



HERA User Manual

Valid for HERA software 4.0



Aesku.Diagnostics GmbH & Co.KG
Mikroforum Ring 2, 55234 Wendelsheim - Germany

HERA User Manual EN
V005: 2025-07-24

History			
Version	Date	Modification	Author
001	2018-08-23	Initial version	Alessia Iori
002	2020-06-26	HERA 2.0 (department view in the laboratory dashboard, help in light color)	Iori
003	2022-08-10	HERA 3.4 (order module) Merge Systems-Diagnostics	Iori
004	2024-01-17	Intended use update according to IVDR	Iori
004a	2025-02-06	Update according to IVDR requirements	Dr. Isabella Jumpertz
005	2025-07-24	HERA 4.0 (new style for login and page numbering, manual archive) + eIFU	Iori

Table of content

TABLE OF CONTENT	3
GENERAL INFORMATION	6
STRUCTURE AND CONSULTATION OF THE MANUAL	6
PURPOSE OF THE MANUAL	6
DOCUMENT IDENTIFICATION	6
MANUFACTURER	6
CE MARKING	7
FDA	7
REGULATORY SYMBOLS	7
INTENDED PURPOSE	7
LIMITATION OF USE	8
USER QUALIFICATION.....	8
TECHNICAL SERVICE	9
1 INTRODUCTION	10
2 LOGIN	11
2.1 CHANGE PASSWORD.....	12
2.2 CHANGE LANGUAGE.....	13
2.3 LOGOUT	14
3 PROGRAM OVERVIEW	15
3.1 MENU	16
3.2 MAIN TOOLBAR.....	16
3.3 WORKSPACE.....	18
4 LABORATORY DASHBOARD.....	19
4.1 LABORATORY BUTTON	20
4.2 DEPARTMENT OVERVIEW	20
4.3 DEVICE/DEPARTMENT SAMPLE STATUS	22
4.3.1 <i>Device samples status overview</i>	22
4.3.2 <i>Department samples status overview</i>	23
4.3.3 <i>Samples status meaning</i>	24
4.4 SAMPLES LIST.....	25
4.4.1 <i>Samples list sorting</i>	26
4.4.2 <i>Information</i>	27
4.4.3 <i>Functionality</i>	28
4.4.3.1 Sample log	29
4.4.3.2 Results preview	29
4.4.3.3 Lock the sample programming to device	30
4.4.3.4 Sample re-programming to device	31
4.4.3.5 Send again the result to LIS	31
5 DEPARTMENT DASHBOARD	33
5.1 DEPARTMENT BUTTON.....	34
5.2 DEVICE OVERVIEW	34
5.2.1 <i>Device sample status overview</i>	35
5.3 TESTS STATUS OVERVIEW	36
5.3.1 <i>Test status meaning</i>	37
5.4 SAMPLES LIST.....	37
6 DEVICE DASHBOARD.....	39
6.1 DEVICE BUTTON	40
6.2 SAMPLES STATUS OVERVIEW	41
6.3 TESTS STATUS OVERVIEW	41

6.3.1	Test status meaning	42
6.4	SAMPLES LIST	43
7	RESULTS DASHBOARD	44
7.1	HEADER SECTION	45
7.1.1	Sample Comment	47
7.1.1.1	How add a sample comment	49
7.1.1.2	How delete a sample comment	51
7.2	DETAIL SECTION	52
7.3	RESULTS SECTION	53
7.3.1	Results table	53
7.3.1.1	How add a test comment	58
7.3.1.2	How delete a sample comment	59
7.3.2	Result toolbar	61
7.3.2.1	Dilution	62
7.3.2.2	Rerun	63
7.3.2.3	Reflex	64
7.3.2.4	Patient History	66
8	MANUAL VERIFICATION DASHBOARD	71
9	SEARCH	73
9.1	QUICK SEARCH	73
9.2	MAIN SEARCH	74
9.3	SEARCH FROM THE SAMPLES LIST	76
10	CONNECTIONS DASHBOARD	78
11	ALARMS DASHBOARD	79
11.1	LIS TO HERA	80
11.1.1	LIS rules	80
11.1.2	LIS codes	81
11.1.3	Device codes	82
11.1.4	Double samples	83
11.2	DEVICE	83
11.2.1	Worklist builder rules	84
11.2.2	Device rules	84
11.3	RESULT RULES	85
11.4	HERA TO LIS	86
11.4.1	Upload result to LIS	86
11.4.2	LIS codes	87
11.5	SYSTEM	87
11.5.1	Worklist creation	88
11.5.2	Insert result	89
12	ORDER MODULE	90
12.1	ORDER ENTRY	90
12.1.1	Patient information	91
12.1.2	Order information	92
12.1.3	Request information	93
12.1.4	Buttons	94
12.1.4.1	Save order	94
12.1.4.2	Cancel order	95
13	SETTINGS DASHBOARD	96
13.1	CONFIGURATION	96
13.2	ADMINISTRATION	97
14	HELP DASHBOARD	98

14.1	SOFTWARE INFORMATION	98
14.2	USER MANUALS.....	98

General Information

The content of this manual is based on the **HERA** Software 4.0.

This User's Manual, drawings and any other documents delivered with the software, are Aesku.Diagnostics property which reserves all rights. Therefore, receipt or possession of the same do not confer any rights to reproduce the contents described therein.

The drawings and/or documents cannot be made available and/or assigned to third parties without written permission from Aesku.Diagnostics. The sale or vision, even partial, is prohibited by law.

Aesku.Diagnostics reserves the right to update at any time the parts of this document as it considers appropriate.

Aesku.Diagnostics accepts no responsibility for improper use of the device and/or for damage caused following operations not covered in this manual.

Structure and consultation of the manual

This manual is an integral part of the software **HERA** delivered to the customer in order to give the operator the necessary and essential instructions regarding the use.

It contains technical, operation, maintenance, and safety information; before using or performing maintenance on the software it is required to have read and understood the manual in order to avoid possible damage to persons and things.

The software must be used only and exclusively for the intended uses listed in the chapter "Intended use."

Purpose of the manual

The purpose of this manual is to provide the operator with all the information necessary to interact with the software medical device as independently and safely as possible, protecting the health and ensuring the quality of work.

The information contained in the user manual should be familiar to anyone who interacts with **HERA** software.

All instructions, drawings and data provided in this document are based on the latest product information available at the time of the printing.

For ease of reference, the manual has been divided into chapters which identify the main concepts; for a quick search for the topics consult the descriptive index.

Document identification

In order to allow the traceability and/or the next reference, the document has the following identification: *TF_HERA_06_A01_User_Manual*.

Assuming that Aesku.Diagnostics make changes/improvements to the Software **HERA**, this manual will be updated and additions will form part of the software medical device.

It is strictly forbidden to make any changes to the software or to this manual; non-compliance with this rule makes Aesku.Diagnostics free from all liability and warranty performance.

Manufacturer

Aesku.Diagnostics GmbH & Co. KG
Mikroforum Ring 2
55234 Wendelsheim - Germany

CE marking

The In-vitro diagnostic medical device **HERA** is made in accordance with Regulation (EU) 2017/746.

The label is displayed on the screen by selecting the  icon, from the main menu on the left of the panel and must be similar to the one shown below and duly completed:



FDA

The Medical Device **HERA** has been developed according to the FDA Requirements applicable to class I - IVD Medical device - 510k Exempt.

Medical Specialty: Clinical Chemistry

Product code: JQP

Registration Number: 862.210

U.S. FDA Listing Number: D247325

U.S. FDA Company Registration Number: 3007510296

All the reference are available in the help of the product.

Regulatory symbols

	Manufacturer
	REF number
	Serial number
	See electronical instructions for use
	In Vitro Diagnostic Medical Device
	European Conformity
	Unique Device Identification

Intended purpose

HERA is a web-based software (Data Management System) and can be considered an IVD device, when used in combination with specific IVD equipment and IVD software (LIS). It is a scalable connectivity solution that can handle connectivity to multiple instruments, multiple LISSs, multiple users and multiple sites. It is designed to handle the clinical laboratory automation workflow, from dispatching specimens, to verifying results and generating internal reports.

HERA is intended for professional use only.

Limitation of use

HERA is not intended for the management of genetics results and microbiology results. Furthermore it is not intended for blood bank.

HERA is intended to perform a *technical* validation of the results.

ADVICE The device may only be used for the intended purpose for which it was built and as contractually agreed with Aesku.Diagnostics. Do not use it for purposes other than those specified in this manual.
Do not use in environments other than those indicated in this manual. Improper use can cause serious damage to people and/or things!

WARNING  Improper use of the device can cause danger to personnel management. For any issue arises during the use, and in any case not mentioned in this document and/or attachments, please contact the AESKU Customer Service to solve the problem encountered in the shortest possible time.

Aesku.Diagnostics denies any liability for damages to persons and / or property caused by improper use of the software medical device **HERA** not respecting the requirements contained in this manual.

User qualification

HERA may only be operated by sufficiently trained personnel, with knowledge of the use of analyzers, of the risk involved in handling human samples, of the constraints imposed by the major national legislative references, European directives and guidelines in clinical laboratory.

ADVICE The term "sufficiently trained personnel" includes all the persons able to operate and intervene on **HERA** device safely and effectively, with knowledge of the language in which the manual is provided, signs and commands present on the manual and/or on the software itself.
Laboratory personnel should be qualified and adhere to the principles of good laboratory practice.
All the user documents supplied must be read prior to use of the equipment.

WARNING  The staff responsible of the use of the device must be trained by Aesku.System and/or by Hospital Staff that has been qualified by Aesku.System at training. The personnel must have the characteristics referred to in the specific section of this document. Compliance with these rules is an essential requirement to ensure safety to operators and patients.

Technical service

The AESKU technical service is available for clarification and/or interventions at the Customer with sending specialized staff.

In the request for assistance should be specified:

- Customer Name
- Serial Number
- Product Version
- Problems encountered

WARNING



All service work must be strictly carried out by personnel authorized by Aesku.Diagnostics.

Service carried out by unauthorized persons can impair the function of the medical device and can cause damage to persons or property. Aesku.Diagnostics assumes no responsibility for damage or injury caused by service performed by unauthorized personnel.

ADVICE

Aesku.Diagnostics ensures **maintenance and support for the last two release of the product.**

1 Introduction

HERA is a modular web-based software developed by Aesku.Diagnostics designed to manage the clinical laboratory automation processes. **HERA** is based on a scalable architecture easily adaptable to different level of complexity and workload scenarios. **HERA** is particularly flexible in terms of instruments and LIS connectivity, being capable to handle multiple instruments and multiple LISs connection, multiple users and, when required, even multiple sites lab organization. It can provide added-value functionality by aggregating information exchanged between connected devices and LISs. **HERA** allows central management of analytical instruments supporting global control of processes and guaranteeing a complete response for the connectivity demands of analysis labs.

The main task of **HERA** is the management and validation of incoming information obtained from IVD analysers connected to the system, through interconnections with various analytical instruments, supporting the user with real time notification and alarms and a comprehensive patient history as well. Thanks to the powerful integrated rules based expert system, **HERA** can automate the clinical laboratory process by applying user customizable rules to the pre-analytical, analytical and post-analytical laboratory workflow. Furthermore, **HERA** provides the user with a modern and intuitive graphical interface based on the most recent technologies.

Within the limits of their access and viewing authorization, **HERA** users can obtain a centralized view of all the laboratory, regardless of the workstation from which they gain access.

HERA also provides an order entry panel that allows to manually order sample in the laboratory when the LIS connection goes down.

2 Login

HERA software may only be used by registered and trained personnel. To prevent any misuse of the software, **HERA** features a user credential system that will be described in detail in the following section.

Open a browser (Chrome, Edge, Firefox, Safari) and type the URL to download the **HERA** client:

<http://hostname:8080/hera>

Note *hostname* is the physical or logical address of the **HERA** server.

The **HERA** installation responsible will communicate to the users the complete URL.

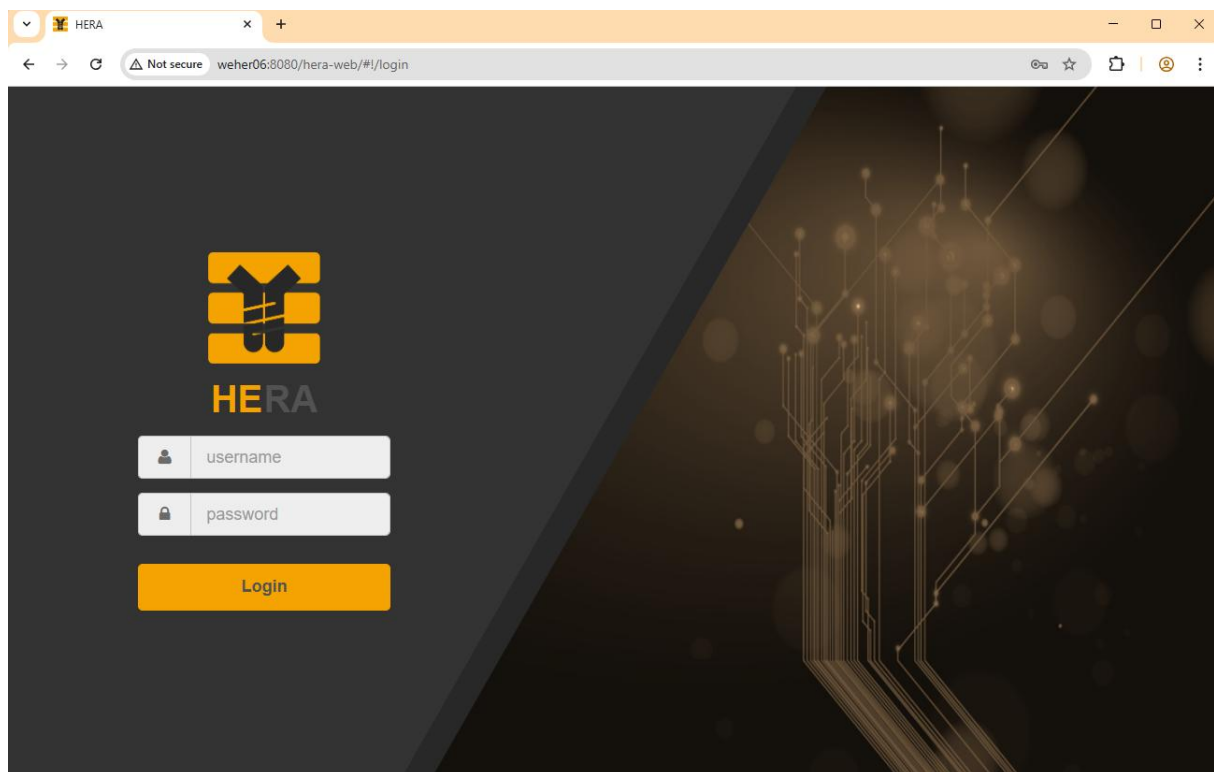
Examples:

`http://herasrv:8080/hera`

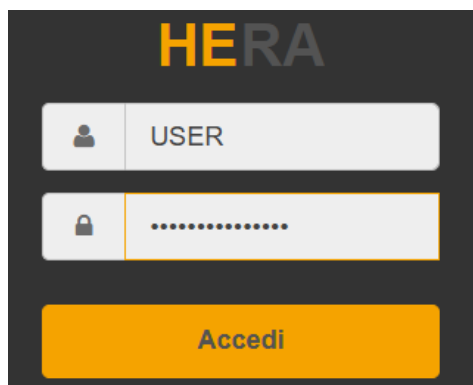
`http://192.168.0.1:8080/hera`

`http://appsrv.domain.local:8080/hera`

The software will start and display the login screen:



Enter your username and password.



The login screen for HERA software. It features the 'HERA' logo at the top. Below it are two input fields: one for the username (labeled 'USER') and one for the password (masked with dots). At the bottom is a large orange button labeled 'Accedi'.

Click “Login” to log into the **HERA** software.

If the user inserts wrong username or password a warning will be raised.

Note Username and password are key sensitive.

User accounts have to be created in advance by an administrator. And the new user at the first login has to change the password.
For further information, please refer to the “Configuration Manual”.

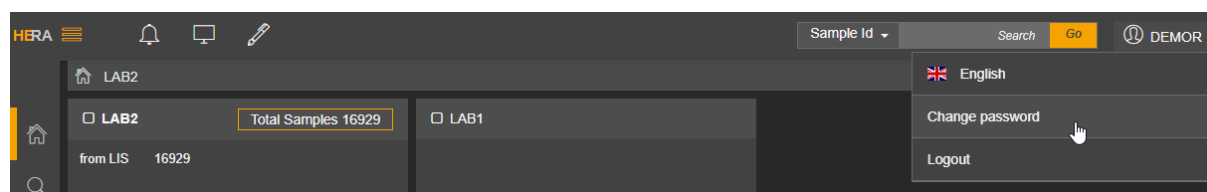
ADVICE The **password** must have this **requirements**:

- *Minimum length 8 characters.*
- *At least one capital letter, one lowercase letter and one number.*
- *The new password will always be different from the previous one.*

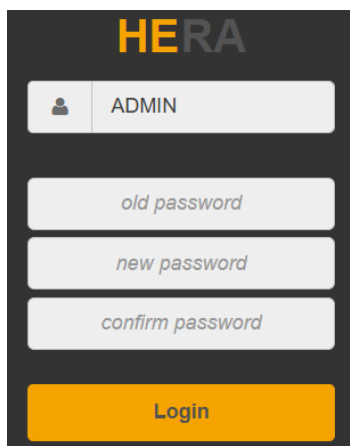
2.1 Change password

The user password has a limited duration that is configured by an administrator in the security section of the “User Configuration” (for further information, please refer to the “Configuration Manual”).

You can also change the password at any time from the HERA home.



The following login screen is displayed:

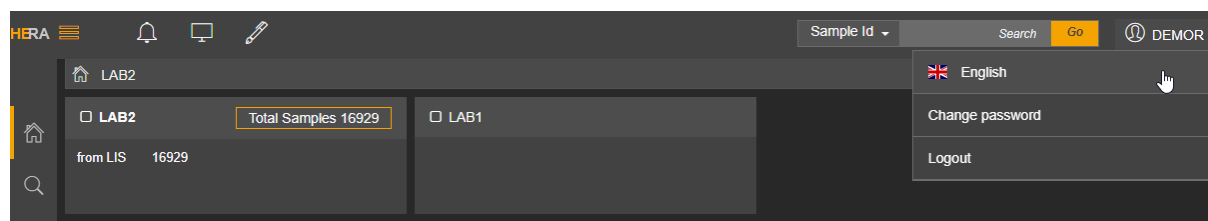


The login screen for HERA software. It features a dark background with the 'HERA' logo at the top. Below the logo is a user selection dropdown currently showing 'ADMIN'. Underneath are three input fields labeled 'old password', 'new password', and 'confirm password'. At the bottom is a large orange 'Login' button.

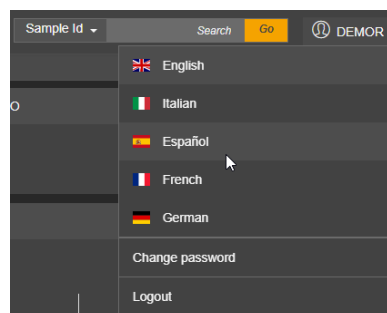
Insert the old password, the new password and the confirmation of the new password. Click "Login" to log into the **HERA** software.

2.2 Change Language

You can change the language of the labelling at any time from the HERA home.



By click on the shown language/flag, all the other available language will be displayed.

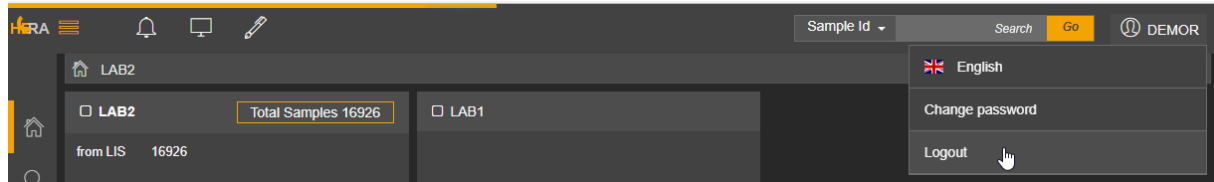


By clicking on the wanted language the software labelling will be instantly switch in the new language.

2.3 Logout

By default the use of HERA is locked, after a time of inactivity of the user. The time is configurable and can be change from user with configuration right.

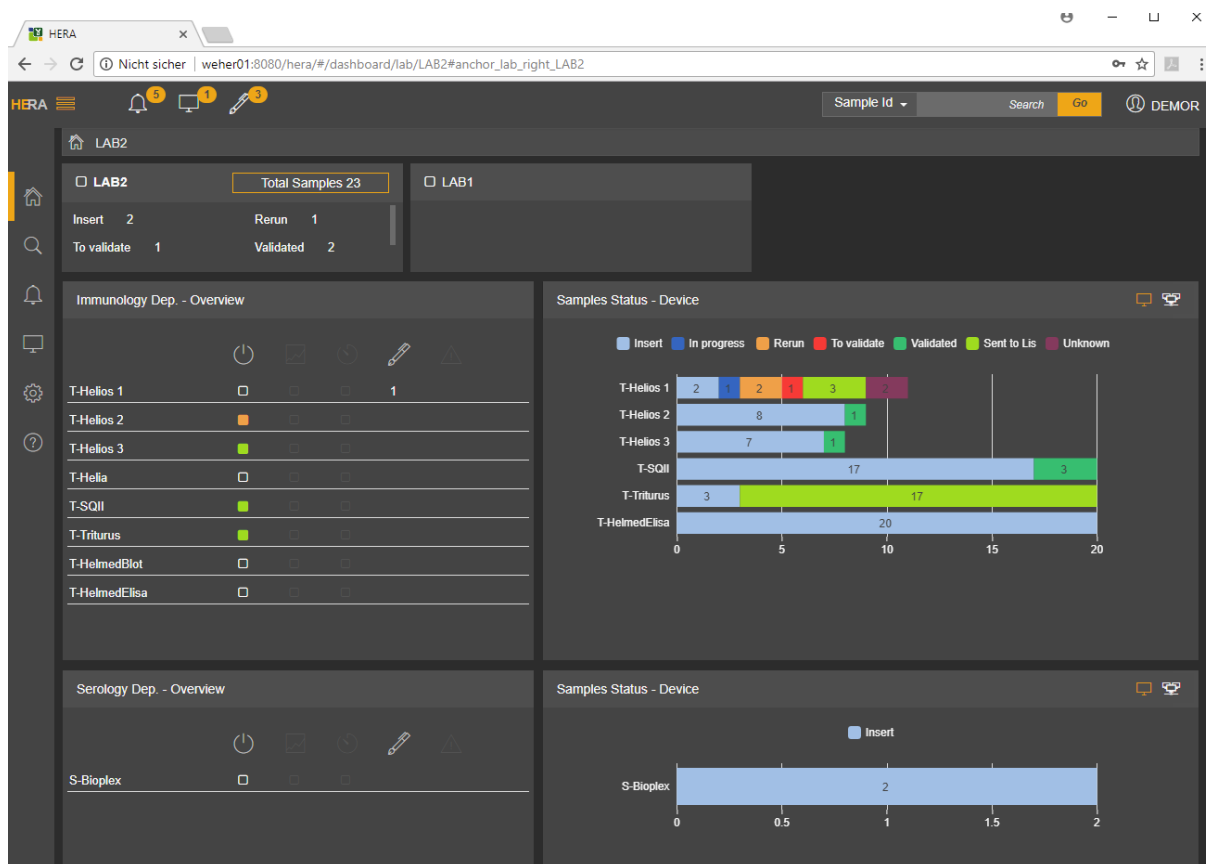
Furthermore you can logout your user from the software at any time from the HERA home.



