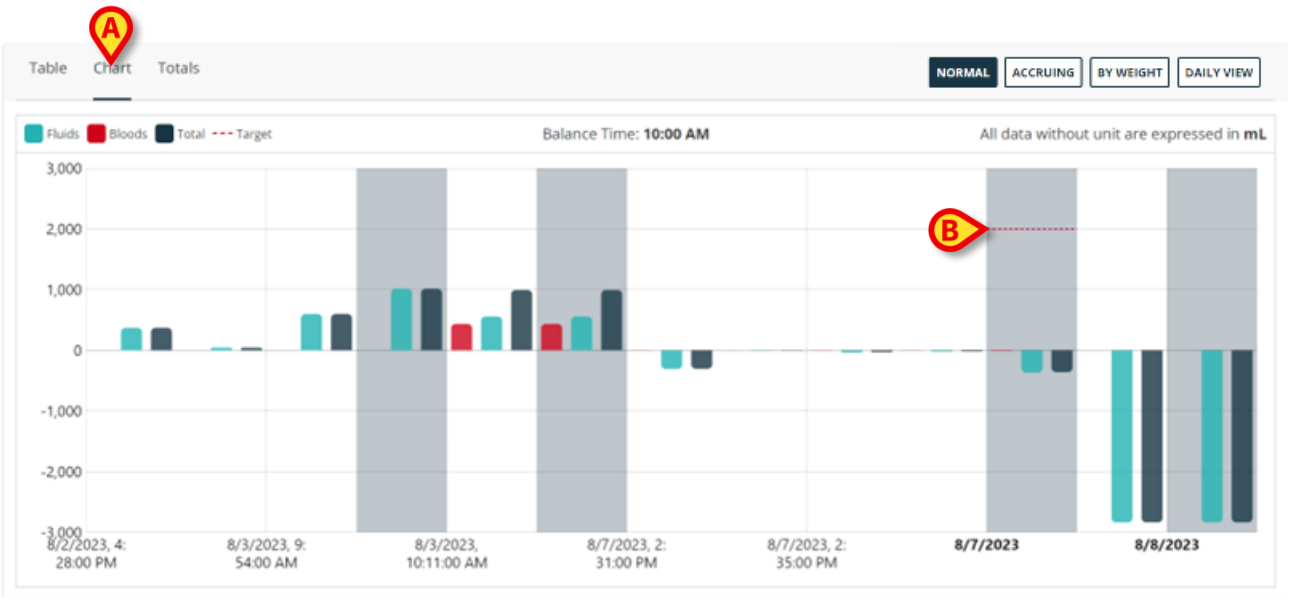


Fig 18

The fluid IN and OUT quantities can be read on the vertical axis (Fig 19 **A**).
The fluid balance date and time can be read on the horizontal axis (Fig 19 **B**).

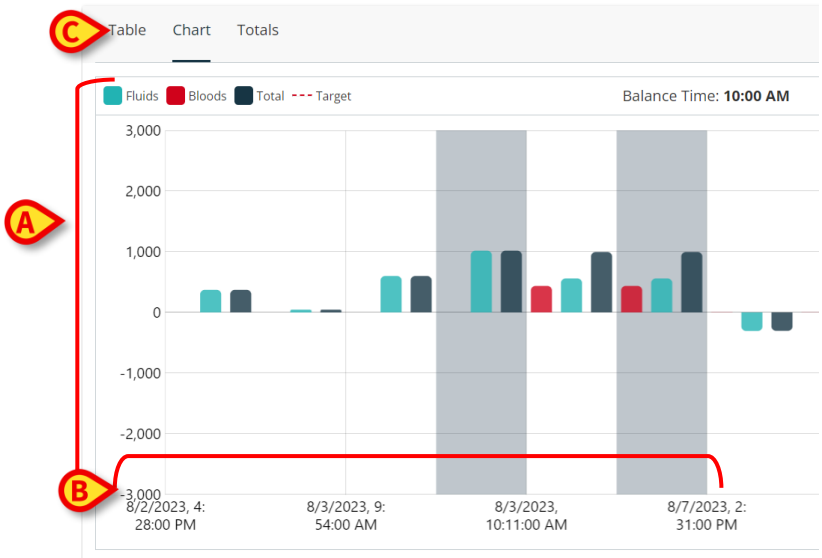


Fig 19 - Chart

The variations in the fluid balances are represented by vertical bars. The colors correspond to the colors set for the corresponding class, as explained by the legend (Fig 19 **C**). The bars above the 0 represent fluid INs, the bars below the 0 represent fluid OUTs. A red dotted line on the chart indicates the daily target, if set (Fig 18 **B,** Fig 20 **A**).

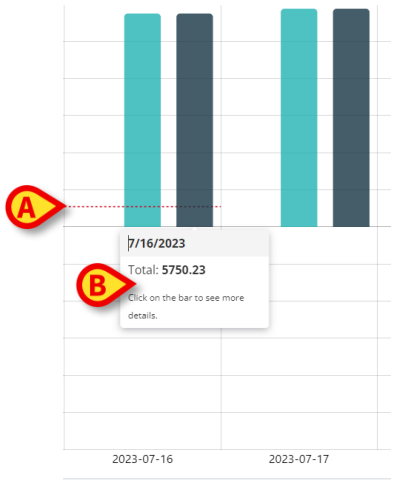


Fig 20

Move the mouse pointer on one of the bars in the chart to display a tooltip with additional information (Fig 20 **B**).

- Click the tooltip to display a window containing the corresponding balance details (Fig 21).

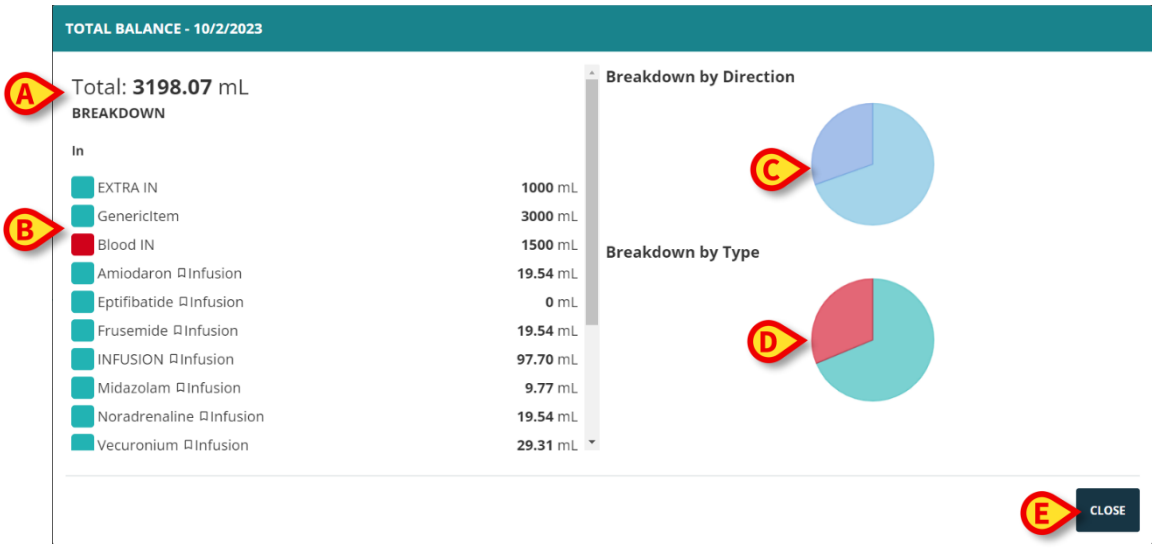


Fig 21

The total is displayed in the top-left corner (Fig 21 **A**).

The "Breakdown" column lists the details of all the IN and OUT items. Each item is listed together with its amount value (Fig 21 **B**).

"Breakdown by direction" shows separated INs and OUTs in a pie chart (Fig 21 **C**).

"Breakdown by type" shows separated Fluids and Blood in a pie chart (Fig 21 **D**).

Move the mouse pointer on the pie chart to read the corresponding percentages.

- Click the pie chart to emphasize the clicked chart portion (Fig 22 **A**) and highlight (Fig 22 **B**) the corresponding balance items on the list.

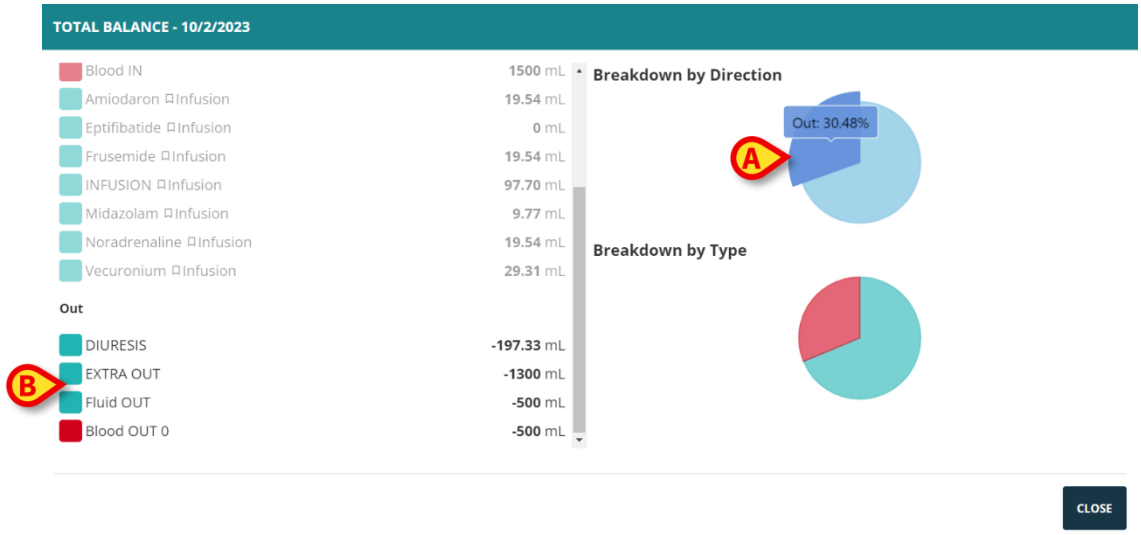


Fig 22

- Click **Close** (Fig 21 **E**) to close the window.

