DIGISTAT® Therapy

DIGISTAT® Version 4.3

User Manual

DIG UD THP IU 0005 ENG V01
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Contents

1. The DIGISTAT® "Therapy" system

For general and detailed information about the DIGISTAT® environment and the instruction for use of the Control Bar software see the document "DIG UD CBR IU 0005 ENG V01 - Digistat Control Bar User Manual".

1.1. Introduction

The DIGISTAT® "Therapy" system is a help for the clinical staff for the patient's treatment plan prescription, administration and documentation tasks.

DIGISTAT® "Therapy" specifically aims to help the clinical staff in

- keeping the treatment plan under constant control;
- executing all the needed actions safely and in time;
- accurately and quickly documenting every action performed and every change in the treatment plan.

DIGISTAT® "Therapy" is widely customizable; it can be adapted to the needs of any healthcare structure. It is in fact possible to customize the features of every possible action in the treatment plan to accurately mirror the specific procedures of the department. Refer to your system administrators for the configuration options.

The "Therapy" suite comprises three modules: "Therapy Prescription", "Therapy Execution" and "Central Station".

- The "Therapy Prescription" module is used by doctors to plan, prescrive and document the patient's treatment plan.

- The "Therapy Execution" module is used by nurses in the treatment administration tasks to document the performance of all diagnostic and therapeutic activities.

- The "Central Station" module makes it possible to monitor all the beds in the department, providing real time information on the state and the needs of each patient.

When a doctor prescribes an action (using the "Therapy Prescription" module, described in paragraph 2) the system automatically generates the orders and notifies them to the nursing staff on the "Therapy Execution" module (paragraph 6).
Every action performed is recorded on the same "Therapy Execution" module and inserted in the patient clinical record.

1.2. Patient selection

To select a patient, if you are using a DIGISTAT® software,

- click the **Patient** button on the Control Bar (Fig 1)

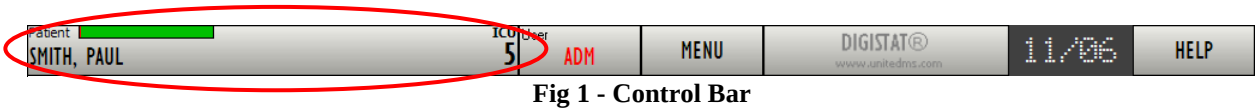


Fig 1 - Control Bar

The DIGISTAT® "Patient Explorer" module will open (if the module is available, otherwise the patient search and selection functions are accomplished by DIGISTAT® "Control Bar").
See either the "Patient Explorer" module or the "Control Bar" technical documentation to know the specific search and selection procedures.

If the software in use is not a DIGISTAT® software see the related documentation.

If your healthcare structure does not use a DIGISTAT® software for the patient search and selection procedures, please refer to the specific related documentation.

When a patient is selected the patient name is displayed on the **Patient** button on Control Bar (Fig 2 **A**).

Fig 2 - Patient selected

The "Therapy Prescription" and "Therapy Execution" modules display the data of the selected patient.

The patient can be selected on the "Central Station" module as well, clicking the box corresponding to his/her bed. See paragraph 7.2.

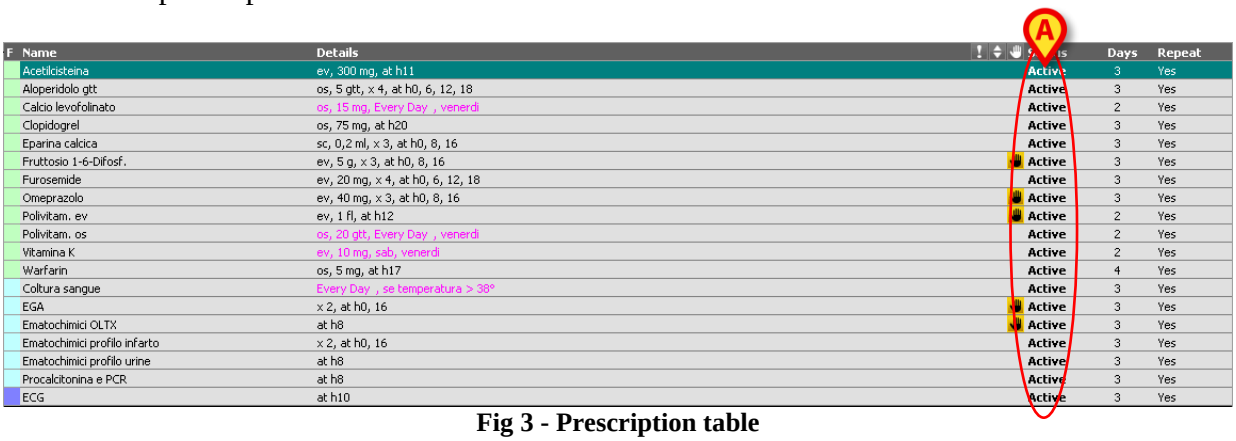
1.3. Basic concepts

This paragraph explains some fundamental notions whose preliminar understanding is essential to the appropriate use of the DIGISTAT® Therapy system.

1.3.1. Prescription status

The "Therapy Prescription" module (described in paragraph 2) makes it possible to create a treatment plan and keep it active in time after scheduled validations. Possible variations are easily and quickly recorded while the general plan remains the same.

The patient's treatment plan is summarized and displayed in a table (Fig 3). Each row corresponds to a treatment prescription.



F	Name	Details	Days	Repeat
	Acetilcisteina	ev, 300 mg, at h11	3	Yes
	Aloperidolo gtt	os, 5 gtt, x 4, at h0, 6, 12, 18	3	Yes
	Calcio levofolinato	os, 15 mg, Every Day , venerdi	2	Yes
	Clopidogrel	os, 75 mg, at h20	3	Yes
	Eparina calcica	sc, 0,2 ml, x 3, at h0, 8, 16	3	Yes
	Fruttosio 1-6-Difosf.	ev, 5 g, x 3, at h0, 8, 16	3	Yes
	Furosemide	ev, 20 mg, x 4, at h0, 6, 12, 18	3	Yes
	Omeprazolo	ev, 40 mg, x 3, at h0, 8, 16	3	Yes
	Polivitam. ev	ev, 1 fl, at h12	2	Yes
	Polivitam. os	os, 20 gtt, Every Day , venerdi	2	Yes
	Vitamina K	ev, 10 mg, sab, venerdi	2	Yes
	Warfarin	os, 5 mg, at h17	4	Yes
	Coltura sangue	Every Day , se temperatura > 38°	3	Yes
	EGA	x 2, at h0, 16	3	Yes
	Ematochimici OLTX	at h8	3	Yes
	Ematochimici profilo infarto	x 2, at h0, 16	3	Yes
	Ematochimici profilo urine	at h8	3	Yes
	Procalcitonina e PCR	at h8	3	Yes
	ECG	at h10	3	Yes

Fig 3 - Prescription table

Each prescription generates a certain number of orders. The orders correspond to the single administrations of the treatment.

A prescription is completed when all the orders that it generated have been executed and no other order will be generated by it in the future.

Completed prescriptions appear in strike-through characters on the prescriptions table (Fig 4).

	~~Midazolam~~	~~0,053 mg/kg/h, 3 ml/h, @60 mg/60 ml, h15.10~~	~~Active~~	7

Fig 4 - Completed prescription

The completed prescriptions are still in "Active" status because it is this way possible to prescribe them again quickly, without having to specify the prescription details again (Fig 4 **A**). It is in fact possible to restore a completed prescription by double-clicking the corresponding row. The prescription specification window will appear, displaying the values of the original prescription. See paragraph 4 for the description of the prescription specification window and the related procedures.

The prescription status is displayed, on the table, in the column indicated in Fig 3 **A**.

There are four possible prescription statuses:

1. “Active” - when a prescription is in “Active” status the prescription values can be displayed and edited. Double-click the corresponding row to open the related “prescription specification” window (described in paragraph 4).

2. “Active and completed” - a prescription is completed when all the orders that it generated are executed and no other order will be generated by it in the future. Completed prescriptions are still active, that means that the prescription values can be diplayed and edited. Double-click the row corresponding to the prescription to display the related “prescription details” window. Completed prescriptions appear in strike-through characters on the prescriptions table.
   The **Remove Completed** button on the command bar cancels all the completed prescriptions from the prescriptions table and turns them to “Terminated” status.

3. “Suspended” - the prescription suspension, performed using the **Suspend** button on the command bar, deletes all the existing orders generated by the prescription. Moreover, when a prescription is in “Suspended” status, it does not generate further administration orders. A suspended prescription can be resumed using the **Resume** button on the command bar. See paragraphs 5.4 (precription suspension) and 5.4.1 (how to resume a suspended prescription) for the related procedures.

4. “Terminated” - the prescription is “Terminated” either using the **Remove** or the **Remove Completed** button on the command bar. When a prescription is terminated all the orders generated by it are deleted. Moreover, the “Terminated” prescription does not generate further administration orders. It is **NOT** possible to resume a “Terminated” prescription. See paragraphs 5.3 (prescriptions removal) and 5.8 (completed prescriptions removal) for the related procedures.

The prescriptions table is described in paragraph 2.3.

1.3.2. Repeatable vs. Non Repeatable Prescriptions

Repeatable prescriptions

A prescription is “***Repeatable***” if it generates orders that must be administered at given intervals. For example: a prescription can state that a drug must be administered every day at a certain time. In this case the prescription is repeatable; it generates the corresponding orders placing each of them in the required days at the required time/s.
The orders are generated for seven days in the future starting from the date indicated as treatment start date. The next orders are generated when the next treatment validations are performed (see paragraph 5.1 for the treatment plan validation procedure).

Non-repeatable prescriptions

Non-repeatable prescriptions generate only the administration orders explicitely specified in the prescription. When all the orders are executed the prescription is "Completed" and appears in strike-through characters on the prescriptions table. Then the prescription turns to "Active and completed" status.
The repeatability of a prescription is set by a specific checkbox on the prescription specification window (see Fig 5 **B** for an example).
The repeatability of a prescription is indicated in the last column on the right on the prescriptions table ("Repeat" column, see Fig 10, paragraph *2.3*).

1.3.3. Punctual vs. Durative administrations

Punctual administrations start and end in one moment (a tablet, for instance).

Durative administrations last a certain amount of time (a drip, for instance).

These two types of administrations are characterized by different graphic features and different management procedures on the Therapy Execution module. See paragraph 6.3 for a detailed description of the possible administration types on Therapy Execution.

1.3.4. The Therapy Cycle - treatment plan re-confirmation procedure

The validity of the treatment plan created on DIGISTAT® Therapy is limited in time and needs to be re-confirmed by the medical staff.

The treatment plan validity period is called "Therapy Cycle". The "Therapy Cycle" duration is configurable by the system administrators. See the information box at the end of this paragraph for more information on the "Therapy Cycle" duration.

The "Therapy Cycle" re-confirmation procedure, described in paragraph 5.1, has the following outcomes:

a) it generates the possible not-still-generated orders within the next "Therapy cycle" (see paragraph 1.3.5 for a description of the way orders are generated from prescription);

b) it validates the orders that are within the next "Therapy cycle" (see paragraph 5.1 for the validation procedures).

The "Therapy Cycle" re-confirmation is a safety procedure that forces to check and verify the treatment plan at specified intervals.

When the treatment plan validity is expired the system does not generate any other order from the existing prescriptions.

The treatment plan expiration time is signalled on screen by specific indicators. These indicators are described in paragraph 2.5.

The treatment plan re-confirmation procedure is described in paragraph 5.1.

The "Therapy Cycle" duration is set by configuration.

The "Therapy Cycle" update procedure can have, depending on the configuration in use, the following outcomes:

- *the validity period is updated for the next N hours;*
- *the validity period is updated until NN:NN o'clock of the following day;*
- *the validity period is updated until the midnight of tomorrow;*
- *the validity period is updated until the midnight of day after tomorrow.*

System configuration is reserved to the system administrator. Refer to the system administrator for more information.

1.3.5. Orders generation

This paragraph explains how the system generates the orders from a prescription specified in the treatment plan.

At prescription time, i.e. when the Prescribe button on the "prescription specification" window is clicked (Fig 31 **A**, see paragraph 3.2), the system generates the orders corresponding to the prescription specifications.
When the treatment prescribed is non-repeatable (see paragraph 1.3.2 for an explanation of "treatment repeatability"), the system generates all the corresponding orders.
When the treatment prescribed is repeatable the system generates the orders for a maximum period of seven days in the future starting from the day indicated in the field "starting from" on the prescription detail window (see for example Fig 5 **A**).

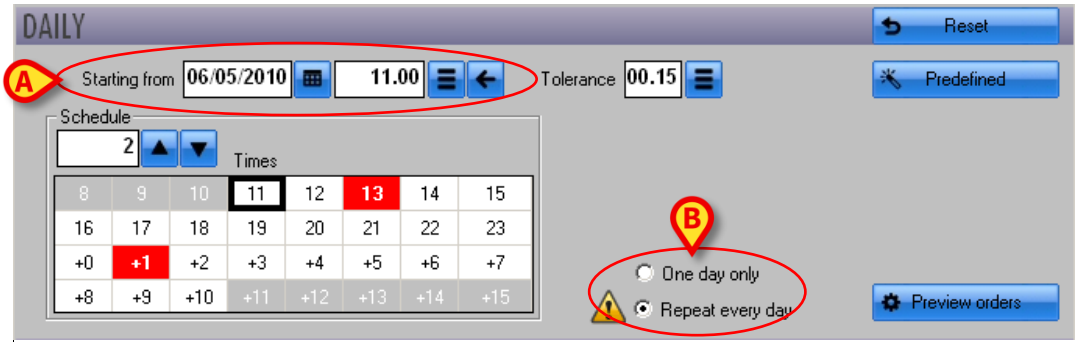


Fig 5 - Daily treatment prescription

For exmple: if a repatable treatment is prescribed "starting from" the 6th of May 2010, the system generates the orders going from the 6th to the 12th of May.

Conditional prescriptions (paragraph 4.2.2) do not generate orders. These prescriptions are executed only when certain specific conditions occur.

1.3.6. Orders validation

The order execution standard procedure requires the order validation before the execution.

The orders that, when generated, are within the “Therapy cycle” are automatically validated.

The other orders are validated every time the “Therapy cycle” is updated when they are within this period (paragraph 5.1).

Non-validated orders are signalled by a specific icon on the Therapy Execution module (Fig 6). They can be executed only after a special procedure, described in paragraph 6.5.2.

Fig 6 - Non-validated order on Therapy Execution

See paragraph 1.3.4 for the explanation of the “Therapy Cycle” (or “treatment plan validity period”).
See paragraph 5.1 for the treatment plan update procedure.
See paragraph 5.1.1 for a description of the “Orders confirmation window”.

1.3.7. Order validity expiration

The validity of an order expires after a certain amount of time after the scheduled administration time has passed. That is: if a validated order is not administered at the scheduled time it remains validated for a certain period. After this period the order goes back to non-validated state (it is named “expired” to differentiate it from future not-yet-validated orders).

Expired orders cannot be validated again.

Expired orders can be deleted from the treatment plan through the “Therapy cycle” update procedure. See paragraph 5.1.

Expired orders can be executed only using a specific procedure. The procedure is described in paragraph 6.5.2.

The orders validity duration is defined by a specific configuration parameter. Refer to the system administrator for more information.

The validity of a conditional prescription expires when the “Therapy Cycle” expires. Thus conditional prescriptions are automatically validated every time the “Therapy Cycle” is updated. See paragraph 4.2.2 for the explanation of “Conditional prescriptions”.

2. The “Therapy Prescription” module

2.1. Module selection

To select the “Therapy Prescription” module

- click the corresponding icon on the lateral bar (Fig 7 **A**).

Fig 7

When a module is selected the icon 

appears highlighted.

The “Therapy Prescription” module’s main screen opens. Fig 8 shows the main screen when no patient is selected.

Fig 8 - Electronic prescription: no patient selected

2.2. “Therapy prescription” module’s main screen

After patient selection the “Therapy prescription” module’s main screen displays the treatment plan of the selected patient. Fig 9 shows an example.

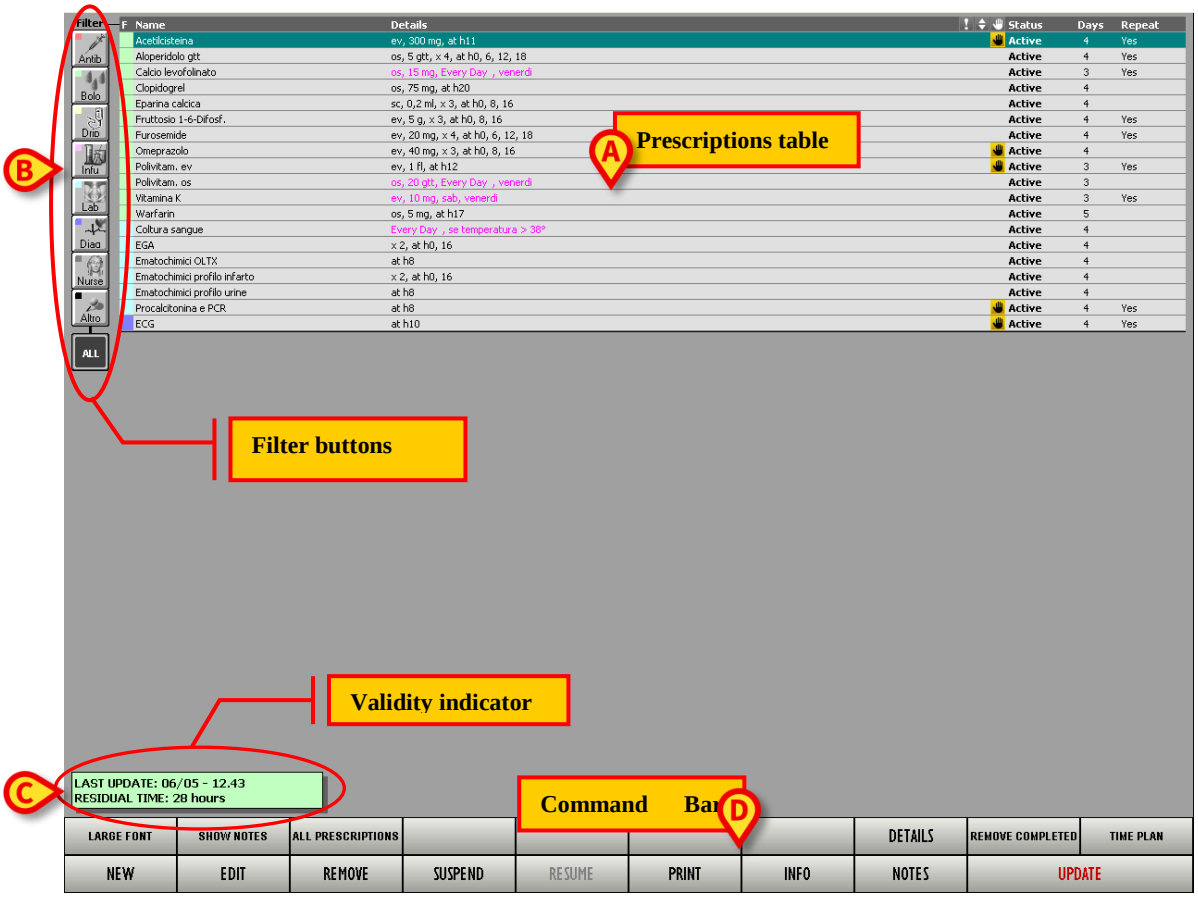


Fig 9 - Treatment plan

The figure highlights the main items on screen:

- the prescriptions table (Fig 9 **A** - described in paragraph 2.3);
- the filter buttons (Fig 9 **B** - paragraph 2.4);
- the validity indicator (Fig 9 **C** - paragraph 2.5);
- the command bar (Fig 9 **D** - paragraph 2.6).

2.3. Prescriptions table description

The various prescriptions of the treatment plan are displayed in a table (Fig 9 **A**, Fig 10).

F	Name	Details	!	⇕	✋	Status	Days	Repeat
	Acetilcisteina	ev, 300 mg, at h11			✋	Active	4	Yes
	Aloperidolo gtt	os, 5 gtt, x 4, at h0, 6, 12, 18				Active	4	Yes
	Calcio levofolinato	os, 15 mg, Every Day , venerdi				Active	3	Yes
	Clopidogrel	os, 75 mg, at h20				Active	4	
	Eparina calcica	sc, 0,2 ml, x 3, at h0, 8, 16				Active	4	
	Fruttosio 1-6-Difosf.	ev, 5 g, x 3, at h0, 8, 16				Active	4	Yes
	Furosemide	ev, 20 mg, x 4, at h0, 6, 12, 18				Active	4	Yes
	Omeprazolo	ev, 40 mg, x 3, at h0, 8, 16			✋	Active	4	
	Polivitam. ev	ev, 1 fl, at h12			✋	Active	3	Yes
	Polivitam. os	os, 20 gtt, Every Day , venerdi				Active	3	
	Vitamina K	ev, 10 mg, sab, venerdi				Active	3	Yes
	Warfarin	os, 5 mg, at h17				Active	5	
	Coltura sangue	Every Day , se temperatura > 38°				Active	4	
	EGA	x 2, at h0, 16				Active	4	
	Ematochimici OLTX	at h8				Active	4	
	Ematochimici profilo infarto	x 2, at h0, 16				Active	4	
	Ematochimici profilo urine	at h8				Active	4	
	Procalcitonina e PCR	at h8			✋	Active	4	Yes
	ECG	at h10			✋	Active	4	Yes

Fig 10 - Prescriptions table

Each row in the table corresponds to a prescription. The prescriptions are grouped into classes. Each class is characterized by a specific colour (see paragraph 2.4 for a description of the different classes). The items belonging to the same class are in alphabetical order.

The columns in the table contain the following information (from left to right):

- "**F**" column ("F" means "Filter") - Indicates the class of the prescription. Each class is associated to a color. See paragraph 2.4.
- "**Name**" column - Indicates the name of the prescribed treatment.
- "**Details**" column - Indicates the deatils of the prescription as, for example, the date and time of the different orders, the doses etc…
- ! column - If the ! icon appears in this column it means that either the actions indicated on this row were executed differently from the way they were prescribed or they were executed without prescription. It is the case, for example, of a treatment executed with doses that are different from those prescribed.
- ⇕ column - The ⇕ icon appears in this column when the values of a durative prescription (a drip, for example) are changed on the "Therapy Execution" module while the administration is in progress. If this is the case the values specified on the "prescription detail" window differ from those recorded on the "Execution" module. The icon disappears when the values on the prescription window are realigned to those specified on "Execution". See paragraph 5.2 for the prescription values change procedures.
- ✋ column - The ✋ icon appears when there is at least a non-validated order approaching administration time. This "proximity to administration time" is a time period set by configuration; in the configuration here described it is a three-hours period.
- "**Status**" column - Indicates the prescription status. See paragraph 1.3.1 for a list of the possible statuses of a prescription.

- "**Days**" column - Indicates the number of days from the first prescription of the treatment. When referred to a prescription in "Terminated" status (see paragraph 1.3.1 for an explanation of this concept) the "Days" column displays the termination date.

- "**Repeat**" column - Indicates whether the treatment is repeatable or not. See paragraph 1.3.2 for an explanation of "repeatable prescriptions".

The prescription is written in strike-through characters when all the corresponding orders are already executed and no other order will be generated by it (completed prescription).

The prescriptions written in purple characters are conditional prescriptions. Conditional prescriptions correspond to the treatments that must be administered only if certain conditions occur (no administration time is specified for these prescriptions). See paragraph 4.2.2 for an explanation of "conditional prescription".

2.4. Prescription filter buttons

Each treatment is associated to a class. The treatment-class association is defined by configuration. The names of the different classes are defined by configuration. The treatments can be grouped in 8 different classes.

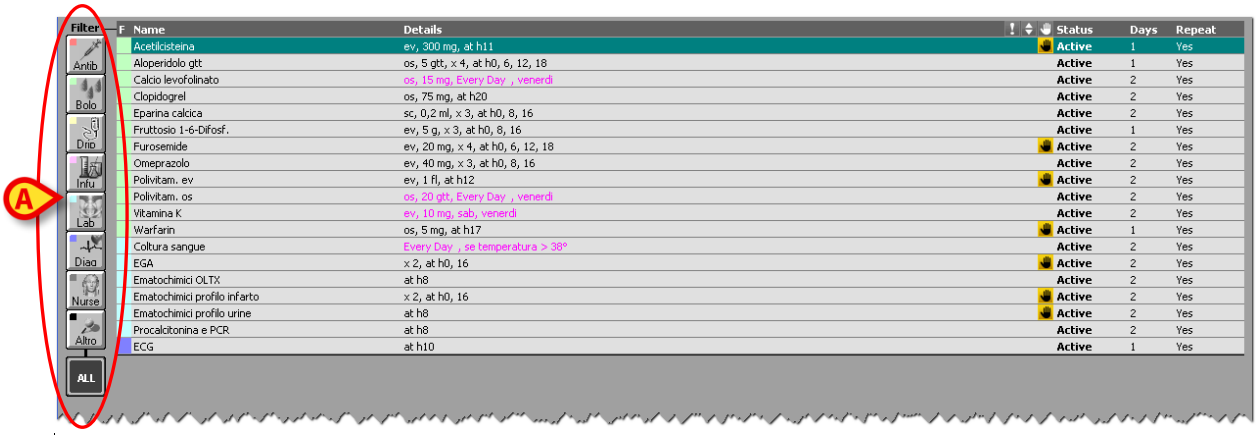


Fig 11 - Prescriptions filters

Each class is characterized by a color. A specific button corresponds to the class (Fig 11 **A**). The classes in use in the configuration here described are:

- Nursing

- Monitoring

- Diagnostic

- Exams

- Infusions

- Drip

- Bolus

- Other.

The class of a treatment is indicated by the color displayed in the "**F**" column (Fig 12).

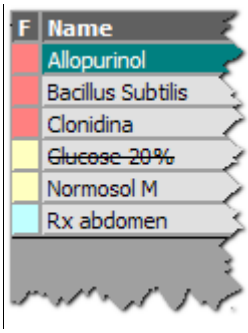


Fig 12 - The class is indicated by the color

In the example shown in Fig 12, the first items in the list, characterized by the  color, belong to the "Bolus" class, while the two following items ( colour) belong to the "Infusions" class.

The buttons indicated in Fig 11 **A** make it possible to filter the items in the table. When one of the buttons is clicked, only the items belonging to the corresponding class are displayed.

For example, the 

button makes it possible to display only the items belonging to the "Bolus" class (Fig 13).

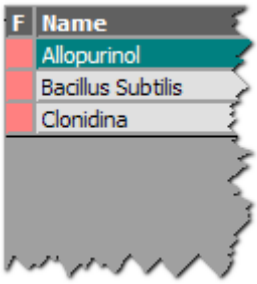


Fig 13

When two buttons are selected at the same time the system displays the items belonging to the two corresponding classes. To display the list shown in Fig 14 ("Infusions" and "Bolus"), for instance, the buttons 

and 

were selected together.

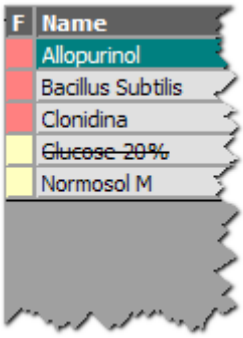


Fig 14

The filter-buttons are on/off switches. Click the button again to remove the filter.

The 

button makes it possible to display the prescriptions full list (Fig 15 **A**).

2.4.1. How to use the filter-buttons

2.4.1.1. How to apply a filter to the prescriptions list

To apply a filter to the prescription list,

- click one of the filter-buttons (Fig 15).

Fig 15

The button is this way selected (Fig 16).

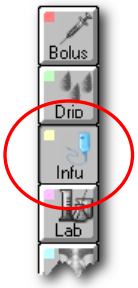


Fig 16 - Selected button

The prescription table displays the list of the items belonging to the class corresponding to the selected button.

2.4.1.2. How to remove a filter

To remove a filter,

- click the selected button again.

The button is this way deselected, the filter is removed.

2.4.1.3. How to display the full prescriptions list again

To display the full prescriptions list,

- click the 

button (Fig 15 **A**).

All the buttons possibly selected are this way deselected.

2.5. Validity indicator

The validity of the treatment plan created on DIGISTAT® Therapy is limited in time. A periodical validation is required. See paragraph 1.3.4 for an explanation of the treatment plan validity.

The box shown in Fig 9 **C** and (in detail) in Fig 17 indicates the treatment plan validity.
The validity indicator is a tool making it possible to constantly monitor the time remaining to the end of the treatment plan validity.