The software will display the login screen.

3 Program overview

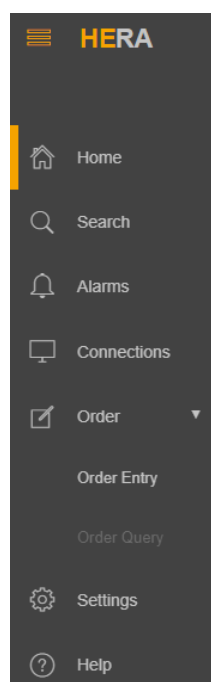
After login the program home screen will be displayed, within the limits of your access and viewing authorization, allowing you to choose from the available features.



The Home space is organized in three sections:

1. Menu
2. Main toolbar
3. Workspace

3.1 Menu



The description of the menu items can be shown or hidden by clicking on the icon . The selected item is shown with an orange bar on the left side.

The menu will provide you with different option, depending on the user rights. The available item are:

- **Home:** allows you, in according with your rights, the access to the principal dashboard of the software in order to check the samples, test, results and devices status.
- **Search:** allows you to search for samples based on various criteria.
- **Alarms:** contains information on configuration error, rules error and system error.
- **Connections:** allows you to start and stop the communication between **HERA** software and devices and/or LIS.
- **Order:** allows you to access to the order entry module.
- **Settings:** contains the configuration and administration modules.
- **Help:** contains information on the installed software version and contact information of the manufacturer. Additionally, you will find a PDF version of the user manuals.

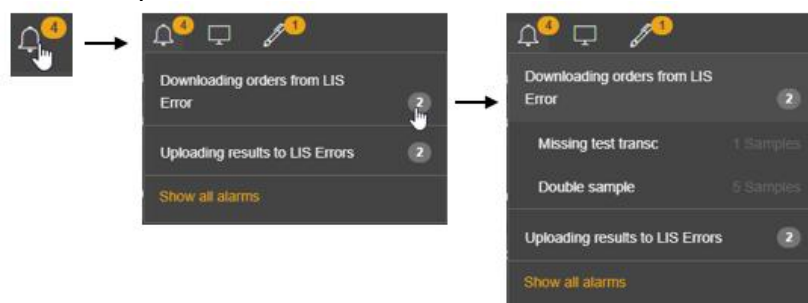
3.2 Main toolbar



The main toolbar:



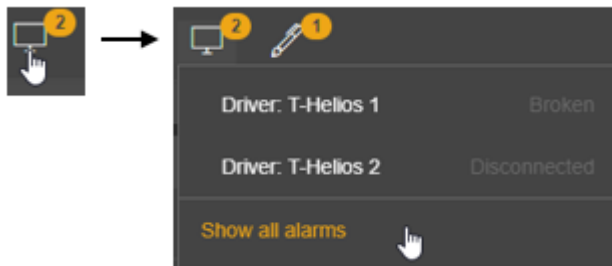
Notifies real time alarms. The icon notifies configuration error, system error, rule error and blinks few seconds when a new error occurs. The number near the icon shows the number of errors type. If you click on the alarm, for each error types, you have the detail of the samples in error.



You can click on “Show all alarms” to have access to the [alarms dashboard](#) or click everywhere out of the alarm box in order to close the box.



Notifies real time driver (LIS, device) error. The icon notifies connection error and blinks few seconds when a new error occurs. The number near the icons shows the number of driver in error. If you click on the alarm, for each driver, you have the detail of the error.



You can click on “Show all alarms” to have access to the [driver dashboard](#) or click everywhere out of the alarm box in order to close the box.



Notifies real time sample to manually validate. The icon blinks few second when a new sample has tests to manually validate. If you click on it, you will be redirected to the [manual verification dashboard](#).

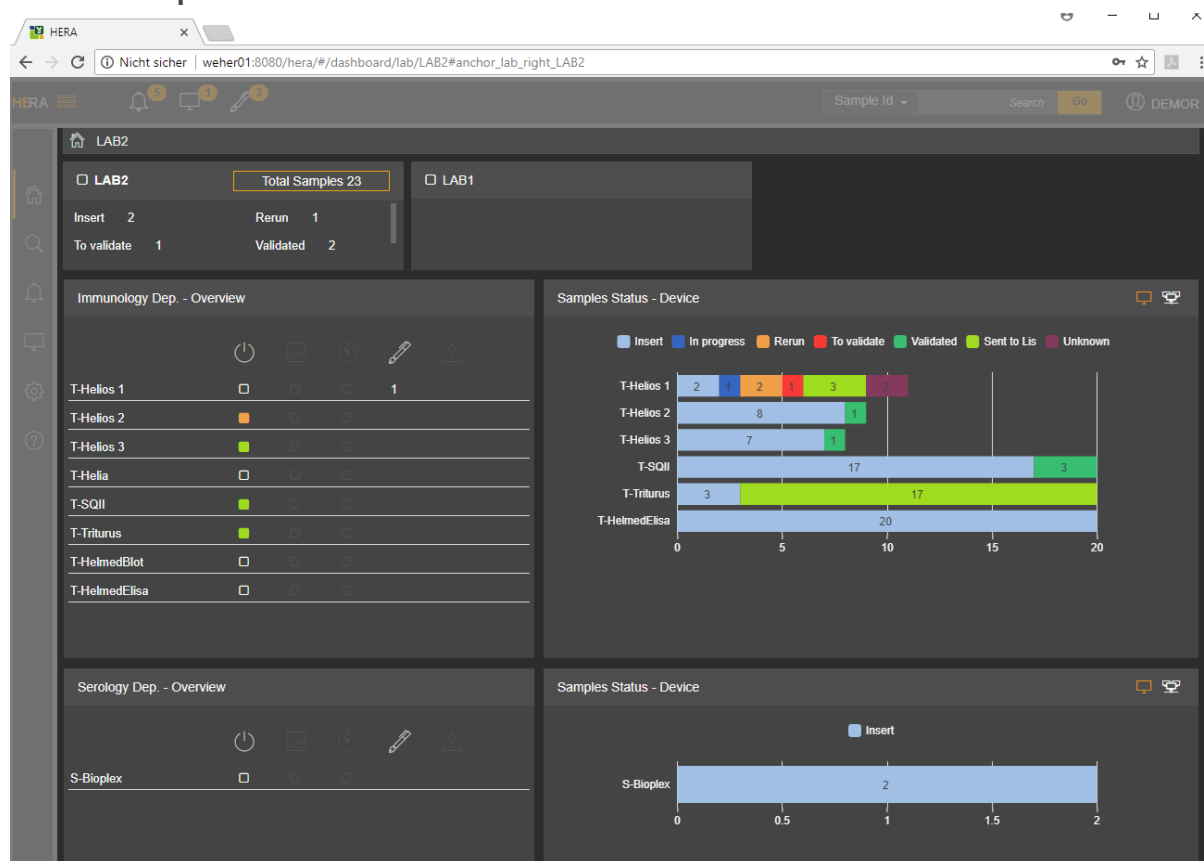


Allows a [quick search](#) for Sample Id, Order Id, Patient Id or Surname, when you are in the Home of the software.



Allows you logout, change password and the language settings.

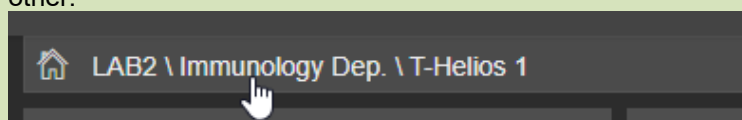
3.3 Workspace



The workspace of the **HERA** software changes depending on the dashboard selected:

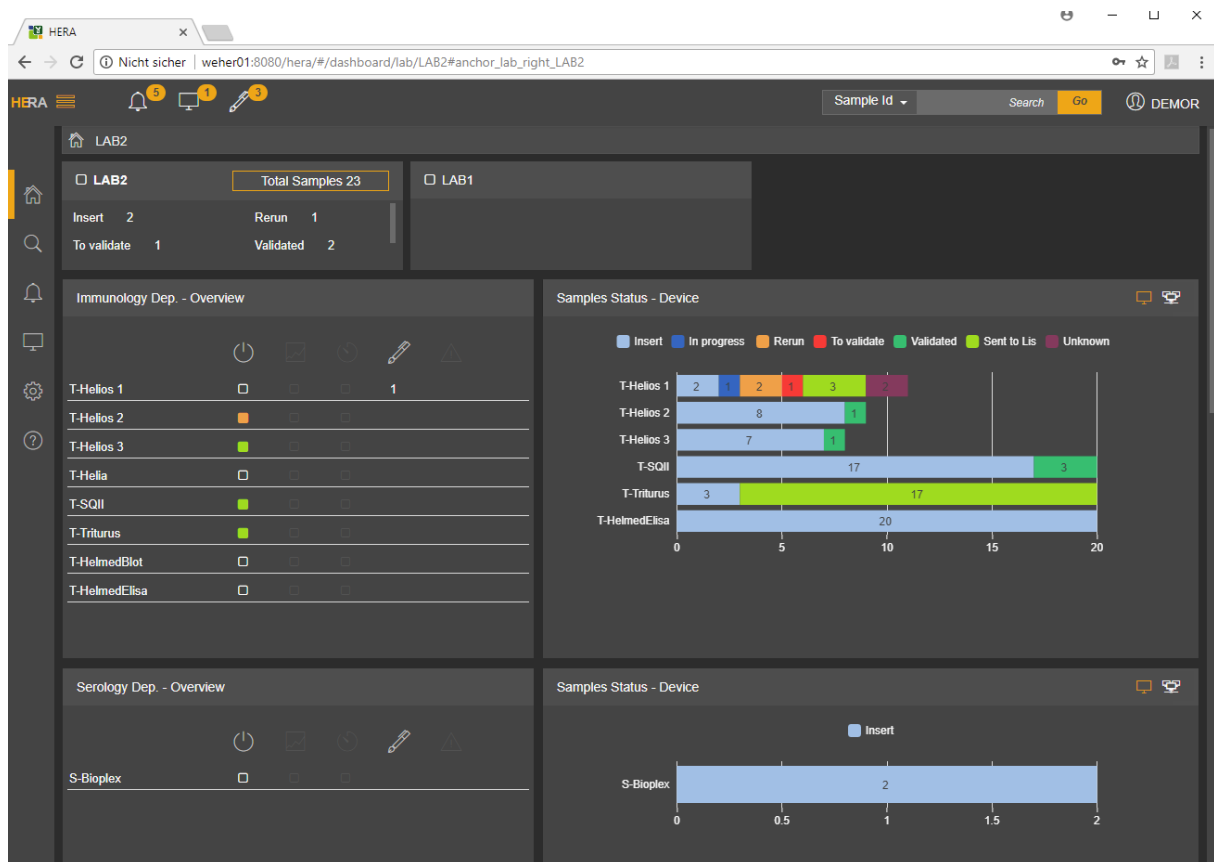
- laboratory dashboard
- department dashboard
- device dashboard
- results dashboard
- search dashboard
- alarm dashboard
- device dashboard
- settings dashboard
- help dashboard

Note The bar at the top of the workspace shows in which dashboard you are. The element of the path shown in this bar are clickable, in order to move easily from one dashboard to the other.



4 Laboratory dashboard

The laboratory dashboard is the “Home” dashboard, if you have right on at least one laboratory.



The dashboard is composed of four main elements:

- **Laboratory button:** contains information about the LIS connection status and the number of sample in the laboratory. There is a button for each configured laboratory.
- **Department overview section:** contains information about the devices connection status and the samples that must be manually validate for a specific department of the selected laboratory. There are as many section as the number of the departments configured for the selected laboratory.
- **Device/Department samples status overview:** contains information about the samples status for each device of a specific laboratory department or about the sample status for the whole department. There are as many section as the number of the departments configured for the selected laboratory.
- **Samples list:** shows the samples list corresponding to a user selection.

The following paragraph will be provide information on all options.

By default, in case of more laboratories, the dashboard shows the data for your default laboratory or, if no default is configured, the dashboard shows the data for the laboratory with the first position in the display order configuration.

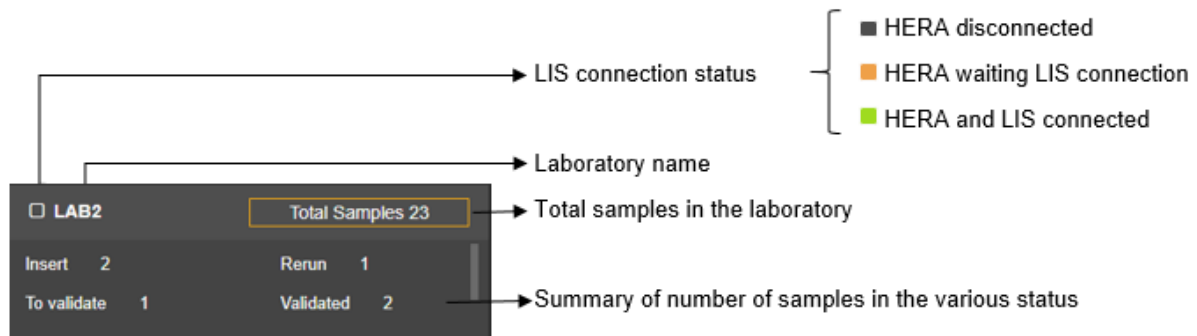
You can move from one laboratory to another by clicking on the desired laboratory button (at the top of the workspace).

4.1 Laboratory button

The laboratory button, at the top of the workspace, contains the main information about the selected laboratory.

The laboratory button is composed of two part:

- *header*: contains the laboratory name, the info of the LIS connectivity status and the total samples number for the laboratory;
- *body*: contains the summary of the samples state.



The detail of the samples and the total samples information are displayed only for the selected laboratory. For the other laboratory, only the LIS connection status is displayed.

Note In case of multiple LIS connection, the colour of the LIS connection status is green only if all the LIS are connected.

By clicking on a laboratory button, you can move from one laboratory to another.

4.2 Department overview

In the laboratory dashboard, there are as many department section as the number of the departments configured for the selected laboratory.

The department overview section contains information about the devices connection status and the samples that must be manually validate.

The section shows:

- the list of devices belonging to the department
- the device connectivity status
- the number of sample that have test to manually validate, for each device.



By clicking on the department name you have access to the [department dashboard](#).
 By clicking on the device name, the device worklist will be displayed in the [samples list](#) section at the bottom of the laboratory dashboard, with autofocus on the list.
 By clicking on the number of sample to validate, the user will be redirected to the [manual verification](#) dashboard, with focus on the list of samples that have results to manually validate.



4.3 Device/Department sample status

In the laboratory dashboard at the right side of each department overview, this section shows:



Device sample status

Using bar chart, the samples status for each device belonging to the department



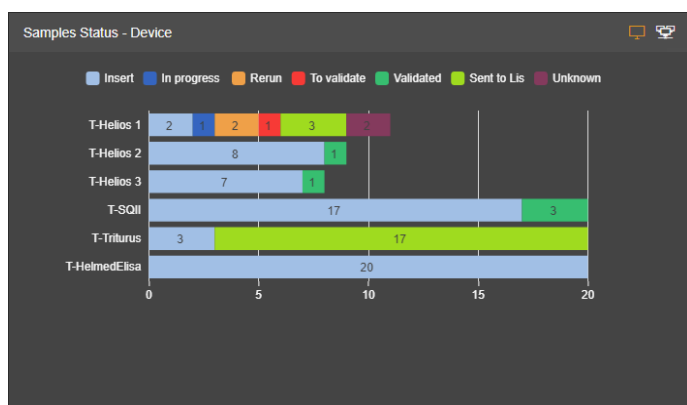
Department sample status

Using pie chart, the samples status for the department

In order to switch from one view to the other, click on the relative icon.

4.3.1 Device samples status overview

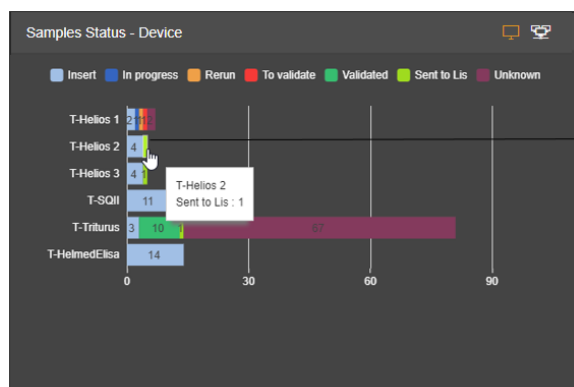
In the laboratory dashboard at the right side of each department overview, this section shows, using bar chart, the samples status for each device belonging to the department.



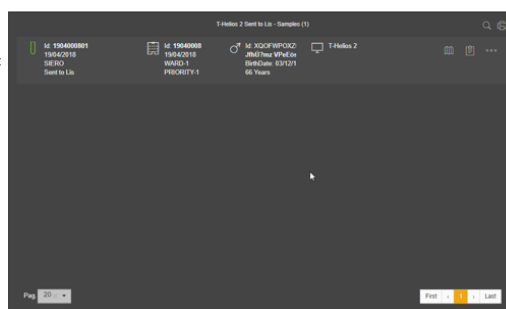
Sample status

- Insert
- In progress
- Completed
- Rerun
- To validate
- Validated
- Sent to LIS
- Unknown

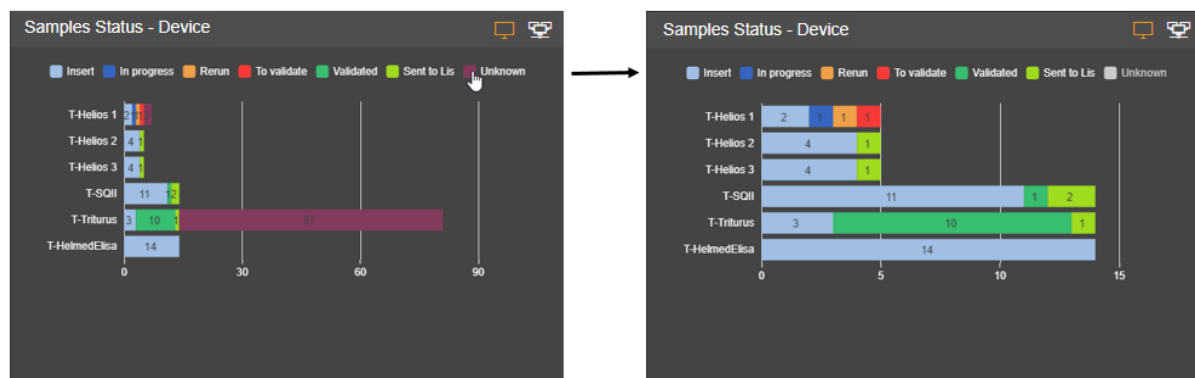
By clicking on one element of the bar chart, the list of samples in that status for that device will be displayed in the [samples list](#) section at the bottom of the laboratory dashboard, with autofocus on the samples list.



Samples list

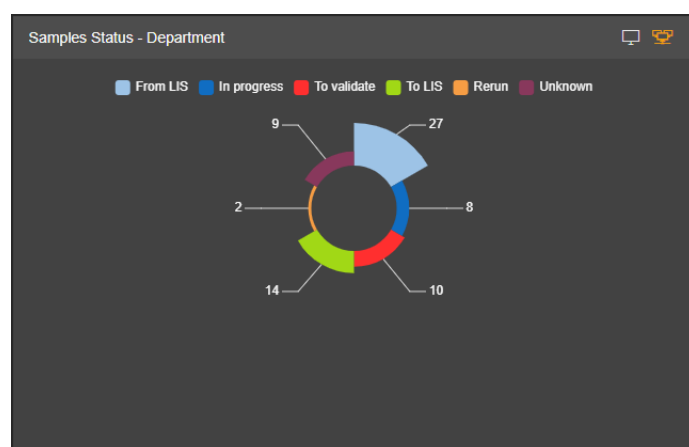


By clicking on the “status name”, the selected status disappears from the chart. By clicking again, the status will be displayed.



4.3.2 Department samples status overview

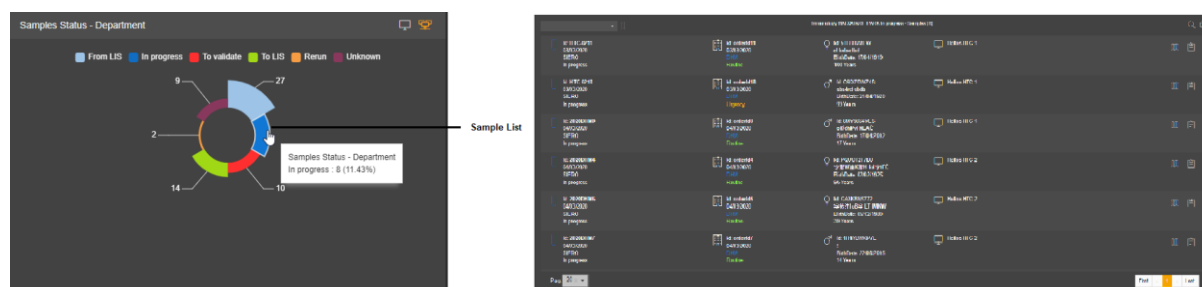
The department sample status overview shows, using pie chart, the samples status for the whole department.