7. Time range selector

A time range selector is present on the lower-right corner of the main screen. It allows to display data referring to a chosen time range, independently of the type of view selected (table, chart, totals) or display mode (normal, accruing, by weight).

Fig 23 – Time range selector

The number of clinical days displayed is defined during configuration. The duration so defined is the “slot of days” that is displayed on a Fluid Balance Web screen.

Use the < and > arrows to move back (left) and forward (right) in the timeline, one “slot of days” per click. That is: if the configured slot is 7 days and the range selected is 21/08 – 28/08, then one click on the left arrow displays the range 14/08 – 21/08.

Use the |< and >| arrows to go to the beginning and end of the Fluid Balance relevant period (that usually is from patient admission to present moment, but that can be configured differently according to the healthcare structure needs; for example, a specific operating room marker can be taken as beginning or end of the relevant period).

8. The command bar

The buttons on the main screen command bar trigger different procedures, here briefly described. See the indicated sections for the full procedures.

Fig 24 - Command bar

New - use this button to insert a new balance entry (i.e. a new column in the table - see section 8.1).

Edit - use this button to edit the values of an already existing balance (see section 8.4).

Target - use this button to set or edit the daily target (see section 13).

History - use this button to display a window containing the history of the changes made to a selected entry.

Delete - use this button to delete one of the inserted balance entries (i.e. a column on the balance table - see section 8.5).

Print – use this button to download the existing configured print reports (see section 15).

8.1. Data entry: the “New” button

The **New** button on the command bar (Fig 25) allows data entry (see section 8.2 for the procedure).

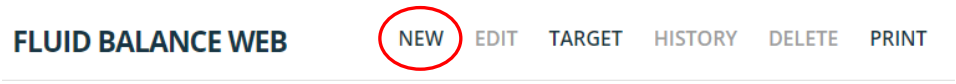


Fig 25 - Command Bar

- Click the **New** button to open the following window (Fig 26).

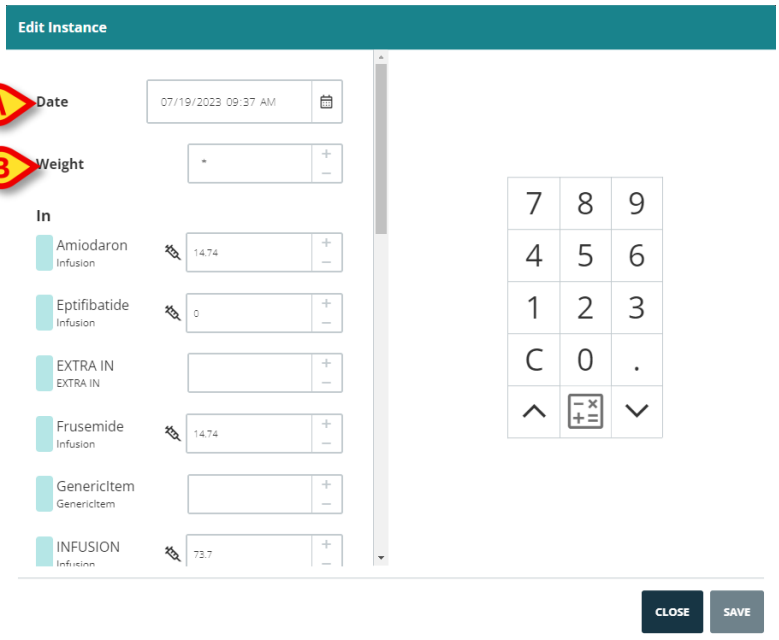


Fig 26 - data entry window

On the window the following tools are available:

8.1.1. Date/Time indicator (Fig 26 A)

Current date/time are here set by default, i.e. the time displayed here is the time at which the **New** button is clicked. If the time of data entry does not correspond to the actual balance time, it is possible to set a different date/time. To do that:

- click the  button.

A calendar/clock opens (Fig 27).

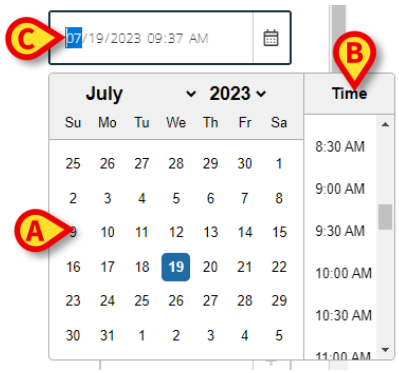


Fig 27

Select the date on the calendar (left - Fig 27 **A**); select the time on the list on the right (Fig 27 **B**). Date and time can also be typed manually in the field (Fig 27 **C**).

It is not possible to set a future date/time.

8.1.2. Patient weight indication (Fig 26 B)

The patient weight indication can be enabled or not by configuration. Three options are available:

- patient weight is not relevant, the “Weight” field is disabled;
- patient weight specification is optional;
- patient weight specification is mandatory.

The patient weight can also be acquired automatically by a configured source and automatically inserted in the “Weight” field at data entry time. The inserted value is still editable.

Refer to the system administrators for more information on configuration options.

8.1.3. Balance items (Fig 28 C)

The possible balance items are listed on the left of the window (Fig 28 **A**), grouped as INs and OUTs. To specify the value of a specific item, click the field placed alongside the name of the item and insert the value (either typing it on the workstation keyboard or using the virtual keyboard on screen - Fig 28 **B**).

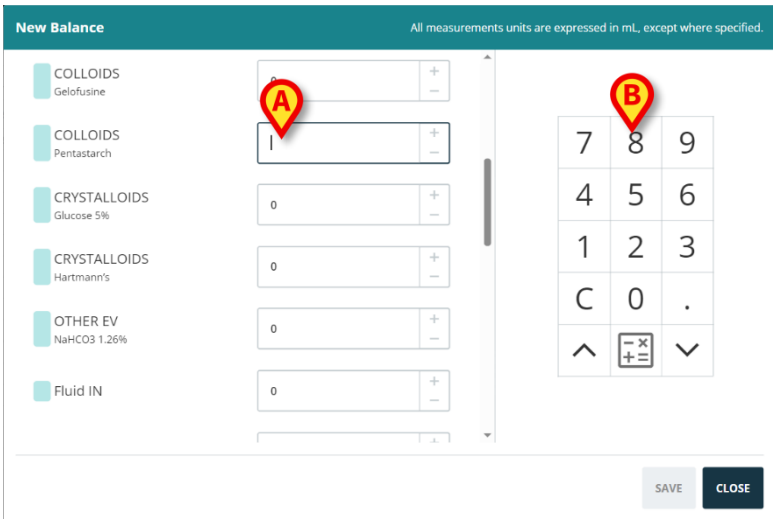


Fig 28

Different icons can be displayed alongside an item to provide additional information on the acquisition mode. These are:

- Calculation tool available, as in 

The Fluid Balance Web module provides a calculation engine that permits the creation of specific calculation tools for derived data (for instance: overall values resulting from various patient parameters). Refer to the system administrator for information related to this feature of the product or to CFG ENG Digistat Suite manual. In these cases, the calculation tool is triggered by the button on the numeric keyboard.

- Data from infusion pumps, as in 

- When this icon is present, the value is automatically acquired from the infusion pumps. Still editable by the user.

- Autorun, as in 

- When this icon is present, the value is automatically acquired and inserted at specific configured times. Still editable by the user.

The + and - buttons on the right of the field add or subtract 1 to the inserted value.

The balance items that are present for a specific patient are defined during configuration. New items can be added using the procedure described in section 8.3. The additional balance items remain available for other patients also, according to user permissions and location configuration.

8.1.4. Notes (Fig 29 A)

In the notes area it is possible to add any note as free text.

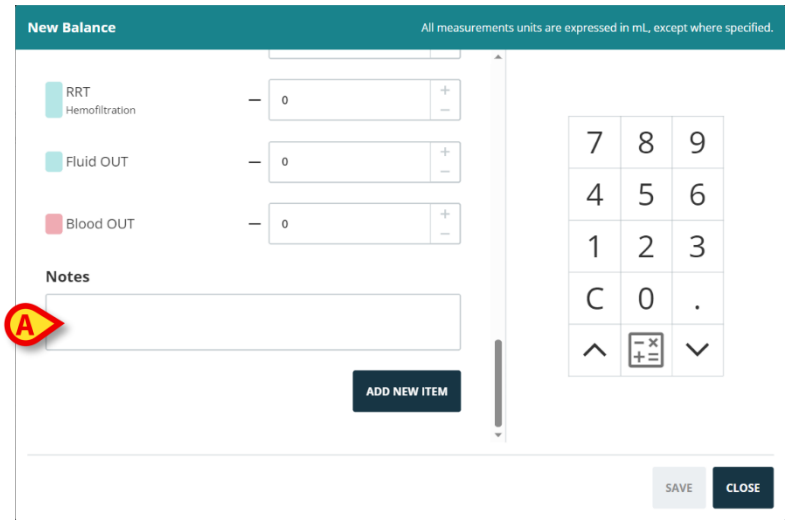


Fig 29

If there is a note referring to a balance specification, a yellow triangle is displayed on the balances table, in the “time” cell (Fig 30 **A**). Move the mouse pointer on the triangle to display a tooltip containing the note text. Click the triangle to read the full note on a dedicated window.