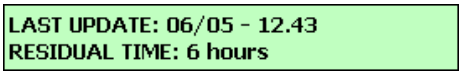


Fig 17 – Validity indicator

The first row of the box specifies the date and time of the last update (Fig 17).

The second row indicates the time remaining to the end of the treatment plan validity.

When the treatment plan expires the box turns to red and specifies that the treatment plan is expired (Fig 18).

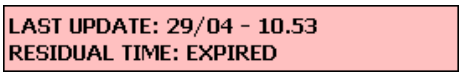


Fig 18 – Expired validity

Also, the treatment plan validity is indicated by a specific indicator on the PATIENT button on Control Bar (Fig 19). This button, which remains always visible, enables the clinical staff to keep the treatment plan validity under control when the "Prescription" module is not selected.

See Fig 19 for an instance.

Fig 19 - Patient button

The red portion of the time bar indicates the time passed from the last update, the green portion represents the time remaining to the expiration of the treatment plan validity.

WARNING!

<u>Updating the treatment plan is extremely important.</u>

The person in charge should check and update the treatment plan validity before it expires.

Treatment plan update procedures are described in paragraph 5.1

2.5.1. The "Notes" area

The area placed on the right of the "Validity indicator" displays the possible patient notes. See paragraph 5.11 for the notes specification procedure.

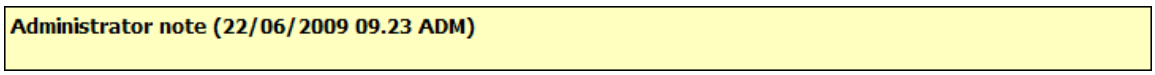


Fig 20 - Notes Area

If relevant, the "notes" area can display the note specification date and time and the acronym of the user who added the note.

2.6. The command bar

The command bar of the "Prescription" module (Fig 9 **D**, Fig 21) contains various buttons that can be used to perform different actions.

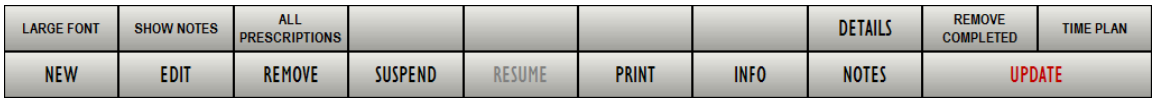
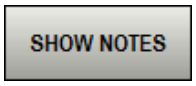


Fig 21 - Command bar

This paragraph summarizes the functions of each button. The detailed procedures are explained in the paragraphs indicated.

This button enlarges the characters displayed on screen to make them easier to be read. See paragraph 5.5.

This button makes it possible to add a new prescription to the treatment plan. See paragraph 3.1.

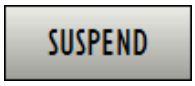


This button displays the notes possibly related to every prescribed action. See paragraph 5.6.

This button makes it possible to display and edit the details of a selected prescription. See paragraph 5.2.

This button displays the patient prescriptions full list, including those suspended and removed. See paragraph 5.7.

This button makes it possible to remove a selected treatment from the treatment plan. See paragraph 5.3.



This button makes it possible to suspend a selected treatment on the treatment plan. See paragraph 5.4.

This button makes it possible to resume one of the treaments previously suspended. See paragraph 5.4.1.

This button makes it possible to create a print report containing the details of the treatment plan. See paragraph 5.12.

This button displays a document containing information about a selected treatment. See paragraph 5.13.

This button makes it possible to display and edit the patient's general notes. See paragraph 5.11.

This button displays the details of a selected prescription. See paragraph 5.9.

This button removes the completed prescriptions from the prescription table. See paragraph 5.8.

This button displays a summary of all the active prescriptions. See paragraph 5.10.

This button makes it possible to update the treatment plan. See paragraph 5.1.

3. How to prescribe a treatment

The following paragraphs describe the procedures that must be performed to specify a prescription and insert it into the patient's treatment plan.

3.1. How to search for a specific treatment

The **New** button on the command bar (Fig 22) displays a window that can be used to search for the treatment (or "standard action") that must be added to the patient's treatment plan (Fig 23). The header of this window is "Select a standard action".

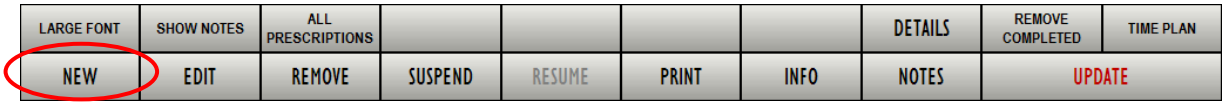


Fig 22 - Command bar

The full treatment selection procedure is summarized in paragraph 3.2. This paragraph describes the window shown in Fig 23.

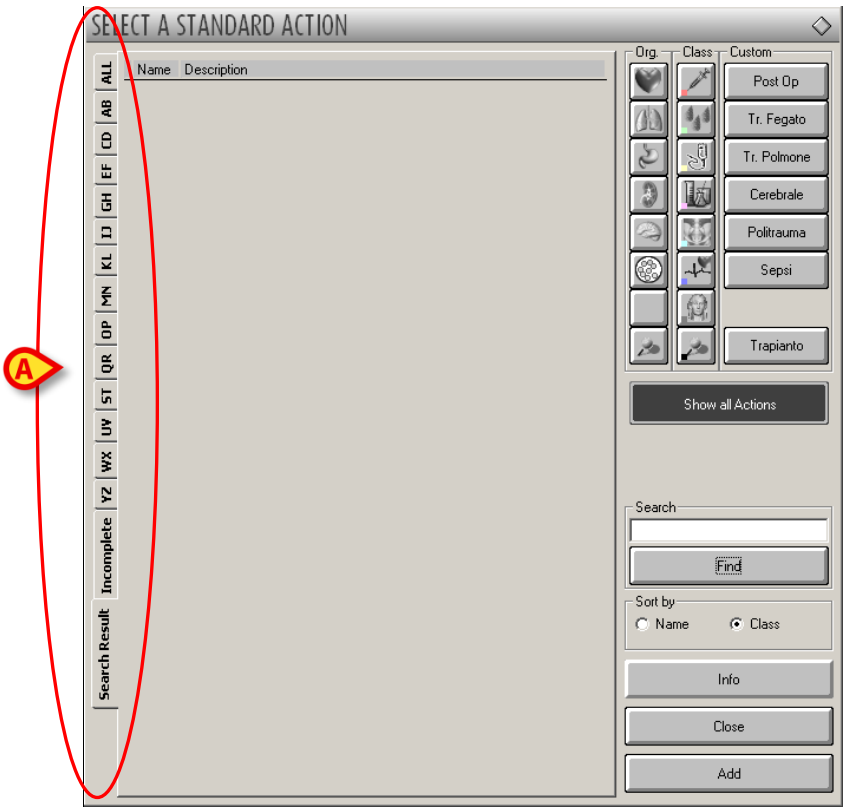


Fig 23 - Select a standard action

This window makes it possible to search and select a treatment (or "standard action") that must be added to the treatment plan.

Various tools, described below, are available for this purpose.

3.1.1. Alphabetic labels

The labels on the left (Fig 23 **A**) make it possible to display the treatments whose names begin with a specific letter. Click the **AB** button, for instance, to display the treatments whose names begin with “A” and “B” (an example is shown in Fig 24).

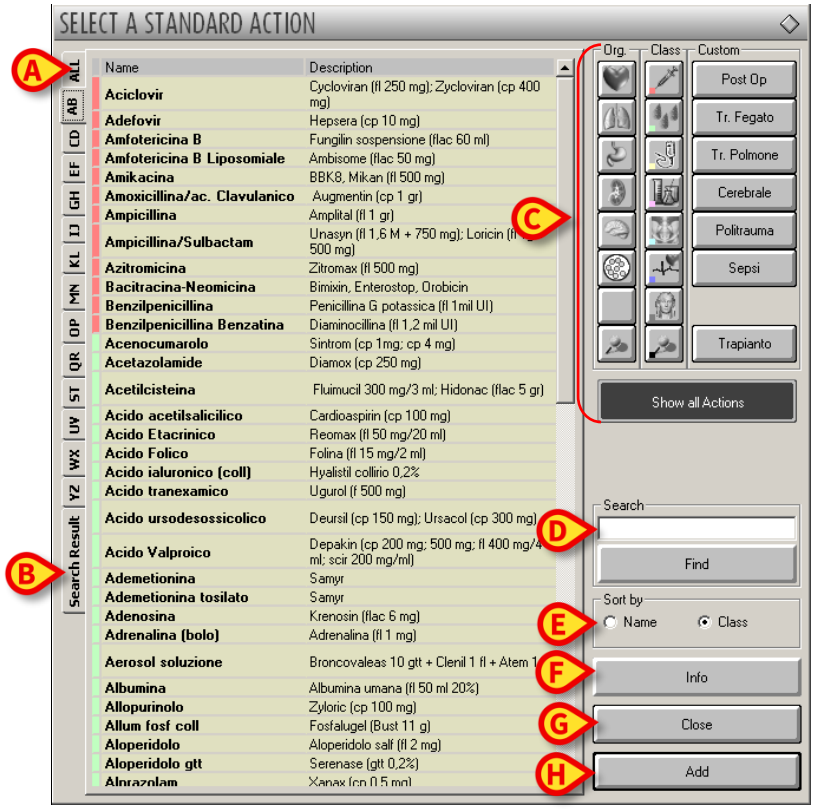


Fig 24 - Treatments whose names begin with “A” and “B”

The **All** label (Fig 24 **A**) displays the treatments full list again.

The **Search Result** label (Fig 24 **C**) displays the results list of the last search performed.

If the name of a treatment appears in blue characters it means that the treatment is related to an external drug management system (for instance: a cabinet or a stockroom). Please contact the technical assistance for more information.

3.1.2. Filter buttons

The filter buttons shown in Fig 25 and Fig 24 **C** make it possible to display a selected subset of treatments.

Fig 25 - Filter buttons

There are three different kinds of filters:

1. The “Organs” filters make it possible to display the subset of treatments that are related to a specific organ (heart, lungs etc...);

2. The “Class” filters reflect the treatment classes explained in paragraph 2.4;

3. The “Custom” filters can be defined by the system administrators according to the needs of the clinical staff.

The list of treatment displayed on the window can be reduced selecting more than one filter at the same time.

The **Show All Actions** button (Fig 25 **A**) displays the treatments full list again.

3.1.3. Search strings

A specific search tool (Fig 24 **D** and Fig 26) makes it possible to find the wanted treatment typing a string of characters that are part of the treatment’s name or description.

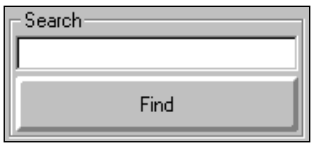


Fig 26 - Treatment search

To perform a search

- type the treatment name in the search field.
- Click the **Find** button.

The system will display the list of all the treatments whose name (or description) contains the specified string.

3.1.4. Sort results

The "radiobuttons" placed below the search field (Fig 24 **E**, Fig 27) make it possible to change the treatments display mode.

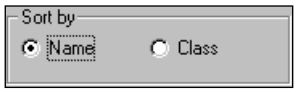


Fig 27 - Sort results by

When the list is sorted "by name" the treatments are displayed in alphabetical order. When the list is sorted "by class" the treatments belonging to the same class are grouped together. The items within the same class are displayed in alphabetical order.

3.1.5. Treatment Information

The **Info** button (Fig 24 **F**) opens a page containing information on the selected treatment. The contents of the page must be configured by the system administrator.

3.1.6. Close window

The **Close** button (Fig 24 **G**) closes the treatment selection window.

3.1.7. Add treatment to the patient plan

The **Add** button (Fig 24 **H**) makes it possible, once a treatment on the window is selected, to add the treatment to the patient treatment plan. See paragraph 3.2 for a summary of the complete procedure.

3.2. How to add a treatment to the patient plan

To add a new treatment to the patient treatment plan:

- Click the **New** button on the command bar (Fig 28).

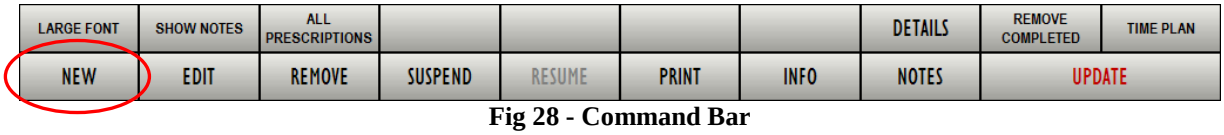


Fig 28 - Command Bar

The window shown in Fig 29 will open.

- Search the wanted treatment using the tools described in the previous paragraphs (3.1).
- Click the treatment to be prescribed.

The corresponding row will be highlighted (Fig 29 **A**).

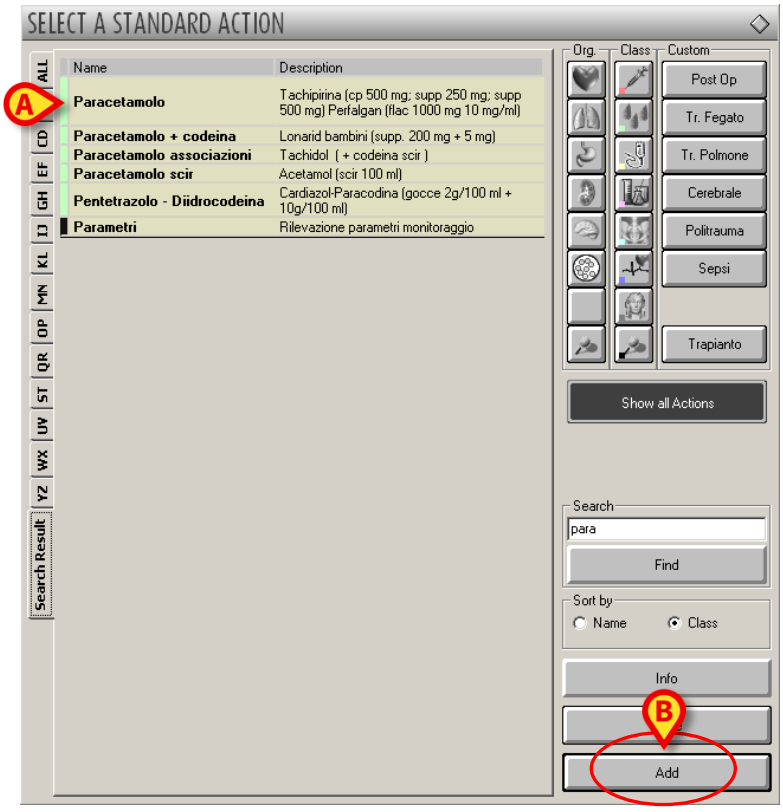


Fig 29

- Click the **Add** button (Fig 29 **B**).

A window making it possible to specify the wanted kind of prescription will open (Fig 30).

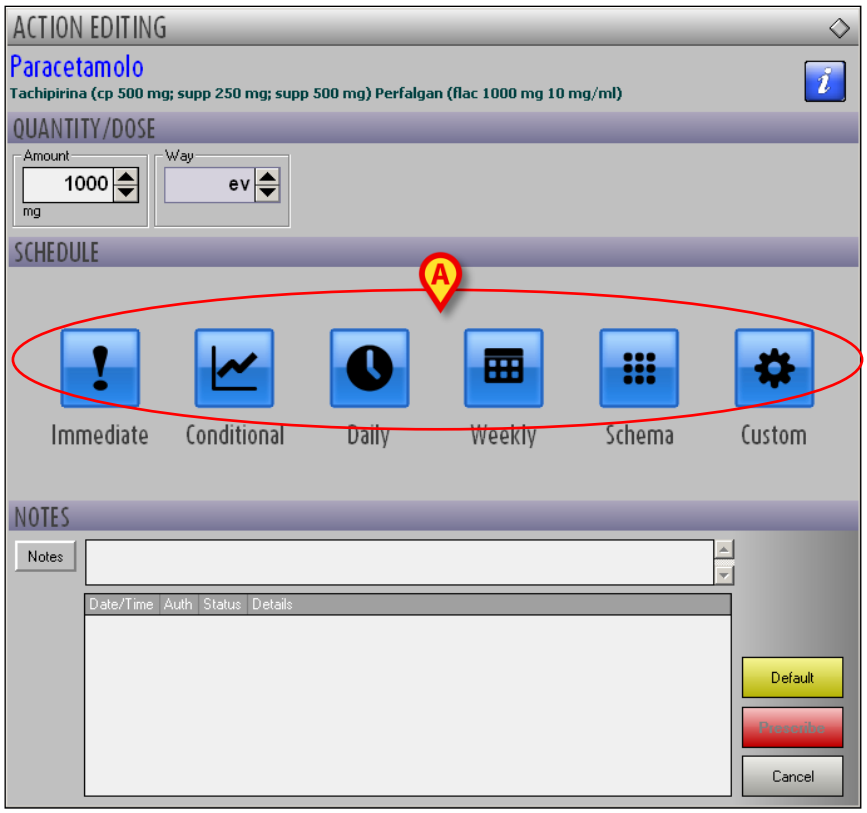


Fig 30

- Select the kind of prescription using the buttons indicated in Fig 30 **A**.

A window enabling to specify all the prescription details will open (Fig 31 shows an example of "Daily" prescription).

*The treatment can be configured to enable only one possible kind of prescription. If this is the case the selection buttons shown in Fig 30 **A** are not displayed and the specification window (see Fig 31 for an example) is instead directly displayed.*

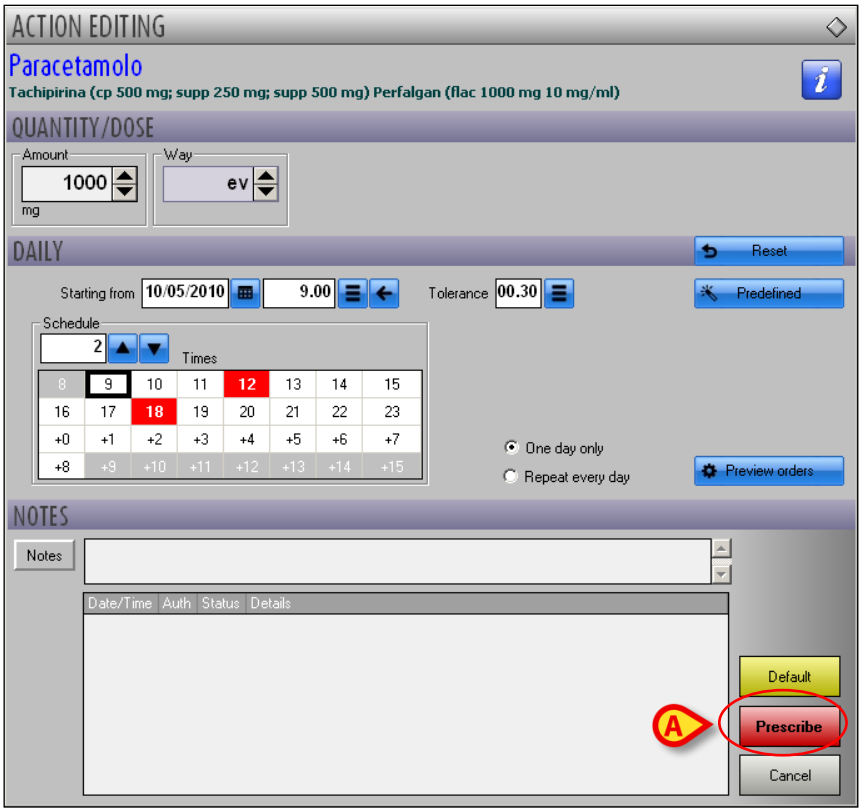


Fig 31 - Daily prescription

- Specify the prescription details.
- Click the **Prescribe** button (Fig 31 **A**).

The treatment is this way added to the patient treatment plan. A row corresponding to the new prescribed treatment appears on the prescription table.

The window shown in Fig 29 is described in detail in paragraph 3.1.

The window shown in Fig 30 and the detailed prescription specification procedures are described in paragraph 4.

4. The treatment specification window

This paragraph describes the treatment specification window shown in Fig 30 and Fig 32.

After treatment selection (Add button - Fig 29 **B**), a window making it possible to specify the details of the selected treatment appears (Fig 32).

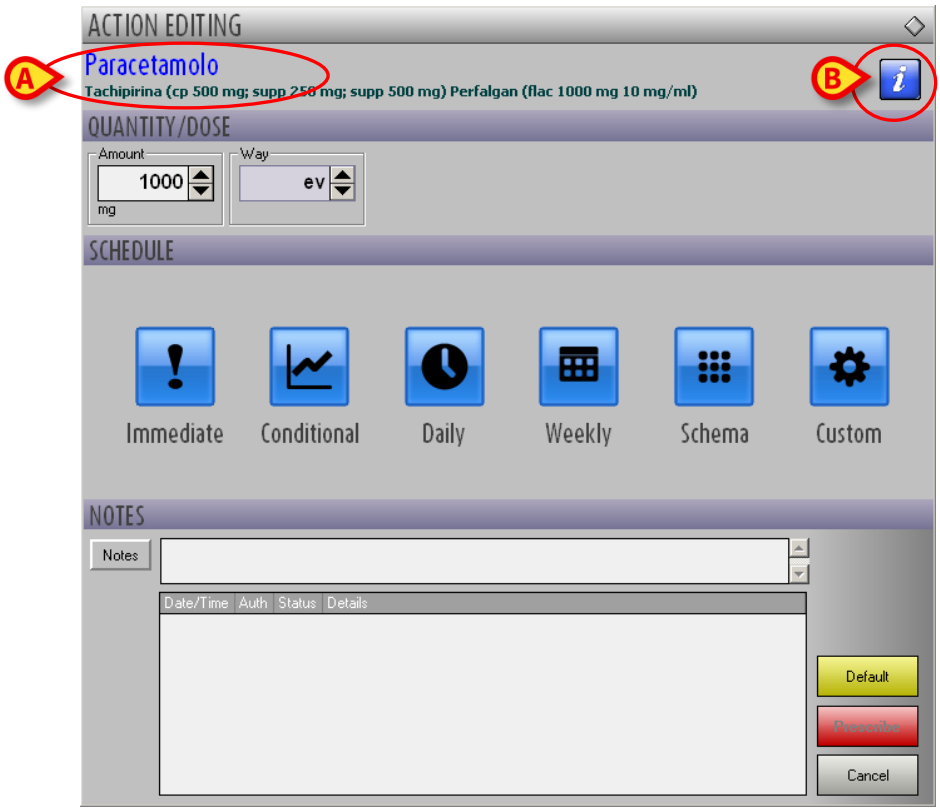


Fig 32 - Prescription

The treatment name is displayed on the upper-left corner of the window (Fig 32 **A**). Under the treatment name additional information can be displayed (specific name, possible dosages etc.).

The  button on the right (Fig 32 **B**) opens a page containing detailed information on the treatment.

The window is divided in several areas, each one dedicated to a specific sub-set of features of the prescription.

Please remember that every treatment is configured to enable the specification of its relevant values and is characterized by specific default values. Thus the specification window changes according to the kind of treatment selected.
It is also possible to set by configuration the automatic selection of the treatment's administration plan (conditional, weekly, daily, schema etc…). In those case the relevant window is automatically displayed (i.e. there is no need to select the kind of administration using the buttons described in paragraph 4.2

Any relevant action can be configured as prescribable treatment. Every configured action is characterized by its relevant parameters and default values.
Therefore the aspect and features of the treatment specification window depend on the treatment prescribed.

4.1. The "Quantity/Dose" area

Use the "Quantity/Dose" area (Fig 33) to specify the dosages and the administration way.

The number and nature of the parameters displayed in this area depend on the specific treatment selected. For example, for an infusion it is possible to specify the drug speed, the solution speed and the concentration (it is the case shown in Fig 33).

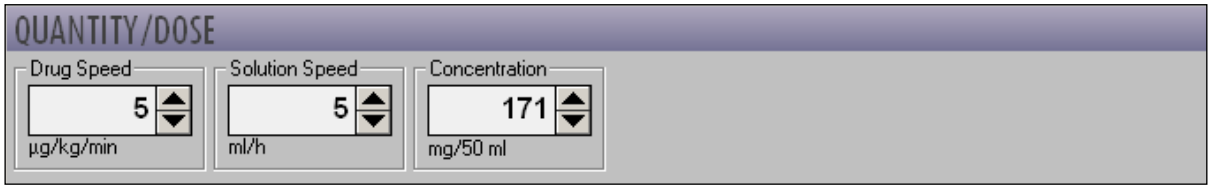


Fig 33 - Quantity/Dose

Standard default values are usually automatically set. Default values can anyway be easily changed.

To edit these values

- click the arrow buttons placed alongside each field -  -.

The value will progressively increase (up arrow) or diminish (down arrow).

Otherwise

- clik on the field that must be edited.

The corresponding value will be highlighted (Fig 34 **A**).

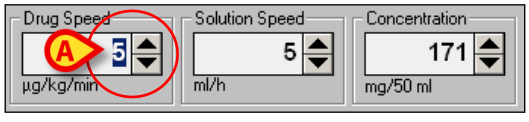


Fig 34

- Type the new value using the workstation keyboard.

The values in the different fields can be related one to the other by a proportionality that is set by configuration. When this is the case, after specifying one value, the system automatically calculates all the related values.

4.2. The “Schedule” area

Use the “Schedule” area (Fig 35) to specify “when” and “how many times” a treatment must be administered.

Six “schedule” types are available. A type can be selected by the buttons indicated in Fig 35 **A**.

Once the type is selected it is possible to specify the treatment schedule details.

It is possible to set by configuration the automatic plan type selection (conditional, weekly, daily, schema etc…). In those cases the relevant window is automatically displayed (i.e. there is no need to select the kind of administration using the buttons described in this paragraph).

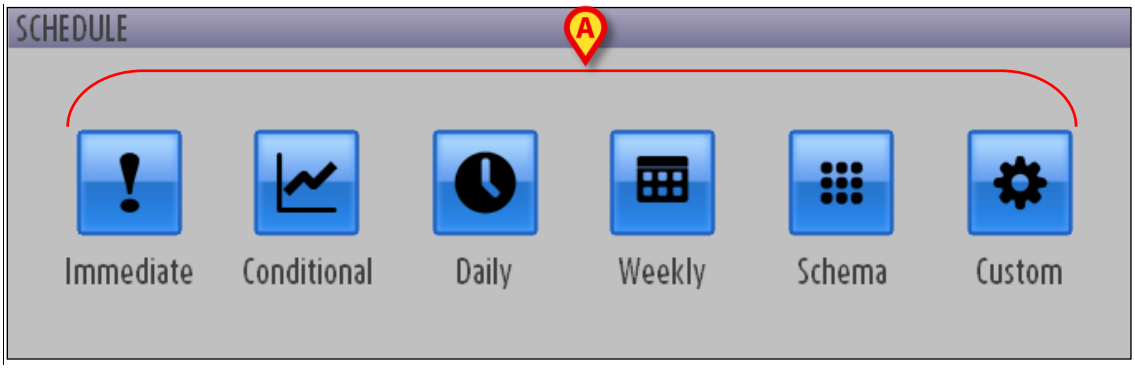


Fig 35 - “Schedule” area

These are the possible plan types:

	IMMEDIATE	The treatment prescribed must be administered immediately. See paragraph 4.2.1.
	CONDITIONAL	The treatment prescribed must be administered only under certain conditions. See paragraph 4.2.2.
	DAILY	The treatment prescribed refers to one day. See paragraph 4.2.3.

	WEEKLY	The treatment prescribed refers to one week. See paragraph 4.2.4.
	SCHEMA	Use this kind of prescription to define a schema like (for example) “administer this treatment 4 times in 3 days”. See paragraph 4.2.5.
	CUSTOM	The treatment plan is completely customized. The orders that must be generated are all explicitely stated. See paragraph 4.2.6.

4.2.1. Immediate administration prescription

“Immediate administration” means that the treatment prescribed must be administered immediately.

To prescribe an immediate administration

- click the  icon on the prescription window.

The “Schedule” area on the window will change in the way shown in Fig 36.