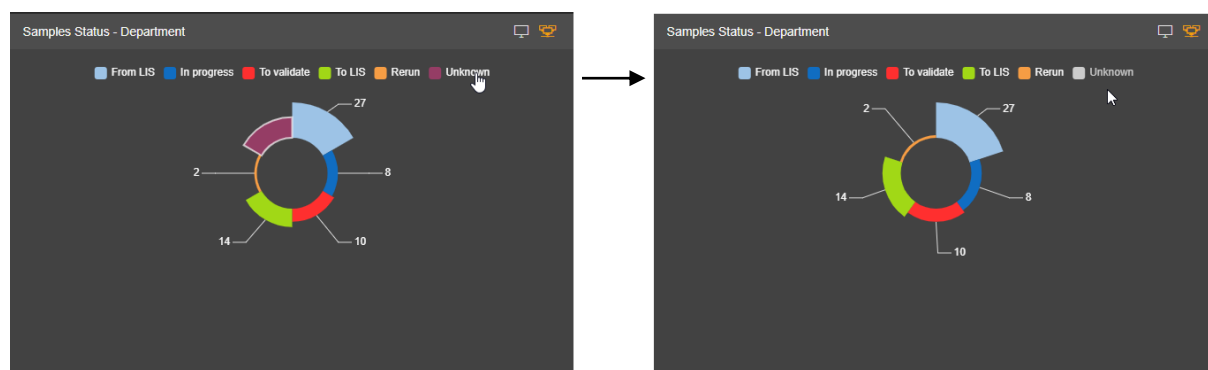
Sample status

- Insert
- In progress
- Completed
- Rerun
- To validate
- Validated
- Sent to LIS
- Unknown

By clicking on one element of the pie chart, the list of samples in that status for the department will be displayed in the [samples list](#) section at the bottom of the laboratory dashboard, with autofocus on the samples list.



By clicking on the “status name”, the selected status disappears from the chart. By clicking again, the status will be displayed.



4.3.3 Samples status meaning

The sample in the device worklist can have the following state:

- **Insert:** the sample have been received from the LIS.
- **In progress:** HERA sent the order to the device and the tests are in progress.
- **Completed:** all the sample tests have a result.
- **Rerun:** the sample has at least a test for which a rerun has been required.
- **To validate:** the sample has at least a test that must be manually validate.
- **Validated:** the sample has all tests results validated.
- **Sent to LIS:** HERA sent all the sample results to LIS.
- **Unknown:** sample without order in HERA (no received from LIS).

Note The chart shows always the lower status for the sample.
The order of the states from lowest to highest is:
insert, rerun, in progress, completed, to validate, validated, sent to LIS.

Ex.

If you have a sample with a test validated and a test in progress, the sample status is "in progress".

Note If you look the sample status on a specific device worklist, the shown sample status is specific for that device and could not be the real status of the sample.
If you look the sample status on a department sample status overview, you have the status of the sample taking in account its status on all the device belonging to the department.

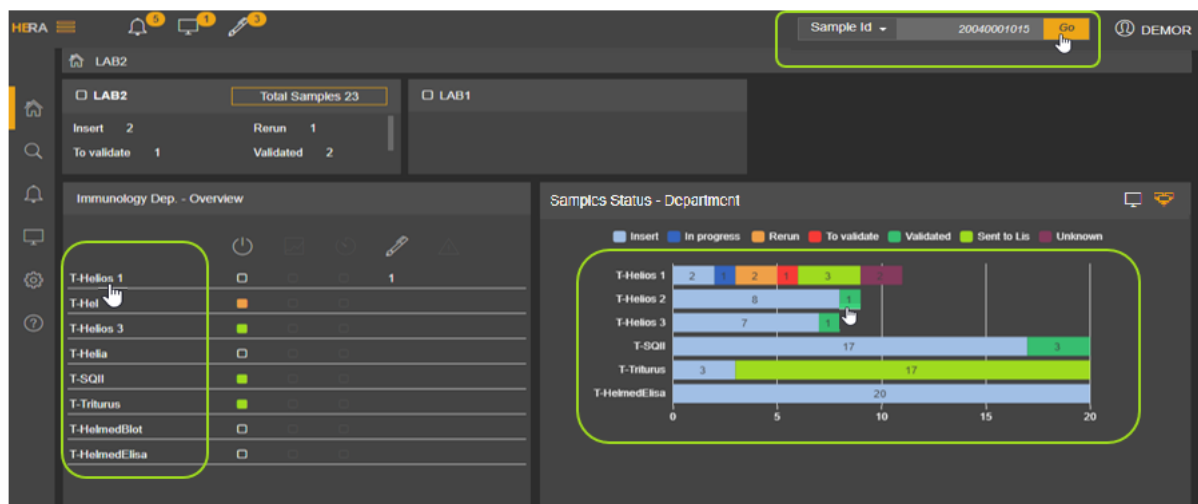
Ex.

You have a sample with tests (test1, test2) that can be worked on two twins device belonging to the same department: deviceA and deviceB. For some reason you perform the test1 on deviceA and test2 on deviceB. When the two devices release the result and you check the sample status in the device sample status chart for each device, the sample status is in progress for deviceA and in progress for deviceB. But if you search the sample in the device sample status (or from the search option), you have the real sample status.

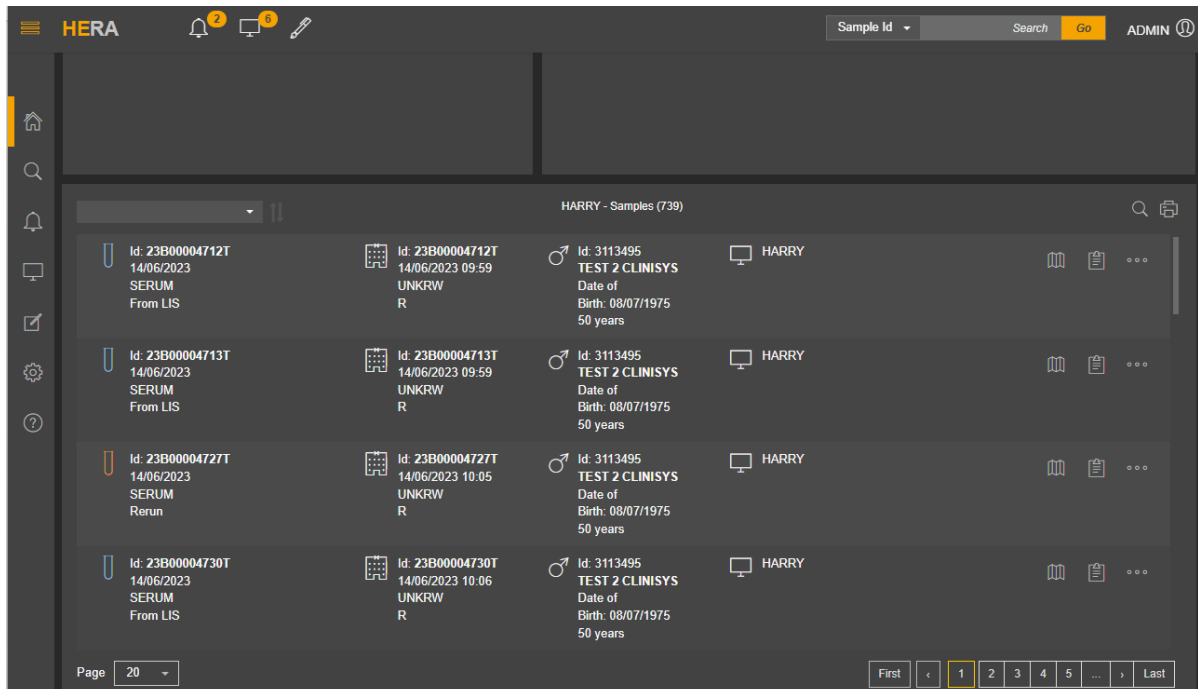
4.4 Samples list

From the laboratory dashboard you can have access to the samples list:

- by clicking on the instruments in the [department overview](#) section
- by clicking on the elements of the bar chart in the [device sample status overview](#) section
- by using the [quick search](#) on the main toolbar of the application



The selected list is displayed in the lower part of the laboratory dashboard and the focus is automatically moved on the top of the list.



HARRY - Samples (739)					
Id: 23B00004712T 14/06/2023 SERUM From LIS	Id: 23B00004712T 14/06/2023 09:59 UNKRW R	Id: 3113495 TEST 2 CLINISYS Date of Birth: 08/07/1975 50 years	HARRY		
Id: 23B00004713T 14/06/2023 SERUM From LIS	Id: 23B00004713T 14/06/2023 09:59 UNKRW R	Id: 3113495 TEST 2 CLINISYS Date of Birth: 08/07/1975 50 years	HARRY		
Id: 23B00004727T 14/06/2023 SERUM Rerun	Id: 23B00004727T 14/06/2023 10:05 UNKRW R	Id: 3113495 TEST 2 CLINISYS Date of Birth: 08/07/1975 50 years	HARRY		
Id: 23B00004730T 14/06/2023 SERUM From LIS	Id: 23B00004730T 14/06/2023 10:06 UNKRW R	Id: 3113495 TEST 2 CLINISYS Date of Birth: 08/07/1975 50 years	HARRY		

There is the possibility:

- to *print* the list, by clicking on the “printer” icon in the upper right corner of the section;
- to [search](#) for specific sample, by clicking on the “search” icon in the upper right corner of the section;
- to [order the samples](#) list, by selecting the sorting criteria in the field in the upper left corner of the section;

- to have access to the main sample information;
- to have access to some functionality;
- to have access to the [results dashboard](#) for the sample, by clicking on the row.

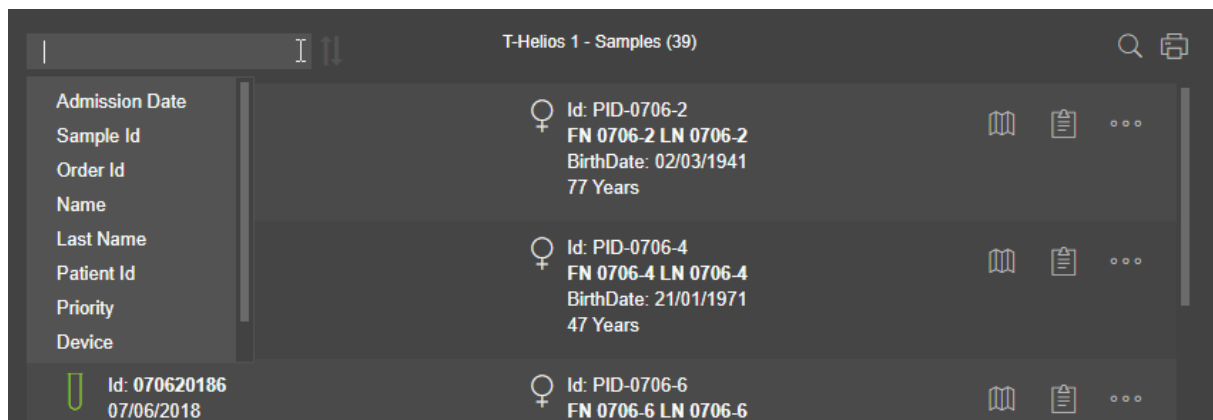
You can change the default number of sample displayed per page or move from a page to another by using the interactive button at the bottom of the page.

4.4.1 Samples list sorting

By default the samples in the list are order by increasing “seq insert” (the old samples are at the top of the list). But you have the possibility to order the samples by other parameter:

- Admission date
- Sample Id
- Order Id
- Name
- Last name
- Patient Id
- Priority
- Device
- Ward

By clicking on the box top left in the header of the samples list, the sorting parameters are shown:



After the parameter selection, the sample are ordered by increasing parameter value:

Sample Id		T-Helios 1 - Samples (39)			
07/06/2018	SIERO	Rerun	♀	Id: PID-0706-10 FN 0706-10 LN 0706-10 BirthDate: 11/01/1981 37 Years	...
07/06/2018	SIERO	Sent to Lis	♀	Id: PID-0706-2 FN 0706-2 LN 0706-2 BirthDate: 02/03/1941 77 Years	...
07/06/2018	SIERO	Insert	♀	Id: PID-0706-4 FN 0706-4 LN 0706-4 BirthDate: 21/01/1971 47 Years	...
07/06/2018	SIERO	Sent to Lis	♀	Id: PID-0706-6 FN 0706-6 LN 0706-6 BirthDate: 21/01/1971 47 Years	...
07/06/2018	SIERO		♀	Id: PID-0706-7 FN 0706-7 LN 0706-7	...

You can also order by decreasing parameter value, by clicking on the arrow on the left of the box:

Sample Id		T-Helios 1 - Samples (39)			
08/06/2018	SIERO	Program	♀	Id: LCBWOJOORH UX LqeG iϕb注WJ BirthDate: 01/05/1999 19 Years	...
08/06/2018	SIERO	Program	♀	Id: FULVPEZTMW 转XV字IAZ dtY ĆZP BirthDate: 22/06/1982 35 Years	...
08/06/2018	SIERO	Program	♀	Id: DJGQPJTDV1 字éW IWQ OvJbSE字 BirthDate: 06/10/1956 61 Years	...
08/06/2018	SIERO		♂	Id: A6TB2D6B70 vP 转v注t BϕéĆ字CF BirthDate: 18/03/1906	...

4.4.2 Information

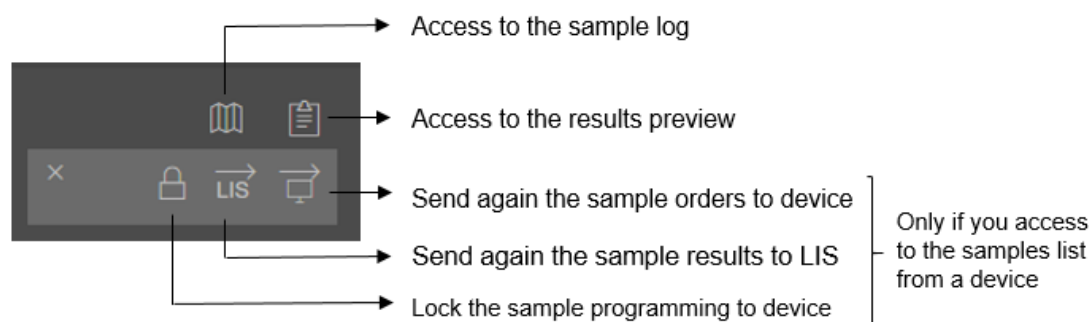
For each row of the samples list you have information about:

- **Sample:** sample Id, admission date, specimen, sample status.
- **Order:** order Id, admission date, ward, priority.
- **Patient:** patient Id, name, age, date of birthday, sex.
- **Device:** device, rack and position (if you access to the samples list from a device).

Id: 1904000301 19/04/2018 SIERO Rerun	Id: 19040003 19/04/2018 WARD-1 PRIORITY-1	♀ Id: P3 firstnameP3 lastnameP3 BirthDate: 19/03/1987 31 Years	T-Helios 1	...
Sample information	Order information	Patient information	Device information	

4.4.3 Functionality

For each sample of the samples list you can:



4.4.3.1 Sample log

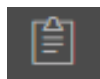


The sample log contains the information about what happened to the sample, saving data about operation, device, user and date.

Sample Log						
Autom. Track - Samples (1/210)						
 Id: D1M000 05/03/2020 SIERO		 Id: 0N0VJE40TE VINQAR 李BZALL BirthDate: 12/12/1913 106 Years		 Id: D1M000 05/03/2020 Routine		
Type	Device	Module	Description	Rack - Pos	Date	User
Track	Autom. Track	TRACK	CLOSED	-	05/03/2020 14:38:20	DEMO
Track	Autom. Track	REFRIG.	STORAGE-REFRIG-001-NEW-STORED-OUT-3515-100-50	5 - 27	05/03/2020 14:38:00	DEMO
Track	Autom. Track	RSD	SORTING-OUT-RSD-00-NEW-STORING-OUT-351A-TO-STORAGE-1000-50	AA32 - B-124	05/03/2020 14:22:00	DEMO
Track	Autom. Track	RECAPPER 013	RECAPPING-STATION-RECAP-063-NEW-RECAPPING-TO-SORTER-1000-300	-	05/03/2020 14:20:20	DEMO
Send to LIS				-	05/03/2020 11:07:40	DEMO
Auto Verification				-	05/03/2020 11:07:35	DEMO
Device Result	Helios HTC 1			1 - 45	05/03/2020 11:07:35	DEMO
Send to LIS				-	05/03/2020 11:07:08	DEMO
Auto Verification				-	05/03/2020 11:07:01	DEMO

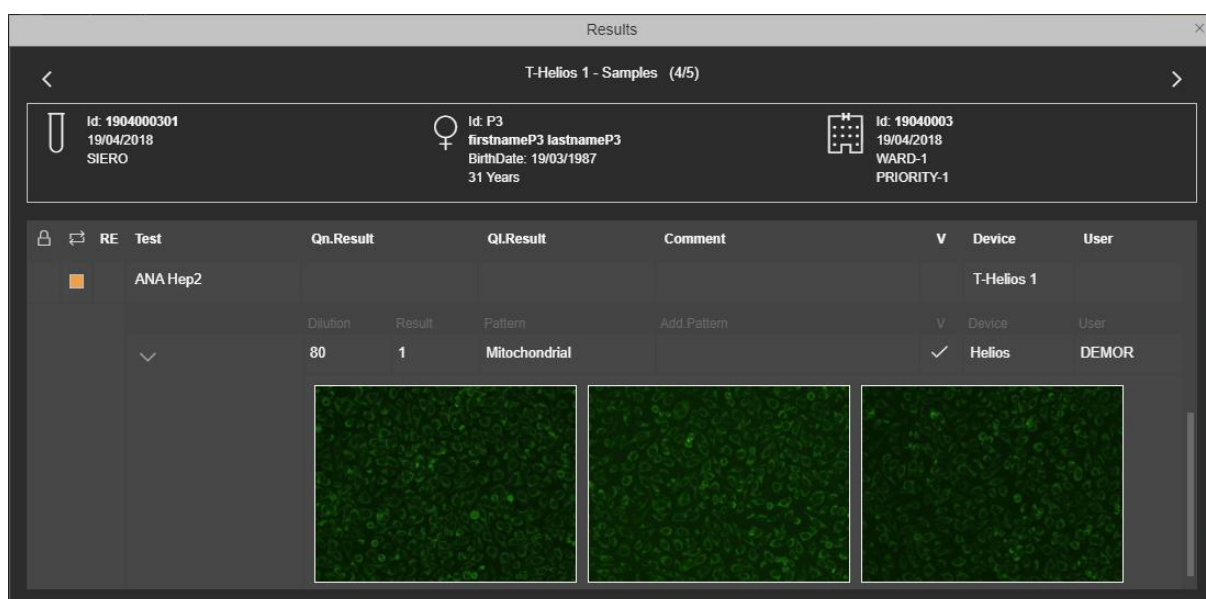
You can move from a sample to the other by clicking the arrows on the header of the panel, or exit from the panel by clicking the X in the upper right corner.

4.4.3.2 Results preview



The results preview allows you to have a preview of the sample results without access to the results dashboard. All the test are displayed (with or without result) and in case of IFA result, also the IFA result and image are displayed.

Results								
T-Helios 1 - Samples (4/5)								
 Id: 1904000301 19/04/2018 SIERO		 Id: P3 firstnameP3 lastnameP3 BirthDate: 19/03/1987 31 Years		 Id: 19040003 19/04/2018 WARD-1 PRIORITY-1				
RE	Test	Qn.Result	QLResult	Comment	V	Device	User	
	Celicheck-IgA (new)	2.51			✓	T-Triturus	Hera	
	Ethanolamin-G	6.31			✓	T-Triturus	Hera	
	Ethanolamin-M	81.2			✓	T-Triturus	Hera	
	3204 Cardiolipin-G verd	6.03			✓	T-Triturus	Hera	
	Cardiolipin-G	0.16			✓	T-Triturus	Hera	
	ANA Hep2					T-Helios 1		
		Dilution	Result	Pattern	Add.Pattern	V	Device	User
		80	1	Mitochondrial		✓	Helios	DEMOR



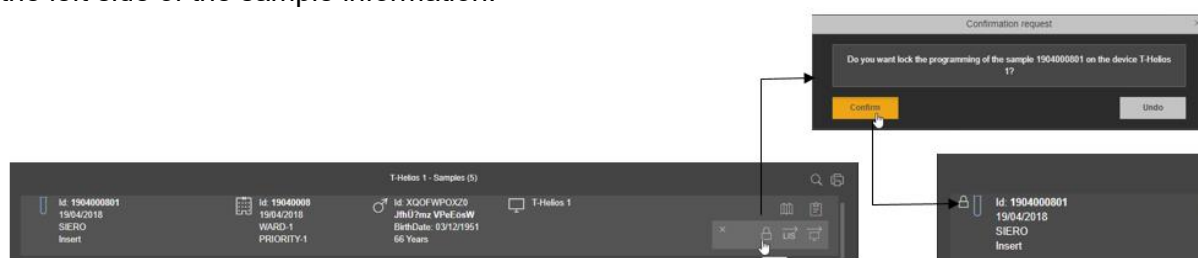
You can move from a sample to the other by clicking the arrows on the header of the panel. You can exit from the panel by clicking the X in the upper right corner.

4.4.3.3 Lock the sample programming to device

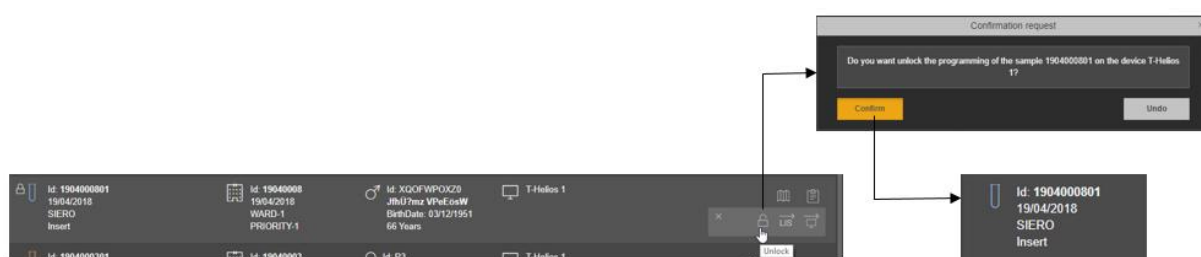


This functionality is available only if you access to the samples list specifying a device. By clicking on the icon you can disable the sample programming to the device. A confirmation message will always offered to you, in order to confirm or undo the operation.

In order to remind that you locked the sample programming, a “lock” icon will be displayed on the left side of the sample information.



If you want unlock the sample programming, click on the unlock option and confirm the unlock operation.