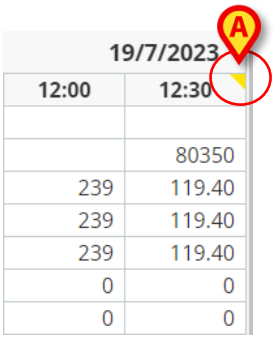


Fig 30

8.2. How to insert the balance values

This paragraph describes, using an example, the fluid balance values insertion procedure. Fig 31 shows a screen referring to a patient with no balance values yet.

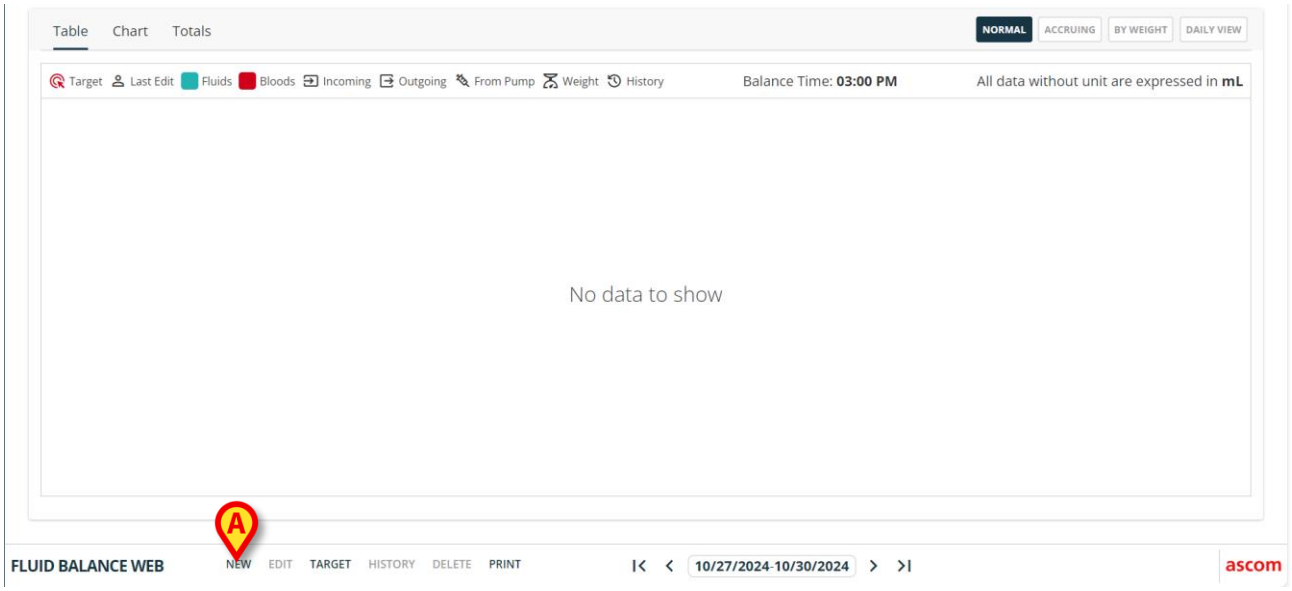


Fig 31

- Click the **New** button on the command bar (Fig 31 **A**). The following window opens (Fig 32).

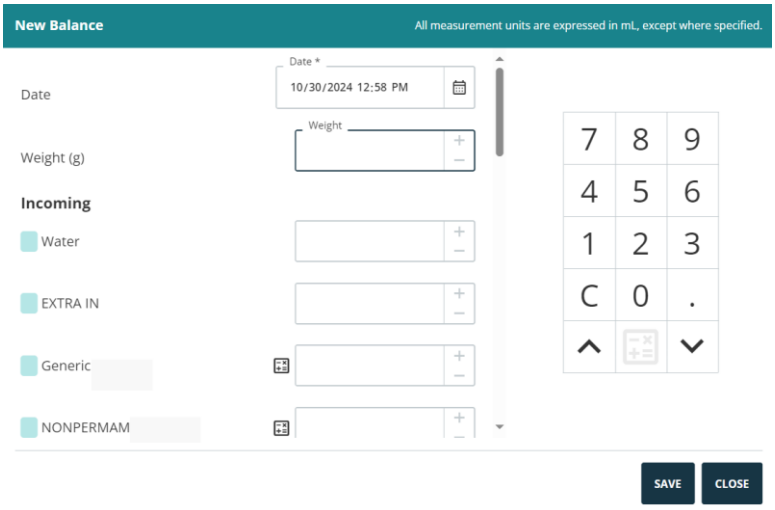


Fig 32

- Insert the balance values using either the workstation keyboard or the virtual keyboard on the right (Fig 33 **B**). Insert the patient's weight if required (Fig 33 **A**).

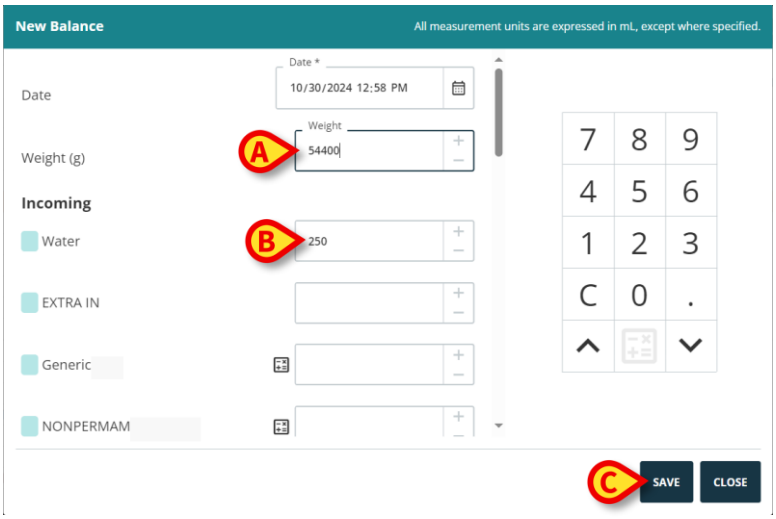
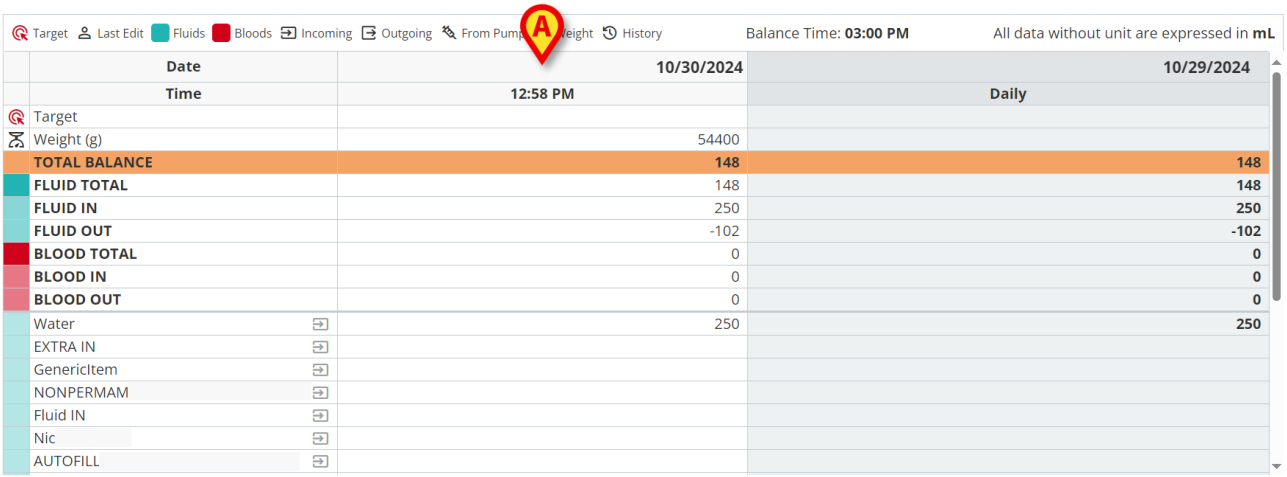


Fig 33

- Click **Save** (Fig 33 **C**). A column is added to the balance table (Fig 34 **A**).



Date	10/30/2024	10/29/2024
Time	12:58 PM	Daily
Target		
Weight (g)	54400	
TOTAL BALANCE	**148**	**148**
FLUID TOTAL	148	**148**
FLUID IN	250	**250**
FLUID OUT	-102	**-102**
BLOOD TOTAL	0	**0**
BLOOD IN	0	**0**
BLOOD OUT	0	**0**
Water	250	**250**
EXTRA IN		
GenericItem		
NONPERMAM		
Fluid IN		
Nic		
AUTOFILL		

Fig 34

Total and partial balances calculations are automatically performed.