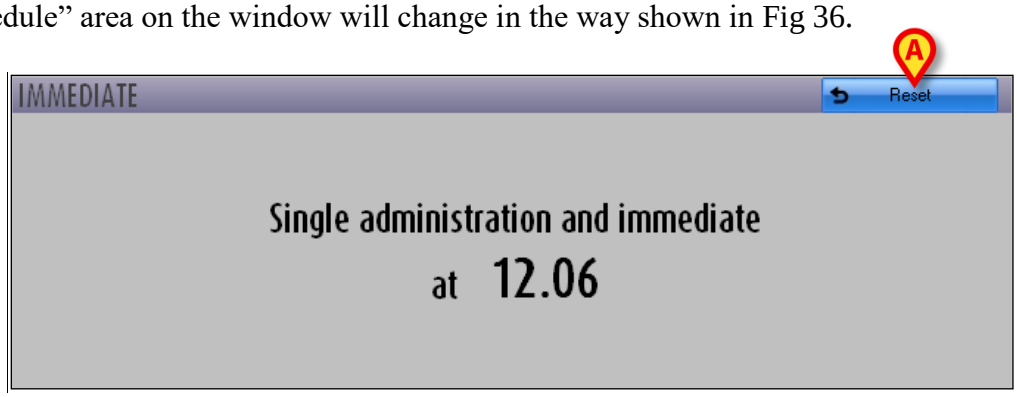


Fig 36

The window states that a single immediate administration is being ordered. The administration time (that is present time) is specified as well.

The **Reset** button on the top-right corner (Fig 36 **A**) makes it possible to go back to the selection window shown in Fig 35.

4.2.2. Conditional administration prescription

“Conditional administration” means that the treatment prescribed must be administered only under certain conditions.

To add a conditional prescription

- click the  icon on the prescription window.

The window will change in the following way

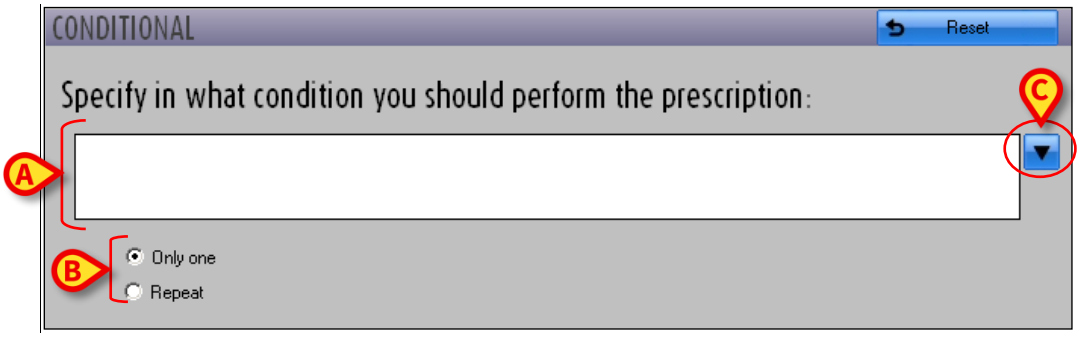


Fig 37 - Conditional prescription

- Specify in the area indicated in Fig 37 **A**, the administration condition, i.e. the condition that "triggers" the treatment administration.

Use the "radiobuttons" indicated in Fig 37 **B** to specify whether the treatment will be administered only once or it will be kept in the treatment plan to be repeated in the future.

Conditional prescriptions are characterized by "purple" color on the prescriptions table (Fig 38, paragraph 2.3).

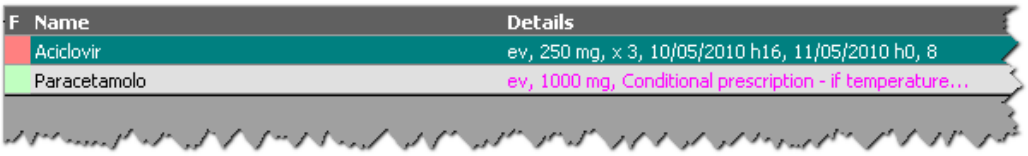


Fig 38

Conditional prescriptions are characterized by "purple" color in the corresponding boxes on the "Therapy Execution" module (Fig 39, paragraph 6.3).

Fig 39

In case you want to go back to the selection window shown in Fig 35, use the **Reset** button on the top-right corner.

4.2.2.1. Standard phrases for the condition specification

It is possible to use pre-defined “Standard phrases” to rapidly indicate the administration conditions.

To insert a “Standard phrase”

- click the  button indicated in Fig 37 **C**.

The following window opens

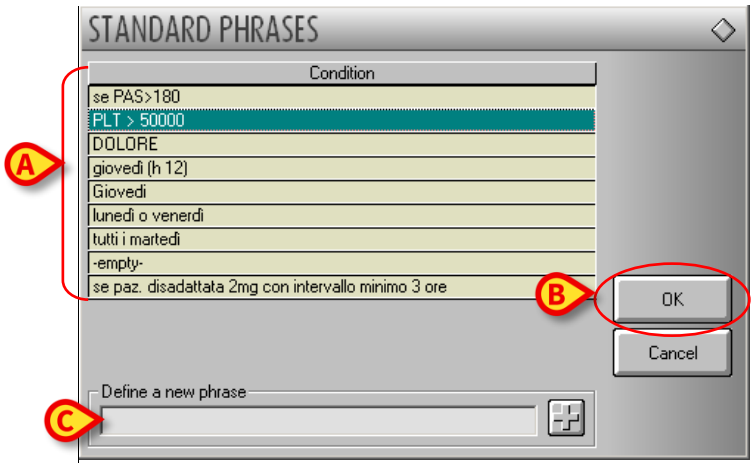


Fig 40 - Standard phrase selection

- Click the relevant phrase. The phrase is this way highlighted (Fig 40 **A**).
- Click the **Ok** button (Fig 40 **B**).

The selected phrase is inserted as condition in the prescription window (Fig 41). If necessary, the phrase can be now edited by the user.

Fig 41 - Inserted standard phrase

4.2.2.2. New standard phrase

To define a new standard phrase

- click the field indicated in Fig 40 **C**.

A cursor appears in the field.

- Type the new standard phrase (Fig 42).

Fig 42 - New standard phrase

- Click the button placed alongside the field (Fig 42 **A**).

The new phrase is this way added to those already existing (Fig 43 **A**).

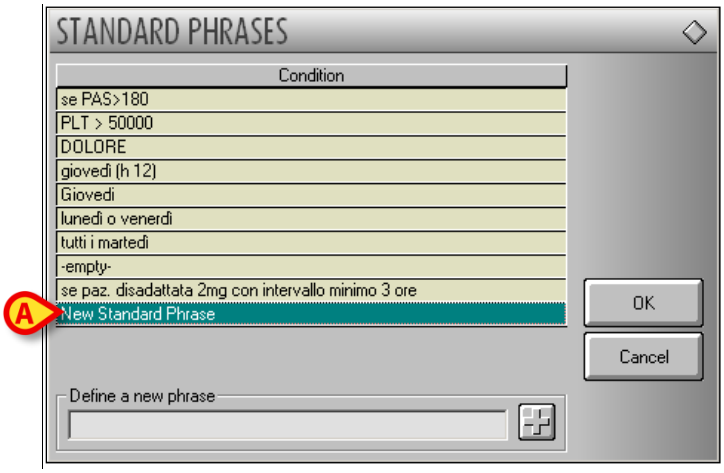


Fig 43

4.2.3. Daily treatment prescription

The prescription of a daily treatment makes it possible to generate the administration orders for one day.

To prescribe a daily treatment

- click the icon on the prescription window.

The window changes in the following way.

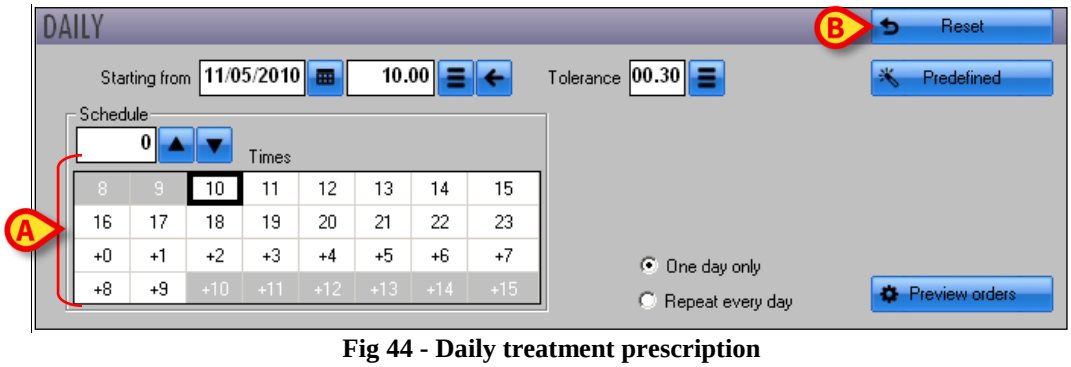


Fig 44 - Daily treatment prescription

The window shown in Fig 44 contains several tools making it possible to specify the prescription details. The next paragraphs describe these tools.
In case you need to go back to the selection window shown in Fig 35, click the **Reset** button on the top-right corner (Fig 44 **B**).

4.2.3.1. Administration time specification

Use the “plan” area (indicated in Fig 44 **A**) to specify the treatment administration times.

The table shown in Fig 45 displays the full hours of the day. Each cell corresponds to a specific hour. The first selectable cell corresponds by default to the closest full hour preceding the current time (for example, if it is 12:30 the first selectable cell is 12:00). 24 cells are selectable (corresponding to 24 hours).

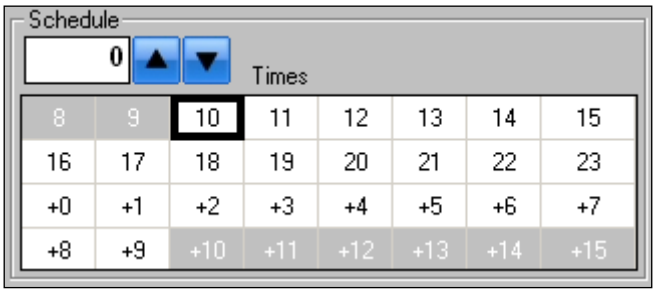


Fig 45

To select a time

- click the corresponding cell.

The selected cell is highlighted red (Fig 46).

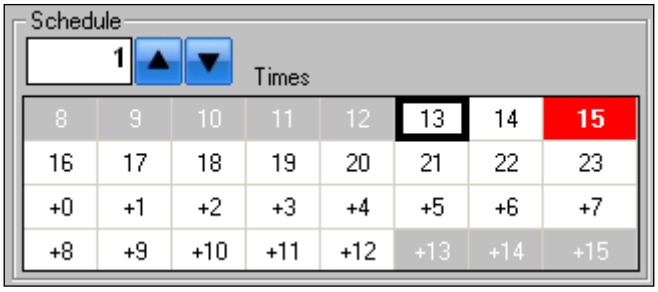


Fig 46 - One administration at 15:00

To deselect a time, click again the corresponding cell. The red cell goes back to white.

It is also possible to specify the number of daily administrations of the treatment.

To do that

- type the number of administrations in the field indicated in Fig 47 **A**.

The system automatically places the administrations at proper times.

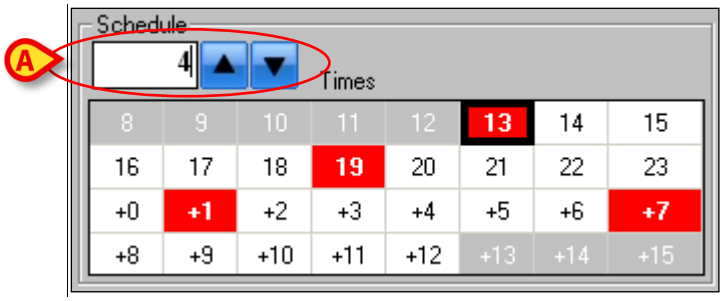


Fig 47

In Fig 47, for example, the user specified that the treatment must be administered 4 times in 24 hours. The system automatically placed the administration orders at 6 hours intervals, with the first administration set at the next selectable time (13:00 o'clock). This scheme can be edited by the user either selecting or deselecting the relevant times (click the corresponding cell to operate).

> *If the user sets a time manually and, after that, makes use of the above-described functionality (i.e. he/she indicates the number of administration orders as in Fig 47* ***A****), the system places the administration orders at regular intervals starting from the time specified by the user.*
>
> *If the user sets two or more times manually and, after that, makes use of the above-described functionality (i.e. he/she indicates the number of administration orders as in Fig 47* ***A****), the system places the administration orders at regular intervals starting from the first time specified by the user and ignoring the other times indicated.*

4.2.3.2. Treatment start time specification

Current day is, by default, the relevant day for the treatment specification. Current time is, by default, the treatment start time (i.e. if it is 12:30 the time indicated by default is "12:00").
It is possible to indicate a different date/time as treatment start time. Namely, it is possible to specify a treatment beginning in a future day and/or at a future time. The values indicated in Fig 48 **A** specify the treatment start time.
Dedicated tools are available to set these values.

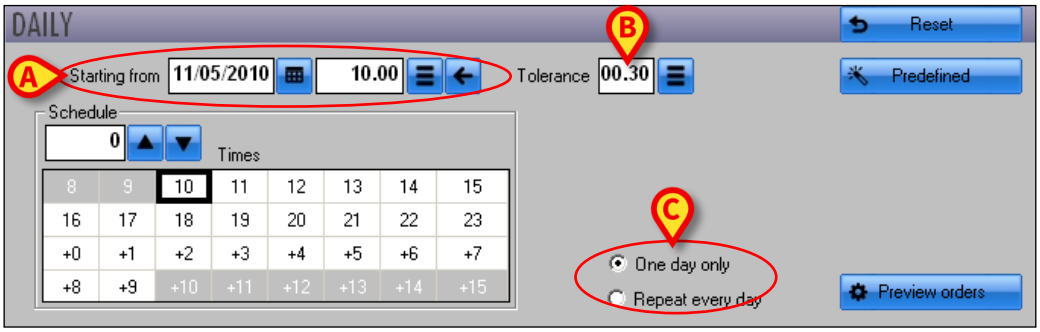


Fig 48 - Daily treatment prescription

To change the start date

- click the button placed alongside the date.

A calendar-window opens (Fig 49).

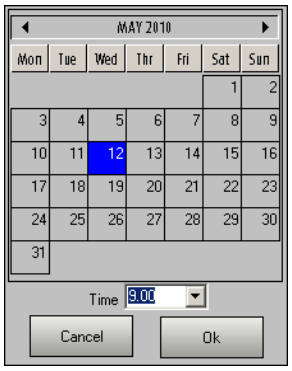


Fig 49 - Calendar

- Select the start date
- Click the **Ok** button on the calendar.

The new start date is displayed, highlighted yellow, on the prescription window.

To change the start time

- click the button placed alongside the time currently selected.

A menu containing several options appears (Fig 50).

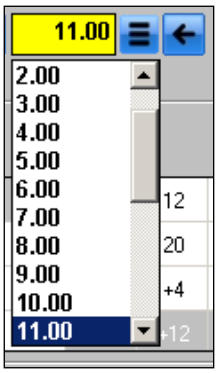


Fig 50

- Click the option corresponding to the wanted start time.

The selected start time remains, highlighted yellow, on the prescription window. The table described in paragraph 4.2.3.1 changes accordingly.

The button can be clicked to set the current time/date back.

4.2.3.3. Tolerance time specification

The "Tolerance" box highlighted in Fig 48 **B** makes it possible to set the tolerance period for the administration.

"Tolerance" is the time interval preceding and following the specified administration time within which the administration is considered "on time".

If a tolerance of 15 minutes is indicated for an administratioon prescribed for 11:00 o'clock, the administration is on time if performed from 10:45 to 11:15.

4.2.3.4. Treatment plan repeatability

The "Radiobuttons" indicated in Fig 48 **C** specify whether the administration must be administered once ("One day only" button) or it must be kept on the treatment plan for further administrations ("Repeat every day" option). See paragraph 1.3.2 for the explanation of "Prescription repeatability".

4.2.3.5. Predefined plan

The **Predefined** button indicated in Fig 51 **A**, opens a window making it possible to select a treatment plan from a list of pre-defined options.

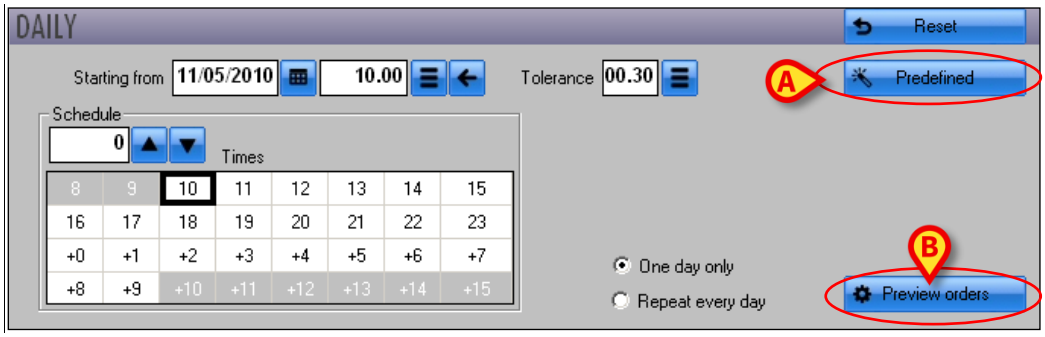


Fig 51 - Daily treatment prescription

To select a pre-defined plan

- click the **Predefined** button.

The following window opens (Fig 52).

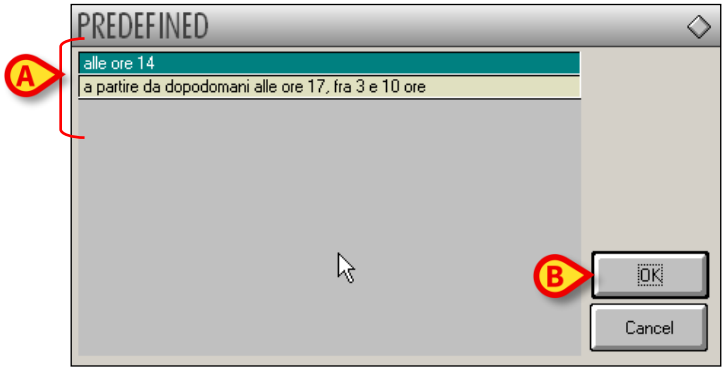


Fig 52 - Pre-defined treatment plans

- Click the option corresponding to the wanted plan (Fig 52 **A**).

The option will be highlighted.

- Click **Ok** (Fig 52 **B**).

The values on the prescription window will change accordingly.

The pre-defined treatment plans are created during configuration by the system aministrators.

4.2.3.6. Orders preview

The **Preview Orders** button indicated in Fig 51 **B** opens a window that summarizes in a list all the orders that will be generated by the treatment plan currently specified (Fig 53).

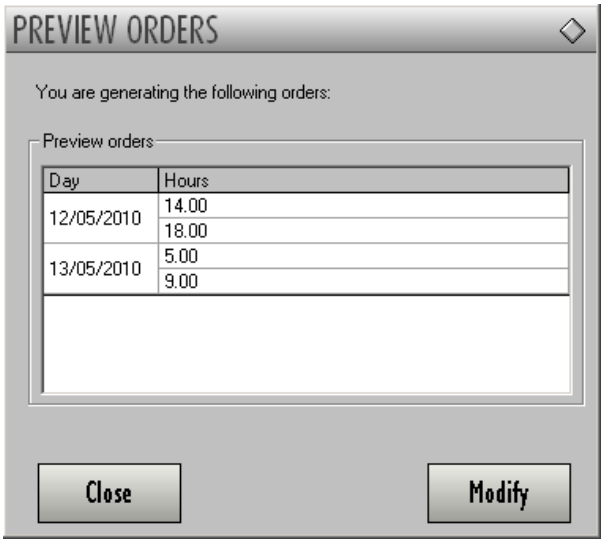


Fig 53 - Orders preview

The "Orders preview" window displays in a table all the orders that will be generated. The scheduled administration date and time are specified for each order.

In case of repeatable prescriptions the "Orders preview" window displays the orders that will be generated in the first seven days. See paragraph 1.3.2 for an explanation of the "prescription repeatability".

Use the **Close** button to close the "Orders preview" window.

Use the **Modify** button to modify the treatment plan, i.e. to add or remove orders and to change their times.

To do that

- click the **Modify** button.

A message box will be displayed, indicating that it will not be possible, after the changes, to go back to the original values (Fig 54).

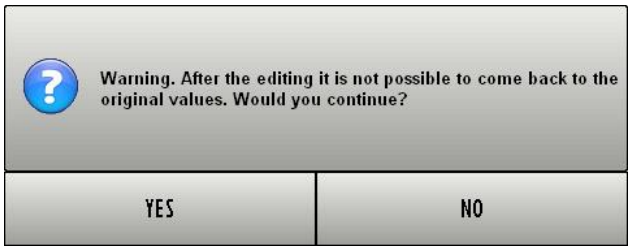


Fig 54

- Click **Yes** to proceed.

The custom prescription functionalities are this way enabled (Fig 55). These functionalities are described in paragraph 4.2.6.

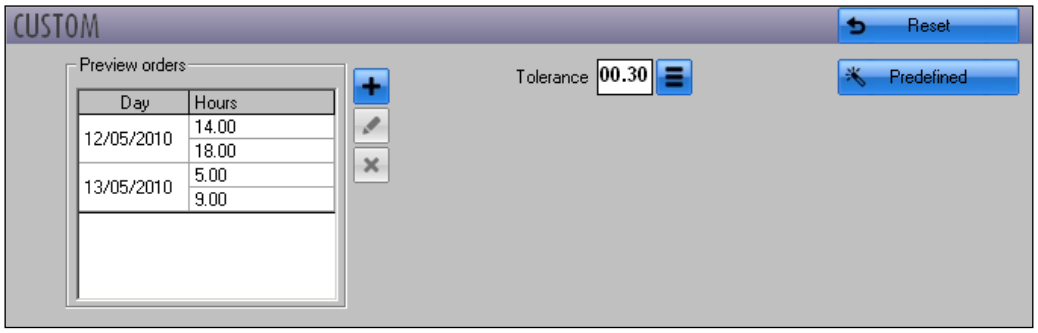


Fig 55 - Custom prescription functionalities

4.2.4. Weekly treatment prescription

Use the "weekly treatment prescription" option to specify the treatment's administration orders for one week.

To prescribe a weekly treatment

- click the  icon on the prescription window.

The window changes in the following way (Fig 56).

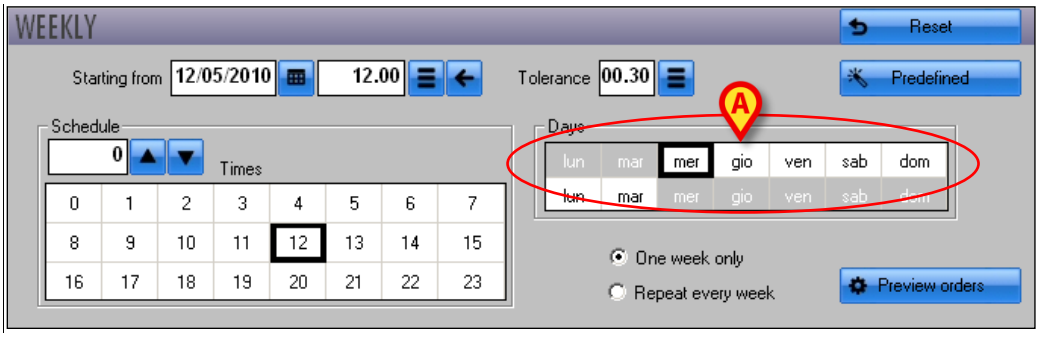


Fig 56 - Weekly plan prescription

This window contains all the options and functionalities already described for the daily prescription plan. These functionalities are explained in the following paragraphs:

- 4.2.3.1 - Prescription times specification;
- 4.2.3.2 - Treatment start time/date specification;
- 4.2.3.3 - Tolerance specification;
- 4.2.3.4 - Treatment plan repeatability (repeatability is reffered in this case to the weekly plan);
- 4.2.3.5 - Pre-defined plan selection;
- 4.2.3.6 - Orders preview.

The above-described functionalities are integrated by a window making it possible to select the administration weekdays (Fig 56 **A**).

To select a day

- click the corresponding cell.

The cell turns red (Fig 57). Click the cell again to deselect it.

Fig 57 - Days selection

When prescribing a weekly treatment plan it is necessary to specify both the administration times and the administration days.

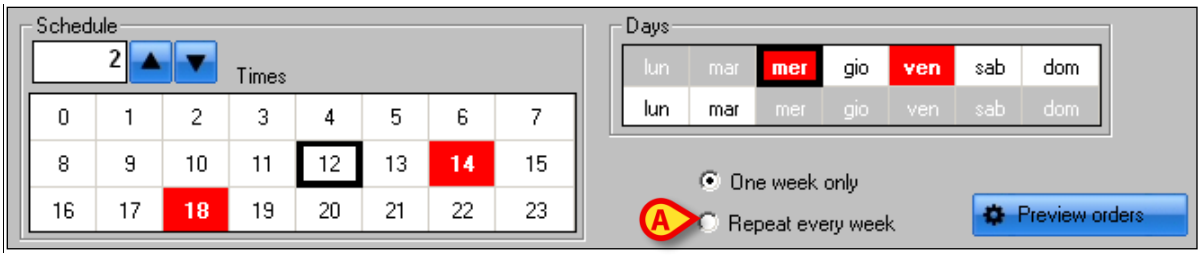


Fig 58

In Fig 58, for example, the treatment must be administered at 14:00 and at 18:00 on Wednesday and Friday. Thus 4 administration orders will be generated.

If the treatment is repeatable (by selecting the "radiobutton" indicated in Fig 58 **A** - "Repeat every week") the system generates every week 4 administration orders at 14:00 and 18:00 on Wednesdays and Fridays.

4.2.5. Treatment prescription schema

Use the "Treatment prescription schema" option to specify a prescription like the following: "Administer this treatment N times in N days (4 times in 3 days, for instance)". The system

calculates the appropriate time intervals and places the administration orders starting from the time indicated in the “Starting from” field.

To use this option

- click the  icon on the prescription window.

The window changes in the following way (Fig 59).

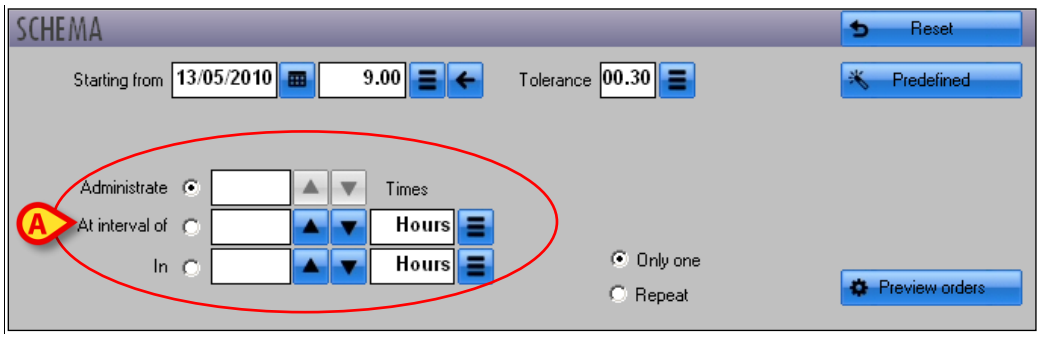


Fig 59 - Dictionary

Some of the functionalities described regarding the daily and weekly treatment plan prescriptions are here maintained. See the paragraphs indicated below for these functionalities:

- 4.2.3.2 - Treatment start time/date specification;
- 4.2.3.3 - Tolerance specification;
- 4.2.3.4 - Treatment plan repeatability (repeatability is referred in this case to the specified schema);
- 4.2.3.5 - Pre-defined plan selection;
- 4.2.3.6 - Orders preview.

Use the tools highlighted in Fig 59 **A** and Fig 60 to define the schema.

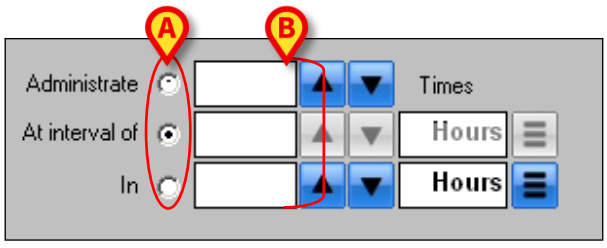


Fig 60

To define a schema,

- use the “radiobuttons” indicated in Fig 60 **A** to select the appropriate option for the wanted schema.

The “Administer” option makes it possible to specify the treatment’s period (every how much time) and duration (in how much time). The system automatically calculates the number of administrations. For example: if the user indicates that a treatment must be administered every 3

hours in 8 hours the system calculates 3 administrations (one now, one after 3 hours, one after 6 hours).

The "Intervals" option makes it possible to specify the number of administrations and the treatment's duration (in how much time). The system automatically calculates the treatment's period (every how much time the orders must be administered). For example: if the user indicates that a treatment must be administered 3 times in 8 hours the system calculates a 2,7 hours period.