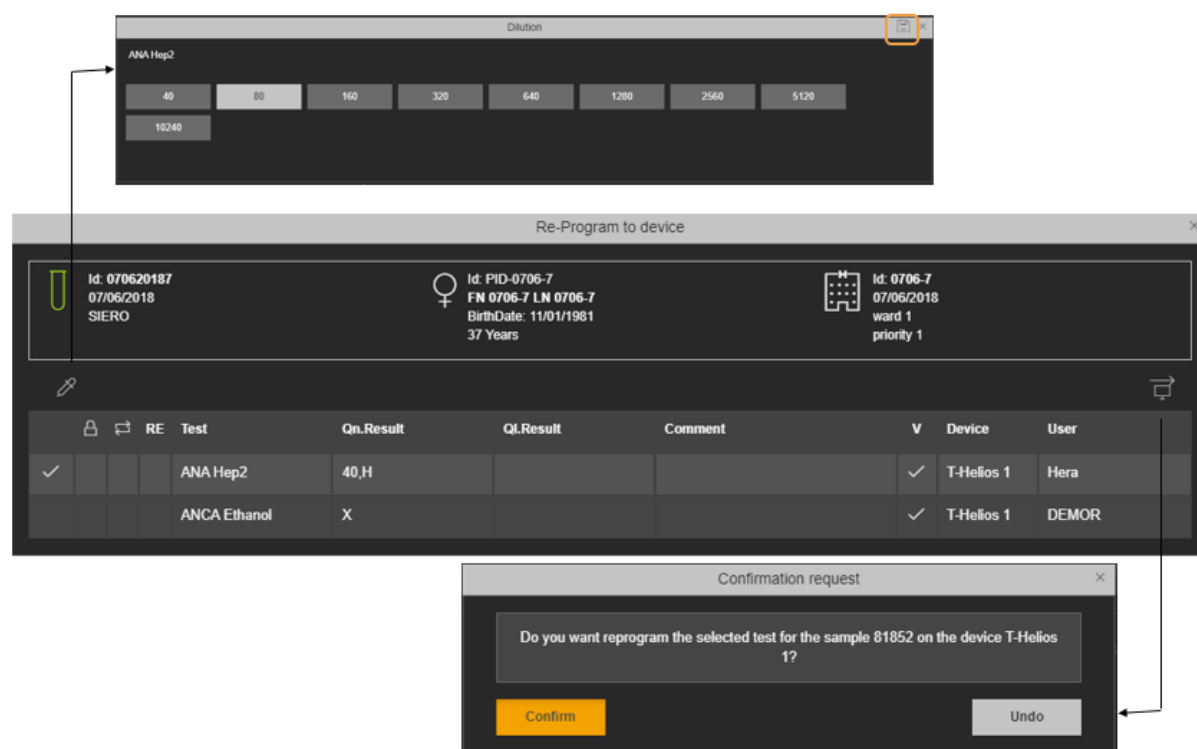
4.4.3.4 Sample re-programming to device



This functionality is available only if you access to the samples list specifying a device. By clicking on the icon you can set the sample tests status to “insert” for a specific test or for all the test that have been worked on that device.

From the shown popup you can select the single test by clicking on the test row or all the tests by clicking on the table header.

For the selected test you can select also the dilution, by clicking on the relative icon.



The 'Re-Program to device' popup displays patient information and a table of tests. The table has columns: RE, Test, Qn.Result, Ql.Result, Comment, V, Device, and User. Two tests are listed: ANA Hep2 and ANCA Ethanol. The ANA Hep2 test has a 'Qn.Result' of '40,H' and is associated with 'T-Helios 1' device and 'Hera' user. The ANCA Ethanol test has a 'Qn.Result' of 'X' and is associated with 'T-Helios 1' device and 'DEMOR' user.

A 'Confirmation request' dialog is shown, asking: "Do you want reprogram the selected test for the sample 81852 on the device T-Helios 1?". It has 'Confirm' and 'Undo' buttons.

After that you have selected tests and dilutions, by clicking on the reprogram icon a confirmation message will always offered to you, in order to confirm or undo the operation.

Note If the sample have tests performed on more devices, if you want set all sample tests to “insert”, you have to repeat the operation for each devices that performed the tests.

4.4.3.5 Send again the result to LIS



This functionality is available only if you access to the samples list specifying a device. By clicking on the icon you can send again to the LIS one or all the sample tests performed on that device.

From the shown popup you can select the single test by clicking on the test row or all the tests by clicking on the table header.

Re-Send to LIS



Id: 070620182
07/06/2018
SIERO



Id: PID-0706-2
FN 0706-2 LN 0706-2
BirthDate: 02/03/1941
77 Years



Id: 0706-2
07/06/2018
ward 1
priority 1

→ LIS

	Test	Qn.Result	Ql.Result	Comment	Date	User
✓	ANA Hep2	80,H			08/06/2018 11:20:24	Hera
	ANA Hep2 (2)	X	X		08/06/2018 11:20:24	Hera
	ANA Hep2 (3)	X	X		08/06/2018 11:20:24	Hera

Confirmation request

Do you want send again to the LIS the selected test for the sample 81848 (data from the device T-Helios 1)?

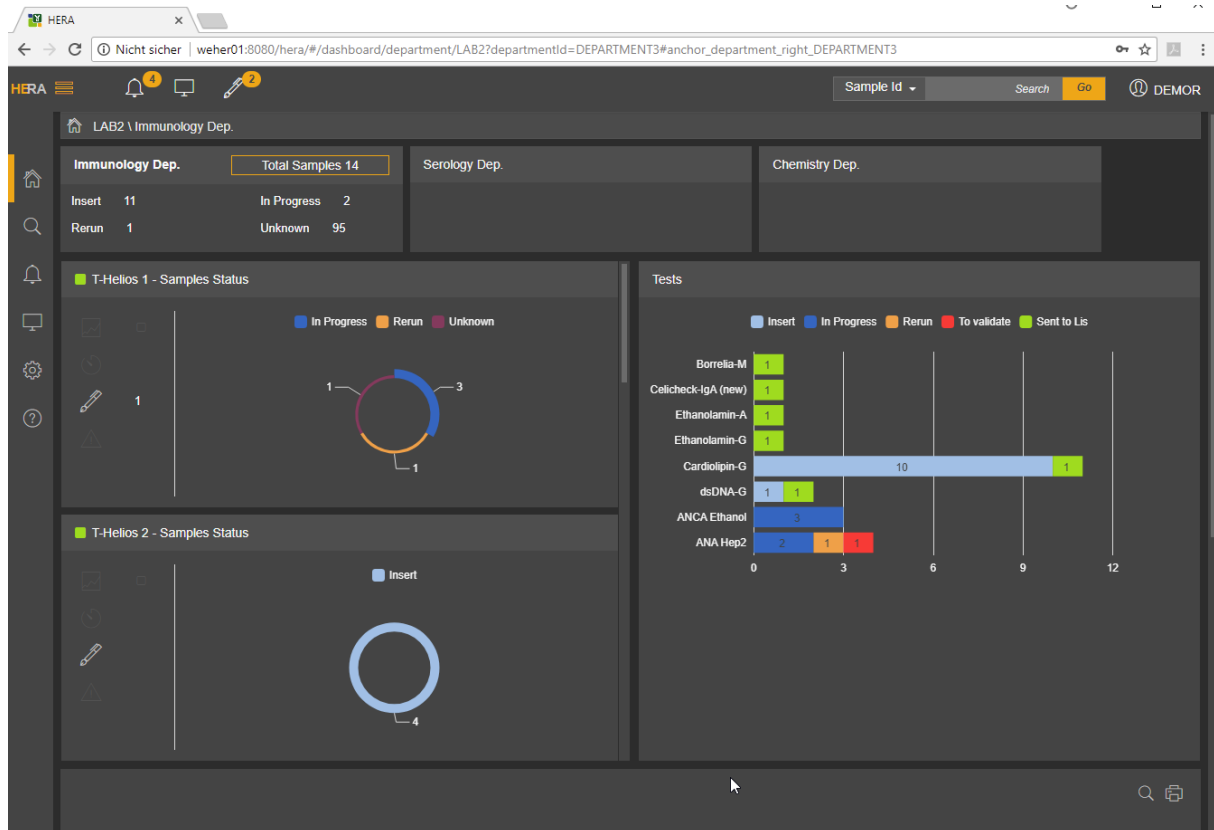
Confirm

Undo

After that you have selected tests, by clicking on the resend icon a confirmation message will always offered to you, in order to confirm or undo the operation.

5 Department dashboard

The department dashboard is the “Home” dashboard, if you have right on at least two department. If you have right on a laboratory, you can access to the department dashboard by clicking on the header of the department overview section in the laboratory dashboard.



The dashboard is composed of four main elements:

- **Department button:** contains information about the the number and the status of samples in the department. There is a button for each configured department.
- **Device overview section:** contains information about the devices connection status and the samples that must be manually validate for a specific device of the selected department. There are as many sections as the number of the devices configured for the selected laboratory.
- **Department test status overview:** contains information about the tests status in the department.
- **Samples list:** shows the samples list corresponding to a user selection.

The following paragraph will be provide information on all options.

By default, in case of more department, the dashboard shows the data for your default department or, if no default is configured, the dashboard shows the data for the department with the first position in the display order configuration.

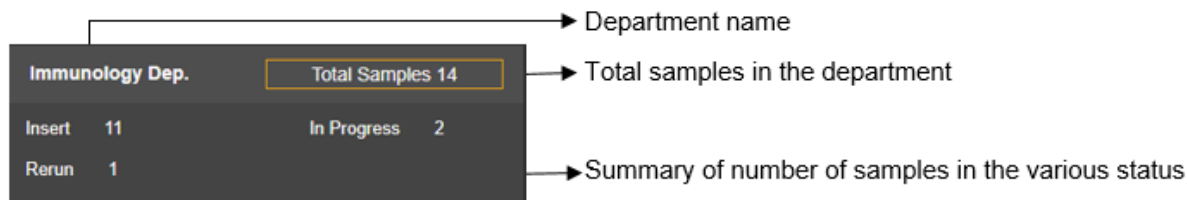
You can move from one department to another by clicking on the desired department button (at the top of the workspace).

5.1 Department button

The department button, at the top of the workspace, contains the main information about the selected department.

The laboratory button is composed of two part:

- **header:** contains the department name and the total samples number for the department;
- **body:** contains the summary of the samples state.



The detail of the samples and the total samples information are displayed only for the selected department.

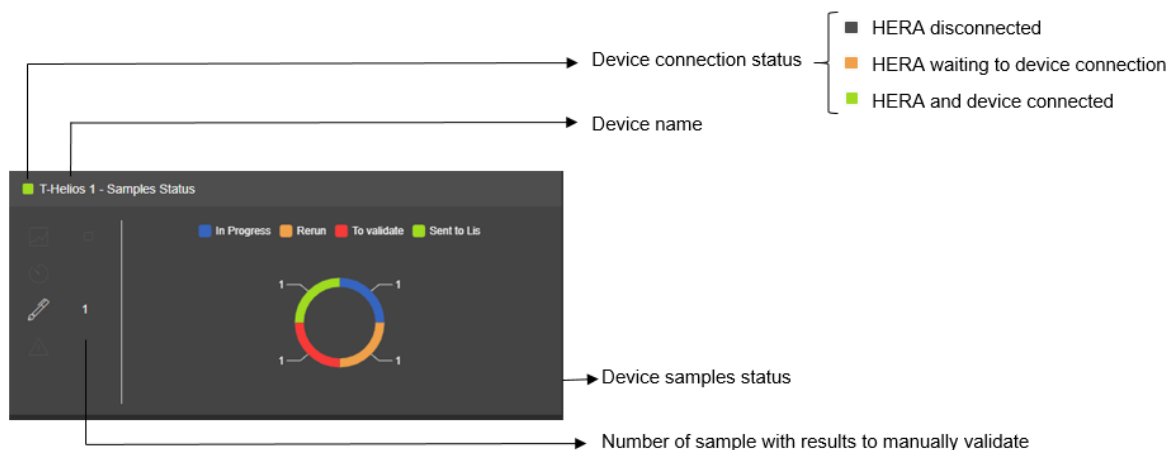
By clicking on a department button, you can move from one department to another.

5.2 Device overview

In the department dashboard, there are as many device overview sections as the number of the devices configured for the selected department.

The section shows:

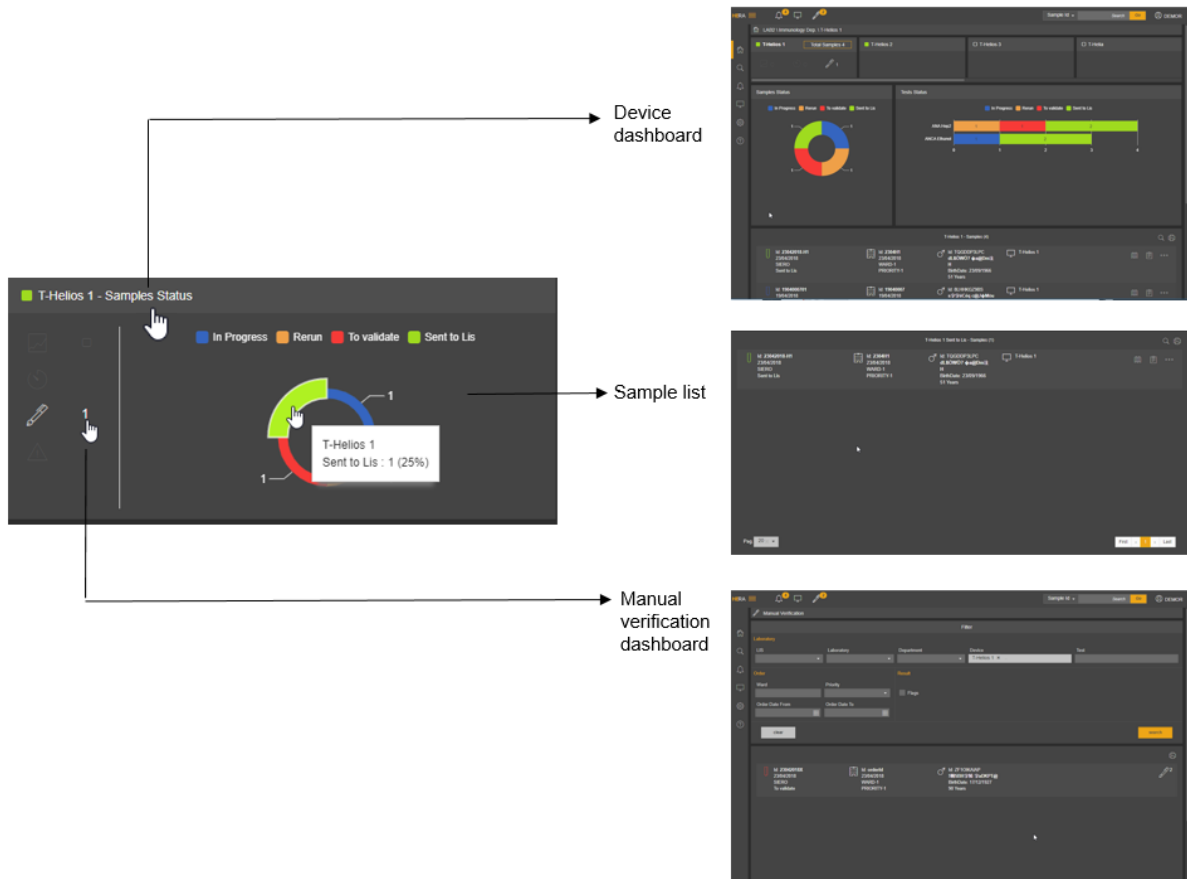
- the device connectivity status
- the number of samples that have test to manually validate
- the samples status in the device worklist.



By clicking on the device name you have access to the [device dashboard](#).

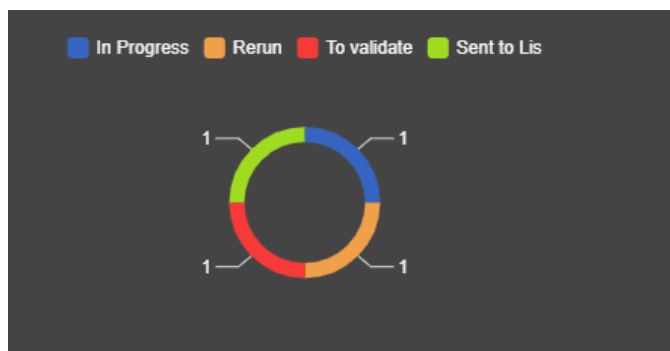
By clicking on the number of samples to validate, the user will be redirected to the [manual verification](#) dashboard, with focus on the list of samples that have results to manually validate.

By clicking on one section of the pie chart, the list of samples in that status will be displayed in the [samples list](#) section at the bottom of the department dashboard, with autofocus on the list.



5.2.1 Device sample status overview

This section shows, using pie chart, the samples status for each device belonging to the department.

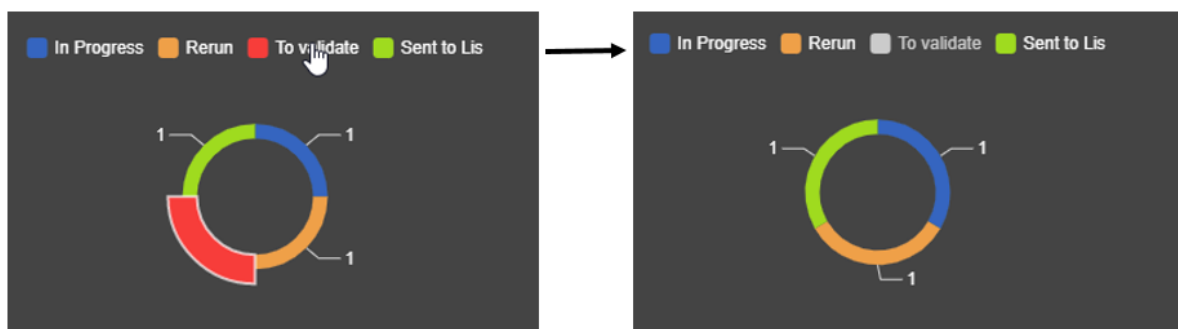


Sample status

- Insert
- In progress
- Completed
- Rerun
- To validate
- Validated
- Sent to LIS
- Unknown

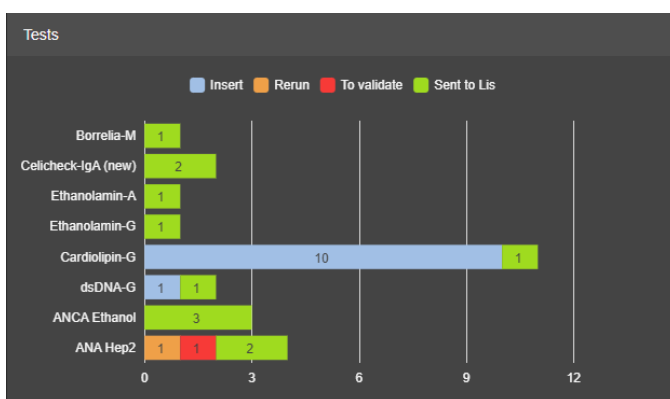
By clicking on one element of the pie chart, the list of samples in that status for that device will be displayed in the [samples list](#) section at the bottom of the department dashboard, with autofocus on the samples list.

By clicking on the “status name”, the selected status disappears from the chart. By clicking again, the status will be displayed.



5.3 Tests status overview

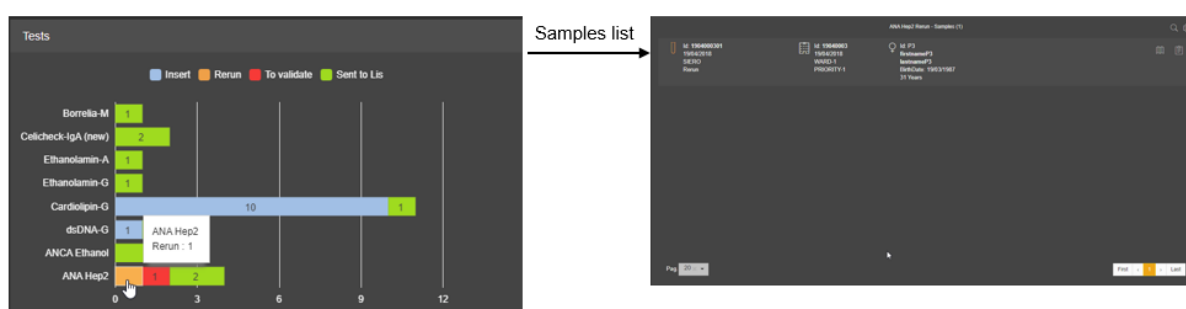
In the department dashboard, the tests status overview section shows, using bar chart, tests status for the department.



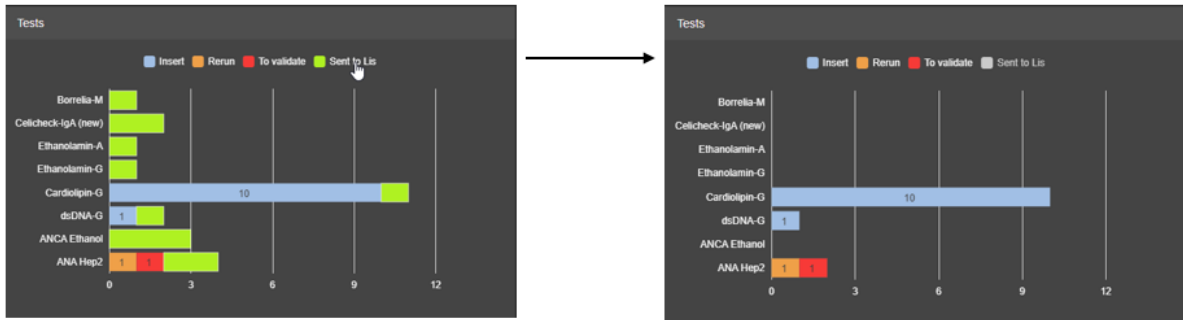
Test status

- Insert
- In progress
- Completed
- Rerun
- To validate
- Validated
- Sent to LIS

By clicking on one element of the bar chart, the list of sample with the selected test in the wanted status will be displayed in the [samples list](#) section at the bottom of the department dashboard, with autofocus on the samples list.



By clicking on the "status name", the selected status disappears from the chart. By clicking again, the status will be displayed.



5.3.1 Test status meaning

The tests can have the following state:

- **Insert:** the test have been received from the LIS.
- **In progress:** HERA sent the test order to the device and the test is in progress.
- **Completed:** the test has a result.
- **Rerun:** a rerun has been required for the test
- **To validate:** the test must be manually validate.
- **Validated:** the test result is validated.
- **Sent to LIS:** HERA sent the test result to LIS.