8.3. How to add a balance item

The balance items listed on the data entry window are set during configuration. It is possible to add new items to those listed in the data entry window. To do that:

- Click the **Add New Item** button on the data entry window (Fig 35 **A**). The **Add New Item** button is at the end of the balance items list; to display it, it is necessary to scroll down the scrollbar indicated in Fig 35 **B**.

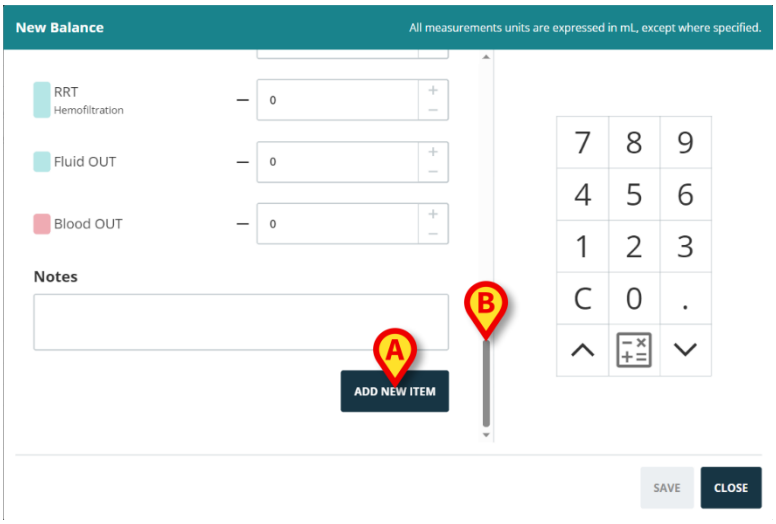


Fig 35 - Add new item

The following window is displayed.

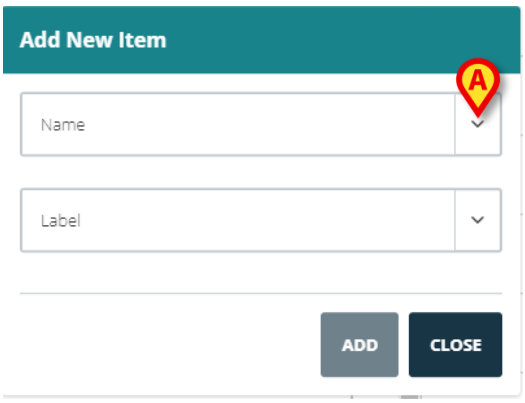


Fig 36 - Select new item

- Click the arrow indicated in Fig 36 **A**. A menu containing all the selectable items opens (the list is defined during configuration - Fig 37). Use the lateral scrollbar to display all the items on the menu.

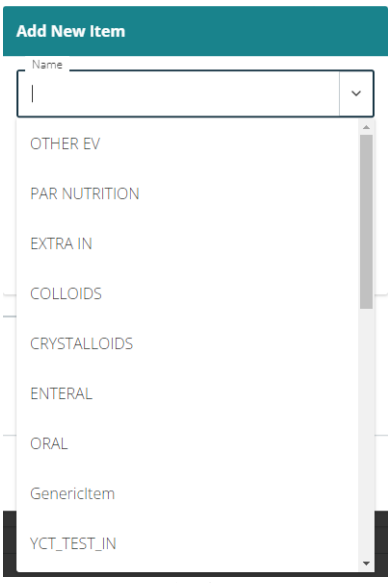


Fig 37

➢ Click the item to be added. The item's name is displayed in the "name" field (Fig 38).

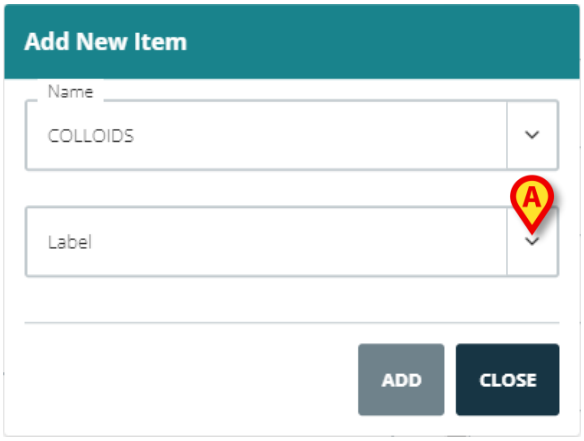


Fig 38

Use the "Label" menu to further specify the item, if necessary. See Fig 39 for an instance.

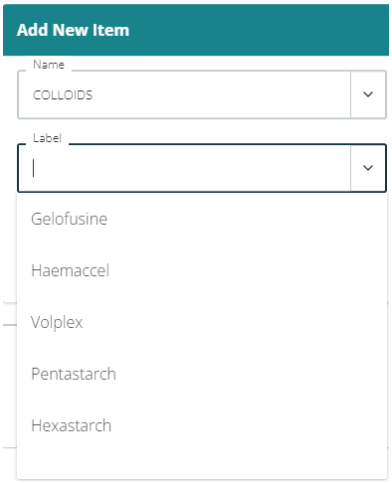


Fig 39

After label specification (optional),

➢ Click the **Add** button to add the item to the items table (Fig 40 **A**).

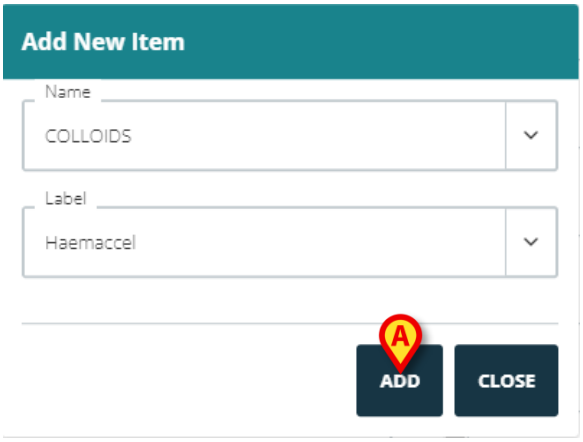


Fig 40

The balance items added using this procedure remain available for other patients also, according to user permissions and location configuration.

8.4. How to edit an existing balance entry

To edit an existing balance entry

- Click the column corresponding to the balance to be edited. The selected column appears as circled (Fig 41 **A**).

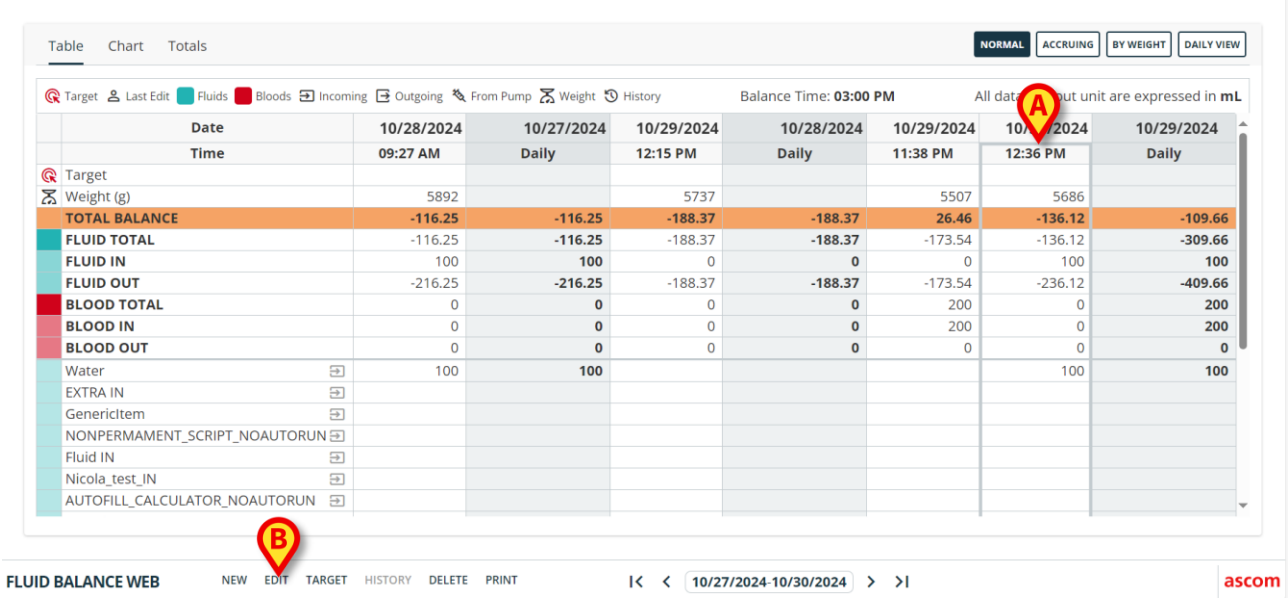


Fig 41

- Click the **Edit** button on the command bar (Fig 41 **B**).

The data entry window opens, containing the values of the selected column (Fig 42).