The "In" option makes it possible to specify the number of administrations and the treatment's period (every how much time). The system automatically calculates the treatment's duration (in how much time the orders must be administered). For example: if the user indicates that a treatment must be administered 3 times every 2 hours the system calculates a 6 hours duration.

- Specify the relevant values in the fields indicated in Fig 60 **B**.

Use the  button indicated in Fig 61 **A** to specify the schema's unit of measure (hours, days, minutes). The system automatically turns the specified value into the appropriate unit of measure (more than 119 minutes is turned to hours, more than 47 hours is turned to days).

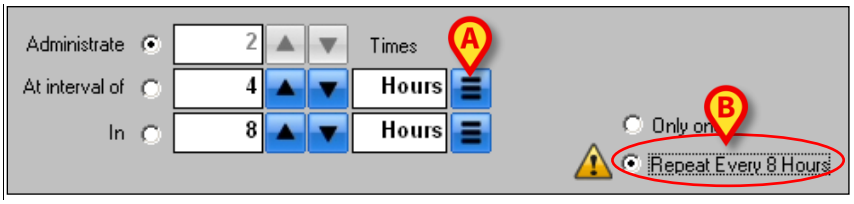


Fig 61

Select the option indicated in Fig 61 **B** to specify a repeatable schema. The repeatability period is the schema duration. In the example shown in the figure the schema is repeated every 8 hours. See paragraph 1.3.2 for a description of repeatable treatments.

4.2.6. Custom treatment plan prescription

It is possible to prescribe a treatment plan that is completely decided by the user. In these cases the orders are all explicitely specified, one by one.

To prescribe a custom treatment plan

- click the  icon on the prescription window.

The window changes in the following way (Fig 62).

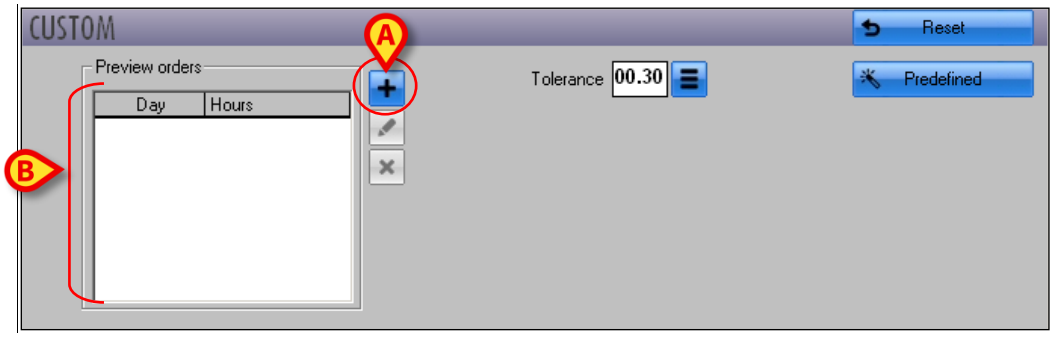


Fig 62 - Custom treatment plan specification

- Click the  button indicated Fig 62 **A**.

A window making it possible to specify the treatment date and time opens (Fig 63). Current date and time are set by default.

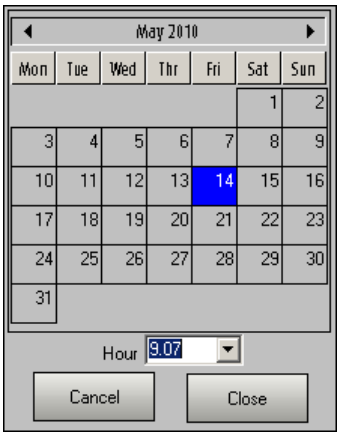


Fig 63

- Specify the order's date and time.
- Click the **Close** button.

A row will be added to the "Orders preview" table (Fig 64, Fig 62 **B**). The row indicates the treatment's date and time.

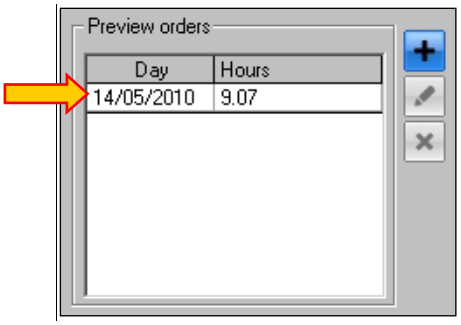


Fig 64

4.2.6.1. Editing the order values

To edit the values of an order

- click the row corresponding to the order that must be edited (click it on the cell displaying the time).

The row is highlighted (Fig 65 **A**). The buttons indicated in Fig 65 **B** are active.

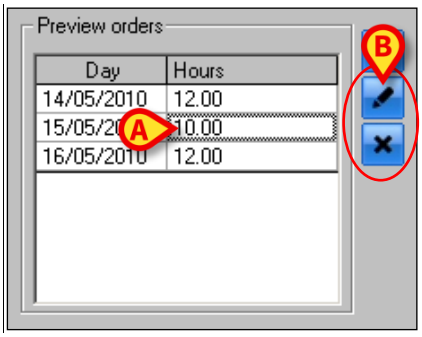


Fig 65

- Click the  button.

A calendar window appears, displaying the values of the selected order (date and time).

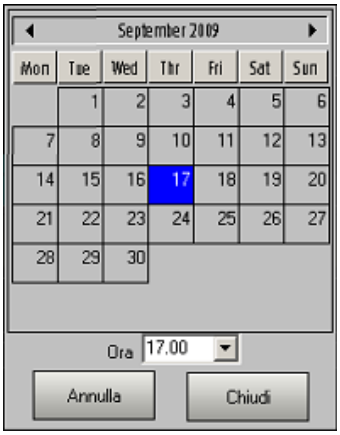


Fig 66

- Edit the order values.
- Click the **Close** button.

The order's values are this way changed.

4.2.6.2. How to delete an order

To delete one of the specified orders,

- click the row corresponding to the order that must be deleted (click the cell displaying the time).

The row is highlighted (Fig 65 **A**). The buttons indicated in Fig 65 **B** are active.

- Click the  button. The order is this way deleted.

4.2.6.3. Other options on the custom prescription window

Some of the functionalities that have been described before relating the daily and weekly treatment plan prescriptions are here maintained. See the paragraphs indicated below for these functionalities:

- 4.2.3.3 - Tolerance specification;
- 4.2.3.5 - Pre-defined plan selection;

4.3. The “Notes” area

The “Notes” area on the prescription specification window (Fig 67 **A**) makes it possible to:

1) add a note to the prescription;
2) read about the past prescriptios of the same treatment.

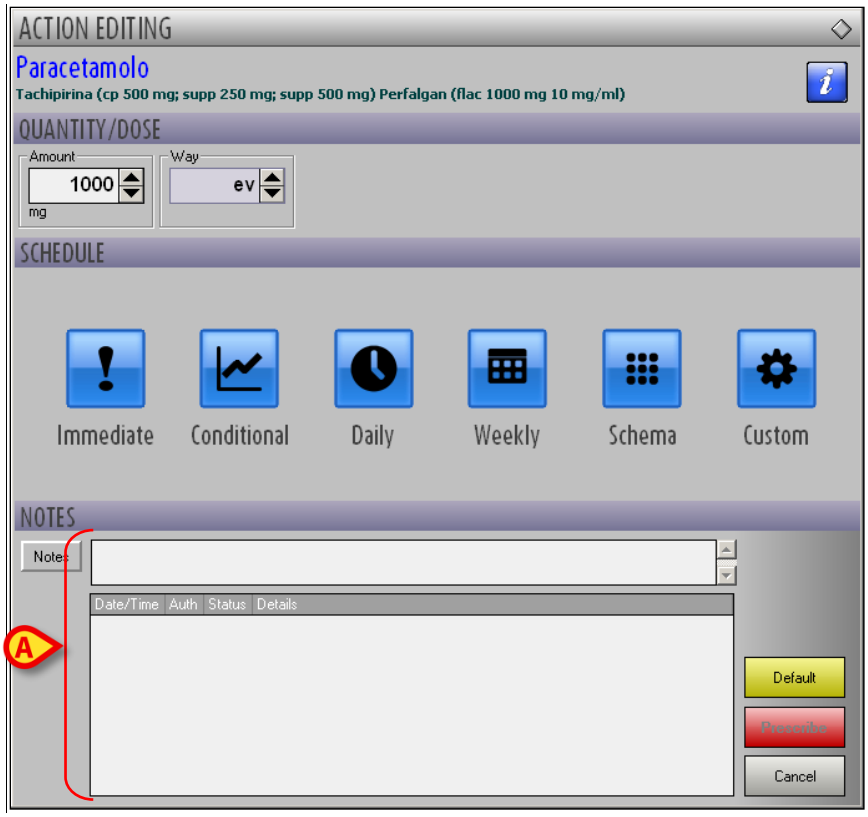


Fig 67 - Notes area

4.3.1. How to add a note

To add a note

- click the “Notes” field (Fig 68 **A**).

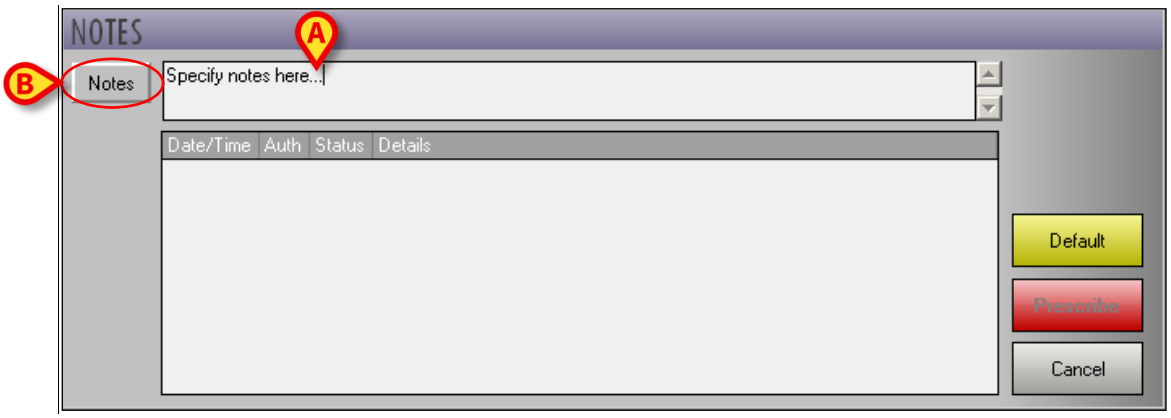


Fig 68

- Specify the note.

The notes are visible on the prescribed treatments table when the **Show Notes** button is selected on the command bar (see Fig 102, paragraph 5.6).

The notes added using these functionalities are referred to the treatment prescription, not to the patient. The patient notes are specified through the procedure described in paragraph 5.11.

4.3.1.1. Standard phrases for notes specification

Pre-defined “Standard phrases” can be used to speed-up the notes specification.

To add a standard phrase

- click the **Notes** button (Fig 68 **B**).

The following window opens (Fig 69).

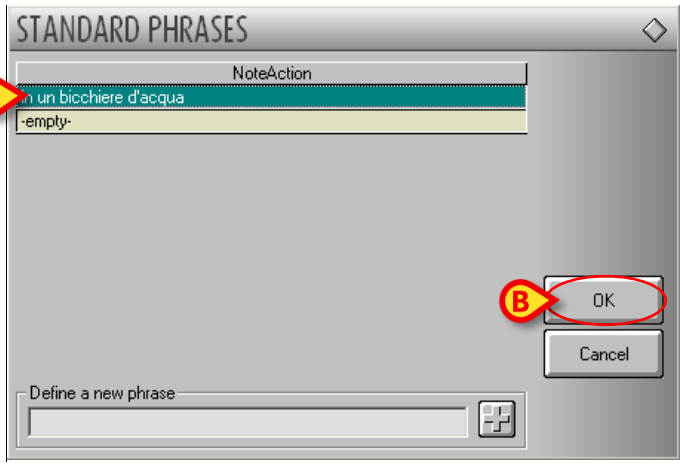


Fig 69 - Standard Phrases

The window shown in the figure contains the list of all the pre-defined phrases.

- Click the wanted phrase.

The phrase is highlighted (Fig 69 **A**).

- Click the **Ok** button (Fig 69 **B**).

The phrase is displayed in the "Notes" field.

It is possible for an authorized user to add a new standard phrase to the existing list.

To define a new phrase

- click the **Notes** button (Fig 68 **B**).

The "Standard phrases" window opens (Fig 70).

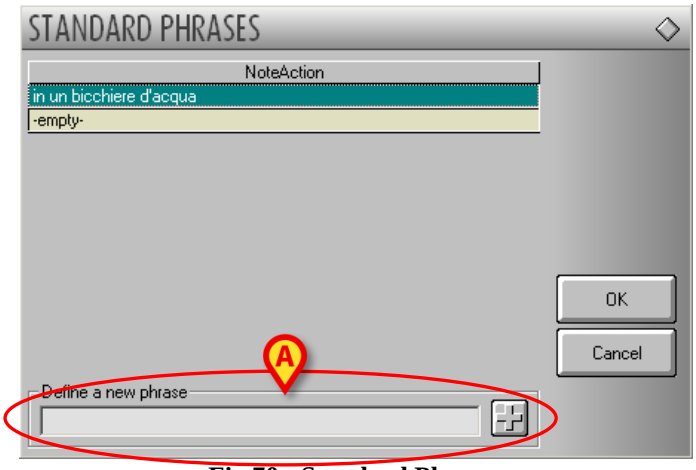


Fig 70 - Standard Phrases

- Click the "Define a new phrase" field (Fig 70 **A**).
- Type the new standard phrase (Fig 71 **A**).

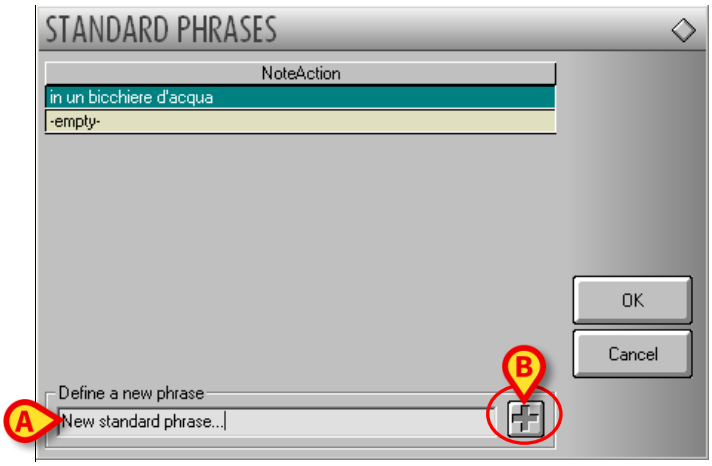


Fig 71 - New standard phrase

- Click the  button placed alongside the field (Fig 71 **B**).

The new phrase is this way added to the standard phrases list (Fig 72) and will be available in the future.

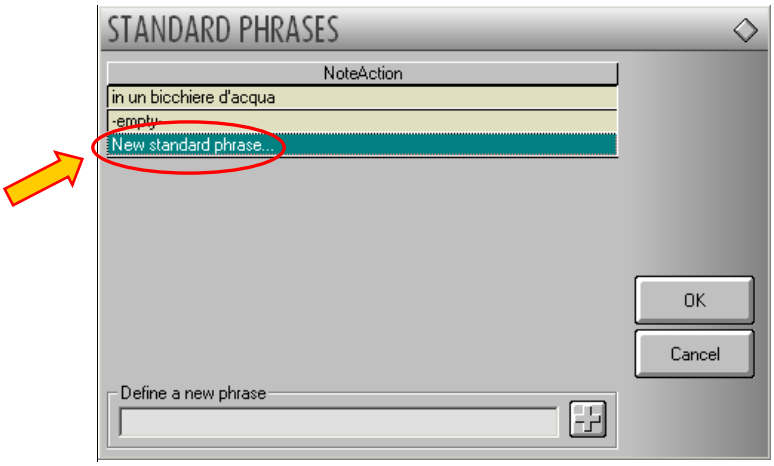


Fig 72

The phrase can be inserted in the "Notes" field (Fig 73) using the procedure described in paragraph 4.3.1.

Fig 73

4.3.2. Treatment history

The history area (Fig 74 **A**) displays a table containing the main information on the previous orders that were generated for that treatment.

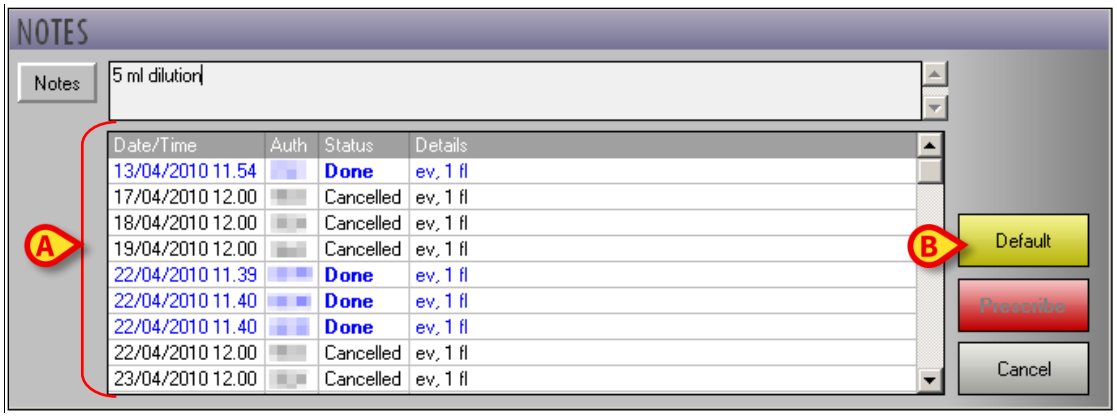


Fig 74 - Treatment history

In the table each row corresponds to an action referred to a certain order.

For each action the following information is provided:

- action date and time;
- acronym of the user who prformed the action;
- kind of action performed;
- action details.

4.3.2.1. How to restore the prescription default values

If, after editing the prescription values, it is necessary to restore the prescription default values,

- click the **Predefinito** button on the "Notes" area, indicated in Fig 74 **B**.

All the changes will be lost; the prescription default values will be restored.

4.3.3. Prescription window configurability

Virtually any kind of action can be added to the actions list, with its specific features (values, parameters, default values etc…).

The treatment specification window changes accordingly. Thus changes the way the treatment specification window looks like.

The look and functionalities of the prescription specification window depend on the kind of treatment specified.

Refer to the system administrators for the treatments configuration.

5. The command bar

The command bar of the "Therapy Prescription" module (Fig 9 **D**, Fig 75) is formed by several function-buttons.

Fig 75 - Command bar

Each button gives access to a specific functionality. This paragraph describes the functionalities activated by each button.

5.1. Treatment plan update

To understand this paragraph - 5.1 - and the following one - 5.1.1 - it is necessary a good understanding of the basic concepts explained in paragraph 1.3.

The treatment plan update procedure makes it possible to

a) validate the orders that are within the "Therapy cycle" that have not yet been validated (the "Therapy cycle" is explained in paragraph 1.3.4);
b) generate the not-yet-generated orders within 7 days after validation;
c) delete the orders that must be deleted.

To update the treatment plan

- click the UPDATE button on the command bar (Fig 76).

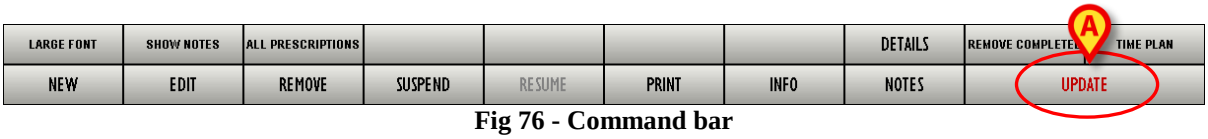


Fig 76 - Command bar

The following window opens (Fig 77).

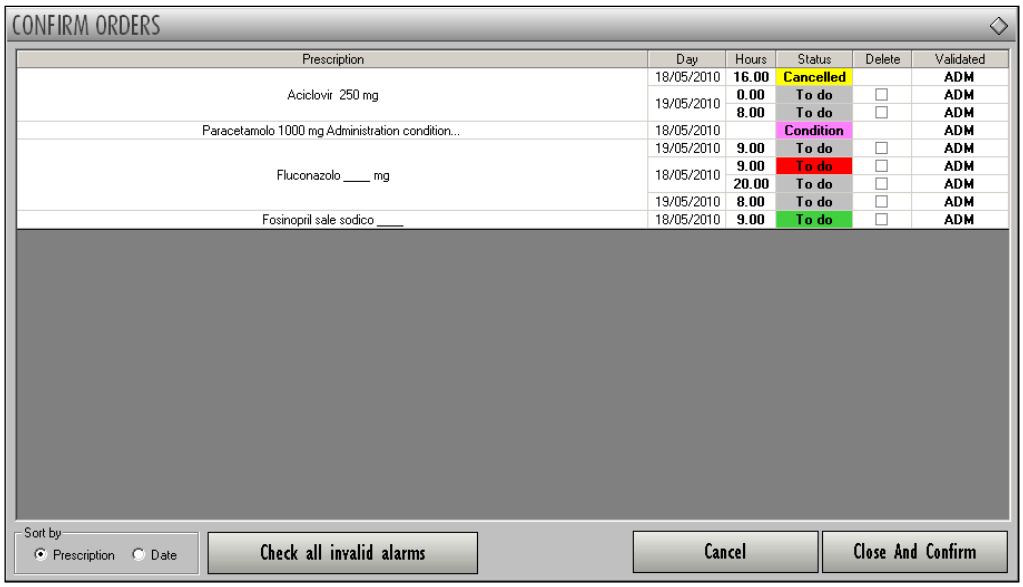


Fig 77 - Orders confirmation

The "Orders confirmation" window displays in a table all the orders that are within the "Therapy cycle" and the past orders that have not been administered yet. This window is described in paragraph 5.1.1.

- Click the **Chiudi e Conferma** button.

The window closes. A print report is created, containing the list of the orders to be administered. The printed list contains all the not-yet-administered orders that are within the Therapy Cycle. The print preview is displayed (Fig 78).

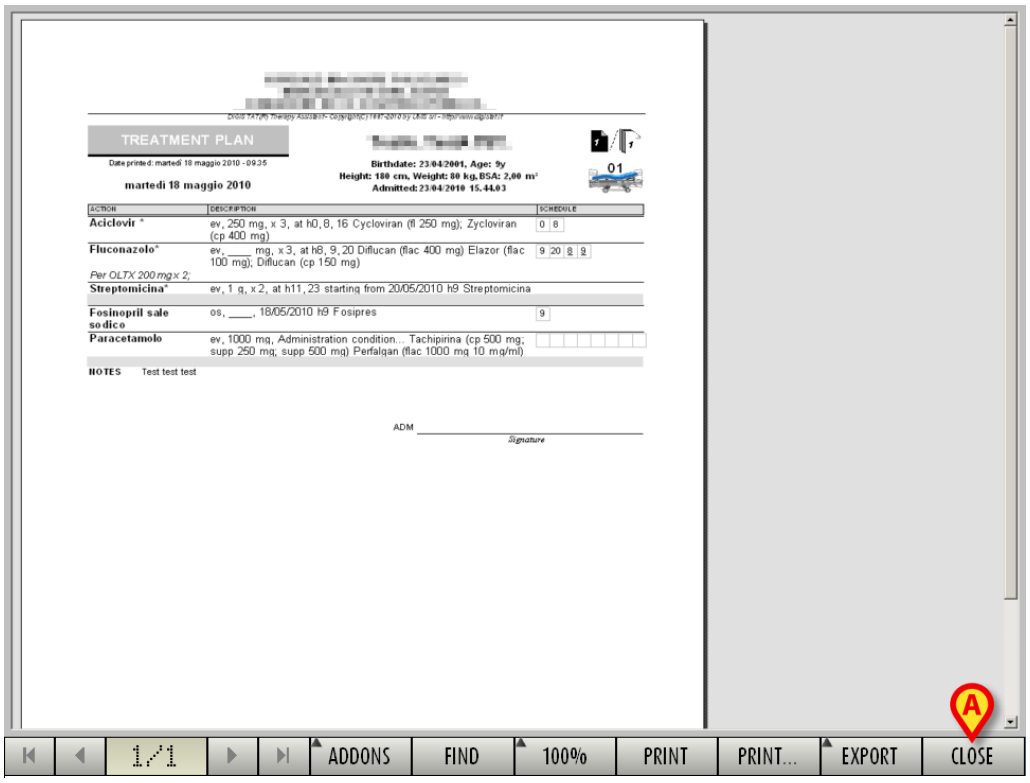


Fig 78 - Orders list print preview

- Click **Close** to close the preview (Fig 78 **A**).

The treatment plan is this way updated. The time counter is reset to zero on the treatment plan validity indicators.

5.1.1. Orders confirmation window description

The "Orders confirmation" window (Fig 79) is displayed when the **Update** button on the command bar is clicked.
The window displays in a table all the orders that are within the "Therapy cycle" and the past orders that have not been administered yet.

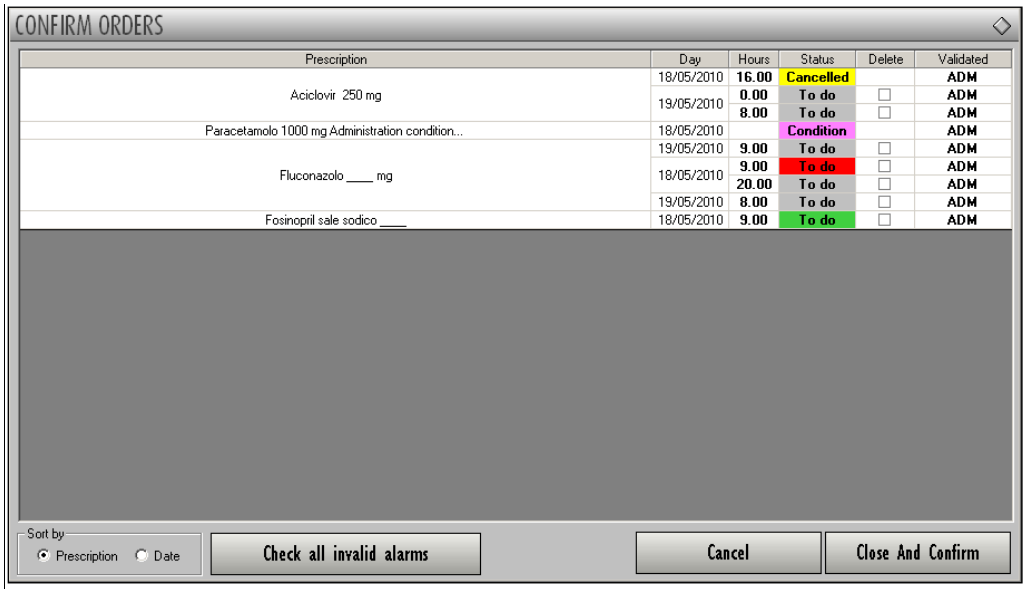


Fig 79 - Orders confirmation

Each row on the table corresponds to an order. For each order the following information is provided:

- prescribed treatment name (Fig 80 **A**);
- prescribed administration date (Fig 80 **B**);
- prescribed administration time (Fig 80 **C**);
- order status (Fig 80 **D**);
- order deletion checkbox (Fig 80 **E**);
- validation indication (Fig 80 **F**).

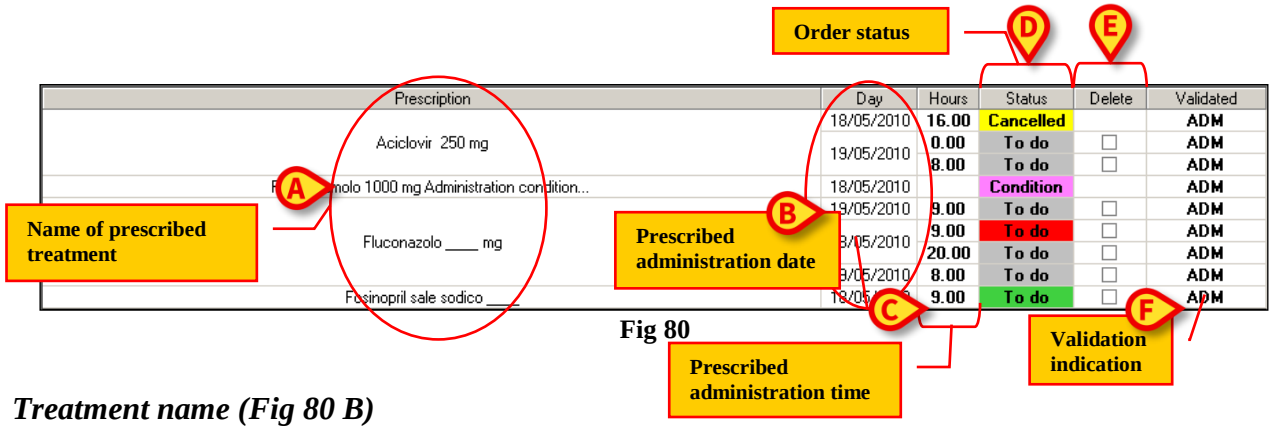


Fig 80

Treatment name (Fig 80 B)

The name indicated in this area can refer to several adjacent rows on the table. Each row corresponds to a single administration order.