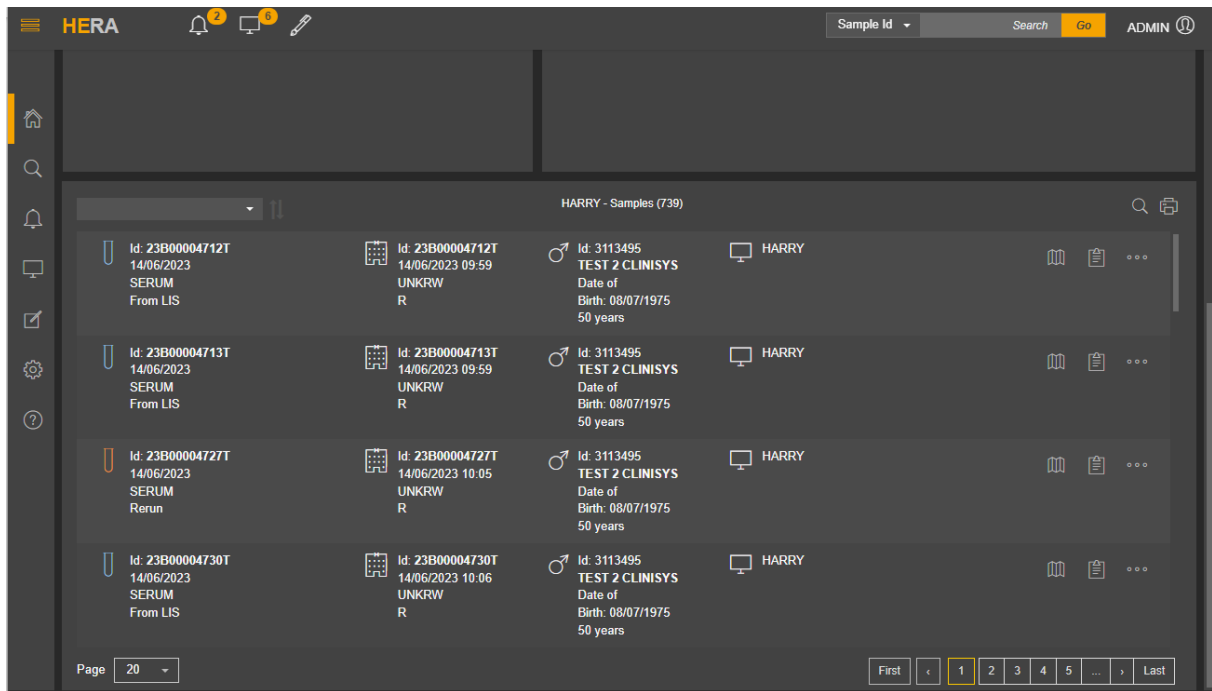
5.4 Samples list

From the department dashboard you can have access to the samples list:

- by clicking on the elements of the pie chart in the [device sample status overview](#) section
- by clicking on the elements of the bar chart in [the test status overview](#) section
- by using the [quick search](#) on the main tollbar of the application



The selected list is displayed in the lower part of the laboratory dashboard and the focus is automatically moved on the top of the list.



The screenshot shows the HERA interface with a sidebar on the left containing icons for home, search, notifications, and settings. The main area displays a table of samples for patient HARRY. The table has columns for sample ID, date, time, test name, and patient information. There are also icons for printing, searching, and sorting. At the bottom, there is a pagination control showing page 20 of 20.

Sample Id	Date	Time	Test	Patient
Id: 23B00004712T	14/06/2023	09:59	TEST 2 CLINISYS	HARRY
Id: 23B00004713T	14/06/2023	09:59	TEST 2 CLINISYS	HARRY
Id: 23B00004727T	14/06/2023	10:05	TEST 2 CLINISYS	HARRY
Id: 23B00004730T	14/06/2023	10:06	TEST 2 CLINISYS	HARRY

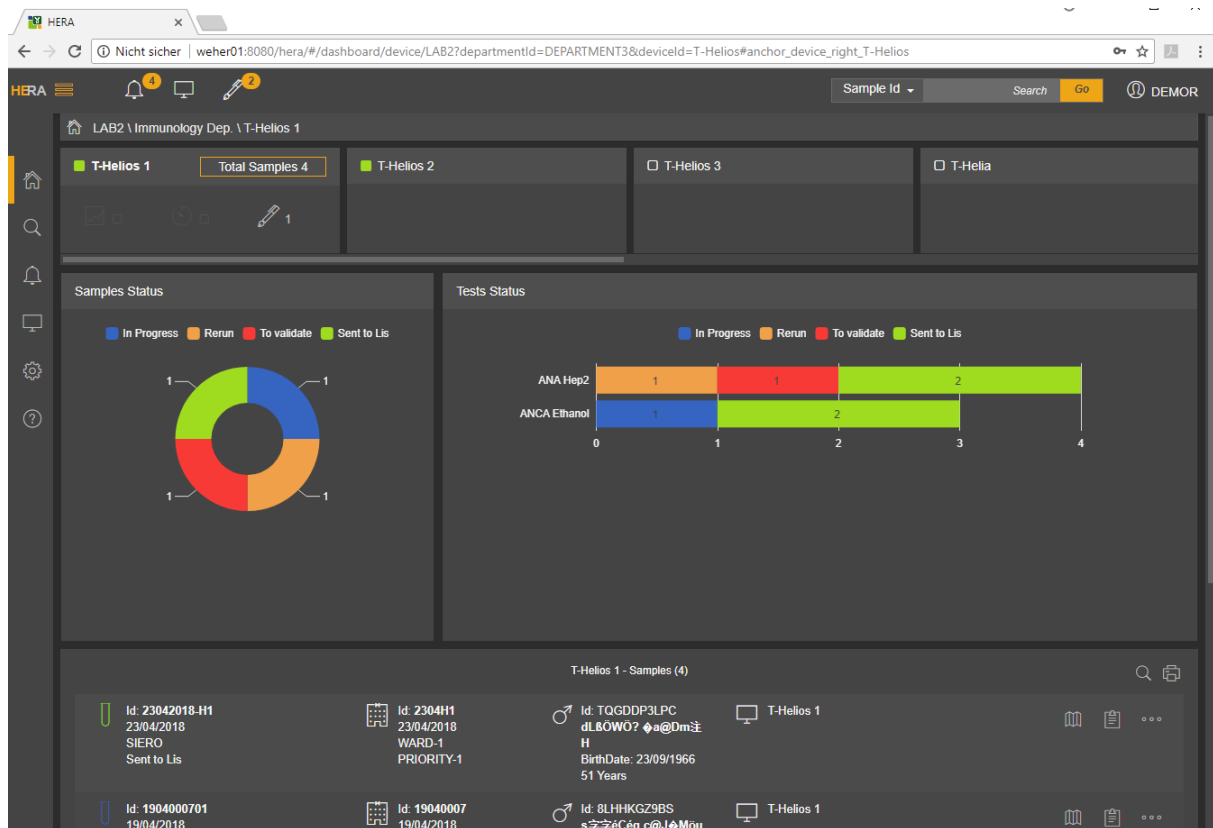
There is the possibility:

- to *print* the list, by clicking on the “printer” icon in the upper right corner of the section;
- to [search](#) for specific sample, by clicking on the “search” icon in the upper right corner of the section;
- to [order the samples list](#), by selecting the sorting criteria in the field in the upper left corner of the section;
- to have access to the [main sample information](#);
- to have access to some [functionality](#);
- to have access to the [results dashboard](#) for the sample, by clicking on the row.

You can change the default number of sample displayed per page or move from a page to another by using the interactive button at the bottom of the page.

6 Device dashboard

The device dashboard is the “Home” dashboard, if you have right only to one or same device. If you have right on departments and/or laboratories, you can access to the device dashboard by clicking on the header of the device overview section in the department dashboard.



The dashboard is composed of four main elements:

- **Device button:** contains information about the the total number of samples in the device worklist, the device connection status and the number of samples that have at least one test to manually validate. There is a button for each configured device in the department.
- **Sample status overview:** contains information about the device worklist and the summury of samples status for that device.
- **Device test status overview:** contains information about the tests status for that device.
- **Samples list:** by default shows the device worklist but can shows also a samples list corresponding to a user selection.

The following paragraph will be provide information on all options.

By default, in case of more device, the dashboard shows the data for your default device or, if no default is configured, the dashboard shows the data for the device with the first position in the display order configuration.

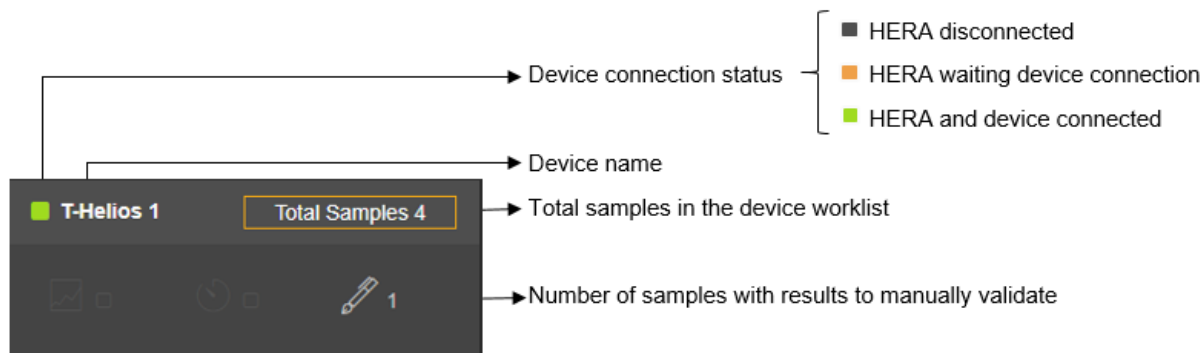
You can move from one device to another by clicking on the desired device button (at the top of the workspace).

6.1 Device button

The device button, at the top of the workspace, contains the main information about the selected device.

The laboratory button is composed of two part:

- **header:** contains the device name, the device connection status and the total samples number for device worklist;
- **body:** contains the number of samples that have at least one test result to manually validate.

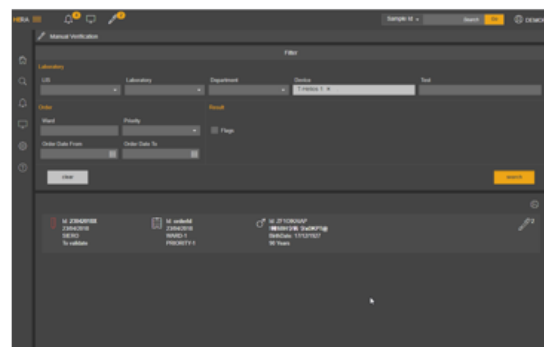
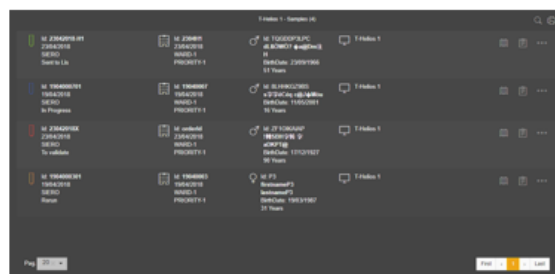
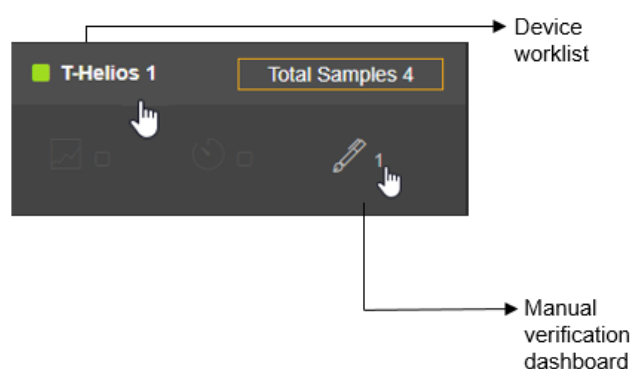


The total samples information are displayed only for the selected device. For the other devices, only the connection status is displayed.

By clicking on a device button, you can move from one device to another.

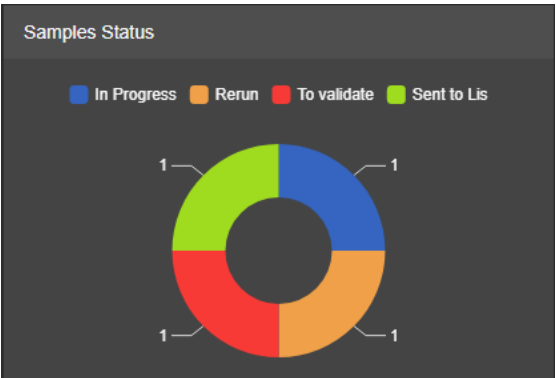
By clicking on the device name, the device worklist will be displayed in the [samples list](#) section at the bottom of the department dashboard, with autofocus on the list.

By clicking on the number of samples to validate, the user will be redirected to the [manual verification](#) dashboard, with focus on the list of samples that have results to manually validate for that device.



6.2 Samples status overview

This section shows, using pie chart, the samples status for the device.



Sample status

- Insert
- In progress
- Completed
- Rerun
- To validate
- Validated
- Sent to LIS
- Unknown

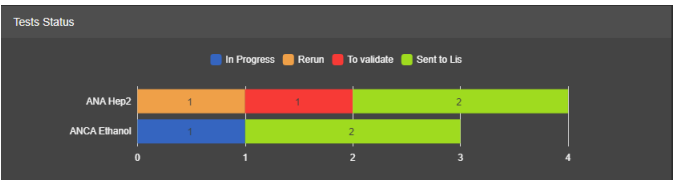
By clicking on one element of the pie chart, the list of samples in that status for the device will be displayed in the [samples list](#) section at the bottom of the device dashboard, with autofocus on the samples list.

By clicking on the “status name”, the selected status disappears from the chart. By clicking again, the status will be displayed.



6.3 Tests status overview

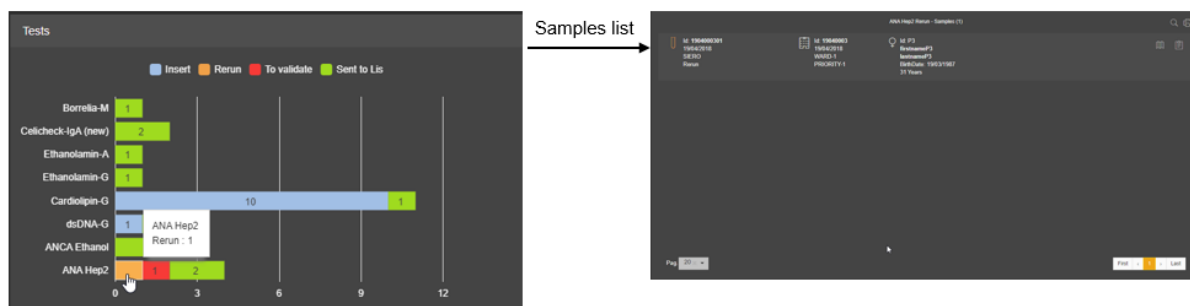
In the device dashboard, the test status overview section shows, using bar chart, tests status for the device.



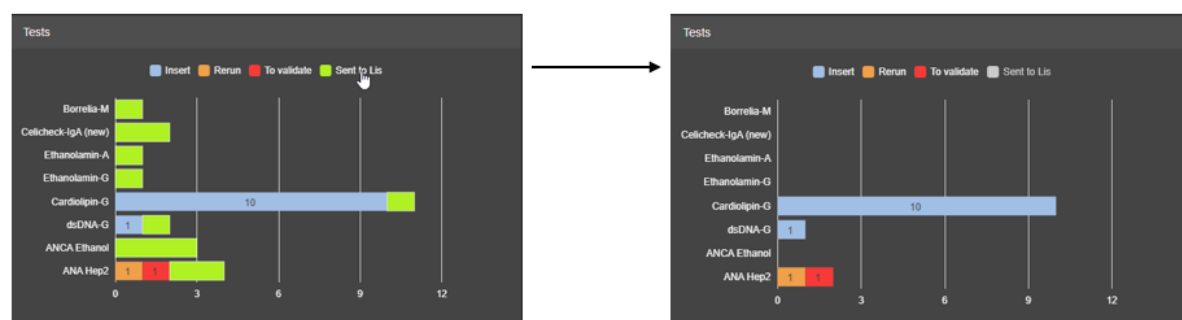
Test status

- Insert
- In progress
- Completed
- Rerun
- To validate
- Validated
- Sent to LIS

By clicking on one element of the bar chart, the list of samples with the selected test in the wanted status will be displayed in the [samples list](#) section at the bottom of the device dashboard, with autofocus on the samples list.



By clicking on the “status name”, the selected status disappears from the chart. By clicking again, the status will be displayed.



6.3.1 Test status meaning

The tests can have the following state:

- **Insert:** the test have been received from the LIS.
- **In progress:** HERA sent the test order to the device and the test is in progress.
- **Completed:** the test has a result.
- **Rerun:** a rerun has been required for the test
- **To validate:** the test must be manually validate.
- **Validated:** the test result is validated.
- **Sent to LIS:** HERA sent the test result to LIS.

Note If you look the test status on a specific device, the shown test status is specific for that device and could not be the real status of the test. You can use the department test status overview to know the real test status.

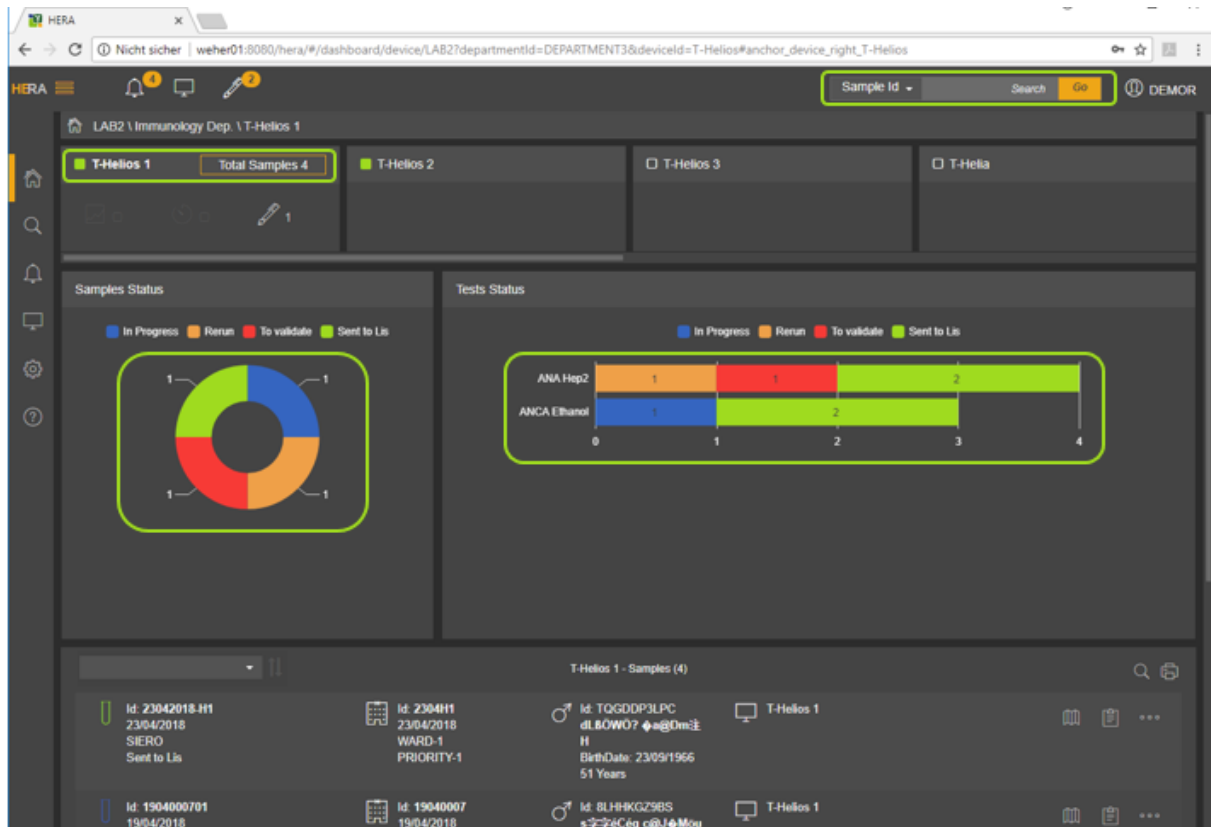
Ex.

You have a sample with test1 that can be worked on two device: deviceA and deviceB, in the same department. You perform the test on deviceA. When you check the test status in the test status chart for each device, the test1 is “in progress” for deviceA and “insert” for deviceB. But if you search the test status from the department test status overview, you have test1 in “in progress” status.

6.4 Samples list

From the device dashboard you can have access to the samples list:

- by clicking on the element of the pie chart in the [device sample status overview](#) section
- by clicking on the element of the bar chart in [the test status overview](#) section
- by using the [quick search](#) on the main toolbar of the application
- by clicking on the header of the device button.



The selected list is displayed in the lower part of the laboratory dashboard and the focus is automatically moved on the top of the list.

There is the possibility:

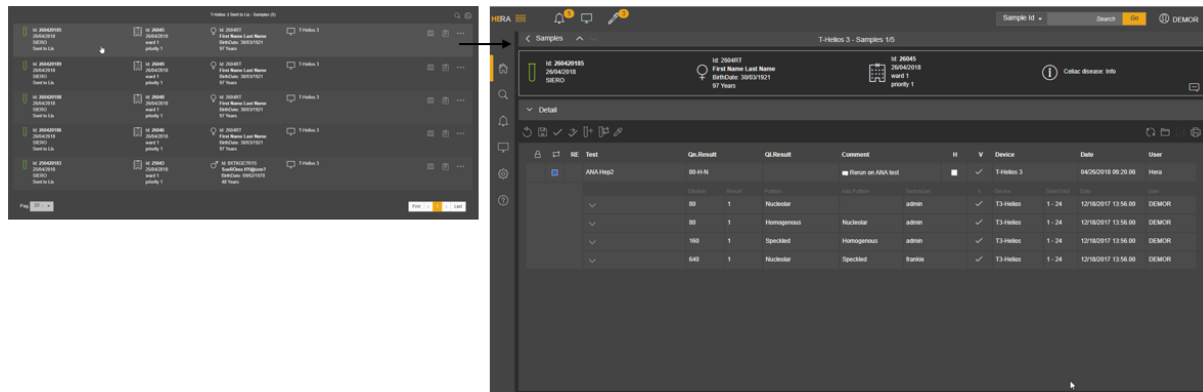
- to *print* the list, by clicking on the “printer” icon in the upper right corner of the section;
- to [search](#) for specific samples, by clicking on the “search” icon in the upper right corner of the section;
- to [order the samples list](#), by selecting the sorting criteria in the field in the upper left corner of the section;
- to have access to the [main sample information](#);
- to have access to some [functionality](#);
- to have access to the [results dashboard](#) for the sample, by clicking on the row.

You can change the default number of samples displayed per page or move from a page to another by using the interactive button at the bottom of the page.