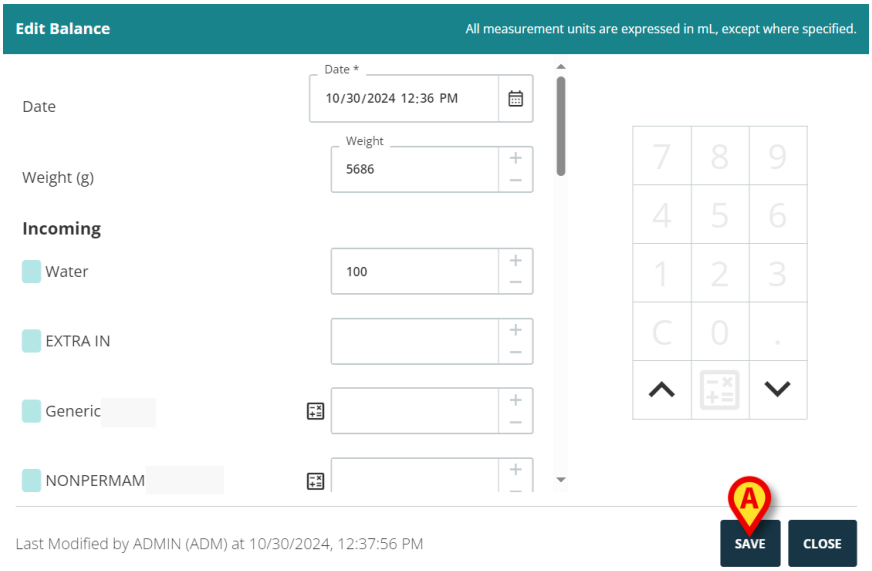


Fig 42

On this window It is possible to

a) Edit the values of the existing items.

b) Edit the date/time. After saving, the column corresponding to the balance will be positioned in the table according to the new date/time (columns order is chronological).
c) Edit patient weight.
d) Add new items using the “Add new item” functionality described in paragraph 8.3.

➢ Click **Save** to save the changes (Fig 42 **B**).

8.5. How to delete an existing balance

To delete an existing balance

➢ Click the column relating to the balance to be deleted. The selected column appears as circled (Fig 43 **A**).

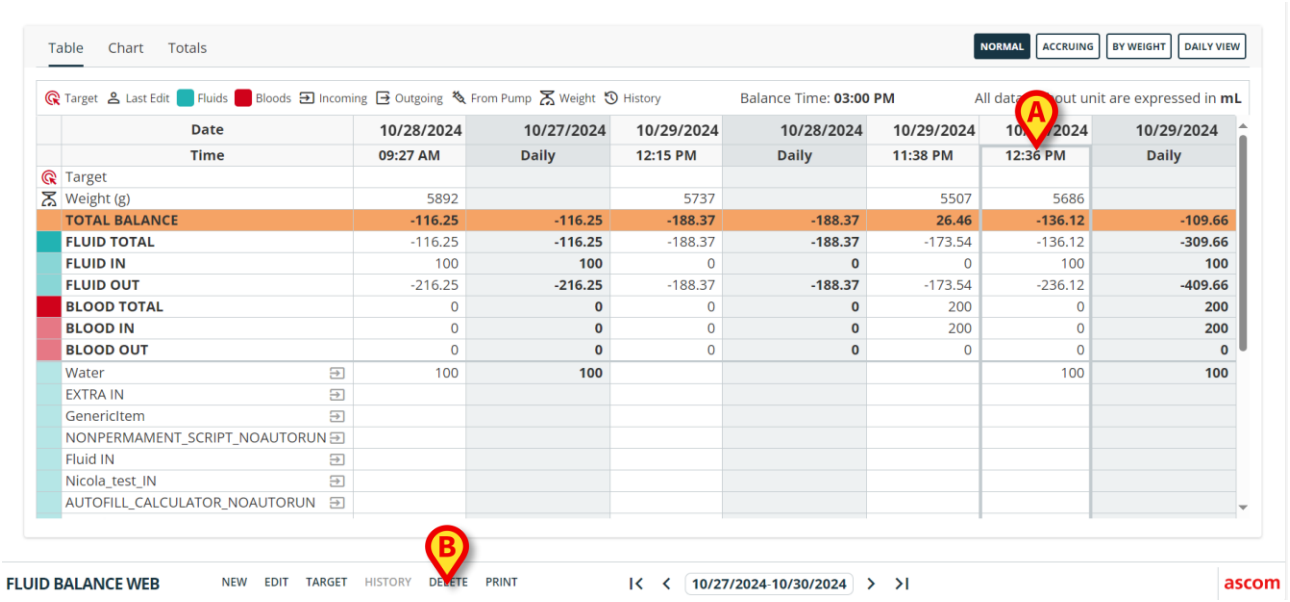


Fig 43

➢ Click the **Delete** button on the command bar (Fig 43 **B**).

User confirmation is required (Fig 44).

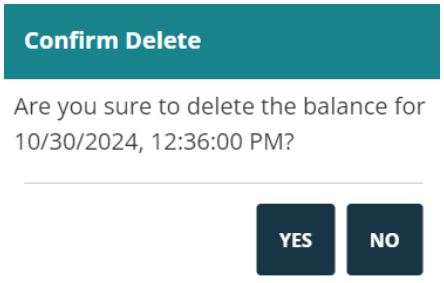


Fig 44

➢ Click **Yes** to delete the balance/column.

9. “Accruing” fluid balance

The **Accruing** option (Fig 45) makes it possible to change the balance table display mode to “Accruing mode”.

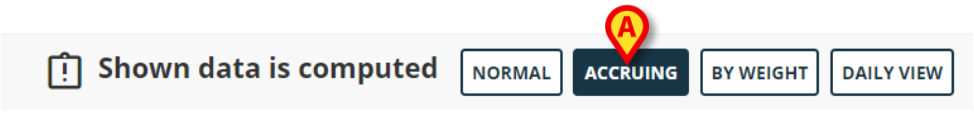
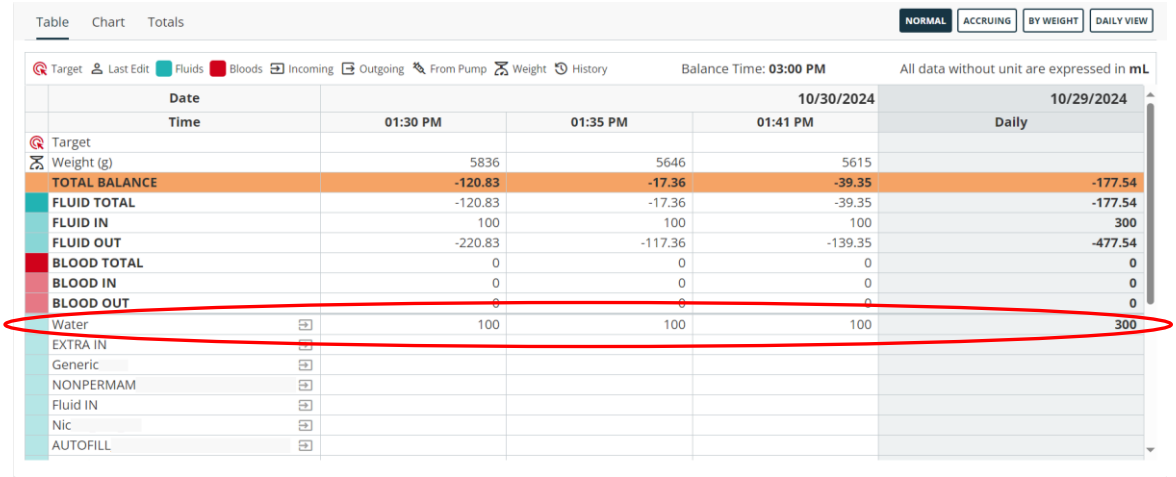


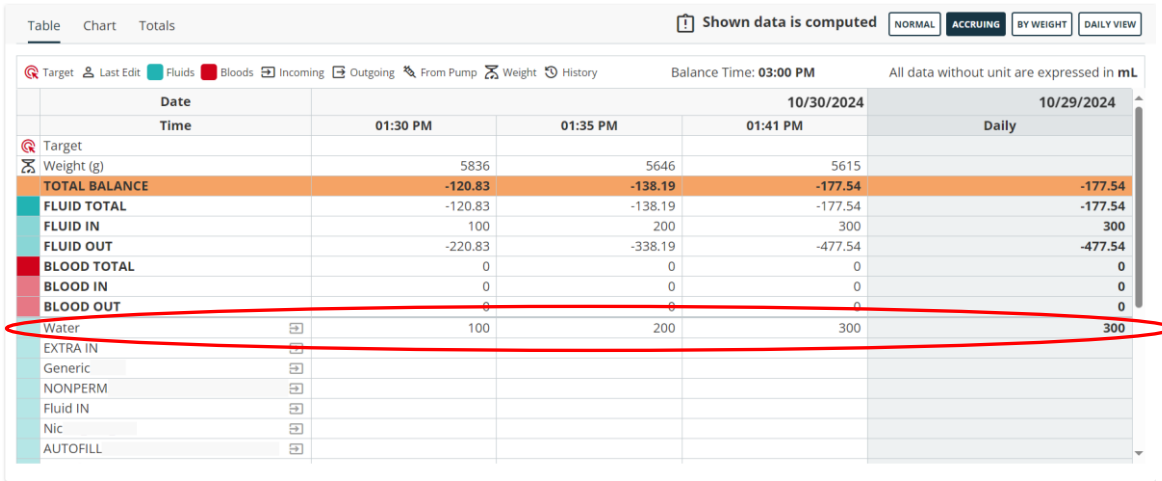
Fig 45

This button displays the values of every column in an “Accruing” mode.
The following example shows the difference between the two display modes (Fig 46 and Fig 47):