Date (Fig 80 C)

The planned administration date of the correponding order is specified on each row.

Times (Fig 80 D)

The planned administration time of the correponding order is specified on each row.

Checkbox (Fig 80 E)

On the second last column there is a deletion checkbox. If the box is selected (Fig 81) it means that the corresponding order will be deleted.

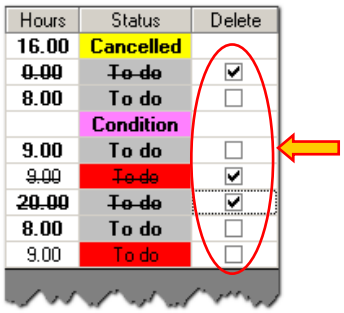


Fig 81 - Deletion checkboxes

The order selected for deletion is written in strike-through characters on the “Hours” and “Status” columns.

Status (Fig 80 F)

The order status is specified on each row. The status of an order can be:

- To do
- Done
- Cancelled
- Condition

The “status” cell is highlighted in specific colours. The colour provides additional information on the order.

- Grey - future orders
- Green - ready for the administration
- Red - the administration is late (alarm)
- Blue - durative administration is in progress
- Purple - conditional order
- Yellow - deleted

See Fig 82 for an example.

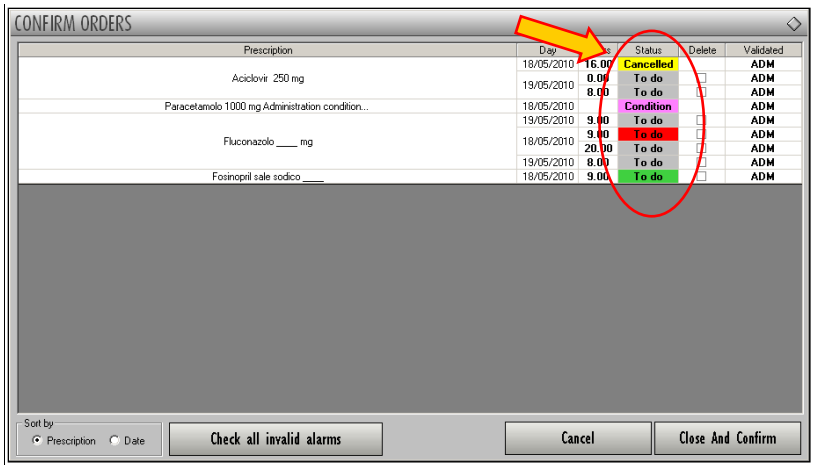


Fig 82

Further information is provided by the characters used:

- strike-through characters mean that the corresponding order is selected for deletion;
- bold character means that the order is within the "Therapy cycle";
- plain character means that the order is outside the "Therapy cycle" in the past.

Validation indications (Fig 80 F)

The last column on the right ("Validated" column) displays information relating to the order validation.

When the cell contains the user acronym (ADM in Fig 82) it means that the order has been validated. If the user acronym is in bold characters it means that the currently logged user is validating the order with the current validation procedure. If the user acronym is not in bold characters it means that the order was validated in the past by the user whose acronym is specified in the cell.

If the cell does not display the user acronym it means that the order is not valid anymore (validation expired) and it cannot be validated again.

Orders list display mode

The orders can be listed either by date or by prescription.

To change the display mode

- click the wanted option on the bottom-left corner of the window (Fig 83).

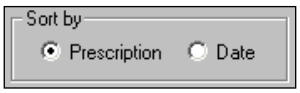


Fig 83

The "Prescription" option groups the orders of the same prescription all together. The various prescriptions are displayed in alphabetical order (Fig 84a)

The “Date” option groups together, in chronological order, all the orders that must be executed on the same day (Fig 84b).

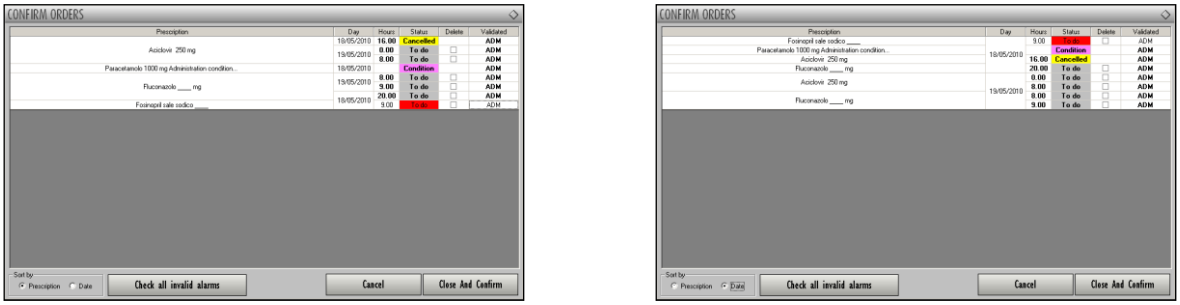


Fig 84 a/b - By prescription (left)/By date (right)

Quick selection of the alarmed non-valid orders

The **Check all invalid alarms** button on the window selects for deletion all the orders that are not valid and are alarmed (i.e. they should have been administered in the past). It is this way possible to quickly delete these orders. The orders are deleted, after “delete” checkbox selection, when the **Close and Confirm** button is clicked.

5.2. Editing the values of an existing prescription

To edit the values of an existing prescription

- click, on the prescriptions table, the name of the prescription whose values must be edited.

The corresponding row is highlighted (Fig 85 **A**).

Fig 85 - Edit prescription

- Click the **Edit** button on the command bar (Fig 85 **B**).

The "Treatment specification" window, described in paragraph 4, opens. The window refers to the selected prescription.

The window also appears double-clicking the prescription row.

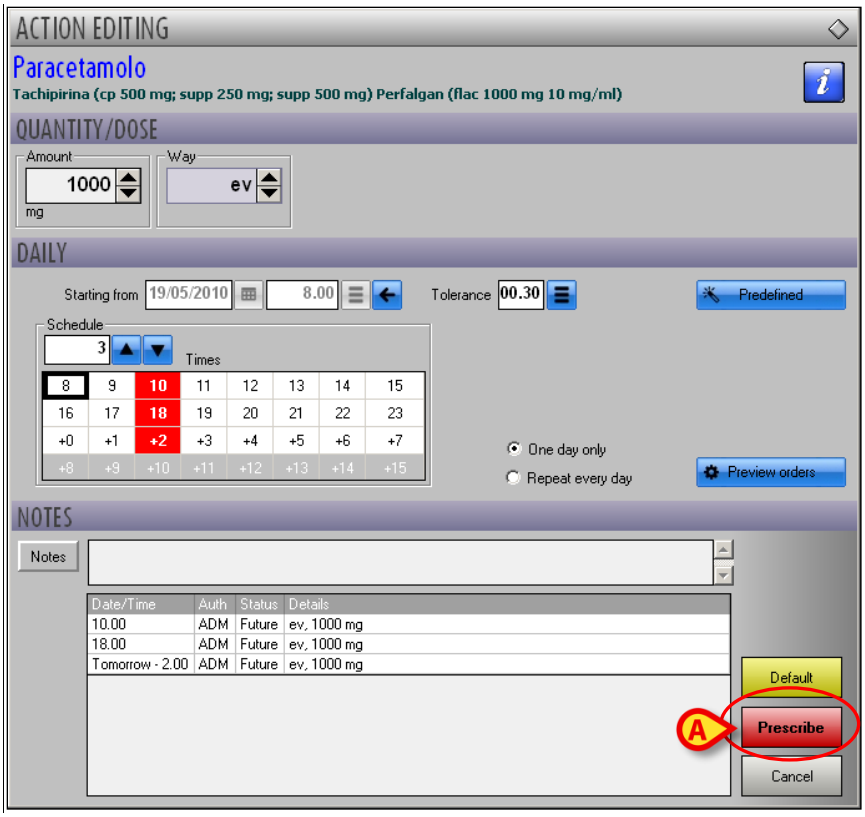


Fig 86 - Action editing

- Edit the prescription values.
- Click the **Prescribe** button (Fig 86 **A**).

A specific pop-up message (Fig 87) asks the user to double-check that the possible active orders in "ready" status (green colour on the "Execution" module) have not been already administered.

WARNING!

The prescription editing implies the deletion of all the orders possibly generated before the editing and the generation of a set of new orders according the new values.

Double check that the "former" orders have not been already administered.

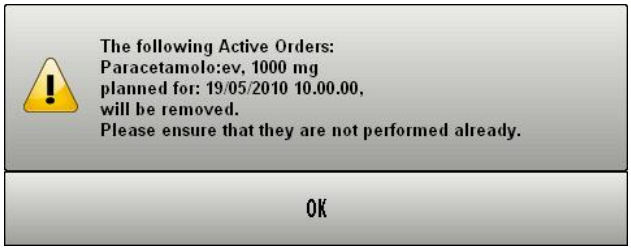


Fig 87

- Click **Ok** to complete the procedure.

5.3. Remove prescription

To remove a prescription from the patient treatment plan

- click, on the prescription table, the row corresponding to the precription that must be removed.

The row is highlighted (Fig 88 **A**).

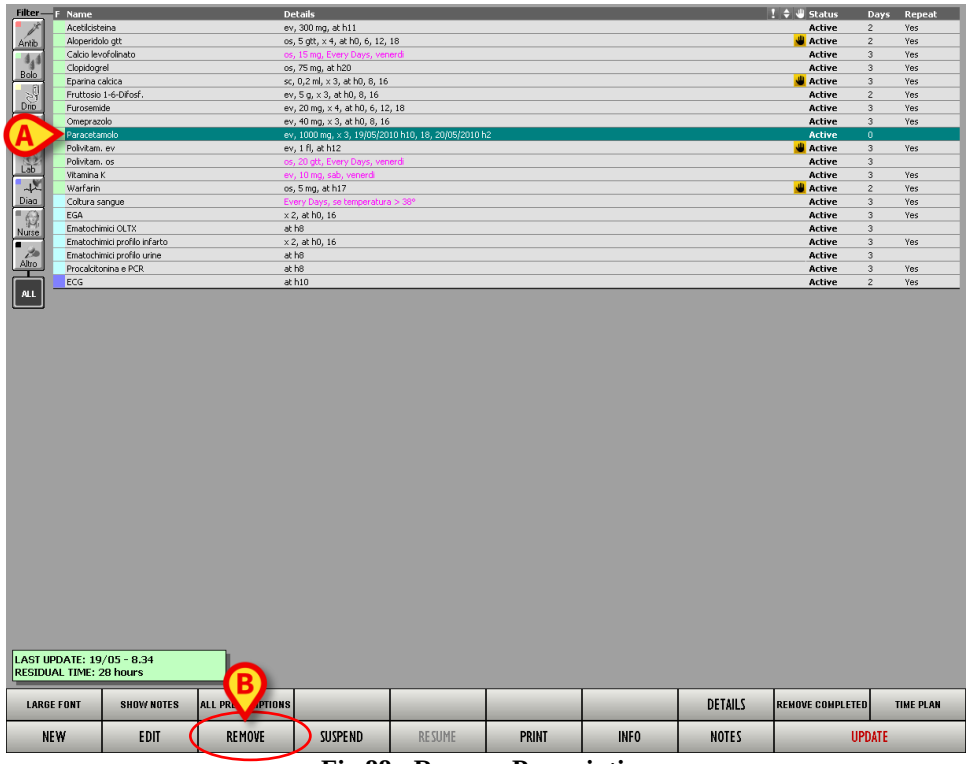


Fig 88 - Remove Prescription

- Click the **Remove** button on the command bar (Fig 88 **B**).

A confirmation is required by the following pop up window.

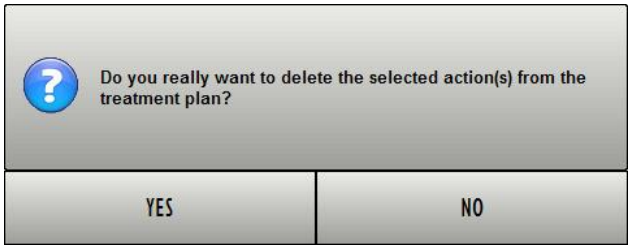


Fig 89 - Confirm removal

- Click **Yes** to confirm.

The selected row disappears from the prescriptions table.

A specific pop up message (Fig 90) asks the user to double-check that the possible active orders in "ready" status (green colour on the "Execution" module) have not been already administered.

WARNING!

The removal of a prescription causes the removal of all the orders generated by the prescription itself.

Double check that these orders have not been already administered.

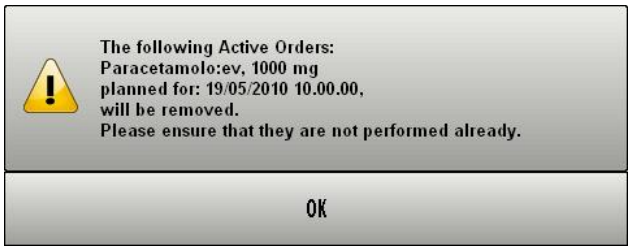


Fig 90

- Click **Ok** to complete the procedure.

The removed prescriptions turn to "Terminated" status. They are still visibile in "All prescriptions" mode (see paragraph 5.7). When the prescription table is displayed in "All prescriptions" mode the removed prescriptions are labelled by the - Terminated - flag appearing in the "Status" cell (Fig 91 **A**).

Fig 91 - Terminated prescription

A removed prescription cannot be resumed.

The deletion of a prescription corresponding to a durative action which is currently running does not automatically stop the corresponding action. It instead generates a new order whose corresponding action must be manually performed on the "Execution" module.

For example: if a prescription corresponding to an infusion currently running is stopped, the corresponding box on the "Execution" module turns back to green colour. This happens to let the nursing staff know that there is a new order to be executed (the action "Removal", in this case). See chapter 6 for a description of the procedures related to the "Therapy Execution" module.

5.4. Suspend prescription

To suspend a prescription

- click, on the prescriptions table, the row corresponding to the prescription to be suspended.

The clicked row is highlighted (Fig 92 **A**).

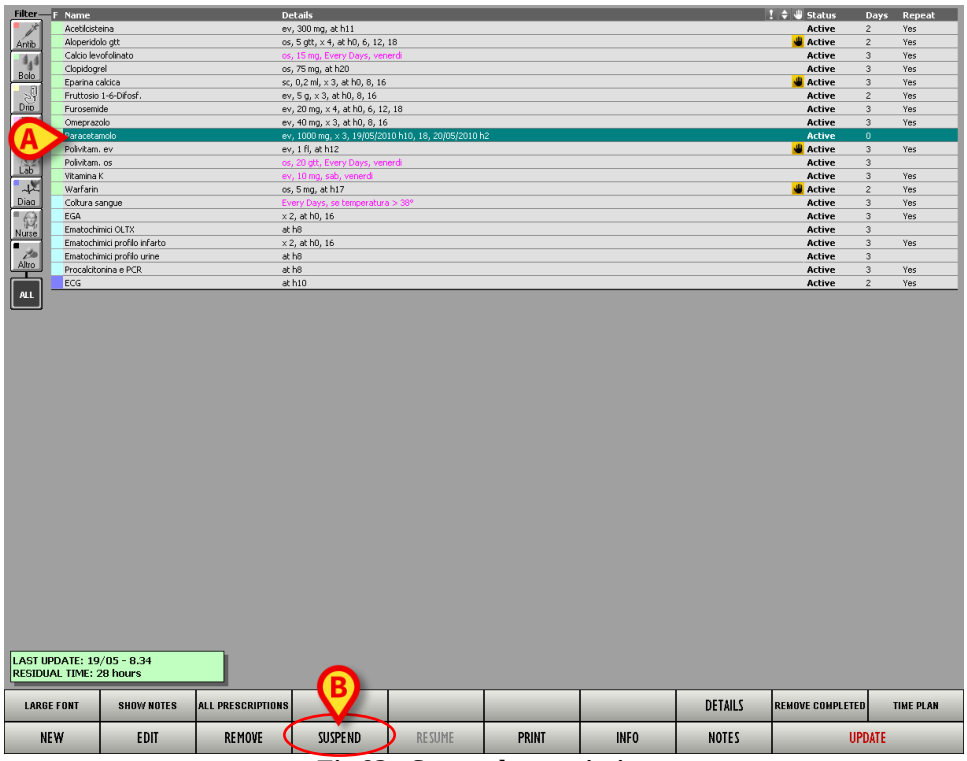


Fig 92 - Suspend prescription

- Click the **Suspend** button on the command bar (Fig 92 **B**).

The system requests a confirmation with the following pop up window.

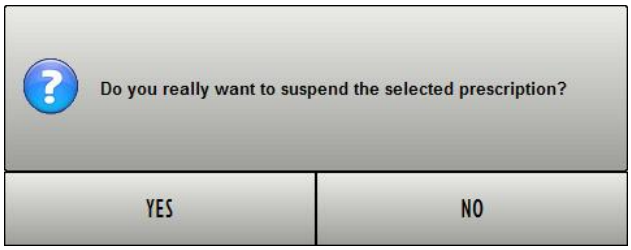


Fig 93 - Confirm suspension

- Click **Yes** to confirm.

The selected row disappears from the prescriptions table.

A specific pop up message (Fig 94) asks the user to double-check that the possible active orders in "ready" status (green colour on the "Execution" module) have not been already administered.

WARNING!

The suspension of a prescription causes the removal of all the orders generated by the prescription itself.

Double check that these orders have not been already administered.

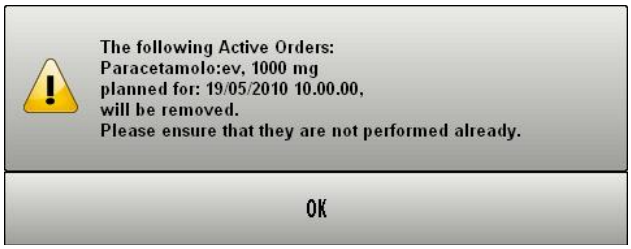


Fig 94

- Click **Ok** to complete the procedure.

The suspended prescriptions turn to "Suspended" status are still visibile in "All prescriptions" mode (see paragraph 5.7). When the prescription table is displayed in "All prescriptions" mode the suspended prescriptions are labelled by the - Suspended - flag appearing in the "Status" cell (Fig 95 **A**).

Fig 95 - Suspended prescription

The suspension of a prescription corresponding to a durative action which is currently running does not automatically stop the corresponding action. It instead generates a new order whose corresponding action must be manually performed on the "Execution" module.

For example: if a prescription corresponding to an infusion currently running is suspended, the corresponding box on the "Execution" module turns back to green colour. This happens to let the nursing staff know that there is a new order to be executed (the action "Removal", in this case). See chapter 6 for a description of the procedures related to the "Therapy Execution" module.

5.4.1. How to resume a suspended prescription

The suspended prescriptions are visibile when the prescription table is displayed in "All prescriptions" mode (see paragraph 5.7).

To display the prescriptions table in "All prescriptions" mode

- click the **All Prescriptions** button on the command bar (Fig 96 **A**). The button is this way selected.

The prescriptions table displays all the prescriptions: the active, the suspended and the removed ones.

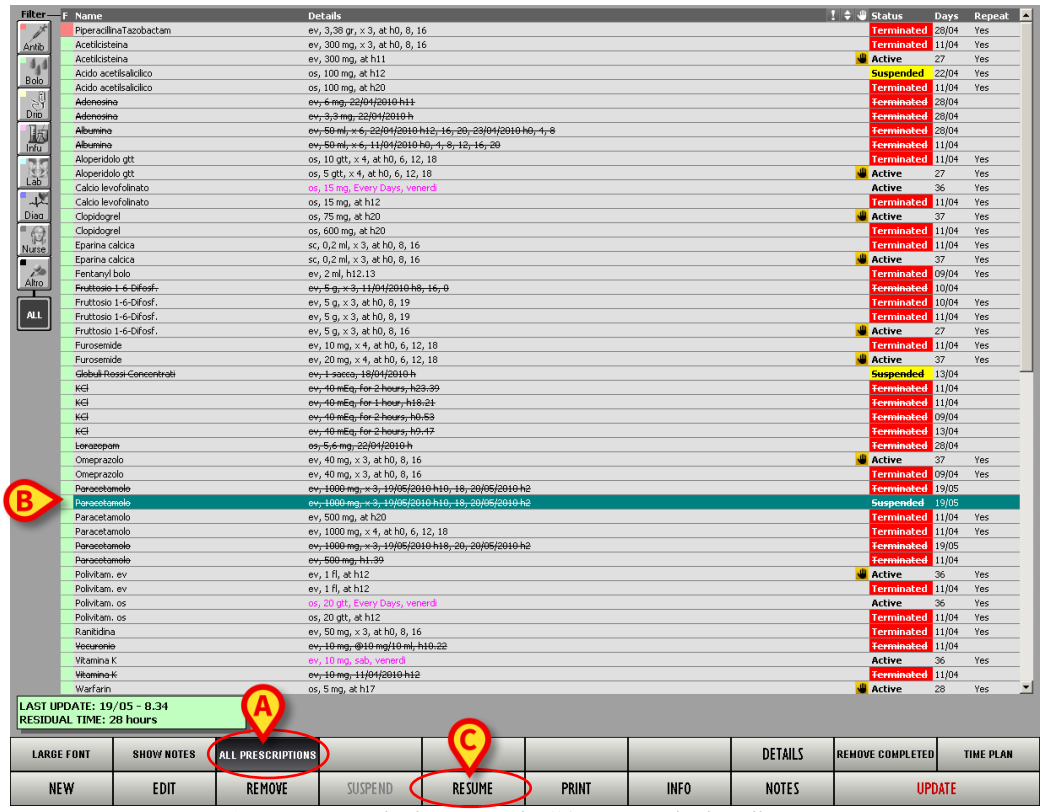


Fig 96 - Prescription table in "All prescriptions" mode

- Click the row corresponding to the suspended prescription that must be resumed.

The clicked row is highlighted (Fig 96 **B**).

Only the prescriptions in "Suspended" status can be resumed.

The **Resume** button is active on the command bar (Fig 96 **C**).

- Click the **Resume** button.

A user confirmation is required (Fig 97).

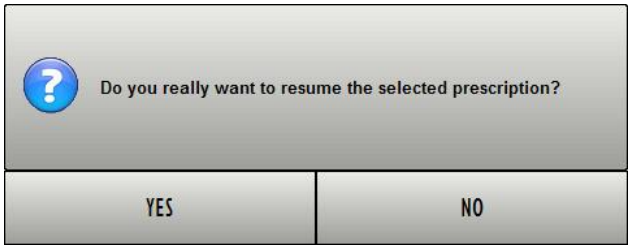


Fig 97 - Confirm suspension

- Click **Yes** to confirm.

The selected prescription becomes active again. The yellow label Suspended disappears; the prescription is again part of the patient treatment plan.

5.5. Large font display

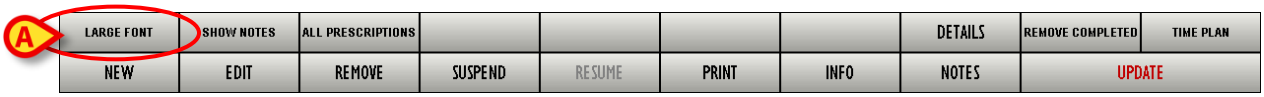


Fig 98 - Command bar

The **Large Font** button (Fig 98 **A**) makes it possible to display the information on screen in larger fonts that are easier to read.

Fig 99 shows the prescriptions table when normally displayed.

F	Name	Details	Status	Days	Repeat
	Acetilcisteina	ev, 300 mg, at h11	Active	2	Yes
	Aloperidolo gtt	os, 5 gtt, x 4, at h0, 6, 12, 18	Active	2	Yes
	Calcio levofolinato	os, 15 mg, Every Days, venerdi	Active	3	
	Clopidogrel	os, 75 mg, at h20	Active	3	
	Eparina calcica	sc, 0,2 ml, x 3, at h0, 8, 16	Active	3	Yes
	Fruttosio 1-6-Difosf.	ev, 5 g, x 3, at h0, 8, 16	Active	2	
	Furosemide	ev, 20 mg, x 4, at h0, 6, 12, 18	Active	3	Yes

Fig 99 - Normal display

Fig 100 shows the prescriptions table when displayed in “large fonts”.

F	Name	Details	Status	Days	Repeat
	Acetilcisteina	ev, 300 mg, at h11	Active	2	Yes
	Aloperidolo gtt	os, 5 gtt, x 4, at h0, 6, 12, 18	Active	2	Yes
	Calcio levofolinato	os, 15 mg, Every Days, venerdi	Active	3	
	Clopidogrel	os, 75 mg, at h20	Active	3	
	Eparina calcica	sc, 0,2 ml, x 3, at h0, 8, 16	Active	3	Yes
	Fruttosio 1-6-Difosf.	ev, 5 g, x 3, at h0, 8, 16	Active	2	
	Furosemide	ev, 20 mg, x 4, at h0, 6, 12, 18	Active	3	Yes

Fig 100 - Large fonts display

5.6. Show notes

Fig 101 - Command Bar

The **Show Notes** button (Fig 101 **A**) displays in the prescriptions table all the notes associated to the various prescriptions.

See the table shown in Fig 102 for an example.

Vitamina K	ev, 10 mg, sab, venerdi Vitamina K salf (fl 10 mg/2 ml)	Active	3	Yes
Warfarin	os, 5 mg, at h17 Coumadin (cp 5 mg)	Active	2	Yes
Coltura sangue	Every Days, se temperatura > 38° emocoltura	Active	3	Yes
EGA	x 2, at h0, 16 Emogasanalisi arteriosa	Active	3	Yes
Ematochimici OLTX	at h8 + troponina	Active	3	Yes
Ematochimici profilo infarto	x 2, at h0, 16	Active	3	Yes
Ematochimici profilo urine	at h8	Active	3	Yes
Procalcitonina e PCR	at h8 attenzione, mandare in laboratorio prima delle ore 11.00	Active	3	Yes
ECG	at h10 pro test	Active	2	Yes

Fig 102 - Notes displayed

The notes displayed by the **Show Notes** *button are inserted on the "Prescription specification" window (see paragraph 4.3 for the procedure).*

5.7. Display all prescriptions

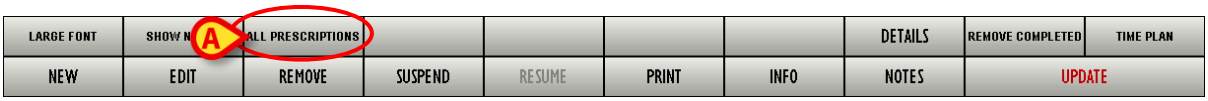


Fig 103 - Command Bar

The **All Prescriptions** button (Fig 103 **A**) makes it possible to display, on the prescriptions table:

- the active prescriptions,

Fig 104 - Active prescription

- the suspended prescriptions,

Fig 105 - Suspended prescription

- the terminated prescriptions.

Fig 106 - Terminated prescription

Fig 107 shows, as example, a prescriptions table displaying "all prescriptions".