7 Results dashboard

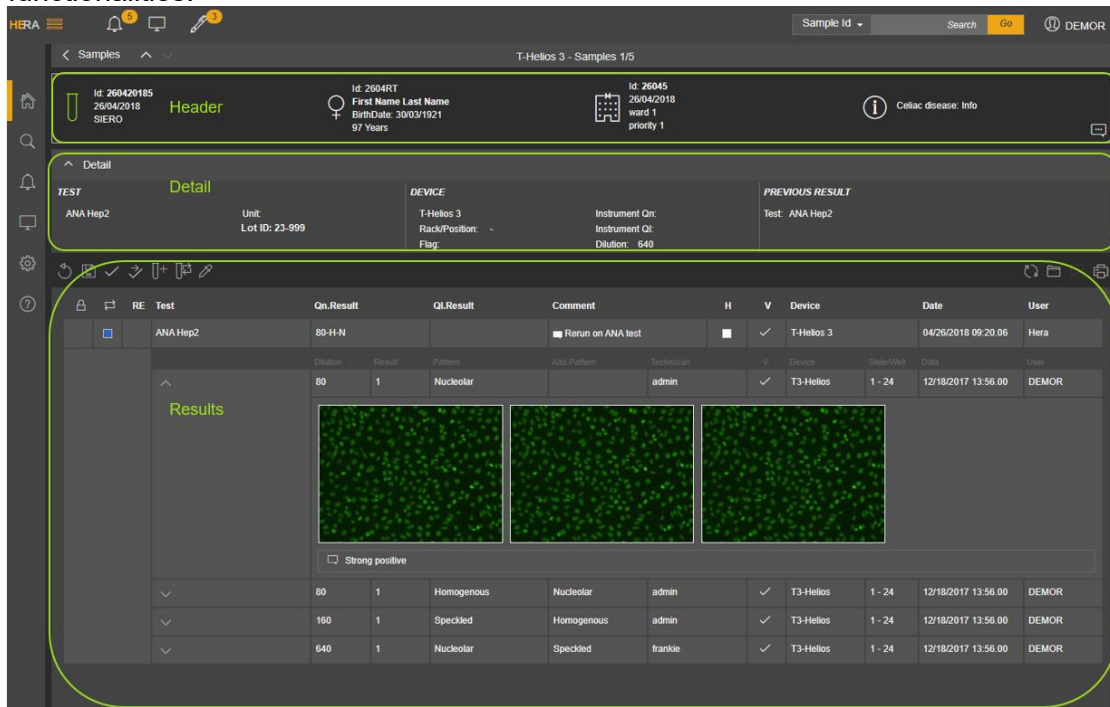
The results dashboard gives you access to the sample results and to a series of functionality as validation, manual entry of results (quantitative result, qualitative result, comment), rerun, reflex, change dilution and quick consultation of the patient history.

You have access to the results dashboard by clicking on the sample row displayed in a samples list section (from the Home, after a search, from the list of the sample to manually validate).

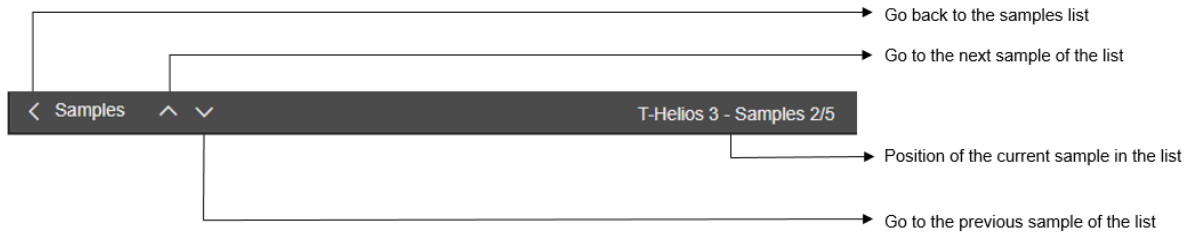


The results panel is organized into three section:

- **Header:** In this section are reported the information about the sample, the order, the patient and eventual clinical info and sample comment.
- **Detail:** In this section there are details of the test selected in the section result.
- **Results:** In this section there are the results and the user can access to different functionalities.



In the navigation toolbar you have the information about the list where you came from and the sample position in the list, furthermore you have the possibility to go back to the list or move through the samples list.



When you reach the first or the last element of the list, the arrow to go respectively back or forth is disable.

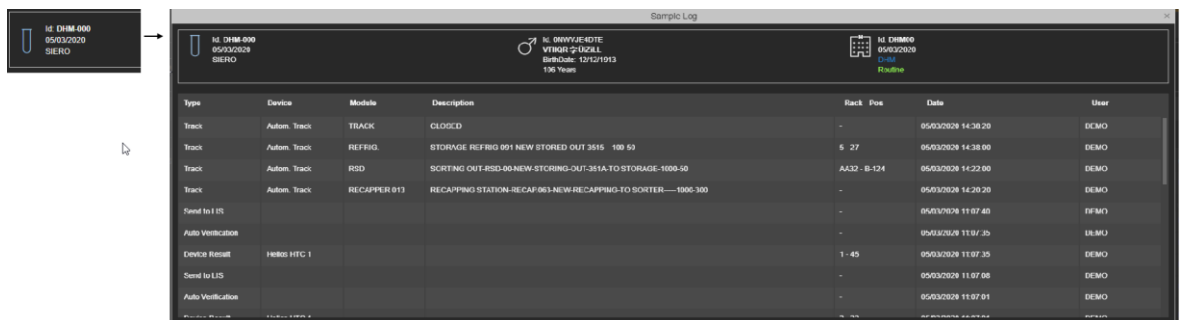
7.1 Header section



In this section you can find the following information:

- **Sample information**
 - Sample status: the colour of the sample give you the sample status in the list where you came from.
 - Sample Id: the identification number for that sample.
 - Sample collection date
 - Specimen

By clicking on the sample information you have access to the sample log.



Type	Device	Model	Description	Rack	Pos	Date	User
Track	Autom. Track	TRACK	CLOSED	-	-	05/03/2028 14:30:29	DEMO
Track	Autom. Track	REFRIG.	STORAGE REFRIG 001 NEW STORED OUT 3015 100 50	5	27	05/03/2028 14:38:00	DEMO
Track	Autom. Track	RSD	SORTING OUT-RSD-00 NEW-STORING-OUT-301A TO STORAGE-1000-50	AA32 - B-124	-	05/03/2028 14:22:00	DEMO
Track	Autom. Track	RECAPPER 013	RECAPPING STATION-RECAP-003 NEW-RECAPPING-TO SORTER-1000-300	-	-	05/03/2028 14:20:20	DEMO
Send to LIS	-	-	-	-	-	05/03/2028 11:07:40	DEMO
Auto Verification	-	-	-	-	-	05/03/2028 11:07:35	DEMO
Device Result	HERA HEC 1	-	-	1 - 45	-	05/03/2028 11:07:35	DEMO
Send to LIS	-	-	-	-	-	05/03/2028 11:07:08	DEMO
Auto Verification	-	-	-	-	-	05/03/2028 11:07:01	DEMO

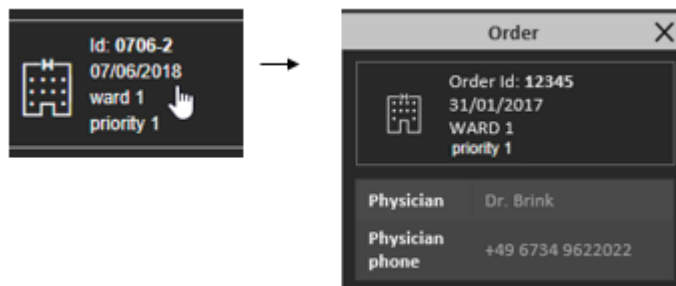
- **Patient information**
 - Sex:  (female) or  (male)
 - Patient Id: the unique identification number for the patient on which HERA builds the patient history.
 - Patient Name and Surname
 - Patient Birthday
 - Patient age

By clicking on the patient information you have access to the following information:

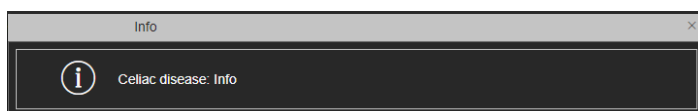


- *Order information*
 - Order Id: the identification order number (more Sample Id can refer to the same Order Id)
 - Order date
 - Order ward
 - Order priority

By clicking on the patient information you have access to the following information:

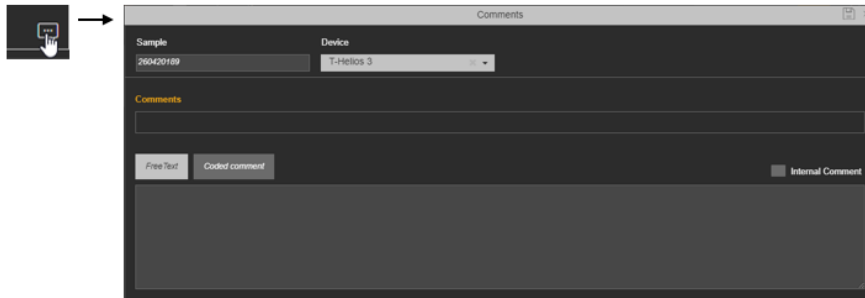


- *Clinical information*
By clicking on the clinical information you have access to it:



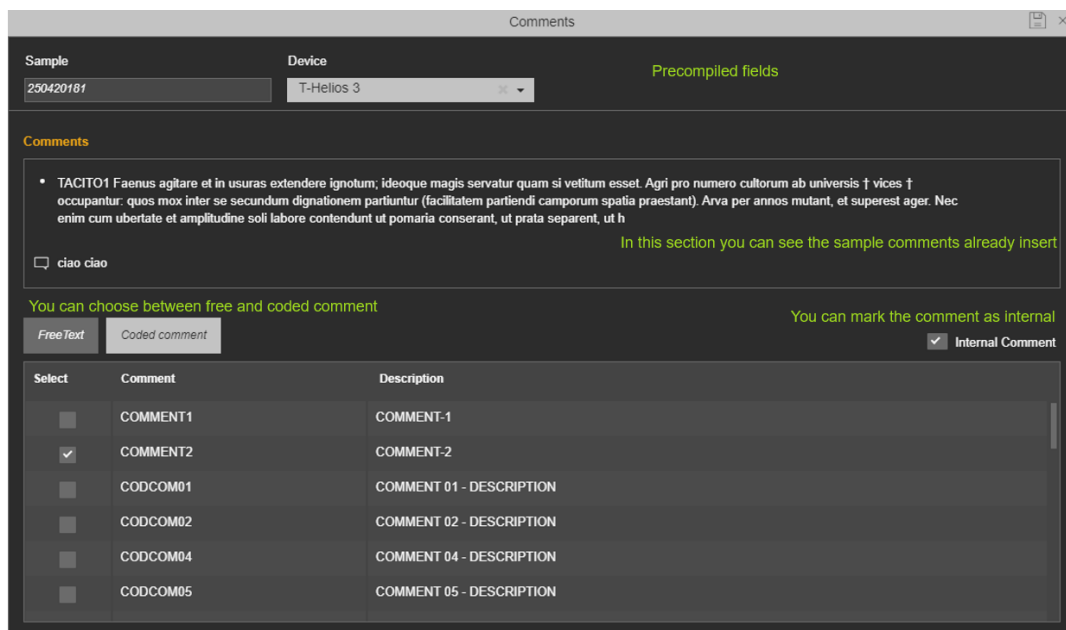
7.1.1 Sample Comment

In the header section you have also the possibility to add comments to the sample by clicking on the relative icon.



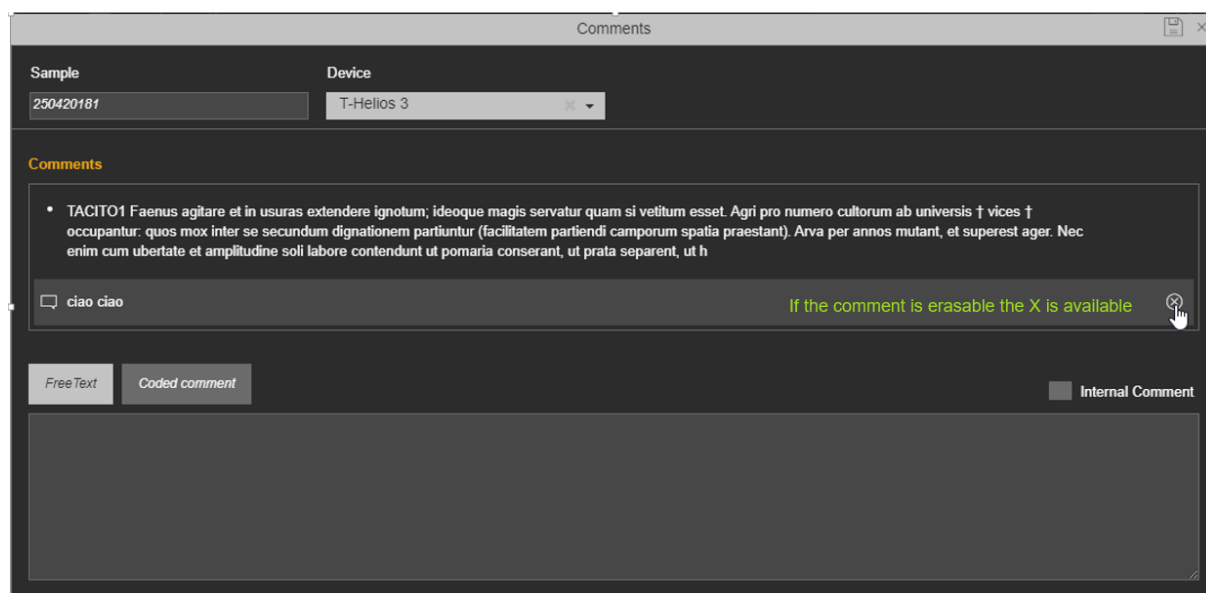
The panel is organized in three section:

- The first section displayed sample Id and device. This fields are pre-compiled.
- The second section displayed the sample comments already insert.
- The third section give you the possibility to insert free comment or coded comment. Furthermore you have the possibility to define the comment as internal comment, in this way the comment will not be sent to the LIS.

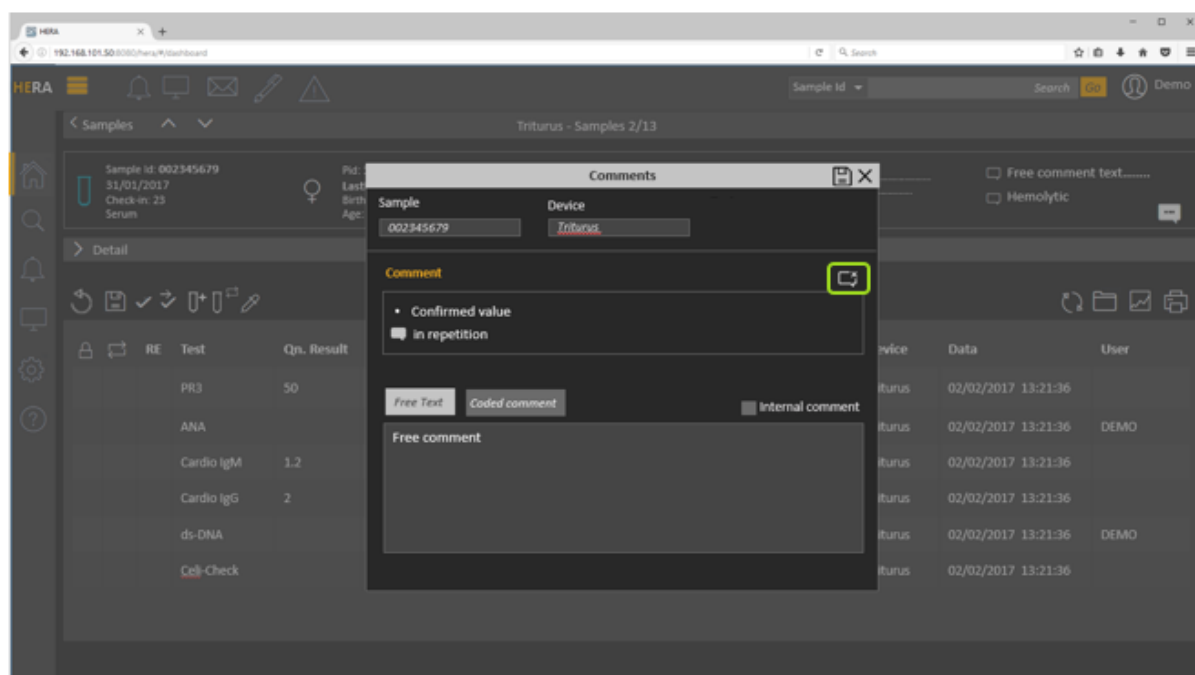


You can delete an insert comment, only if the comment has not been sent to LIS or is an internal comment.

	internal comment	erasable
	comment not sent to the LIS	erasable
	comment sent to the LIS	not erasable

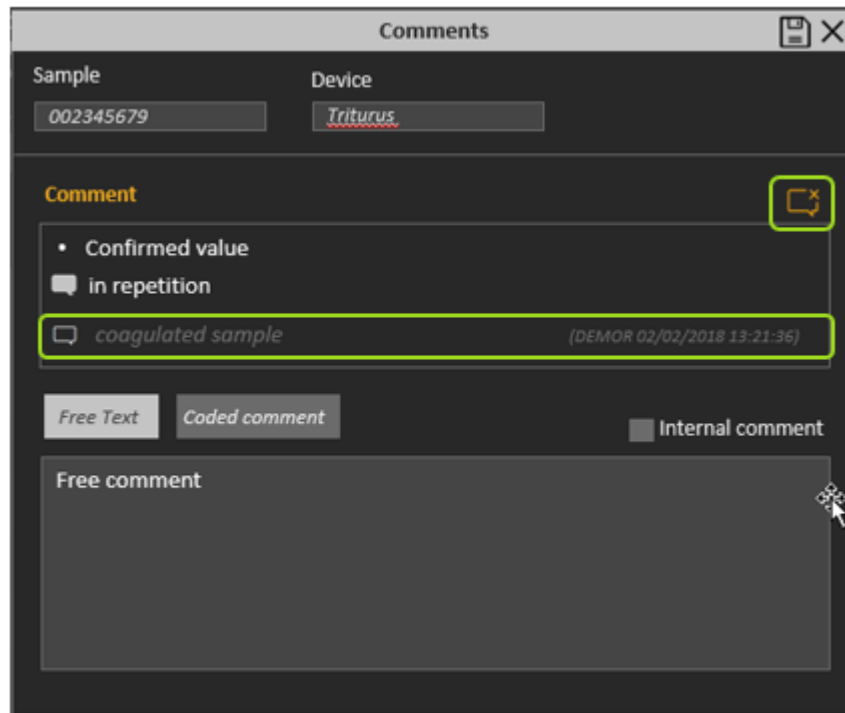


If the sample have deleted comment the icon “deleted comment” is displayed.



If the user click on the icon in order to visualize the deleted comments, the icon colour change to orange and the deleted comments are displayed in the comment box.

The comments are written with another colour and with italic font. The comment icon report if was an external or internal comment. There is also the information about who deleted the comment and at what time (if possible).



The image shows a 'Comments' dialog box with a title bar containing a save icon and a close 'X' icon. Inside, there are two input fields: 'Sample' with the value '002345679' and 'Device' with the value 'Triturus'. Below these is a 'Comment' section with a yellow box around a comment icon. The comment text area contains a bulleted list with 'Confirmed value' and 'in repetition', followed by a text entry 'coagulated sample' with a timestamp '(DEMOR 02/02/2018 13:21:36)'. At the bottom, there are buttons for 'Free Text' and 'Coded comment', and a checkbox for 'Internal comment' which is currently unchecked. A large text area for 'Free comment' is at the very bottom.

Click on the orange icon in order to no show the deleted comment. The icon turn to white.

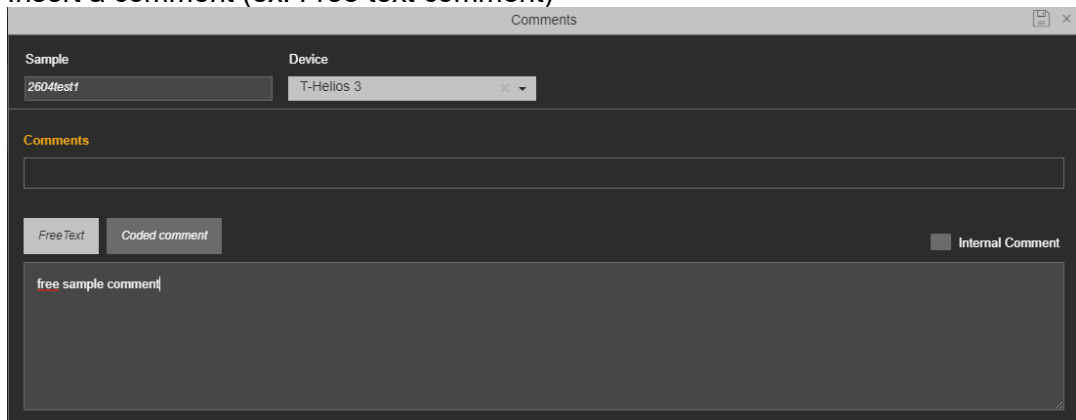
7.1.1.1 How add a sample comment

1. Click on the comment icon in the header of the result dashboard



The image shows the header of the result dashboard. It contains several information blocks: a patient ID '2604test1' with date '26/04/2018' and test 'SIERO'; a patient ID '2604RT' with first name 'Last Name', birth date '30/03/1921', and age '97 Years'; a patient ID '26041' with date '26/04/2018', ward '1', and priority '1'; and a 'Celiac disease: Info' section with an information icon. A comment icon is visible in the bottom right corner.

2. Insert a comment (ex. Free text comment)



The image shows the 'Comments' dialog box with the 'Sample' field set to '2604test1' and the 'Device' field set to 'T-Helios 3'. The 'Comments' section is empty. The 'Free Text' button is selected, and the 'Coded comment' button is disabled. The 'Internal Comment' checkbox is unchecked. The 'Free comment' text area contains the text 'free sample comment'.