Date			10/30/2024	10/29/2024
Time	01:30 PM	01:35 PM	01:41 PM	Daily
Target				
Weight (g)	5836	5646	5615	
TOTAL BALANCE	-120.83	-17.36	-39.35	-177.54
FLUID TOTAL	-120.83	-17.36	-39.35	-177.54
FLUID IN	100	100	100	300
FLUID OUT	-220.83	-117.36	-139.35	-477.54
BLOOD TOTAL	0	0	0	0
BLOOD IN	0	0	0	0
BLOOD OUT	0	0	0	0
Water	100	100	100	300
EXTRA IN				
Generic				
NONPERMAM				
Fluid IN				
Nic				
AUTOFILL				

Fig 46 - Normal mode



Date			10/30/2024	10/29/2024
Time	01:30 PM	01:35 PM	01:41 PM	Daily
Target				
Weight (g)	5836	5646	5615	
TOTAL BALANCE	-120.83	-138.19	-177.54	-177.54
FLUID TOTAL	-120.83	-138.19	-177.54	-177.54
FLUID IN	100	200	300	300
FLUID OUT	-220.83	-338.19	-477.54	-477.54
BLOOD TOTAL	0	0	0	0
BLOOD IN	0	0	0	0
BLOOD OUT	0	0	0	0
Water	100	200	300	300
EXTRA IN				
Generic				
NONPERM				
Fluid IN				
Nic				
AUTOFILL				

Fig 47 - Accruing mode

The two tables shown in Fig 46 and Fig 47 refer to the same balance. The first one is displayed in “Normal” mode, the second one is displayed in “Accruing” mode.
The table refers to three subsequent data entries. The first one at 11.56 (100 ml Generic Item); the second one at 11:57 (100 ml Generic Item); the third one at 11:59 (100 ml Generic Item).
Notice, on the tables, the values referring to the Generic Item (red circled in the figure).

In Fig 46 (Normal mode), the second column displays the value 100, the third column displays the value 100.
In Fig 47 (Accruing mode), the second column displays the value 200 (100+100), the third column displays the value 300 (100+100+100).
Total values are displayed in the fourth column. They are the same in both figures (300 Ml IN is the total balance value for the Generic item).

When the “Accruing” mode is activated, a warning is displayed to remind the user that the data displayed is computed and not actual data (Fig 45).

The “Accruing” display mode can also be applied to the “Chart” view (Fig 48 and Fig 49).

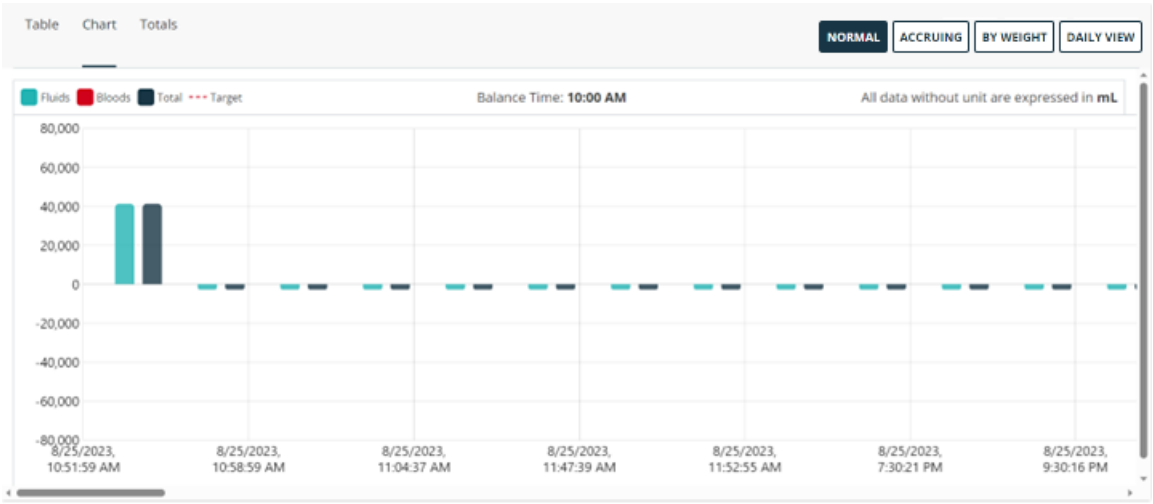


Fig 48 – Chart: normal mode

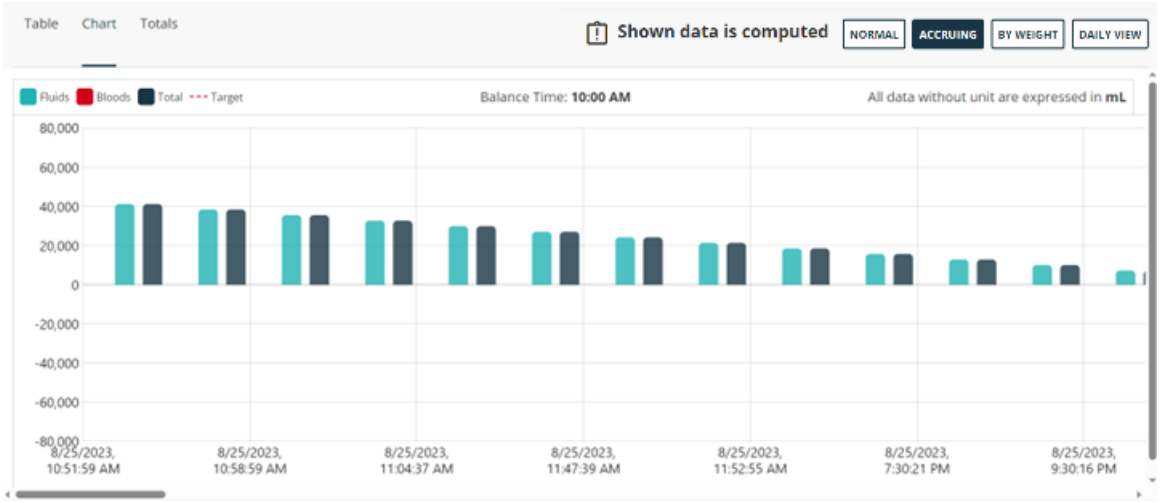


Fig 49 – Chart: accruing mode

10. Totals

The “Totals” view (Fig 50 **A**) displays the trends and the total balances of each single item considering the overall patient stay.

- Click the “Totals” option (Fig 50 **A**) to activate this view.

Fig 50

The following screen is displayed (Fig 51).

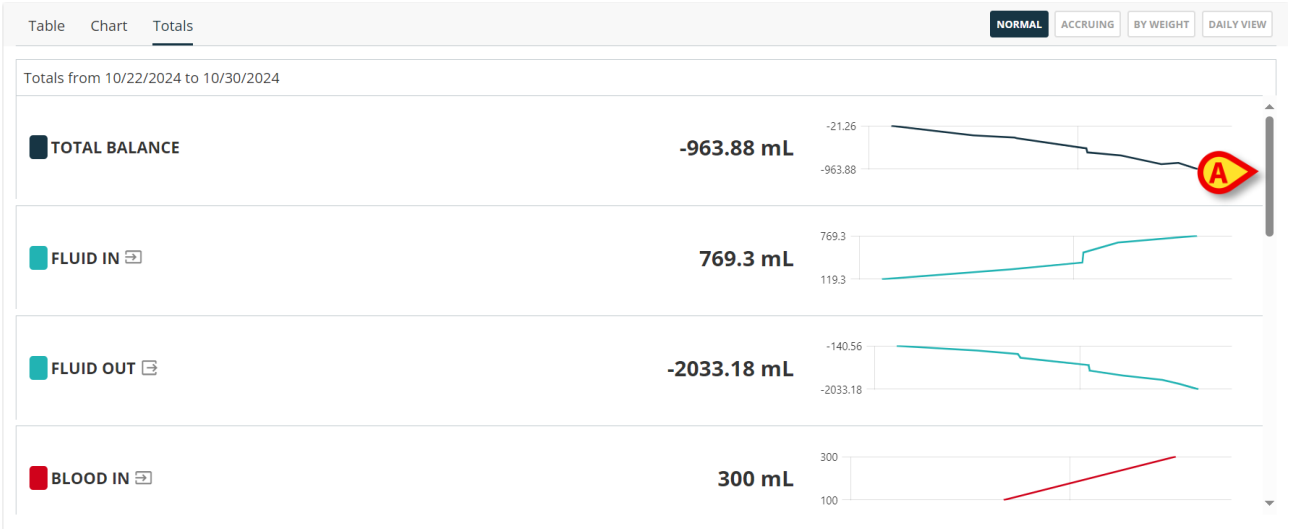
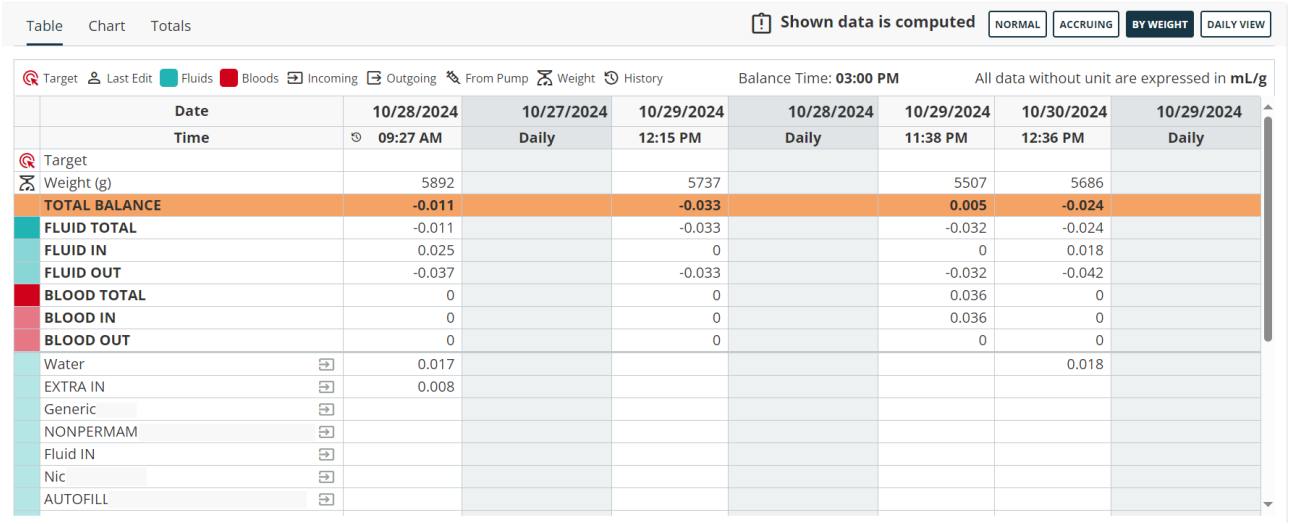