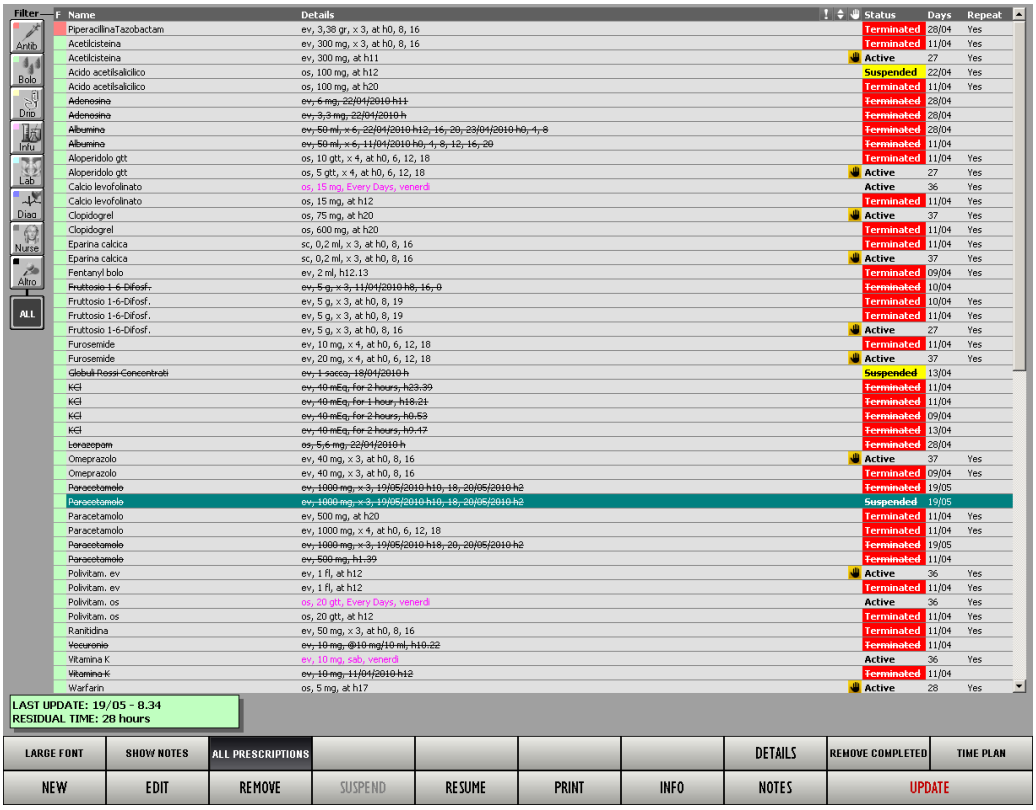


Fig 107 - Prescription table displayed in "All prescriptions" mode

5.8. Remove completed prescriptions

A prescription is completed when all the orders that it generated have been executed and no other order will be generated by it in the future. These prescriptions are still in "Active" status.
The rows corresponding to these prescriptions are still visible on the prescription table. Completed prescriptions are displayed in strikethrough characters (Fig 108).

Fig 108 - Completed prescription

These rows can be removed from the table using the **Remove Completed** button on the command bar (Fig 109 **A**).

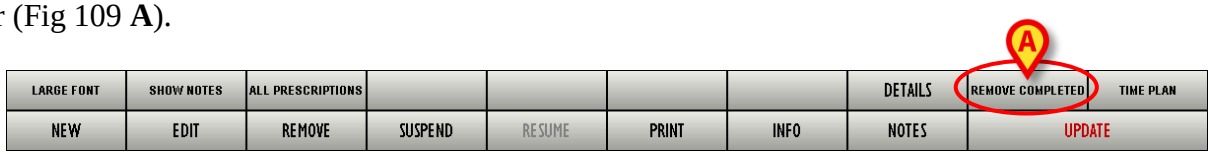


Fig 109 - Command bar

A user confirmation is required (Fig 110).

Fig 110

- Click **Yes** to remove from the prescriptions table the rows corresponding to the completed prescriptions.

The removed prescriptions turn to "Terminated" status. Thay can be displayed again when the prescriptions table is in "All prescriptions" mode (see paragraph 5.7).

The "Terminated" prescription cannot be resumed.

5.9. Show the prescription details

The **Details** button (Fig 111) opens a window containing all the details of a single prescription. This window displays all the available information on the prescriptions of a treatment and the orders generated by it.

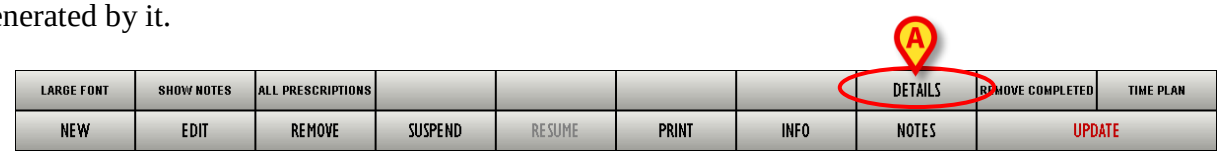


Fig 111

To display the prescription details window,

- click, on the prescriptions table, the row corresponding to the relevant prescription.

The row is highlighted.

- Click the **Details** buttons.

The window shown in Fig 112 opens.

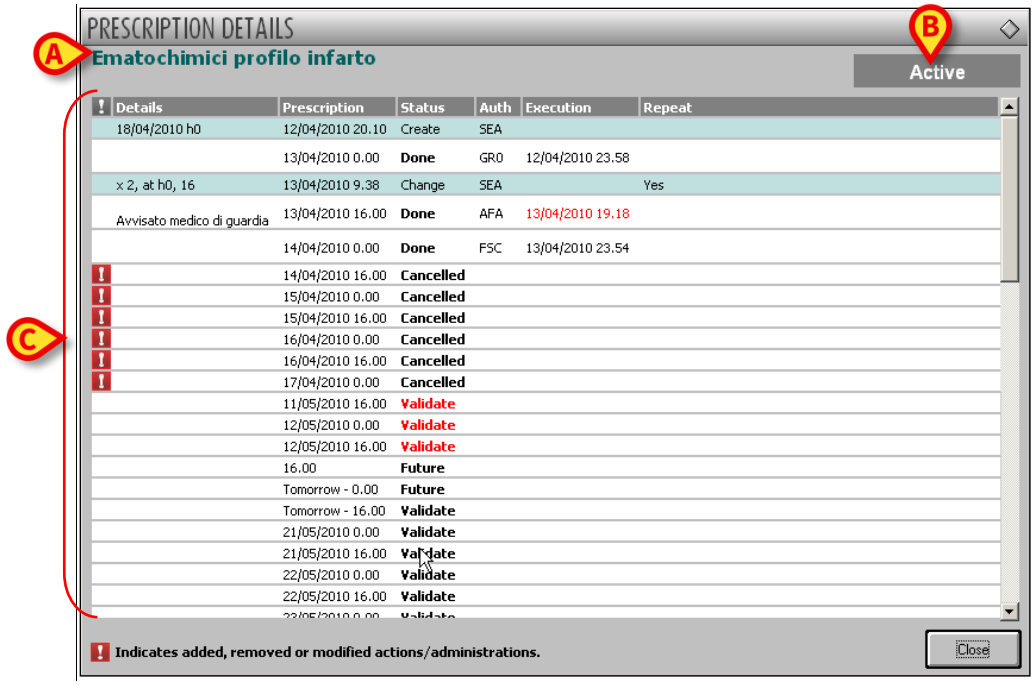


Fig 112 - Prescription details

The name of the treatment is indicated on the top-left corner of the window (Fig 112 **A**).

The prescription status is indicated on the top-right corner of the window (Fig 112 **B**).

All the meaningful events and all the actions performed that are related to the prescription are listed in a table (Fig 112 **C**).

The blue rows refer to the prescription. The white rows refer to the orders.

The information provided on the table is:

- the prescription/administration details;
- date and time in which the event/action displayed was recorded;
- prescription/order status;
- acronym of the user who performed the specific action;
- date and time of administration (if the line corresponds to an administration). When date and time are red it means that they are quite different from those prescribed;
- prescription repeatability.

The  symbol appears at the beginning of a row to indicate that the corresponding action was performed without an explicit prescription.

The "Status" cell indicates an action performed by the user or an event occurred. The information in this cell refers to an order if it is on a white row; it refers to a prescription if it is on a blue row.

The possible indications displayed on the "Status" cell are:

if referred to a prescription (blue lines)

- **Create** - indicates the prescription creation;
- **Change** - indicates any change to the prescription values;
- **Suspend** - indicates the prescription suspension;
- **Resume** - indicates the retrieval of the suspended prescription;
- **Terminate** - indicates the prescription removal.

If referred to an order (white lines)

- **Done** - indicates the execution of an order;
- **Alarm** - indicates an alarm on one of the orders (administration is late);
- **Future** - indicates that the order must be executed in the future;
- **Validate** - indicates that the order must be validated;
- **Cancelled** - indicates the deletion of the order;
- **Start** - indicates when a durative administration was started;
- **Stop** - indicates when a durative administration was stopped.

5.10. Prescriptions time plan

The **Time Plan** button (Fig 113 **A**) opens a window containing a summary of all the active prescriptions and the statuses of the corresponding orders.

Fig 113 - Command bar

To display the time plan

- click the **Time Plan** button on the command bar.

The following window opens.

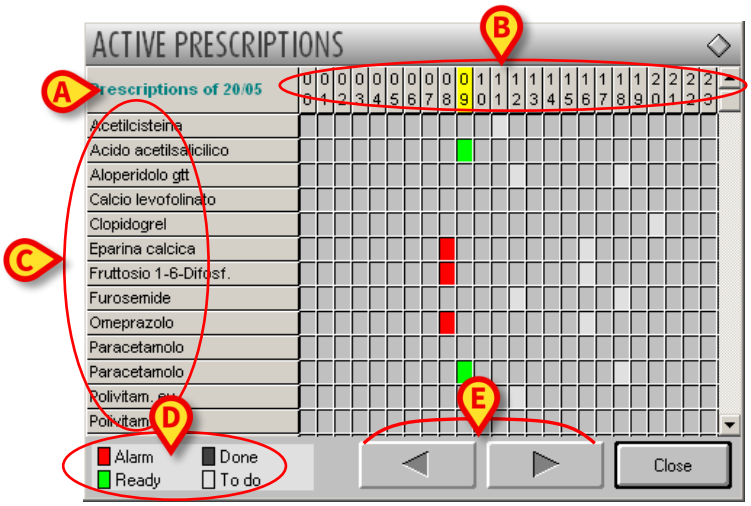


Fig 114 - Scheda oraria

The current day is indicated on the top left corner of the window (Fig 114 **A**).

The line highlighted in Fig 114 **B** indicates the time. The current time is highlighted yellow (it is 09.00 o'clock in the figure).

All the active prescription are listed on the left (Fig 114 **C**). For each prescription there are 24 cells available, one for each full hour. If a cell is highlighted it means that there is an administration scheduled at the corresponding time.

The cell colour provides information on the order status.

- To do - it means that the administration must be performed in the future.

- Done - it means that the order was executed.

- Ready - it means that the order should be executed now, i.e. we are within the time span configured as "range of tolerance" - see paragraph 4.2.3.3 for more details).

- Alarm - it means that the treatment administration is late.

On the bottom-left corner of the window there are indications on how to read the information provided by the window itself (Fig 114 **D**).

Use the arrow-buttons indicated in Fig 114 **E** to display the days either preceding - - or following - - the current day.

5.11. Add\Display notes

Use the **Notes** button on the command bar (Fig 115 **A**) to add a note that will be displayed on the "Therapy Execution" module main screen.

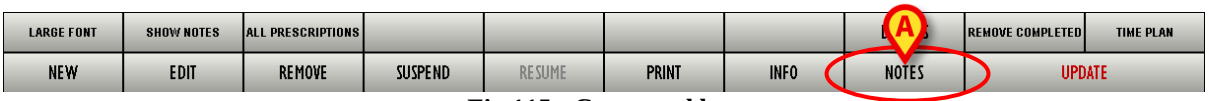


Fig 115 - Command bar

The notes inserted using the procedure described here are general notes referring either to the patient or to the whole therapy. They are not referred to the single treatment prescription. They are not to be confused with the notes specified using the procedure described in paragraph 4.3.1, referring to the treatment prescription.

To add a note

- click the **Notes** button.

The following window opens.

Fig 116 - "Notes" window

- Click the **Edit** button (Fig 116 **A**).

The window changes in the following way

Fig 117 - "Notes" window (edit mode)

- Type the note. The text is displayed inside the window.
- Click the **Save** button to save the note (Fig 117 **A**).

The window closes automatically; the presence of a note is indicated by the color of the button on the command bar (yellow). Click the button again to display the notes-window again.
The note is displayed on the “Electronic Prescription” screen, in a specific box (Fig 118 **A**).

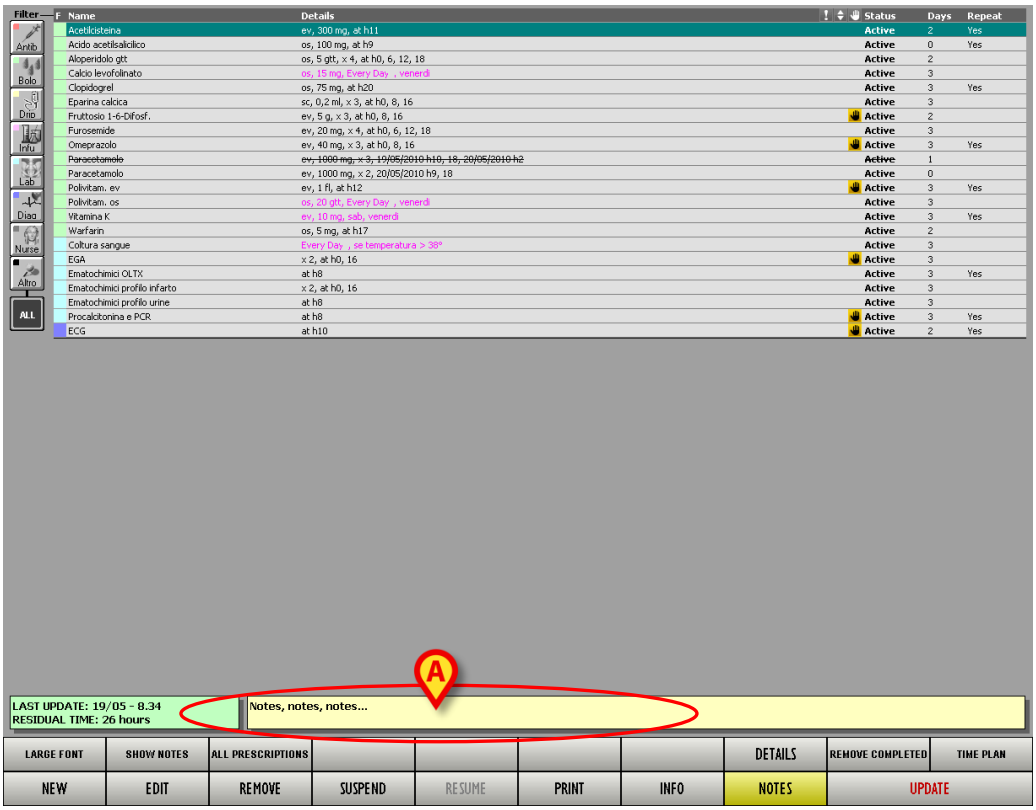


Fig 118 - Nota inserita

Use the **Time Stamp** button (Fig 117 **B**) to display the date, time and the acronym of the user who is adding the note (Fig 119).

Fig 119 - Date and time

Use the **Cut** button (Fig 120 **A**) to cut a selected text portion.

Fig 120

To cut a text portion

- click the **Edit** button (Fig 116 **A**).
- Select the text to be cut using either the mouse device or the workstation keyboard.
- Click the **Cut** button.

The selected text disappears from the "Notes" window.

The notes specified using the **Notes** *button can be displayed by other DIGISTAT® modules as well, if the* **Notes** *button is present on the command bar.*

5.12. Print reports

The **Print** button on the command bar (Fig 121 **A**) creates a print report of the patient treatment plan.

Fig 121 - Command bar

- Click the **Print** button to display a print preview.

5.13. Drug Info

The **Info** button on the command bar (Fig 122 **A**) displays a page containing information on a selected treatment.

Fig 122 - Command bar

To display the treatment information, on the prescriptions table,

- click the row corresponding to the relevant treatment.

The row is highlighted.

- Click the **Info** button on the command bar.

The information page opens.

The contents of the information page are configured by the clinical supervisor. Please refer to your system administrators for information regarding the treatment info pages.

6. The “Therapy Execution” module

The DIGISTAT® “Therapy Execution” module is designed to be a help for the nursing staff in performing the tasks related to the administration of the prescribed treatments.
When a physician prescribes a treatment, the corresponding administration orders are created and added to the “to do” list for the nursing staff.
The orders are automatically generated by the system on the base of the treatment plan specified by the physician on the DIGISTAT® “Therapy Prescription” module (chapter 2). They are displayed in graphic form on the “Therapy Execution” module’s main screen, on an easily readable “treatment schedule” table.
The “Therapy Administration” module is also used to document each action performed: every relevant event is automatically added to the patient clinical record.

6.1. “Therapy Execution” module selection

To select the “Therapy Execution” module

- click the corresponding icon on the lateral bar (Fig 123).

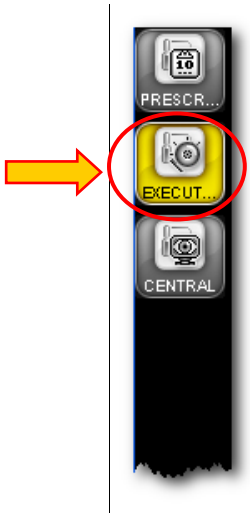


Fig 123

When the module is selected the 

icon is highlighted yellow.

The “Administration” module can be also selected on the “Central Station” module clicking the boxes corresponding to the different patients. See paragraph 7.2 for more details.

6.2. Main screen

The module's main screen appears as in Fig 124.

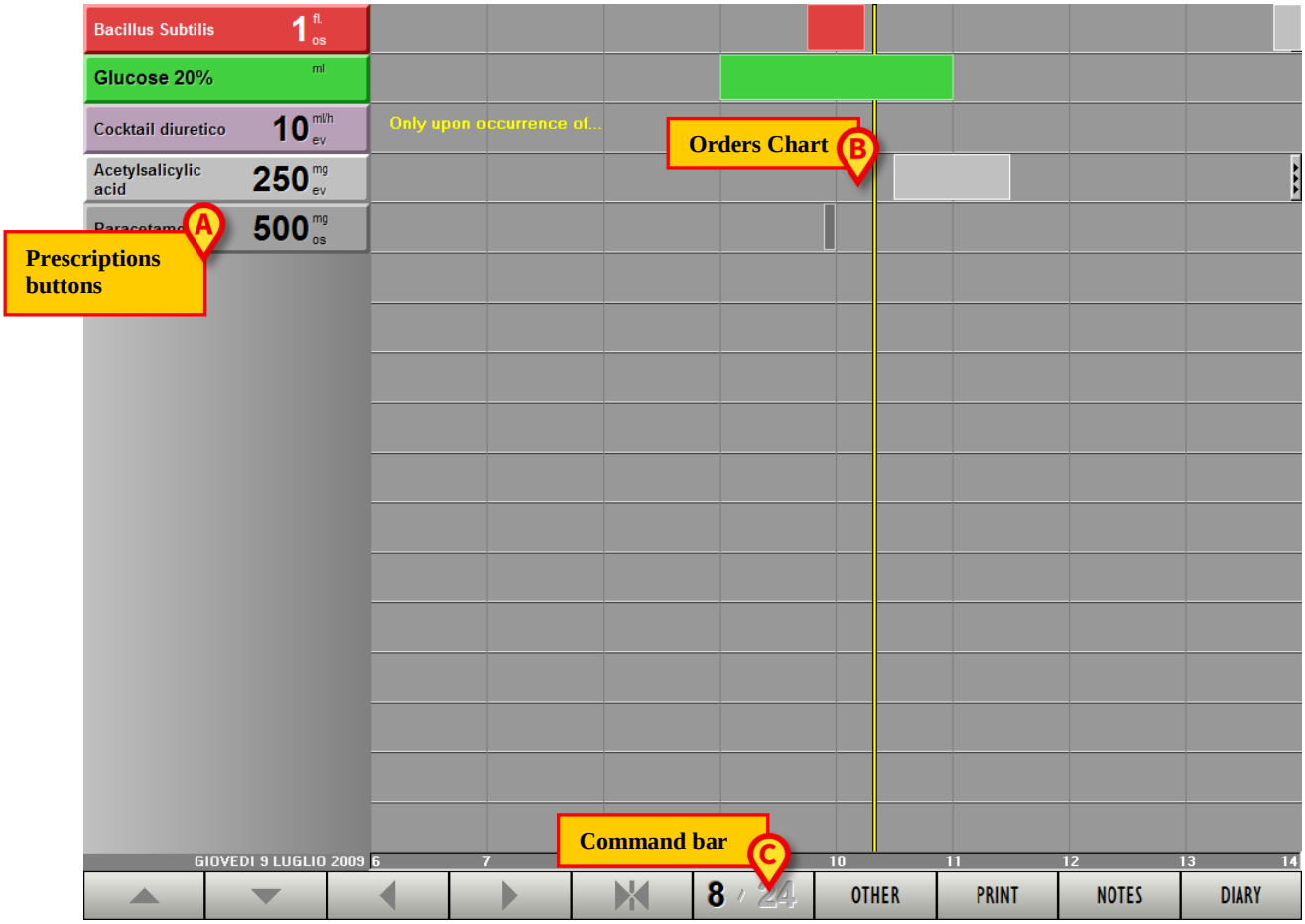


Fig 124 - Administration module (example)

There are three main areas:

1) the column on the left contains the buttons corresponding to the prescribed treatments (Fig 124 **A**);

2) the central area shows in a chart the orders generated by the prescriptions (Fig 124 **B**);

3) the command bar contains the function-buttons making it possible to perform different actions (Fig 124 **C**).

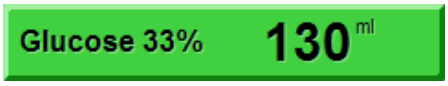
6.3. Prescribed orders representation

The treatments prescribed on the "Prescription" module are displayed on the left as colored boxes (Fig 124 **A**).
These boxes are buttons that, when clicked, make it possible to record the administration of a specific order. See paragraph 6.5 for the administration recording procedure.
The different colors provide information on the status and the kind of the corresponding treatment.

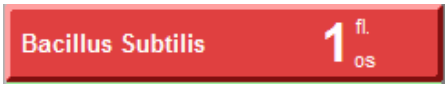
There are 6 possible colors:

Light grey characterizes active prescriptions whose orders must be administered in the future.

Dark grey characterizes completed prescriptions.



Green characterizes prescriptions having an order "ready to be administered".



Red characterizes prescriptions having at least one "late" order.

Cyan characterizes durative prescriptions having one order in progress (see paragraph 1.3.3 for a description of durative prescriptions).

Purple characterizes conditional prescriptions; these are treatments to be administered only if specific conditions occur.

The boxes are displayed by urgency on the "Administration" screen. The "late" orders are on top, then the "ready" ones, then the "durative" orders in progress, then the "conditional" ones, then those to be executed in the future. In the end are the boxes corresponding to completed prescriptions.

I.e. the colors appear in this order:

1. *red*
2. *green*
3. *cyan*
4. *purple*
5. *light grey*
6. *dark grey*

6.4. The orders chart

The central area of the administration screen displays on a chart all the orders generated (the already executed ones, the future ones, the “in progress” ones - Fig 125).

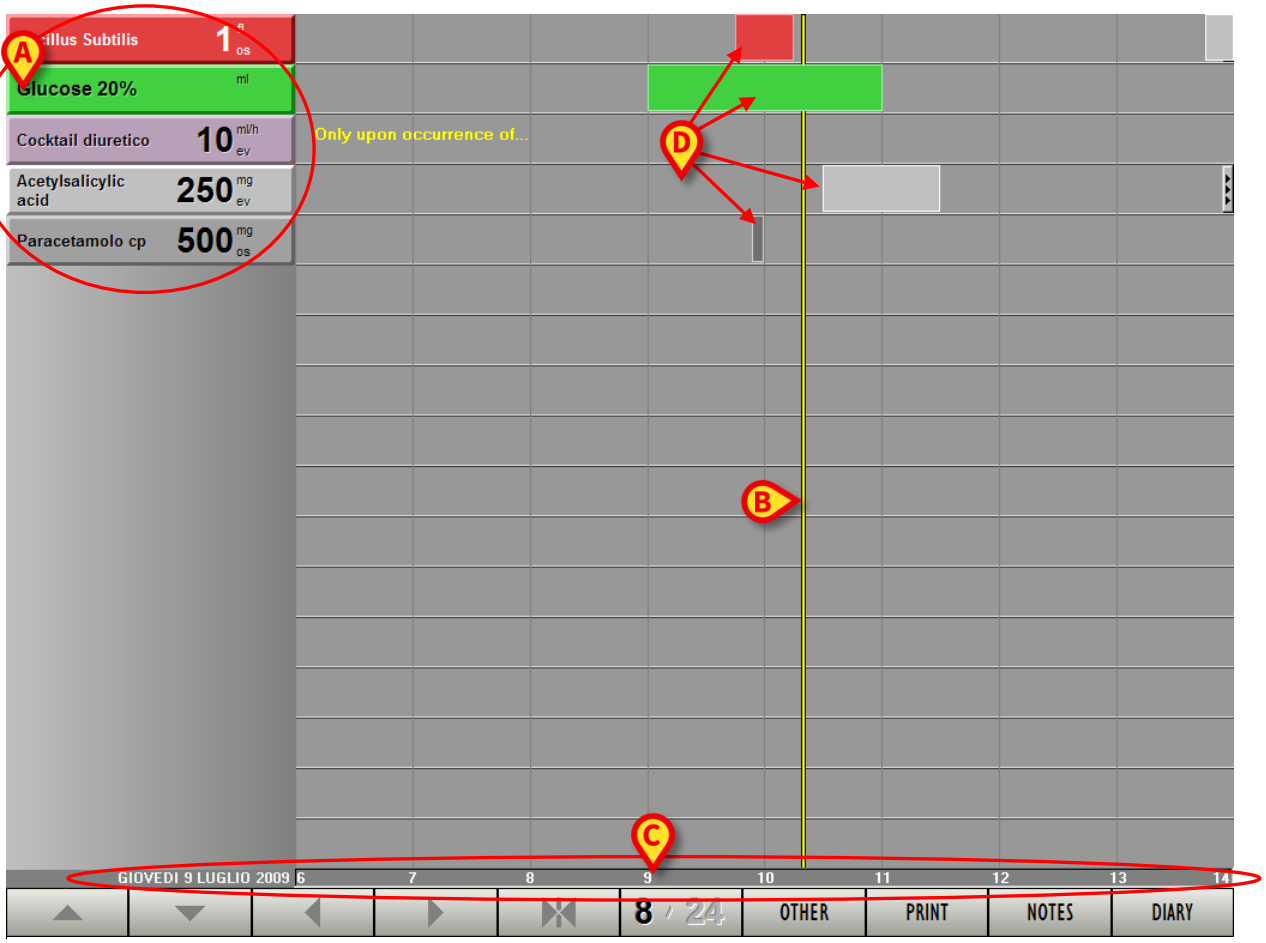


Fig 125 - Orders chart

The chart is a grid, made of rows and columns. The orders corresponding to the same treatment are on the same row (in Fig 125 there are five prescribed treatments on the left - Fig 125 **A**); the columns correspond to the different hours of the day.

The yellow bar shown in Fig 125 **B** indicates the present time. The bar scrolls forward as time goes by. In Fig 125 it is 10:20 a.m. approximately. Time can be read below, on the bar indicated in Fig 125 **C**. The date is displayed on the bar as well.

6.4.1. Graphic representation of the orders

The boxes indicated in Fig 125 **D** correspond to the different orders. The boxes are in the place corresponding to their prescribed administration time (or execution time if already executed).

6.4.1.1. Administration tolerance period

The lenght of the boxes is proportional to the time period that was indicated as “tolerance period for the administration” when the order was prescribed (see paragraph 4.2.3.3).

For instance: if the treatment is prescribed at 10:00 and the administration tolerance period is set to 15 minutes, the administration time indicated on the chart is a period going from 9:45 to 10:15 (it is the case highlighted in Fig 126 **A**).
If the treatment is prescribed at 10:00 and the administration tolerance period is set to 1 hour, the administration time indicated on the administration chart is a period going from 9:00 to 11:00 (it is the case highlighted in Fig 126 **B**).
The position of the boxes corresponds to the prescribed administration times. The boxes length is proportional to the tolerance period.

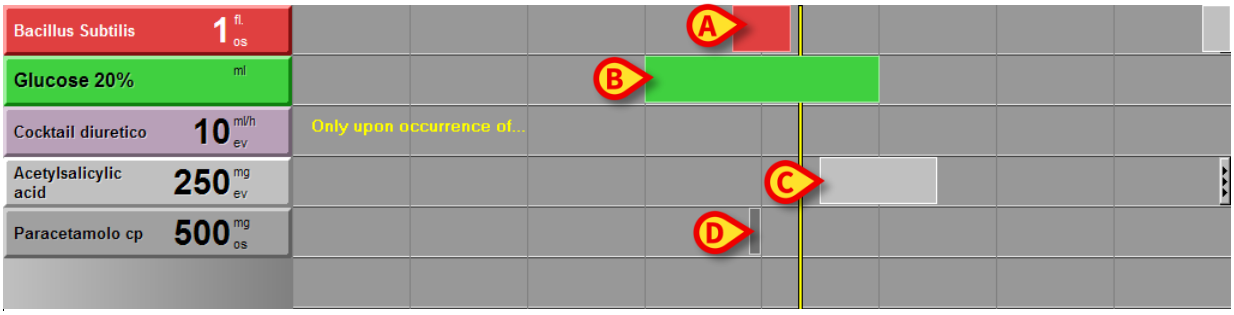


Fig 126

6.4.1.2. Order status

The box color indicates the status of the order.