3. You can also add a second comment (ex. Coded comment, internal comment)

Comments

Sample: 2604test1 Device: T-Helios 3

Comments

free sample comment

FreeText Coded comment

☒ Internal Comment

Select	Comment	Description
☒	COMMENT1	COMMENT-1
☐	COMMENT2	COMMENT-2
☐	CODCOM01	COMMENT 01 - DESCRIPTION
☐	CODCOM02	COMMENT 02 - DESCRIPTION
☐	CODCOM04	COMMENT 04 - DESCRIPTION
☐	CODCOM05	COMMENT 05 - DESCRIPTION

4. Confirm the comment insertion (if you don't want to save, just close the panel with X)

Comments

Sample: 2604test1 Device: T-Helios 3

Comments

free sample comment

FreeText Coded comment

☒ Internal Comment

Select	Comment	Description
☒	COMMENT1	COMMENT-1
☐	COMMENT2	COMMENT-2
☐	CODCOM01	COMMENT 01 - DESCRIPTION
☐	CODCOM02	COMMENT 02 - DESCRIPTION
☐	CODCOM04	COMMENT 04 - DESCRIPTION
☐	CODCOM05	COMMENT 05 - DESCRIPTION

5. Save the added comment (you can see it in the header)

Id: 2604test1 26/04/2018 SIERO

Id: 2604RT First Name Last Name BirthDate: 30/03/1921 97 Years

Id: 26041 26/04/2018 ward 1 priority 1

Celiac disease: Info

free sample comment

COMMENT-1

Detail

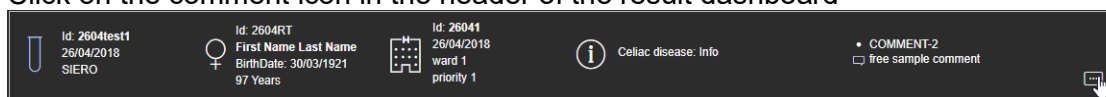
Save

RE	Test	Qn.Result	Ql.Result	Comment	H	V	Device	Date	User
----	------	-----------	-----------	---------	---	---	--------	------	------

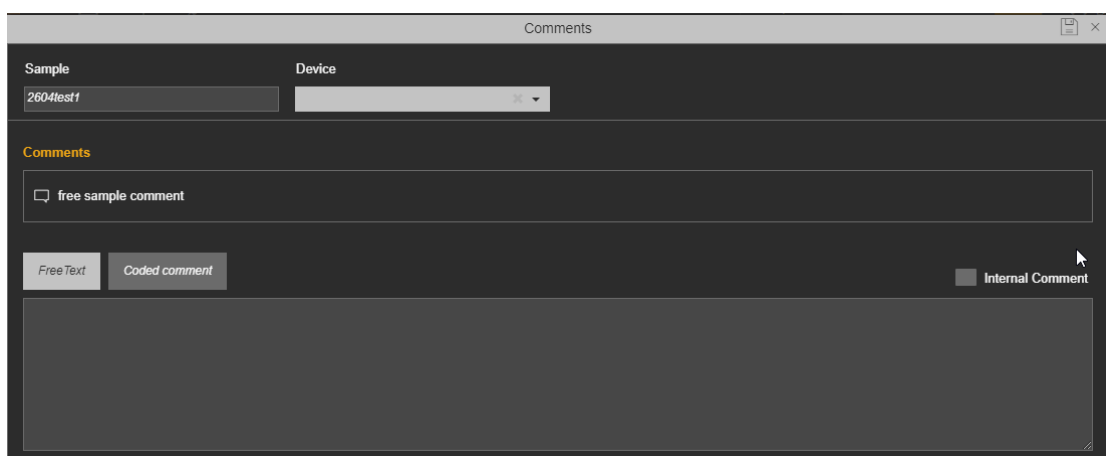
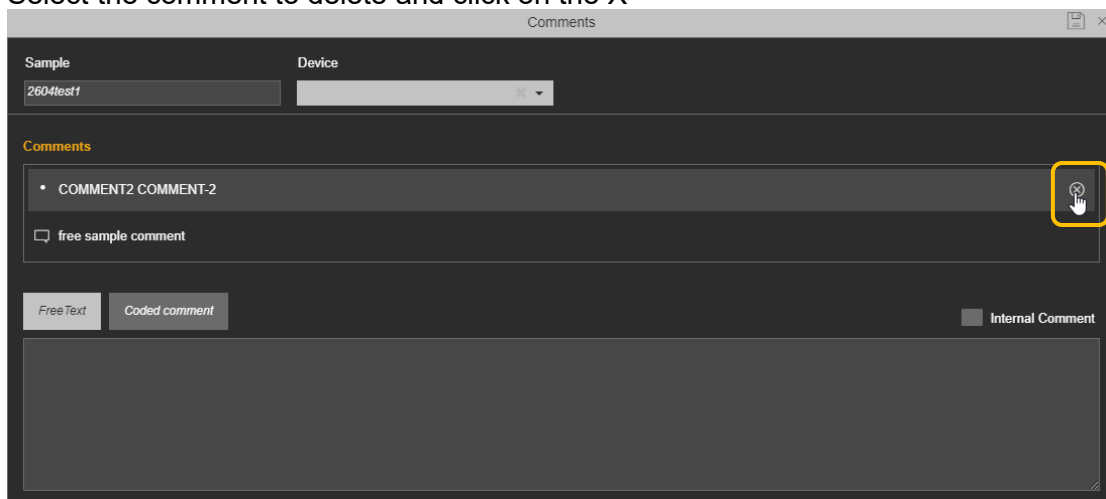
Note If you don't save the data and try to leave the dashboard, a message remember you to save or undo the data modification.

7.1.1.2 How delete a sample comment

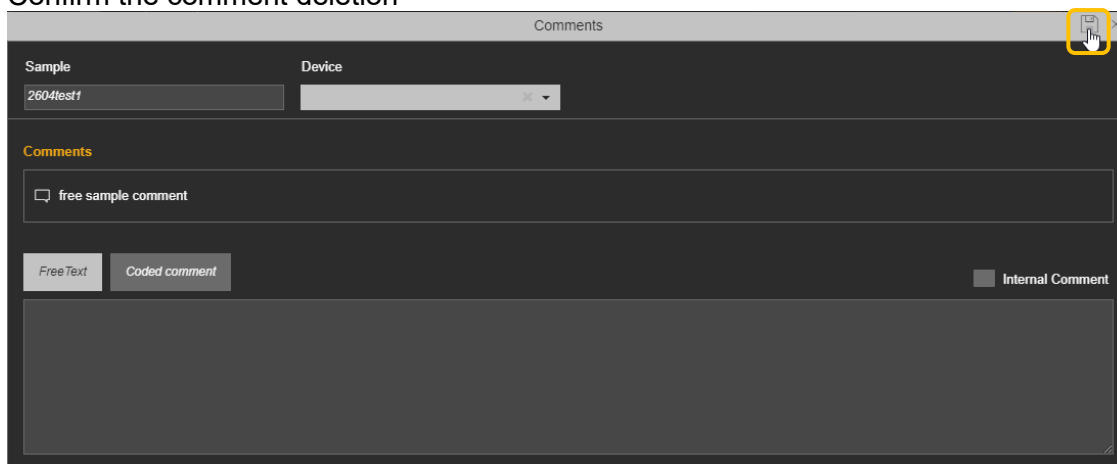
1. Click on the comment icon in the header of the result dashboard



2. Select the comment to delete and click on the X



3. Confirm the comment deletion



4. Save your data modification.

Note If you don't save the data and try to leave the dashboard, a message remember you to save or undo the data modification.

7.2 Detail section

This section contains details of the test selected in the section result. By default, when you open the result dashboard, the detail section is closed. By clicking on the test name in the result section, the detail section will be opened with all the information related to the test for that sample.

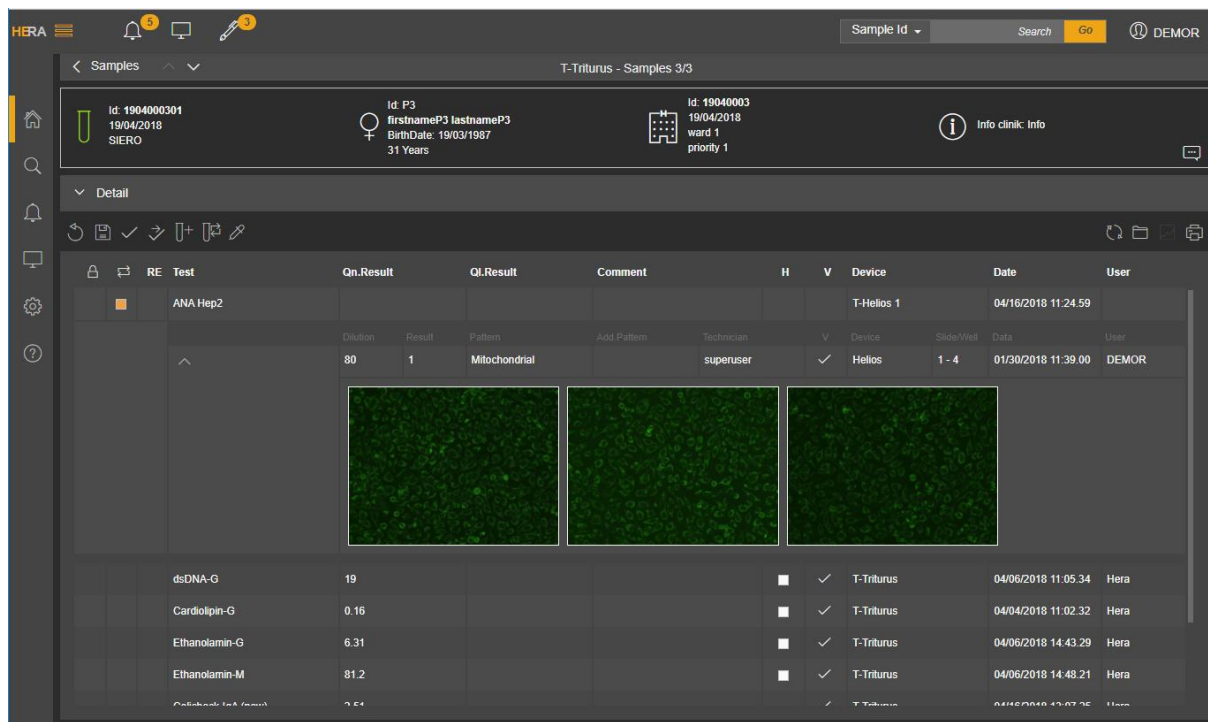
The section is organized in three sector:

- **TEST:** you can see the test name and the unit of measurement (if sent by device)
- **DEVICE:** you have here information about the device that sent the result, rack and position of the sample in the work session, flags, instrument result and dilution.
- **PREVIOUS RESULT:** you find displayed the last two previous result of the patient for that test and, if available, the previous result sent from LIS.

You can close the detail section by clicking on the header of the detail section.

7.3 Results section

The results section contains the list of the tests requested for the sample and their results, furthermore you can access to a different functionality by the results section toolbar.



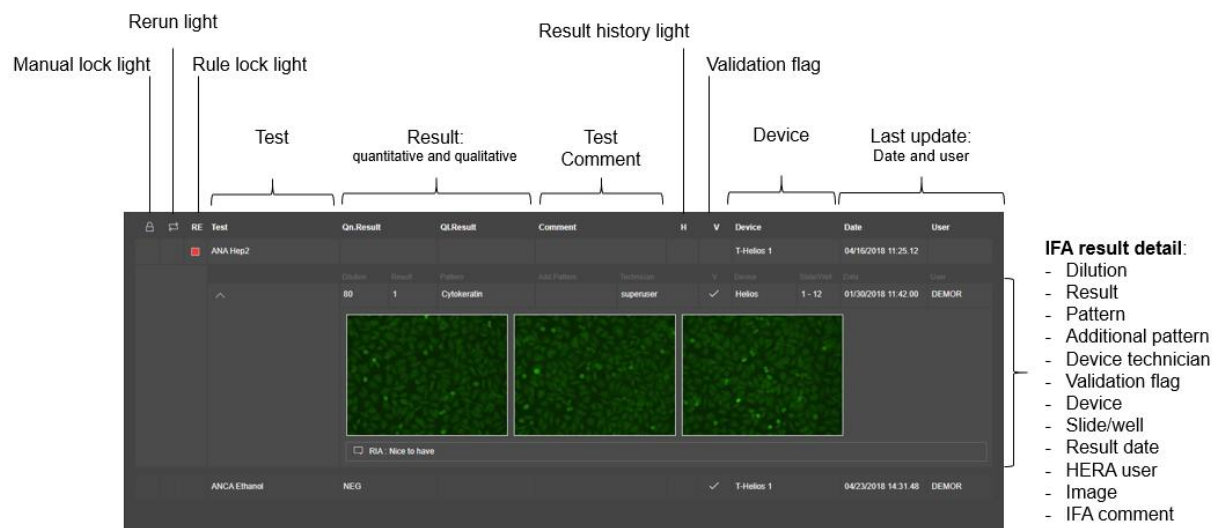
The screenshot shows the HERA interface with the following details:

- Header:** HERA logo, notification icons, Sample Id dropdown, Search bar, Go button, and DEMOR user.
- Navigation:** Left sidebar with icons for Home, Search, Notifications, Settings, and Help.
- Patient Information:**
 - Id: 1904000301, BirthDate: 19/04/2018, SIERO
 - Id: P3, BirthDate: 19/03/1987, 31 Years
 - Id: 19040003, BirthDate: 19/04/2018, ward 1, priority 1
- Detail Section:**
 - Test: ANA Hep2
 - Qn.Result: 80, QL.Result: 1, Pattern: Mitochondrial
 - Image: Three green fluorescence images showing Mitochondrial pattern.
- Results Table:**

RE	Test	Qn.Result	QL.Result	Comment	H	V	Device	Date	User
	ANA Hep2						T-Hellos 1	04/16/2018 11:24:59	
	dsDNA-G	19				✓	T-Triturus	04/06/2018 11:05:34	Hera
	Cardiolipin-G	0.16				✓	T-Triturus	04/04/2018 11:02:32	Hera
	Ethanolamin-G	6.31				✓	T-Triturus	04/06/2018 14:43:29	Hera
	Ethanolamin-M	81.2				✓	T-Triturus	04/06/2018 14:48:21	Hera

7.3.1 Results table

The table where you see the result is so organized:



The diagram labels the following components of the Results table:

- Manual lock light:** Icon in the first column of the test row.
- Rerun light:** Icon in the first column of the test row.
- Rule lock light:** Icon in the first column of the test row.
- Test:** The test name (e.g., ANA Hep2).
- Result: quantitative and qualitative:** The quantitative result (e.g., 80) and qualitative result (e.g., 1).
- Test Comment:** The comment field (e.g., Mitochondrial).
- Result history light:** Icon in the first column of the test row.
- Validation flag:** Checkmark icon in the V column.
- Device:** The device name (e.g., T-Hellos 1).
- Last update: Date and user:** The date and user of the last update (e.g., 04/16/2018 11:25:12, DEMOR).

IFA result detail:

- Dilution
- Result
- Pattern
- Additional pattern
- Device technician
- Validation flag
- Device
- Slide/well
- Result date
- HERA user
- Image
- IFA comment

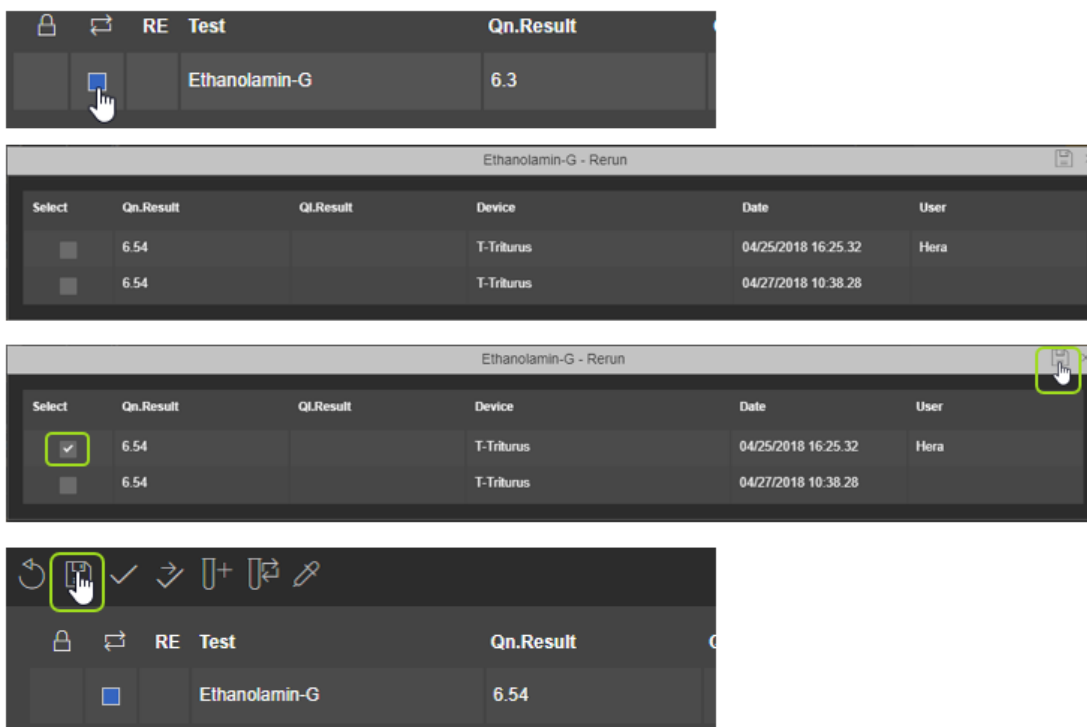


The manual lock functionality allows to block the validation of a result.

This functionality can be useful when you want validate all the result except some. In this case you can block the test validation by clicking on the first column of the test row. A confirmation box will be shown in order to confirm or undo the block. If the user confirm, the "lock" icon will be displayed in the first column.

In order to delete the lock, the user has to click on the cell and confirm the operation.

-  The rerun light shows you if a rerun was required and performed for the test. If a rerun is requested for the test an orange light  is displayed. When the rerun result is sent to HERA, the light turn to blu . Clicking on the blu light, you can see the result before the result and you can choose which result validate.



The screenshot shows the 'Ethanolamin-G' test results. The top table shows the current result (6.3) and a rerun button (blue light). Below it, a window titled 'Ethanolamin-G - Rerun' displays a table of previous results:

Select	Qn.Result	Ql.Result	Device	Date	User
☐	6.54		T-Triturus	04/25/2018 16:25:32	Hera
☐	6.54		T-Triturus	04/27/2018 10:38:28	

A second window shows the same table with the first row selected (checked). A confirmation dialog is shown with a green checkmark and a 'V' icon, indicating validation.

- RE** The rule engine light shows you if a rule locked the test result in order to manually validate the result. If the test is locked a red light  is displayed. By clicking on the red light you can reed, which rule locked the test result.

- H** The result history light turn to white  if the sample test received more that one result. By clicking on the white light you have access to the test result history, where are displayed result, device, result date and user.

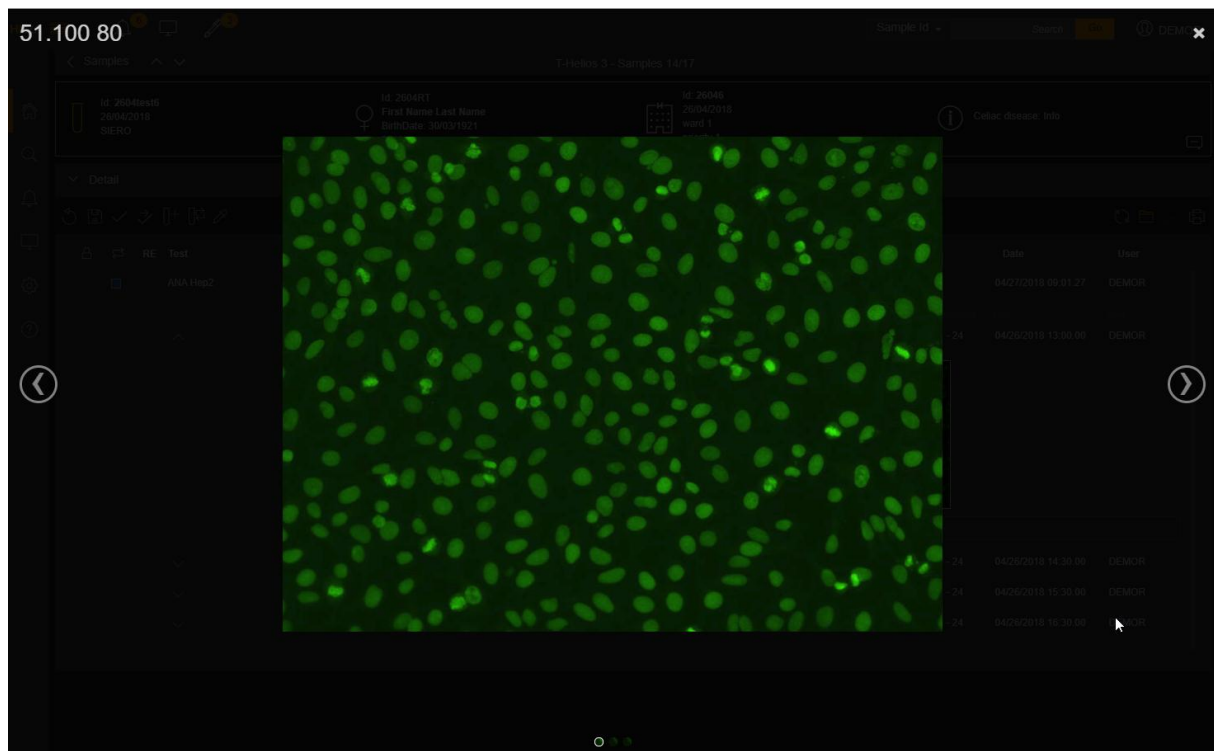


The screenshot shows the 'Ethanolamin-G - Result sequence' window. It displays a table of results:

Qn.Result	Ql.Result	Device	Device Q...	Device Ql...	Date	V	V1 Date	User
6.5		T-Triturus	6.5		04/27/2018 10:36:31		04/27/2018 10:36:31	
6.54		T-Triturus	6.54		04/25/2018 16:25:32		04/25/2018 16:25:32	Hera
6.54		T-Triturus	6.54		04/27/2018 10:38:28		04/27/2018 10:38:28	
6.3		T-Triturus	6.3		04/27/2018 10:42:41		04/27/2018 10:42:41	

- V** The validation flag  shows you if the result is validated or not. All the validated result will be send to the LIS.

In the result section there are also the image related to a test. Click on the image in order to enlarge the image and move from one to another.



A test can have quantitative and/or qualitative result. In order to insert manually a result, you have just to click in the relative box and insert the result. Then you have to save or validate the result using the functionality on the result toolbar.

Note If the test already has a validated result, you must [re-program](#) the test in order to insert a new result. That because the result could be already send to the LIS.

You can also manually add comment to a test, by clicking on the relative field in the result table. The following panel will be displayed.

The panel is organized in three section:

- The first section displayed sample Id, device and test. This fields are pre-compiled.
- The second section displayed the sample comments already insert.

- The third section give you the possibility to insert free comment or coded comment. Furthermore you have the possibility to define the comment as internal comment, in this way the comment will not be sent to the LIS.