Fig 51

Each row corresponds to a balance item. Numeric totals are displayed in the middle. Trends are displayed on the right, in charts.
Use the scrollbar indicated in Fig 51 **A** to view the other items.

11. “By weight” display mode

The “By weight” display mode allows to display the values as amount per gram. Unit of measure, if not differently specified, is mL/g. To activate this mode, the current patient weight must be specified when fluid balance values are entered, on the data entry window (Section 8.1). See Fig 52 for an example.



Date	10/28/2024	10/27/2024	10/29/2024	10/28/2024	10/29/2024	10/30/2024	10/29/2024
Time	09:27 AM	Daily	12:15 PM	Daily	11:38 PM	12:36 PM	Daily
Target							
Weight (g)	5892		5737		5507	5686	
TOTAL BALANCE	**-0.011**		**-0.033**		**0.005**	**-0.024**	
FLUID TOTAL	-0.011		-0.033		-0.032	-0.024	
FLUID IN	0.025		0		0	0.018	
FLUID OUT	-0.037		-0.033		-0.032	-0.042	
BLOOD TOTAL	0		0		0.036	0	
BLOOD IN	0		0		0.036	0	
BLOOD OUT	0		0		0	0	
Water	0.017					0.018	
EXTRA IN	0.008						
Generic							
NONPERMAM							
Fluid IN							
Nic							
AUTOFILL							

Fig 52

The “By weight” display mode can also be applied to charts.

When the “by weight” mode is activated the daily total balances cannot be calculated.

12. Daily view

The “Daily view” option allows to display only the columns referring to the daily totals (i.e. the grey columns). To do that:

- Click the **Daily View** button indicated in Fig 53 **A**.

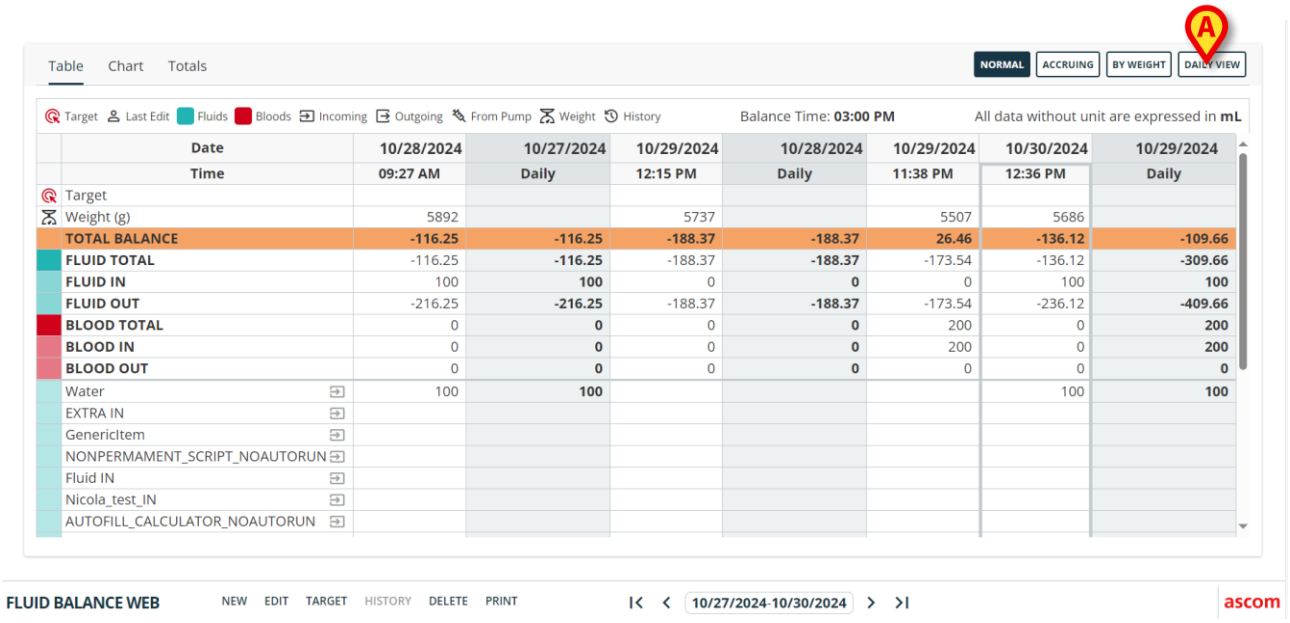


Fig 53

The screen will change in the following way (Fig 54)

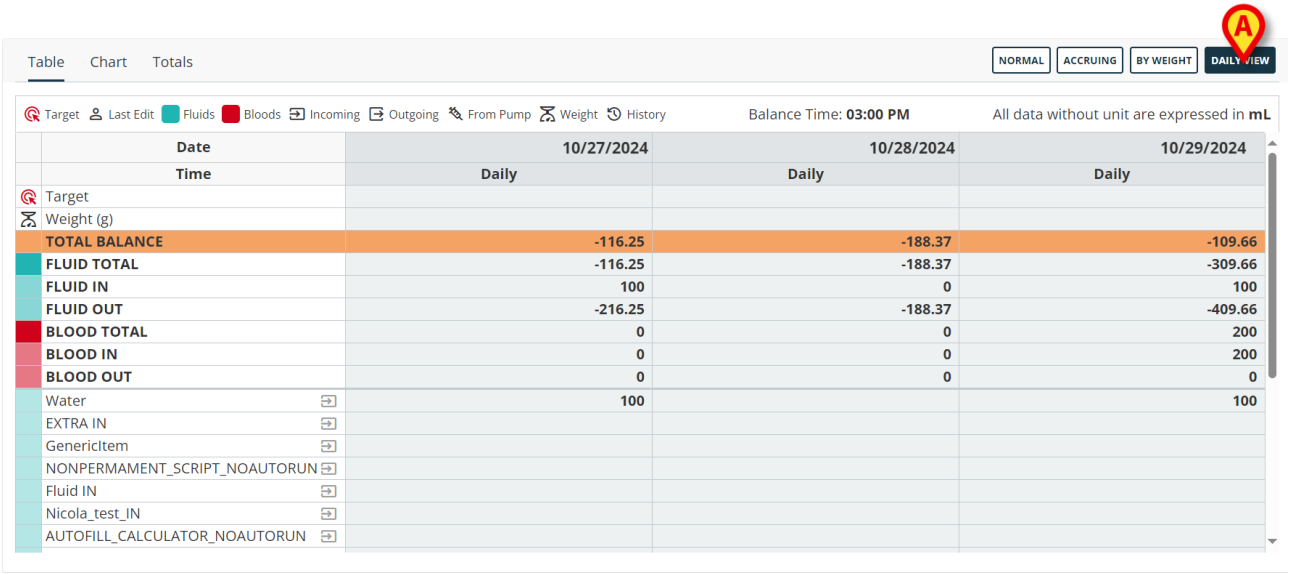


Fig 54

In Fig 54 only the column referring to daily totals are displayed. The Daily View button appears as selected (Fig 54 **A**).

13. Target

The **Target** button on the command bar (Fig 55) allows to specify the balance daily target.

Fig 55

The daily target can be specified both for the current day and for the next day. To specify the daily target:

- Click the **Target** button. The following window opens (Fig 56).