Green means that the order is to be administered immediately, i.e. it means that it is within the administration tolerance period. When the box is green the vertical time bar intersects the box (Fig 126 **B**).

Light grey means that the order is to be executed in the future. When the box is light grey the vertical time bar is on the left of the box (Fig 126 **C**).

Dark grey means that the order was executed (i.e. the treatment was administered). When the box is dark grey the vertical time bar is on the right of the box (Fig 126 **D**).

The lenght of the boxes corresponding to an executed order is reduced to indicate the exact administration time. The tolerance period is not displayed anymore. When the prescription is durative (a drip, for instance) the administration duration is fully displayed in grey. See paragraph 6.5.1 for the durative orders administration procedure.

Red means that the administration of the order is late; i.e. the tolerance period is over (Fig 127 **A**). When the box is red the vertical time bar is on the right of the box.

Cyan characterizes durative prescriptions having one order in progress (Fig 127 **B**). The vertical time bar in these cases coincides with the box’s right border.

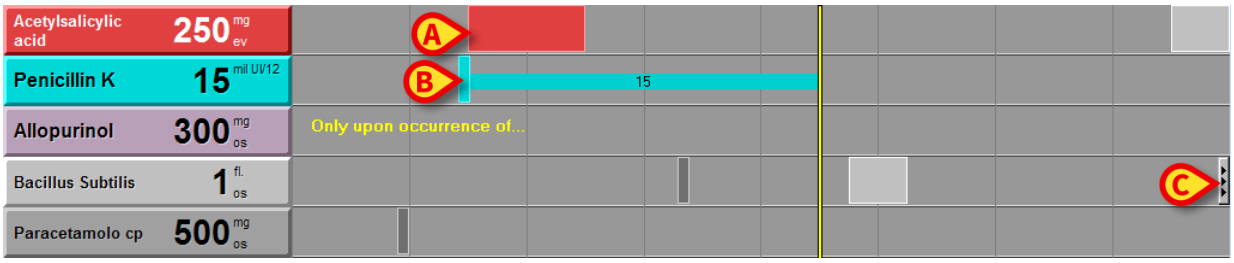


Fig 127

The duration of an administration is displayed in cyan (Fig 128).

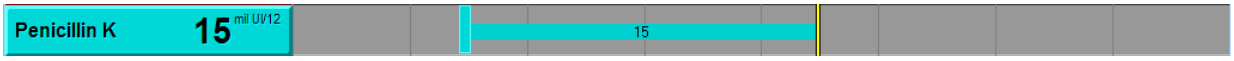


Fig 128 - Durative administration

When the administration is stopped the duration becomes grey (Fig 129).

Fig 129 - Durative administration stopped

Two different shades of cyan - and - can be used for the durative prescriptions to increase the chart readibility. The choice depends on a configuration parameter.

On the chart, three small arrows appear at the end of a row (Fig 127 **C***) if there are (on the right) orders for that prescription that are not currently displayed. When the three arrows are on the left it means that the undisplayed items are on the left.*

The icon appearing on the top-left corner on a box means that the order has not been validated yet. See paragraph 1.3.6 for the explanation of the "order validation" concept. The not validated orders can be administered using a specific procedure. This procedure is described in paragraph 6.5.2.

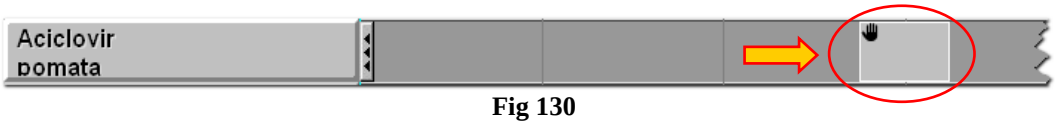


Fig 130

When the administration time for a non validated order approaches, a specific icon - - appears on the "Therapy prescription" module on the prescriptions table on the row corresponding to the prescription that generated the order (Fig 131 **A**).

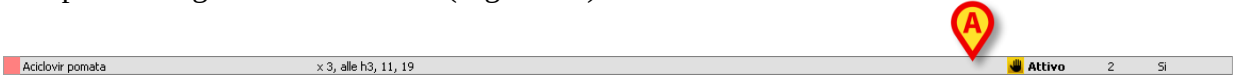


Fig 131

The value indicating that the administration time is approaching is set by configuration. In the configuration here described the specified period is three hours.
A dark vertical line indicates the limit of this period on the chart (Fig 132).

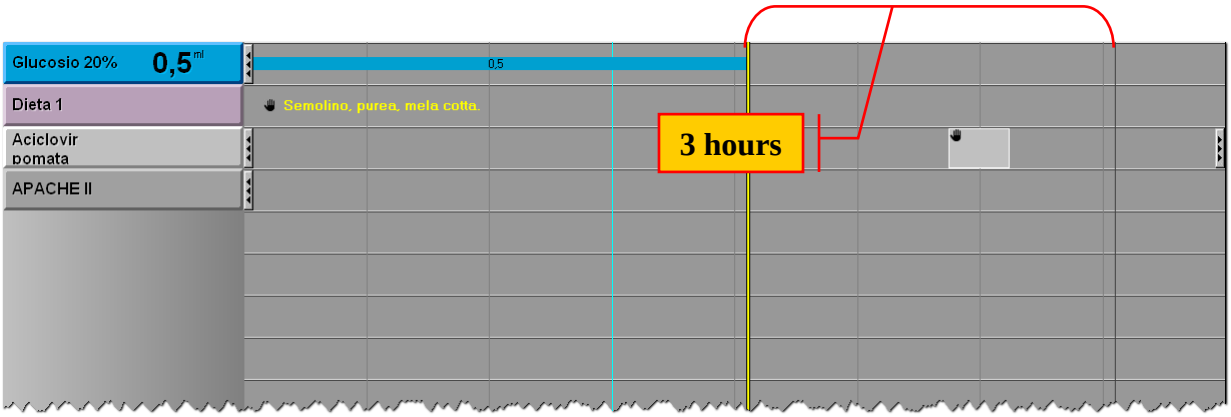


Fig 132

The  icon appears for the conditional prescriptions as well if they are not yet validated. The validity of a prescriptional prescription expires when the "Therapy Cycle" expires. Thus conditional prescriptions are automatically validated every time the "Therapy Cycle" is updated. See paragraph 4.2.2 for the explanation of "conditional treatment". See paragraph 1.3.4 for the explanation of "Therapy Cycle".

6.4.1.3. Additional information on the executed administrations

The executed orders are represented by grey vertical bars. See Fig 133 for an example.

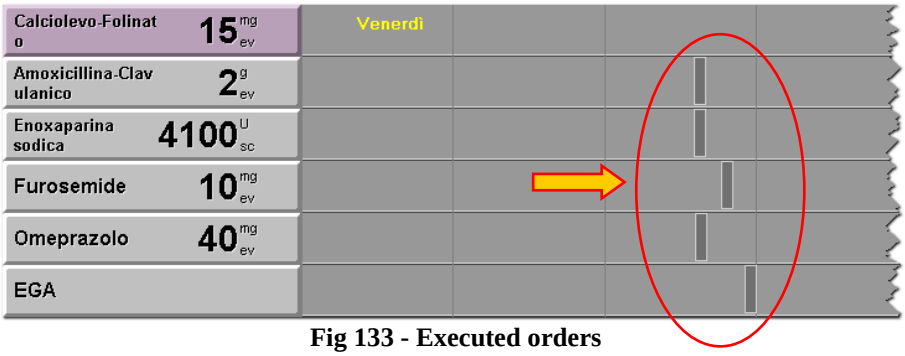


Fig 133 - Executed orders

The graphic design of the vertical bars provides additional information on the kind of administration executed.

These are:

 - it means that the order has been cancelled.

 - it means that the order causes the  icon on the "Therapy Prescription" module. The  icon appears if there is not a prescription originating the executed action.

- it corresponds either to the administration of an extemporaneous order (i.e. an administration recorded using the procedure described in paragraph 6.6.3) or to the durative prescription stop time.

- it corresponds to any other case, to indicate an executed order.

6.5. How to record the treatment administration

To record the administration of a treatment, on the "treatments column" on the left,

- click the button corresponding to the relevant treatment (Fig 134 **A**).

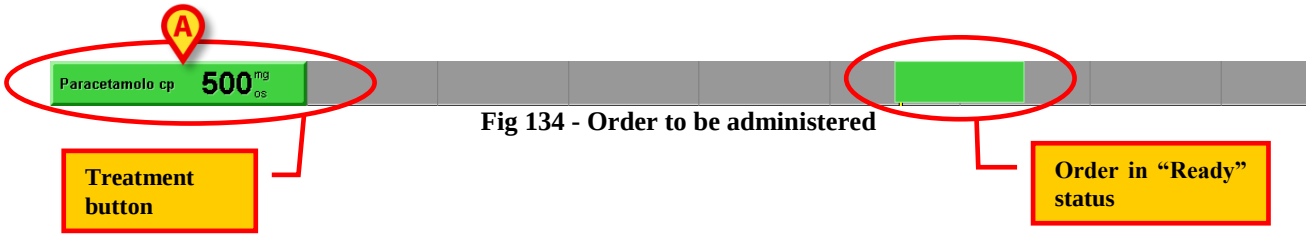


Fig 134 - Order to be administered

An administration window opens (Fig 135).

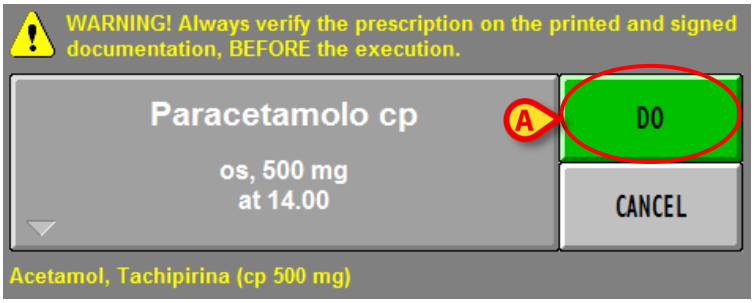


Fig 135 -Order administration window

- Click the **Do** button (Fig 135 **A**).

The chart changes in the following way

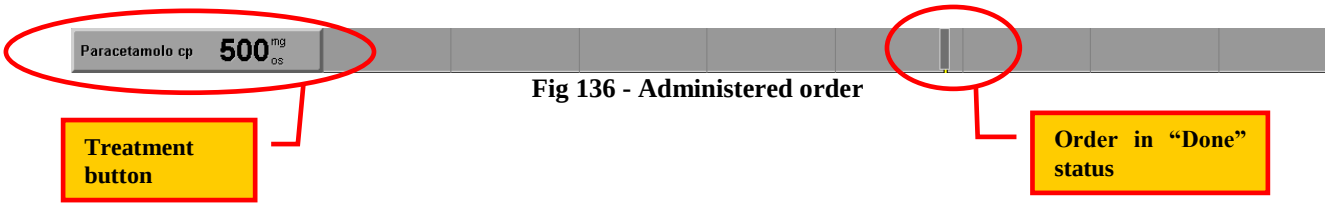


Fig 136 - Administered order

The treatment administration is this way recorded.

The order does not need to be in "Ready" status to be administered. The administration can be recorded before the scheduled prescription time. In this case a user confirmation is required.

6.5.1. Durative treatment administration

The administration recording procedure is slightly different for durative treatments. In these cases it is in fact necessary to record the beginning and the end of the administration.

To record the administration of a durative treatment

- click the treatment button (Fig 137 **A**).

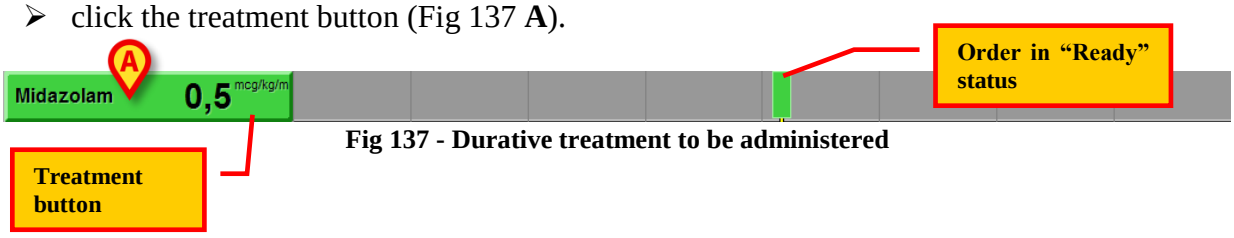


Fig 137 - Durative treatment to be administered

An administration window opens (Fig 138 **A**).

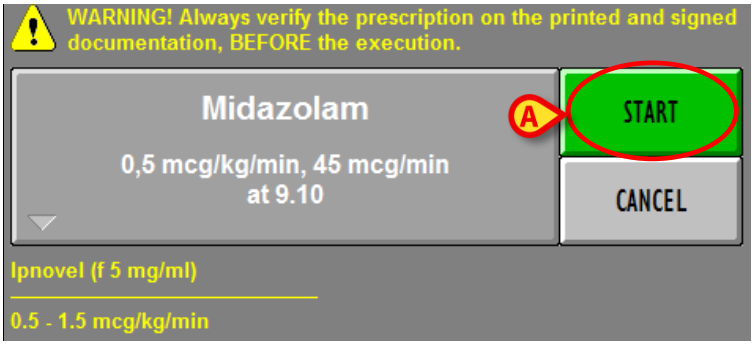


Fig 138 - Durative administration "start"

- Click the **Start** button (Fig 138).

The beginning of the durative treatment administration is this way recorded. The corresponding button becomes cyan (Fig 139 **A**). A cyan bar is traced on the chart while the administration goes on (Fig 139 **B**).

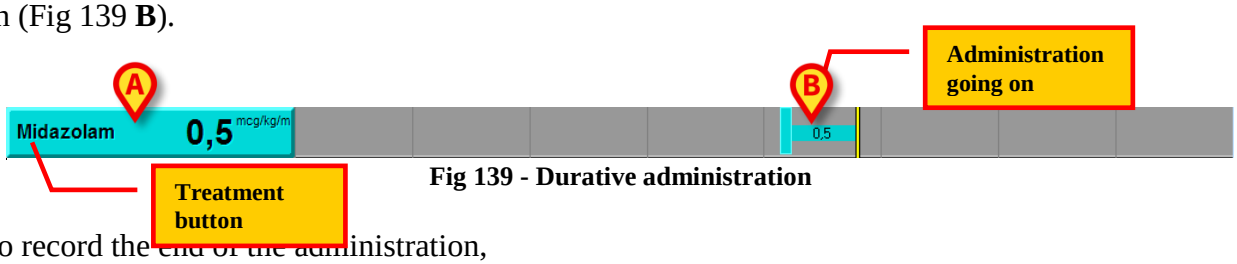


Fig 139 - Durative administration

To record the end of the administration,

- click the treatment button again (Fig 139 **A**).

A specific window appears (Fig 140).

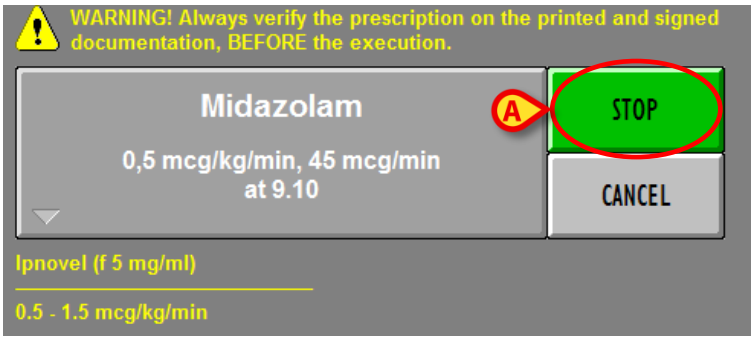


Fig 140 - Durative administration "stop"

- Click the **Stop** button (Fig 140).

The chart changes in the following way.

Fig 141 - Durative administration stopped

The duration of the administration is this way represented on the chart.

6.5.2. Administration of an order either expired or not-yet-validated

The order validity expires after a certain time. See paragraph 1.3.7 for the related procedures. These orders are "Expired". An expired order can be administered anyway but, to do that, a specific procedure must be performed.

Here is the procedure.

- Click, on the left, the button corresponding to the treatment that must be administered.

In the example shown in Fig 142 it is "Acetilcisteina".

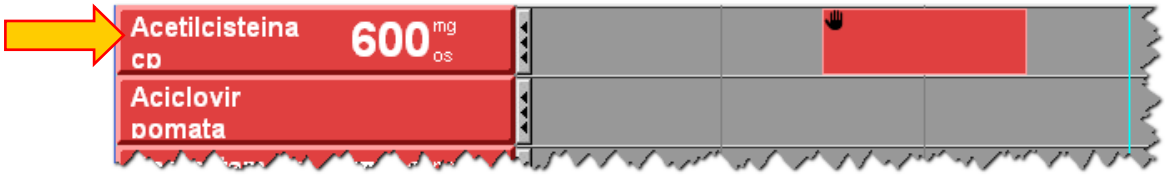


Fig 142

A user confirmation is required (Fig 143).

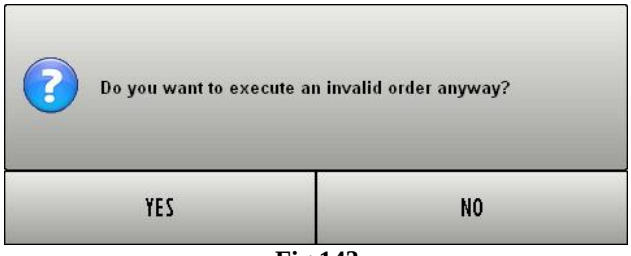


Fig 143

- Click **Yes** to proceed.

The following window is displayed (Fig 144), highlighting the fact that the order is not valid.

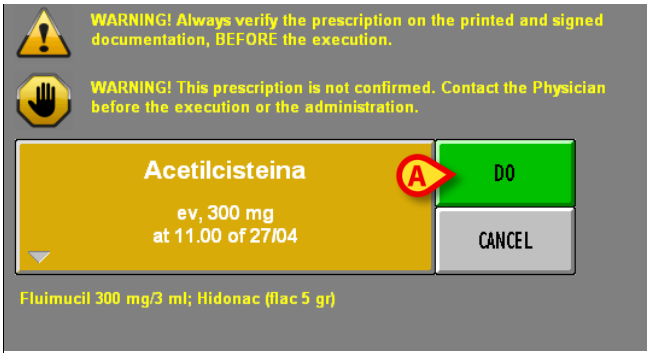


Fig 144

- Click the **Do** button to administer the treatment (Fig 144 **A**).

A note explaining the reasons of the execution must be now inserted.

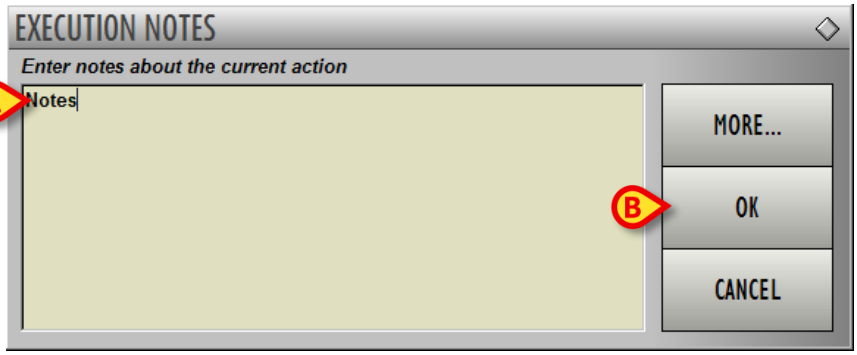


Fig 145

- Insert the note (Fig 145 **A**).
- Click **Ok** (Fig 145 **B**).

The execution is this way recorded.

The same procedure can be used to record the administration of a future not-yet-validated order.

6.5.3. Changes in the administration values

It is possible to record the changes in the values of the durative administration while it is still in progress.

To do that

- click the prescription button corresponding to the treatment whose values must be changed (Fig 146 **A**).

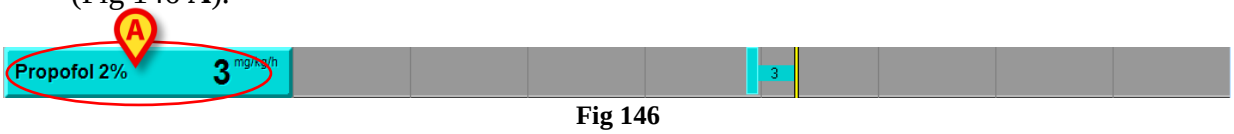


Fig 146

The following window appears (Fig 147).

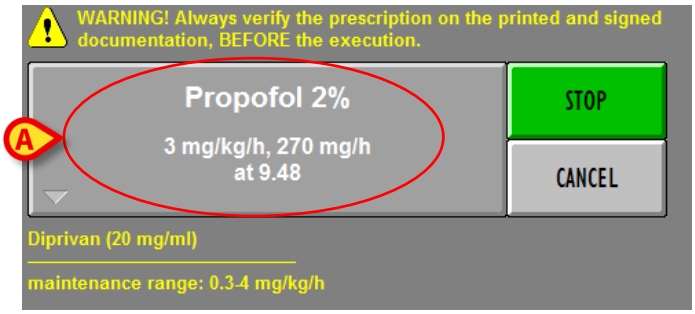


Fig 147

- Click the large button containing the treatment name (Fig 147 **A**).

The window enlarges, as in Fig 148.

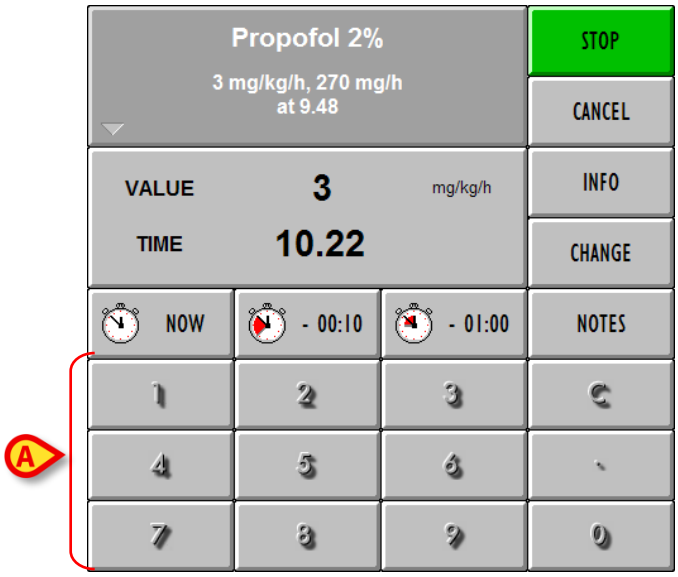


Fig 148

- Use the numeric keyboard (Fig 148 **A**) to set the new administration values (Fig 149 **A**).

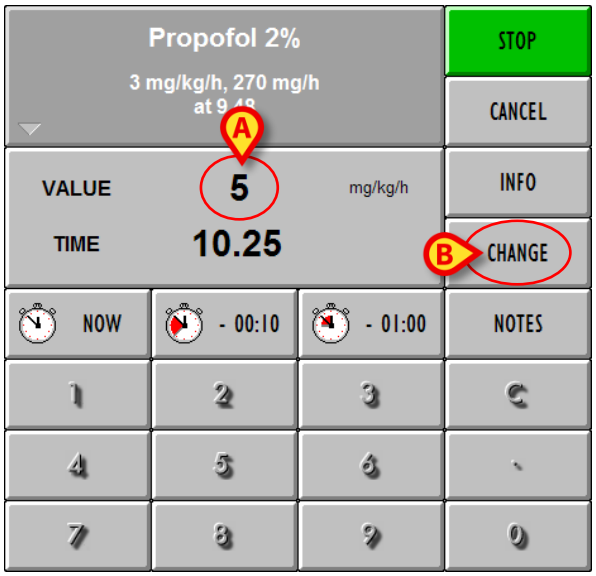


Fig 149

- Click the **Change** button (Fig 149 **B**)

The following window appears, requesting to add a textual note (Fig 150).

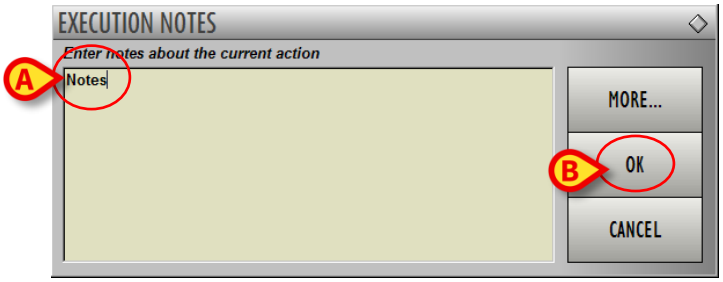


Fig 150

- Type the note (Fig 150 **A**).
- Click the **Ok** button (Fig 150 **B**).

The chart changes in the following way (Fig 151).

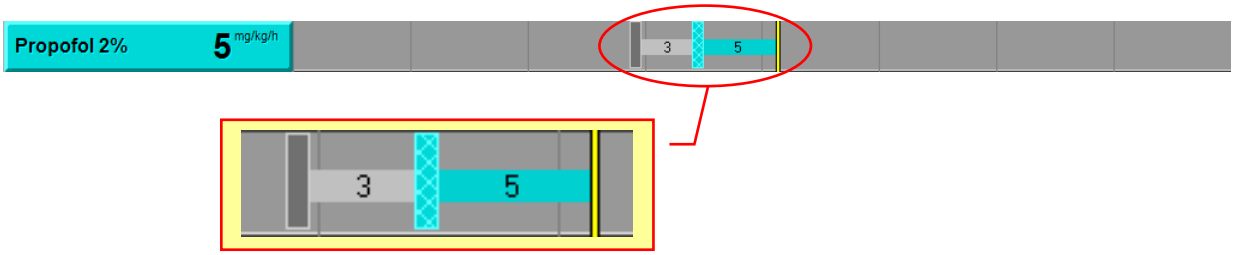


Fig 151

The moment in which the change is recorded is highlighted on the chart by the cyan vertical bar . The old value is specified on the left of the bar ("3" in the figure), the new value is specified on the right ("5" in the figure).

The change is signalled on the "Prescription" module by a specific icon  *on the prescription table (Fig 152). The icon means that the values recorded on the "Execution" module are now different from those specified by "Prescription".*

Fig 152

6.5.4. The administration window

Some of the administration values (quantities and dosages, for instance) can be edited during the treatment administration phase.
The treatment administration window (Fig 155) makes it possible to set or edit these values on the "Therapy Execution" module.

To open the administration window,

- click the prescription button (see Fig 153 for an instance).

Fig 153 - Prescription button

The administration window opens (Fig 154).

Fig 154 - Administration window

- Click the area containing the administration data (Fig 154 **A**).

Additional buttons are displayed on the administration window (Fig 155).

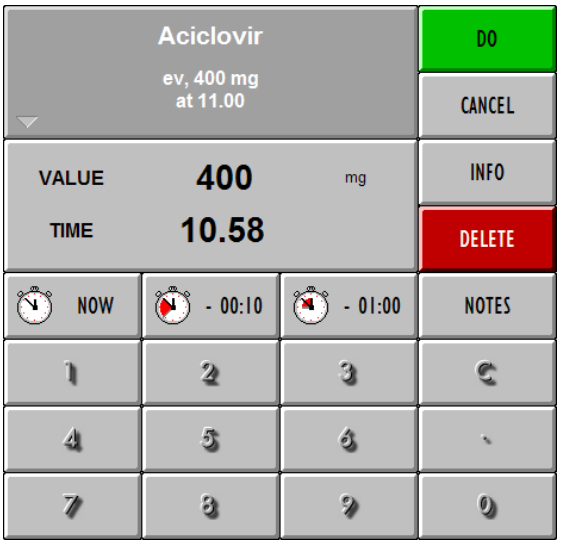


Fig 155

These are the functions of the buttons on the window:

The **Do** button records the treatment administration.
The **Cancel** button closes the window without recording the treatment administration.
The **Info** button opens an information page about the specific treatment.
The **Delete** button deletes the specific order. The orders cancelled this way appear on the chart in the following way -  - see Fig 156.

Fig 156

The **-00:10** button changes the administration recording time (10 minutes back per click).
The **-01:00** button changes the administration recording time (1 hour back per click).
The **Now** button sets the current time again.
The numeric keyboard makes it possible to set the administration values.
The **Notes** button makes it possible to add a textual note.