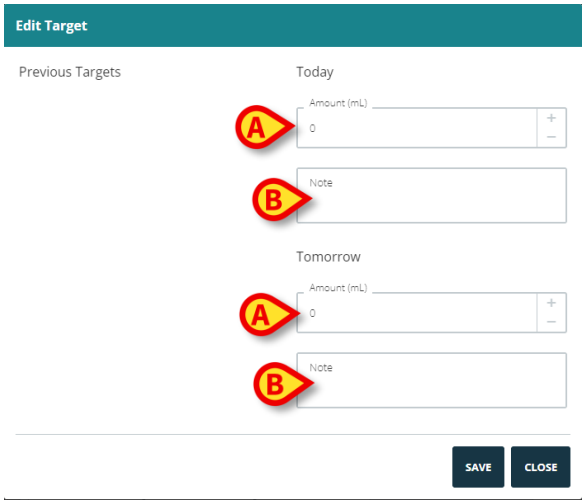


Fig 56 - Fluid balance target

- Type the target value (Amount in mL) in the “Today” / “Tomorrow” field (or both - Fig 56 **A**). Add notes if necessary (Fig 56 **B**).

- Click **Save** (Fig 56 **C**).

The fluid balance target is displayed in the fluid balance table, in the “Target” row of the “Daily" column (Fig 57 **A**).

Fig 57

If specified, the target for tomorrow will be displayed when the “Daily” column for the successive day will be displayed.

All the targets specified during the patient stay are listed under “Previous target” on the left of the “Edit target” window. For each entry on the list (each previous target) are indicated the date of specification, the amount, the acronym of the user who specified it (Fig 58 **A**).

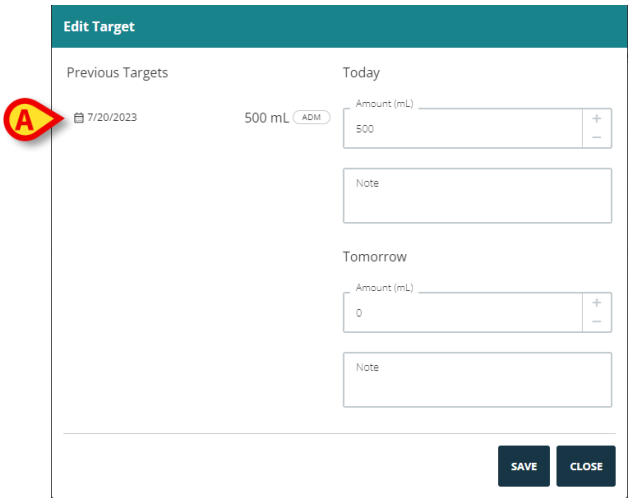


Fig 58

14. History

The **History** button on the command bar displays all the changes made to a balance entry (i.e. a column in the table). The columns that were edited after the first insertion show a little "history" icon -  - in the upper-left corner. These are the entries for which the "History" option is enabled.
To display the history:

- Click the column corresponding to the relevant balance. The selected column is circled (Fig 59 **A**).

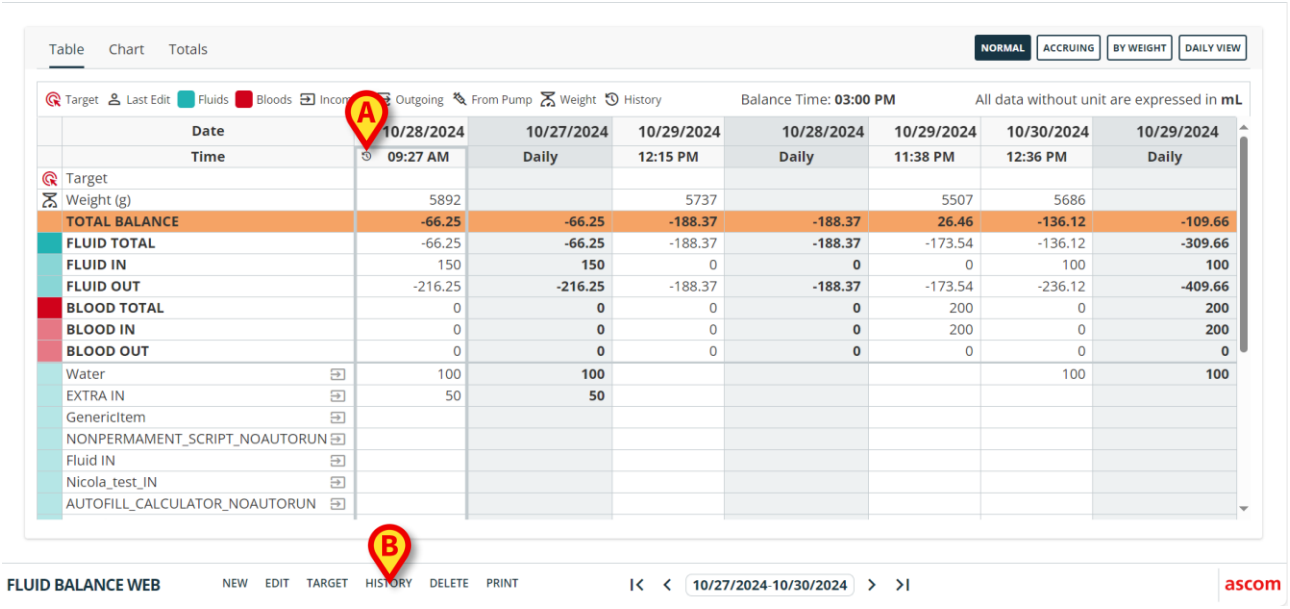


Fig 59

- Click the **History** button on the command bar (Fig 59 **B**).

The "History window" opens (Fig 60).

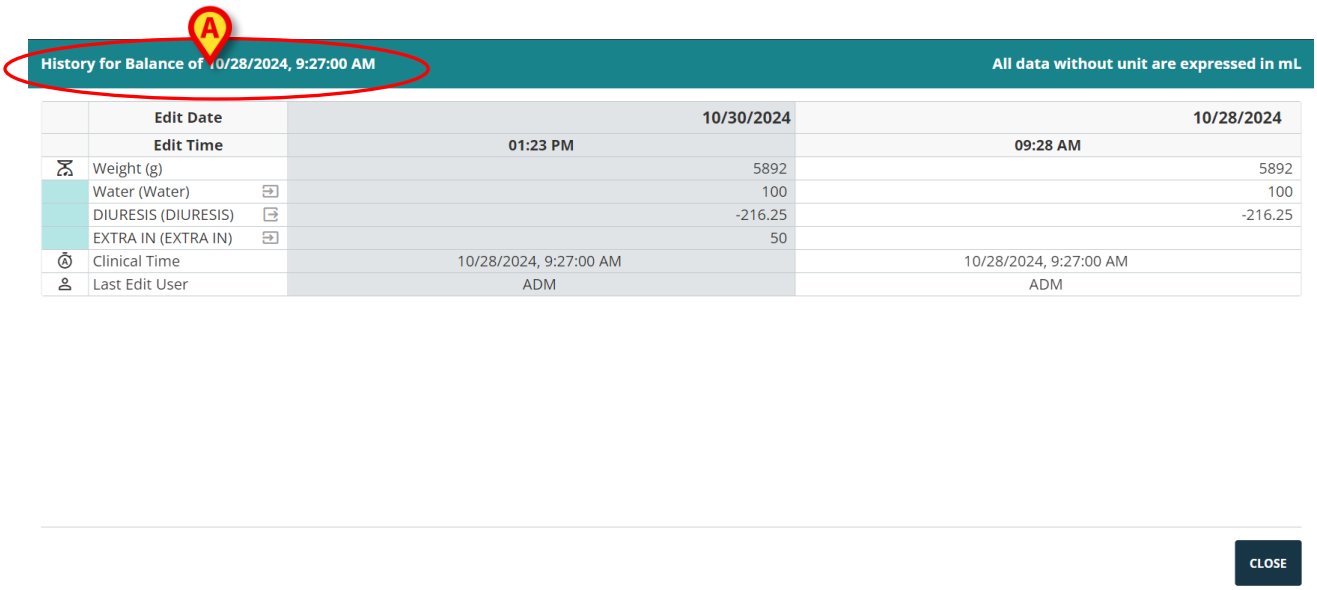


Fig 60

The heading indicates the balance to which the "History window" refers (Fig 60 **A**).

The changes made to the specific balance are summarized in a table.

- The first row of the table indicates the date in which the changes were made.
- The second row indicates the time at which the changes were made.
- The third row indicates the patient's weight.
- Each one of the following rows indicates the changed items with the related amounts.
- The second last row indicates the clinical time to which the change refers. That is, for example: if a balance is recorded on the 19th at 13:00 and an item of that balance is later edited on the 20th at 12:00, then the editing performed on the 20th refers to a clinical time that is the 19th at 13:00; this last value is the one displayed on the "Clinical time" row.
- The last row indicates the acronym of the user who last edited the balance.

Each column on the table corresponds to an editing of the balance, displaying the values relating to that specific editing (date/time, patient weight, amounts, clinical time, user).

15. Print reports

The **Print** button on the command bar allows to create print reports of the fluid balances data (Fig 61).

Fig 61

To create a print report

- Click the **Print** button.

Different print reports can be configured according to the healthcare structure needs. A window listing the available print reports is displayed (Fig 62).

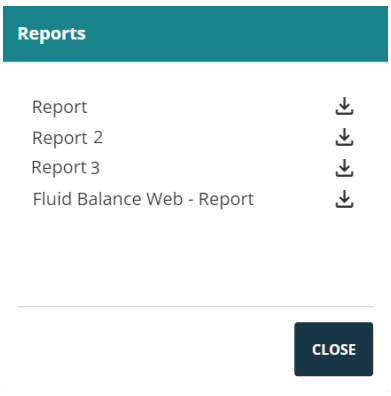


Fig 62

- Click the icon to download the required report.