To add a note

- click the **Notes** button.

The following window opens.

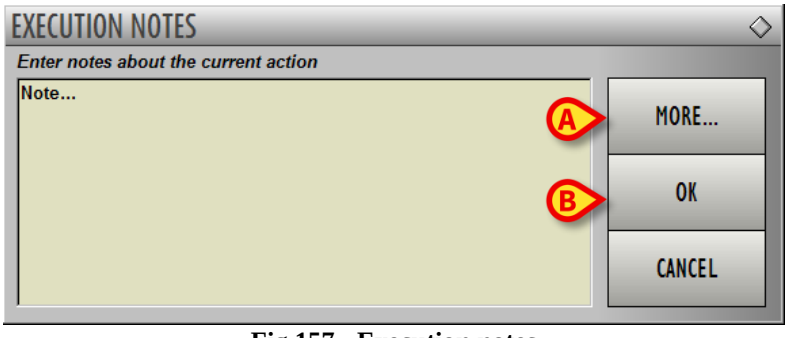


Fig 157 - Execution notes

A textual note can be either inserted manually or using the **More…** button on the window (Fig 157 **A**). This button opens a list of pre-defined standard phrases (Fig 158).

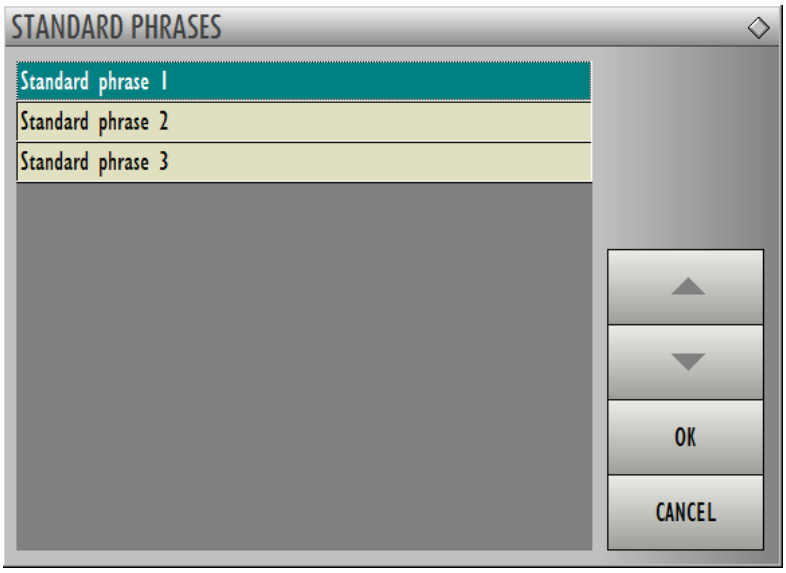


Fig 158 - Standard phrases

The standard phrases can be quickly added to the note. To do that

- click the phrase you want to add.

The phrase is highlighted.

- Click the **Ok** button.

The selected phrase is displayed on the window shown in Fig 157. The standard phrase added this way can be completed or edited by the user.

To complete the procedure

- click the **Ok** button on the "Execution notes" window (Fig 157 **B**).

This note is visible on the "Prescription details" window on the "Prescription" module (see paragraph 5.9).

The administration window, when referred to durative treatments, is different.

Fig 159 shows an example.

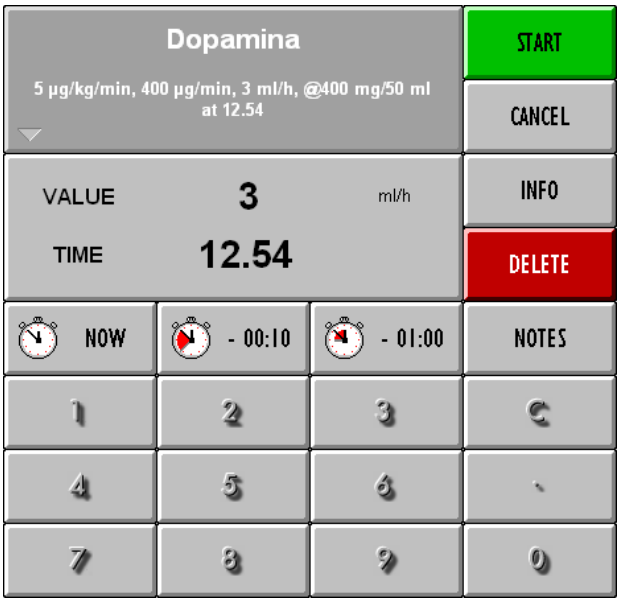


Fig 159

The **Start** button is on the window instead of the **Do** button before the administration is started.
After the administration is started the **Stop** button takes the place of the **Start** button.
The **Change** button is on the window while the administration is in progress.

The procedures related to the administration of durative prescriptions are descibed in paragraph 6.5.1.

6.6. “Execution” module command bar

The various buttons on the “Administration” module command bar (Fig 124 **C**, Fig 160) make it possible to perform specific actions.

Fig 160 - Command bar

The first 6 buttons from the left (Fig 160 **A**) make it possible to change the way the different items are displayed on the window.

The  and  buttons make it possible to scroll up and down the screen contents.

The  and  buttons make it possible to scroll left and right the screen contents.

The  button brings back to the original display mode. When a time different from present time is displayed the button turns red and starts flashing  .

The  button makes it possible to switch from 8 hours to 24 hours display mode (and vice versa). The 8 hours display mode is shown in the previous figures. The 24 hours display mode is shown in Fig 161. When the 24 hours display mode is activated the button on the command bar changes in the following way -  .

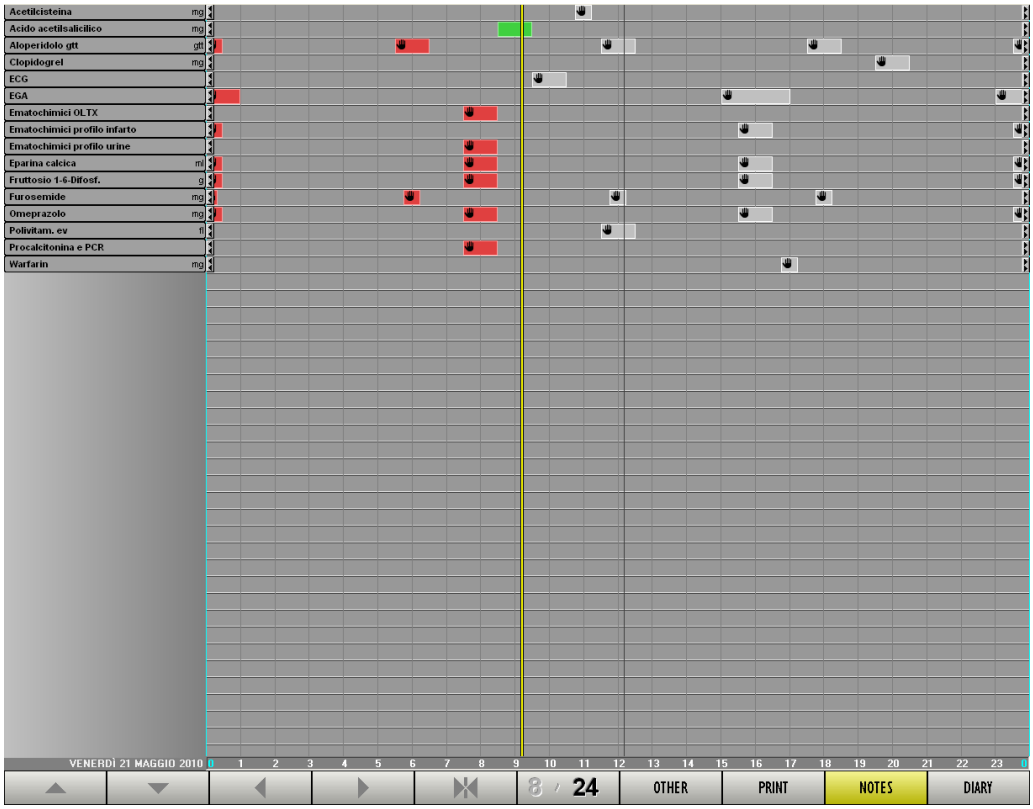


Fig 161 - 24 hours display mode

Fig 162 shows, as example, a detail of a 24 hours display screen.

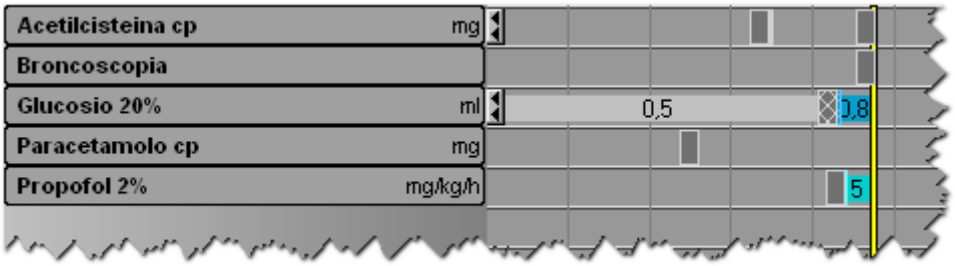


Fig 162 - 24 hours display (detail)

This is a read-only display. I.e. it is not possible to operate on the screen contents when the 24 hours display is activated.
The time span displayed goes from 0:00 to 24:00 of the current day.
Only the prescriptions having at least one order in the time span considered are displayed.
This display mode offers an immediate and complete view of the patient's treatment plan in the 24 hours.

To go back to normal display mode (8 hours) click the 

button again.

6.6.1. Quick chart navigation tool

A quick chart navigation tool (Fig 163) is displayed when any point on the chart area is clicked.

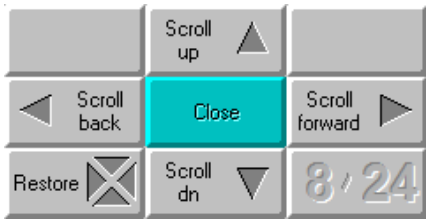


Fig 163

These are the functions of the various buttons:

the **Scroll Up** and **Scroll Dn** buttons scroll up and down the chart contents;

the **Scroll Back** and **Scroll Forward** buttons scroll back and forward the chart contents;

the **Restore** button brings back to the original display mode;

the **8/24** button makes it possible to switch from 8 hours to 24 hours display mode (and vice versa).

The **Close** button makes the quick chart navigation tool disappear.

6.6.2. The "Other" function: extemporaneous orders

The **Other** button on the command bar (Fig 164 **A**) makes it possible to record the administration of a treatment that was not previously prescribed on the "Therapy Prescription" module.

Fig 164

This function can be used when the clinical staff must administer a treatment that is not on the patient treatment plan.

This is the procedure:

- click the **Other** button.

The following window opens:

Fig 165 - Other treatment

The boxes on the window are buttons. Each button is associated to a treatment. The treatments are grouped into classes. The labels placed on top of the window display the names of the various classes.

To display the items of a specific class

- click the corresponding label.

Click the **Drip** label, for instance (Fig 166 **A**), to display the treatments belonging to the corresponding class (Fig 166).

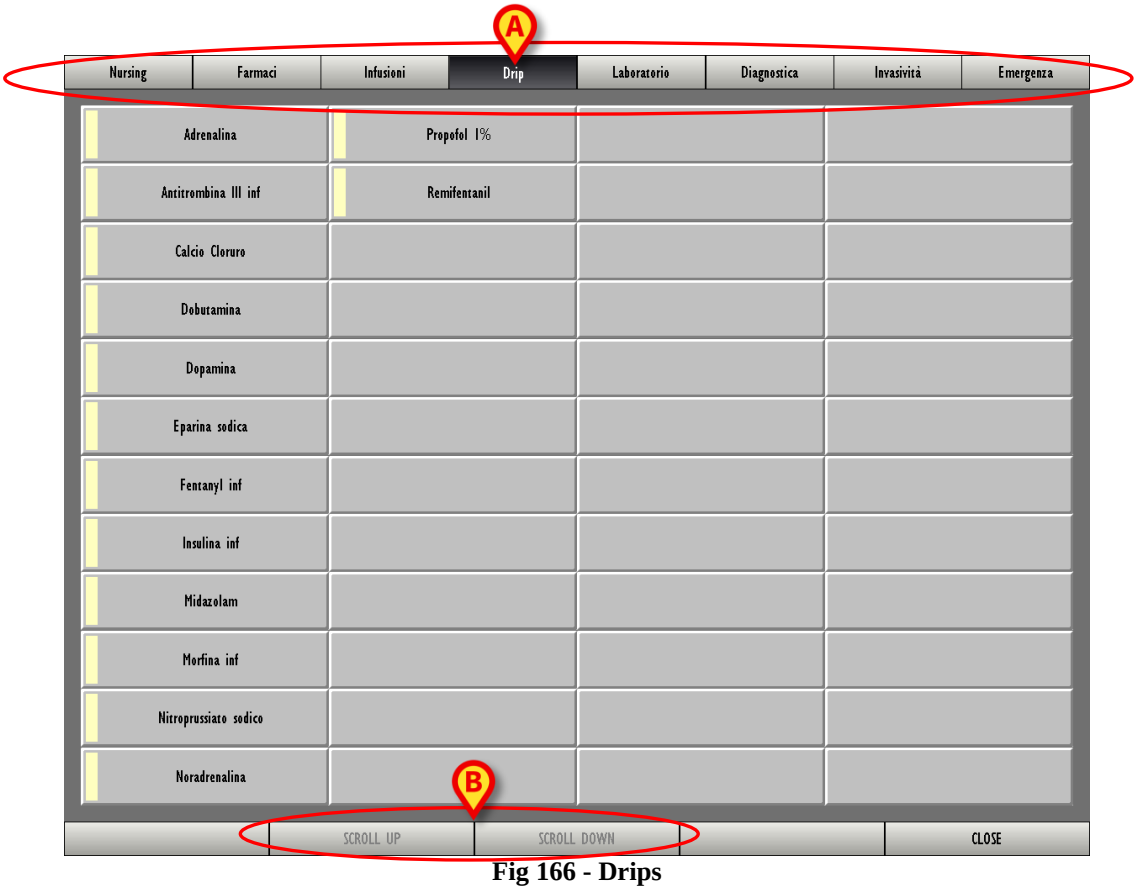


Fig 166 - Drips

When the number of available treatments of a class exceeds the number of available cells the buttons **Scroll Up** and **Scroll Down** (Fig 166 **B**) activate, making it possible to scroll the treatments list.

The various treatments are characterized by a color indicating the class to which they belong. The classes and their related colors are listed in paragraph 2.4.

6.6.3. Extemporaneous orders administration

To record the administration of a treatment that is not part of the patient's treatment plan

- click the **Other** button.

The window shown in Fig 165 and Fig 166 opens.

- Click the label corresponding to the class to which the relevant treatment belongs (Fig 166 **B**).

Only the treatment-buttons belonging to that specific class are this way displayed on the window.

- Click the button corresponding to the wanted treatment (the name of the treatment is displayed on the button).

Another window appears, making it possible to set the values of the specific administration (see Fig 167 for an instance).

- Use the numeric keyboard to set the administration values.
- Click the **Do** button (Fig 167 **A**) to record the treatment administration

Fig 167 - Administration window

The administration is now displayed on the chart as "Executed" (Fig 168).

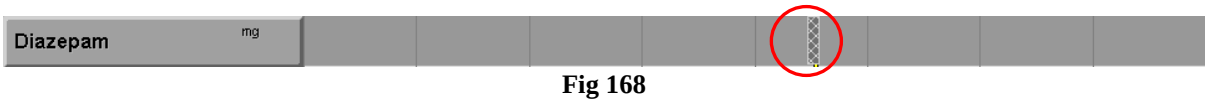


Fig 168

The administration is also displayed on the treatment plan on the "Prescription" module as "Executed" (Fig 169).

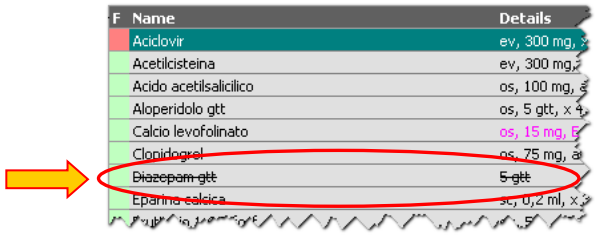


Fig 169

The administration window shown in Fig 167 is described in detail in paragraph 6.5.4.

6.6.4. “Execution” module print functionalities

The **Print** button on the “Administration” module’s command bar (Fig 170) makes it possible to create different kinds of documents.

Fig 170 - Command bar

Click the **Print** button to open a window making it possible to define the features of the document to be printed (Fig 167).

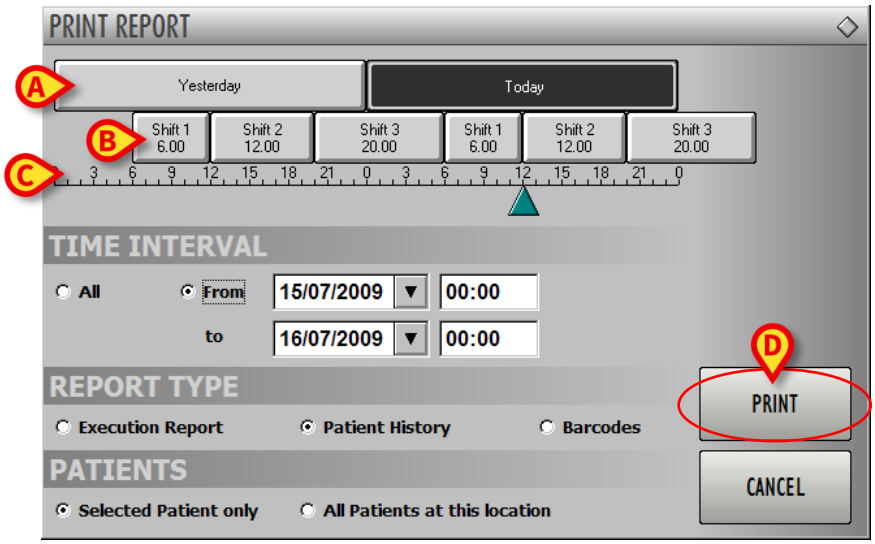


Fig 171 - Print options

The “Print report” window contains several tools making it possible to define the print report features.

These are the tools available:

The **Yesterday** and **Today** buttons (Fig 171 **A**) make it possible to print either the data referring to the current day or the data referring to the day before. The selected option is highlighted.

The “Shifts” buttons (**Shift 1**, **Shift 2** etc. Fig 171 **B**) limit the printed data to those referring to a specific shift. The selected shift is highlighted.

The time bar (Fig 171 **C**) indicates the current time. Current time is between 11:00 and 12:00 o’clock in the figure.

The “Time Interval” area (Fig 172) makes it possible to specify the beginning and the end of the time interval of the data to be printed. The “All” checkbox selection (Fig 172 **A**) prints all the available data, not depending on the time interval.

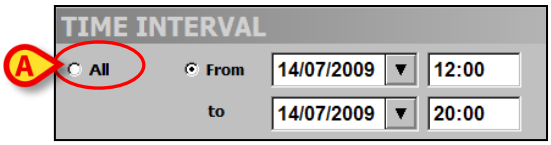


Fig 172 - Print options - Time Interval

The "Report type" area (Fig 173) makes it possible to select the kind of print report. Several options are available. The example here described offers the following options:

- execution report;
- patient history;
- administered treatments barcodes.

Click the corresponding checkbox to select a report type.

Fig 173 - Print options - Report Type

The "Patients" area (Fig 174) makes it possible to print either the single selected patient data or the data of all the patients in the selected location. Click the corresponding checkbox to select an option.

Fig 174 - Print Options - Patients

- When all the report features are set click the **Print** button (Fig 171 **D**) to display a print preview of the report.

6.6.5. Patient notes

The Notes button (Fig 175 **A**) makes it possible to add and display the patient's notes.

Fig 175 - Command bar

The procedures related to this button are described in paragraph 5.11.

6.6.6. Patient clinical diary

The **Diary** button (Fig 175 **B**) makes it possible to access and use the DIGISTAT® "Clinical Diary" module if the module is installed. This module makes it possible to create and manage the patient's clinical diary.

See the specific documentation to know the DIGISTAT® "Clinical Diary" module functions and features.

7. The “Central Station” module

The “Central Station” module displays on the same screen the state and the needs of all the patients in the ward, providing real time information on each patient’s treatment plan and on the related schedule.

7.1. Module selection

To access the module

- click the 

icon on the lateral bar (Fig 176).

Fig 176 - Lateral bar

The “Central Station” screen opens (Fig 177).

7.2. “Central Station”

Fig 177 shows the Therapy “Central Station”.

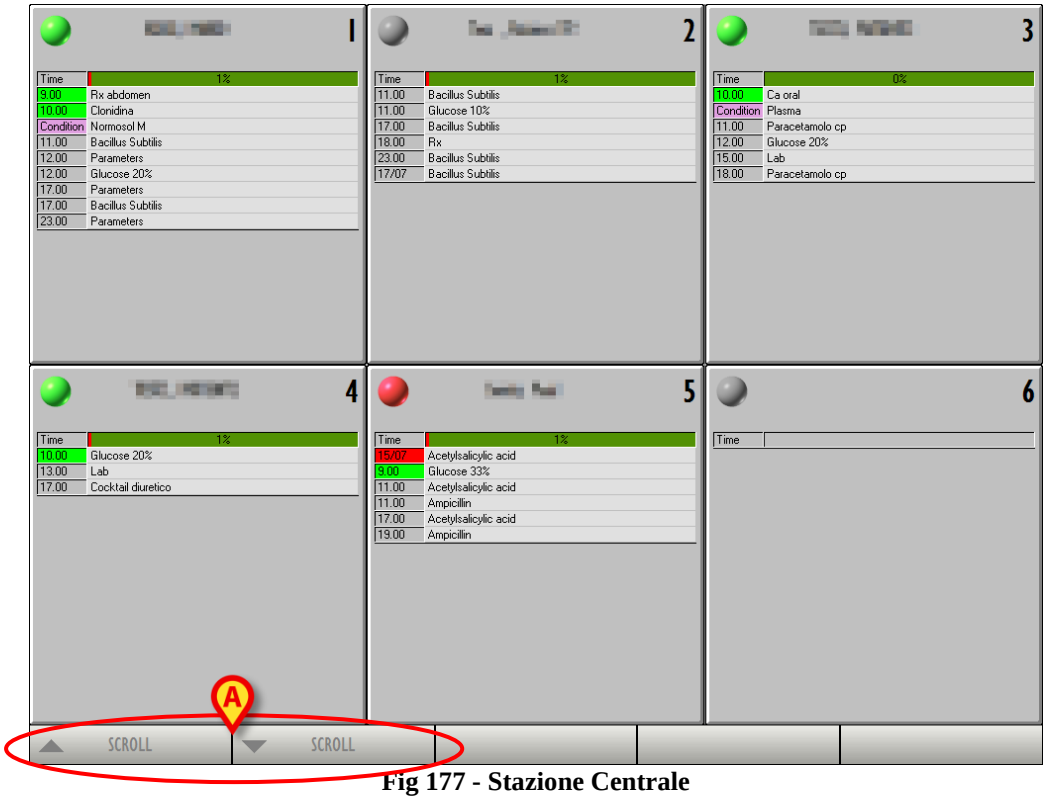


Fig 177 - Stazione Centrale

The screen contains several boxes; each box corresponds to a bed in the ward (Fig 178).
In case the configured beds are more than those displayed on screen the scroll buttons indicated in Fig 177 **A** activate; click these button to display the beds that are not currently displayed.

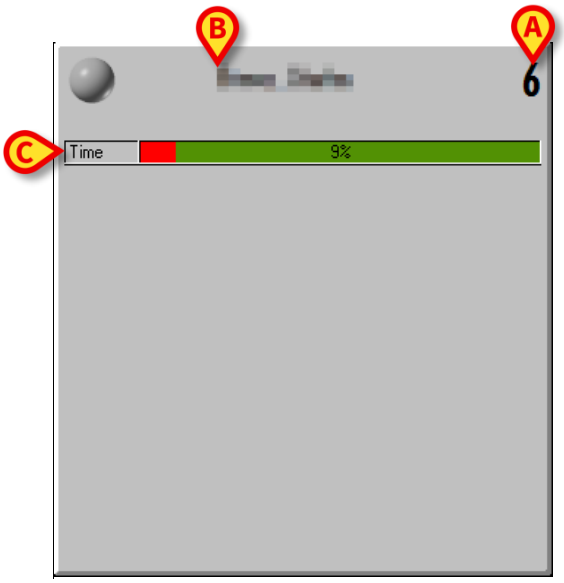


Fig 178 - Bed

The bed number is displayed on the top-right corner of the box (Fig 178 **A**).

When a patient is admitted to the bed the patient name appears on top of the box (Fig 178 **B**). Below the patient's name a temporal bar indicates the time that passed from the last therapy plan update.

The time bar has the same function and displays the same values of the tools described in paragraph 2.5.

In Fig 178 **C** the time bar indicates that the 9% of the total duration of the treatment plan validity passed.

The list of the patient's active orders is displayed in the central area of the patient-box (Fig 179). The orders are displayed by urgency: on top the alarmed ones, then the "ready" ones, then the conditional ones, then the orders to be executed in the future.

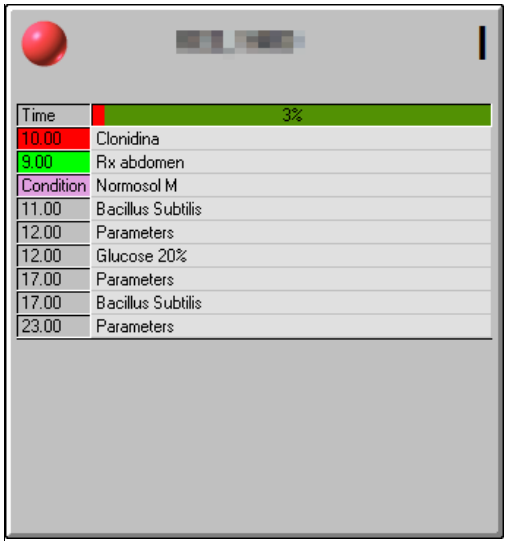


Fig 179 - Orders

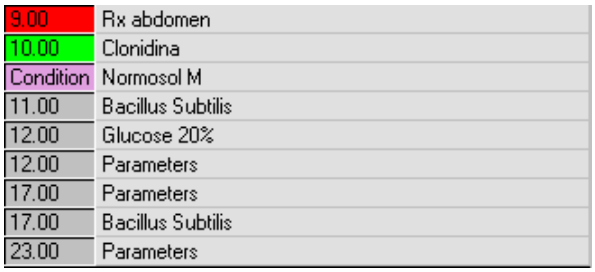


Fig 180 - Orders (detail)

The treatment name and the planned administration time are displayed for each order.

The planned administration time can be highlighted in different ways to provide information on the order state.

- Red means that the administration is late.

- Green means that the order should be administered now.
- Grey means that the administration is planned in the future.
- Purple indicates a conditional prescription (see paragraph 4.2.2 for an explanation of the meaning of "conditional prescription").

When the  icon appears beside an order it means that the order is not validated (there are two possibilities: either the order is not yet validated or the order validity expired).

Fig 181 - Order not validated

If there is at least one late order the round button on the top left corner of the box turns red (Fig 182)

Fig 182

If there is at least one order to be administered "now" the round button on the top left corner of the box turns green (Fig 183).

Fig 183

For the orders planned for the current day the scheduled administration time is indicated; for the orders planned for a different day the administration date is indicated (Fig 184).

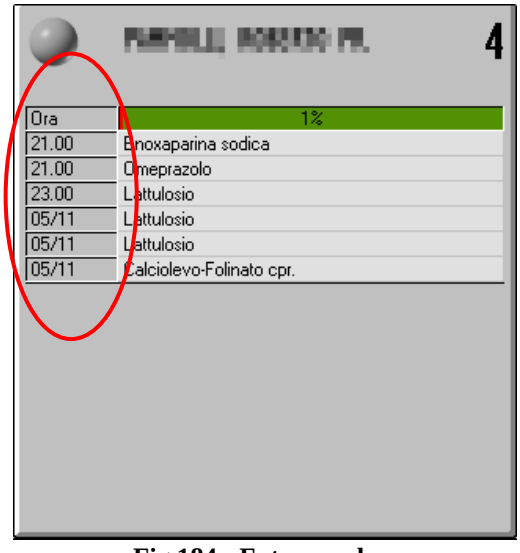


Fig 184 - Future orders

- Click the patient boxes to access the corresponding treatment administration screen ("Therapy Administration" module - Fig 124).

8. Contacts

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