Comments

Sample: 270420180 Device: T-Triturus Test: Ethanolamin-G Precompiled fields

Comments

• NEG In this section you can see the sample comments already insert

You can choose between free and coded comment You can mark the comment as internal

FreeText Coded comment ☒ Internal Comment

Select	Comment	Description
☒	COMMENT1	COMMENT-1
☐	COMMENT2	COMMENT-2
☐	CODCOM01	COMMENT 01 - DESCRIPTION
☐	CODCOM02	COMMENT 02 - DESCRIPTION
☐	CODCOM04	COMMENT 04 - DESCRIPTION
☐	CODCOM05	COMMENT 05 - DESCRIPTION

You can delete an insert comment, only if the comment has not been sent to LIS or is an internal comment.

-  internal comment erasable
-  comment not sent to the LIS erasable
-  comment sent to the LIS **not erasable**

Comments

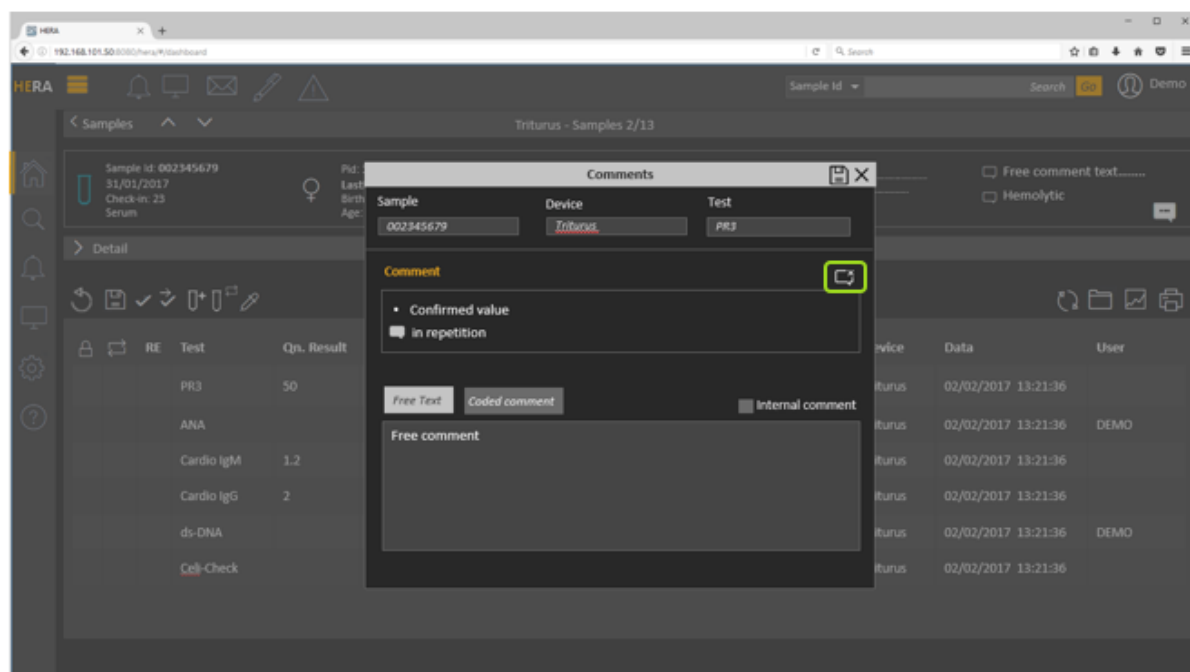
Sample: 270420180 Device: T-Triturus Test: Ethanolamin-G

Comments

• NEG If the comment is erasable the X is available

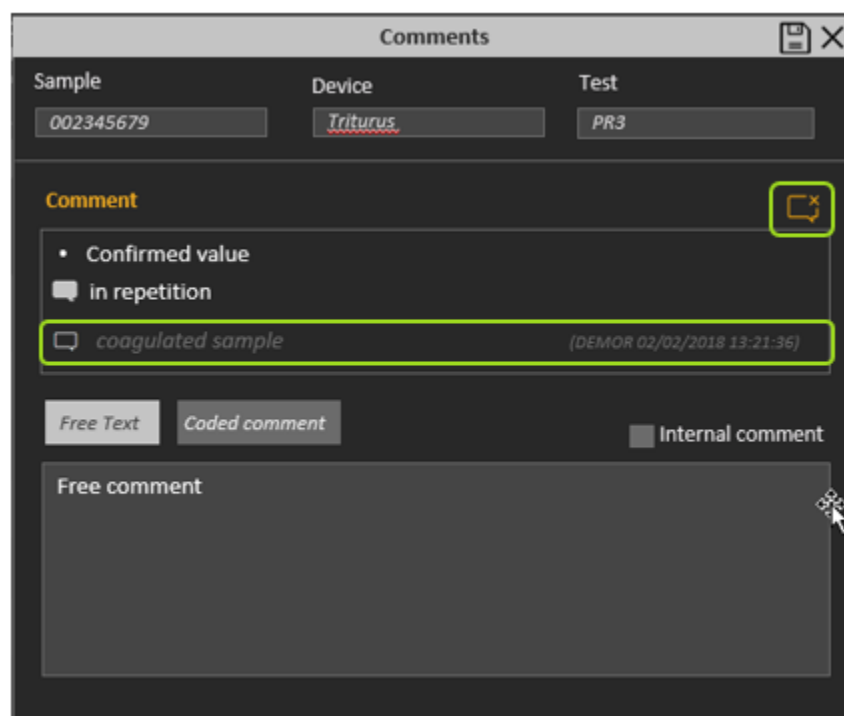
FreeText Coded comment ☐ Internal Comment

If the sample have deleted comment the icon “deleted comment” is displayed.



If the user click on the icon in order to visualize the deleted comments, the icon colour change to orange and the deleted comments are displayed in the comment box.

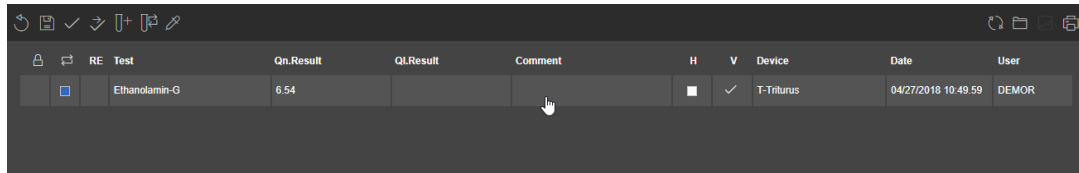
The comments are written with another colour and with italic font. The comment icon report if was an external or internal comment. There is also the information about who deleted the comment and at what time (if possible).



Click on the orange icon in order to no show the deleted comment. The icon turn to white.

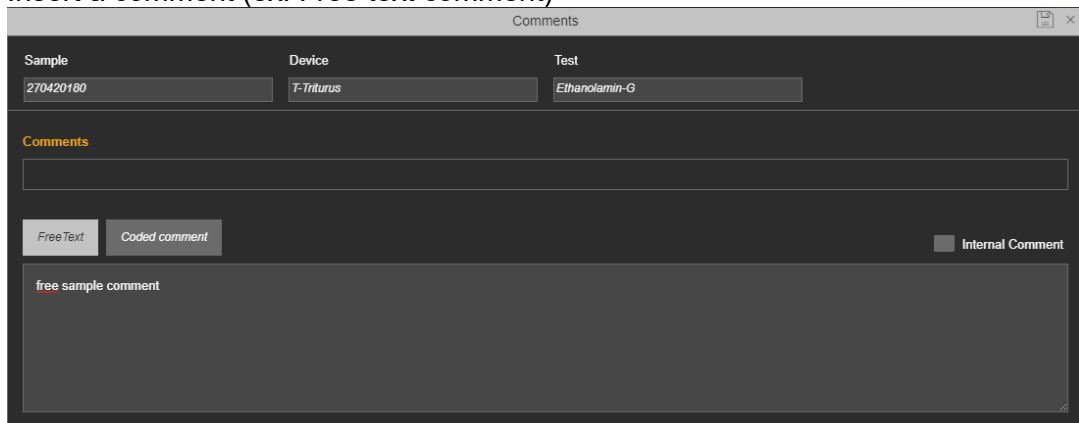
7.3.1.1 How add a test comment

1. Click on the comment field in the result table



RE	Test	Qn.Result	QL.Result	Comment	H	V	Device	Date	User
	Ethanolamin-G	6.54				✓	T-Triturus	04/27/2018 10:49:59	DEMOR

2. Insert a comment (ex. Free text comment)



Comments

Sample: 270420180 Device: T-Triturus Test: Ethanolamin-G

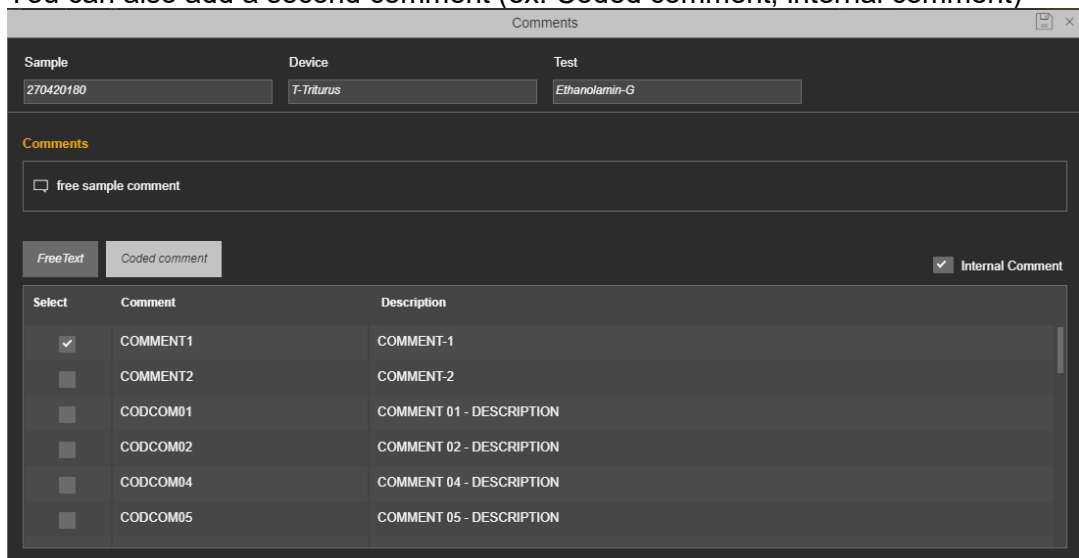
Comments

FreeText Coded comment

free sample comment

Internal Comment

3. You can also add a second comment (ex. Coded comment, internal comment)



Comments

Sample: 270420180 Device: T-Triturus Test: Ethanolamin-G

Comments

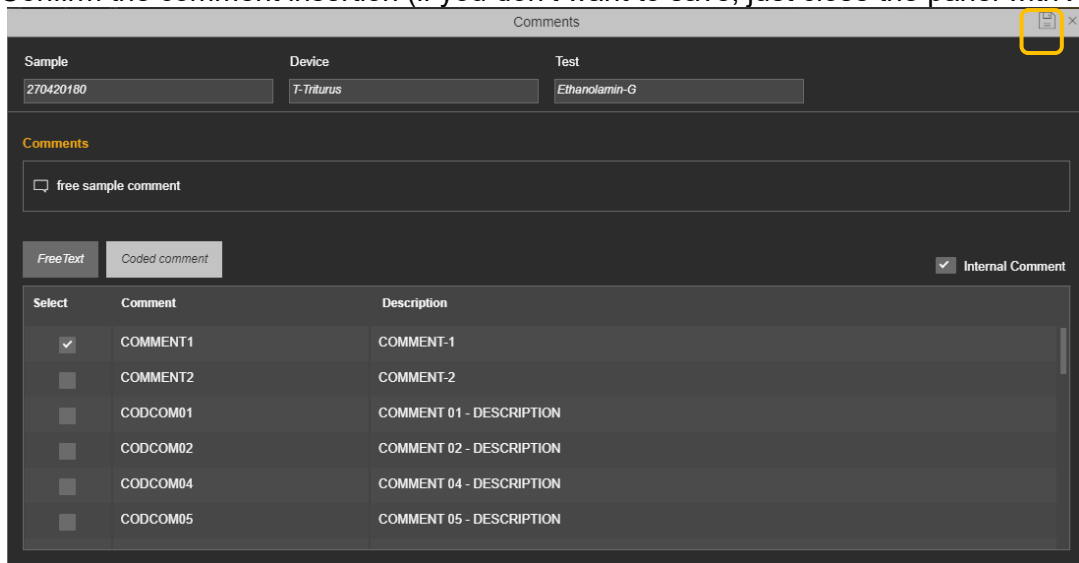
free sample comment

FreeText Coded comment

Internal Comment

Select	Comment	Description
☒	COMMENT1	COMMENT-1
☐	COMMENT2	COMMENT-2
☐	CODCOM01	COMMENT 01 - DESCRIPTION
☐	CODCOM02	COMMENT 02 - DESCRIPTION
☐	CODCOM04	COMMENT 04 - DESCRIPTION
☐	CODCOM05	COMMENT 05 - DESCRIPTION

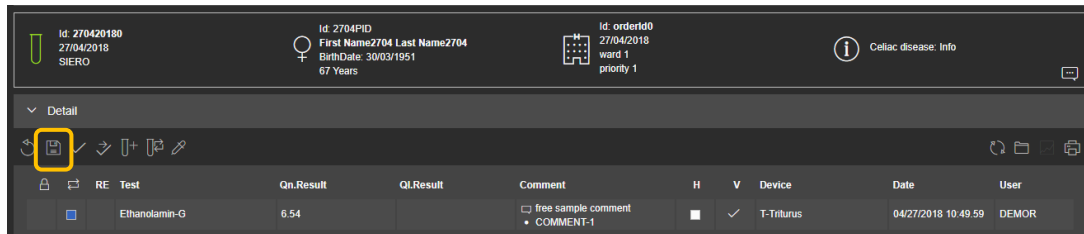
4. Confirm the comment insertion (if you don't want to save, just close the panel with X)



The screenshot shows a 'Comments' panel with a close button (X) highlighted in a yellow box. The panel contains fields for Sample (270420180), Device (T-Triturus), and Test (Ethanolamin-G). Below these is a 'Comments' section with a text input field containing 'free sample comment'. There are tabs for 'FreeText' and 'Coded comment', and a checkbox for 'Internal Comment' which is checked. A table lists several comments:

Select	Comment	Description
☒	COMMENT 1	COMMENT-1
☐	COMMENT2	COMMENT-2
☐	CODCOM01	COMMENT 01 - DESCRIPTION
☐	CODCOM02	COMMENT 02 - DESCRIPTION
☐	CODCOM04	COMMENT 04 - DESCRIPTION
☐	CODCOM05	COMMENT 05 - DESCRIPTION

5. Save the added comment



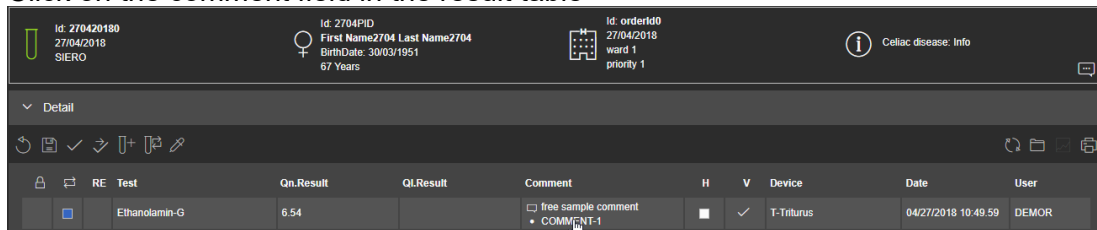
The screenshot shows the main dashboard with a 'Detail' section. A yellow box highlights the 'Save' icon (a floppy disk) in the toolbar. Below the toolbar is a table with columns: RE, Test, Qn.Result, Ql.Result, Comment, H, V, Device, Date, and User. The table contains one row for 'Ethanolamin-G' with a result of 6.54. The 'Comment' column shows 'free sample comment' and 'COMMENT-1'.

Note If you don't save the data and try to leave the dashboard, a message remember you to save or undo  the data modification.

Note You can add a test comment also if the test is already validated and send to the LIS.

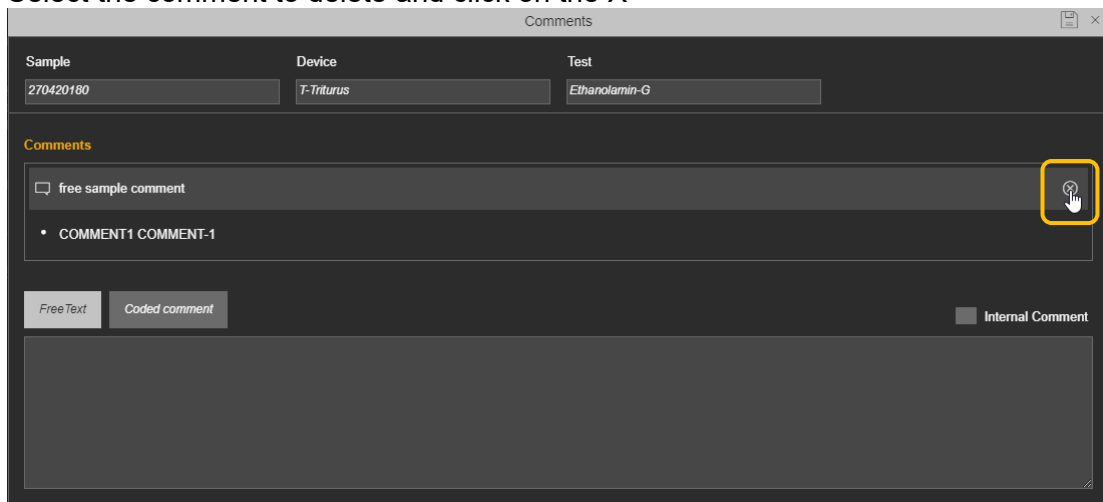
7.3.1.2 How delete a sample comment

1. Click on the comment field in the result table

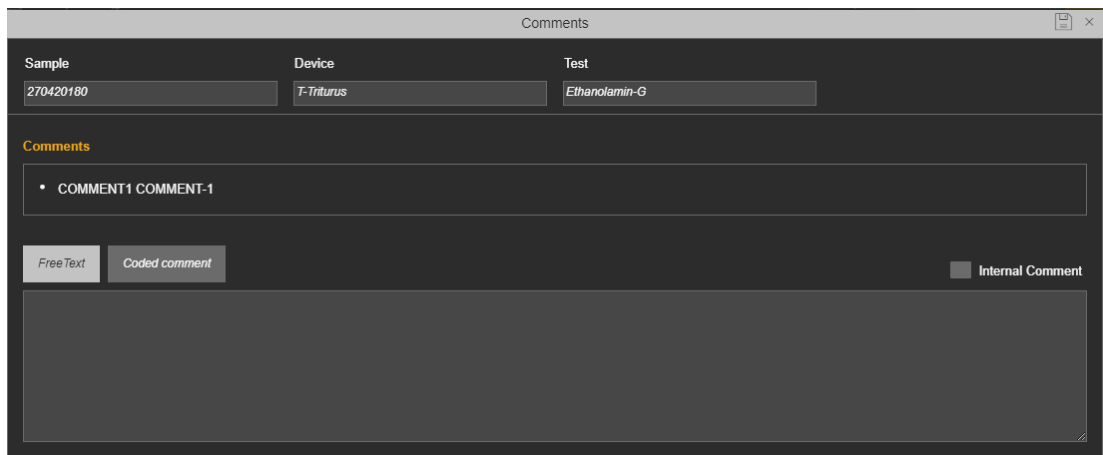


The screenshot shows the main dashboard with a 'Detail' section. A yellow box highlights the 'Comment' field in the table, which contains 'free sample comment' and 'COMMENT-1'. A mouse cursor is pointing at the 'COMMENT-1' text.

2. Select the comment to delete and click on the X

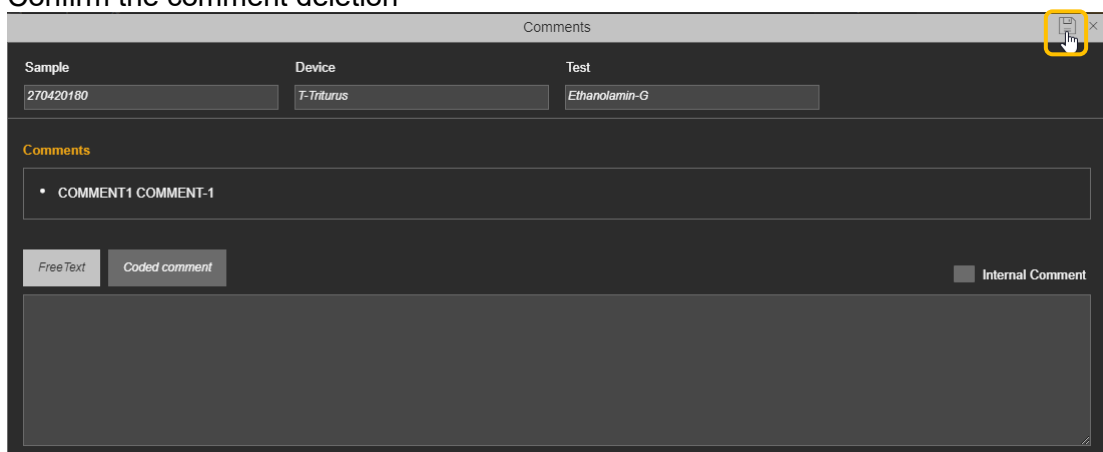


The screenshot shows a 'Comments' window with a header bar containing 'Sample', 'Device', and 'Test' fields. Below these fields is a 'Comments' section with a list of comments. The first comment is 'free sample comment' and the second is 'COMMENT1 COMMENT-1'. A yellow box highlights a delete icon (an 'X' inside a circle) next to the first comment. Below the comment list are two buttons: 'Free Text' and 'Coded comment'. At the bottom right, there is a checkbox labeled 'Internal Comment'.



This screenshot shows the 'Comments' window after the first comment has been deleted. The comment list now only contains 'COMMENT1 COMMENT-1'. The 'Free Text' and 'Coded comment' buttons are still present, as is the 'Internal Comment' checkbox at the bottom right.

3. Confirm the comment deletion



This screenshot is identical to the previous one, showing the 'Comments' window with the comment list containing 'COMMENT1 COMMENT-1'. A yellow box highlights the delete icon (an 'X' inside a circle) next to the comment, indicating the next step in the process.

4. Save your data modification.



Id: 270420180
27/04/2018
SIERO

Id: 2704PID
First Name: 2704 Last Name: 2704
Birth Date: 30/03/1951
67 Years

Id: orderId0
27/04/2018
ward 1
priority 1

Cellac disease: Info

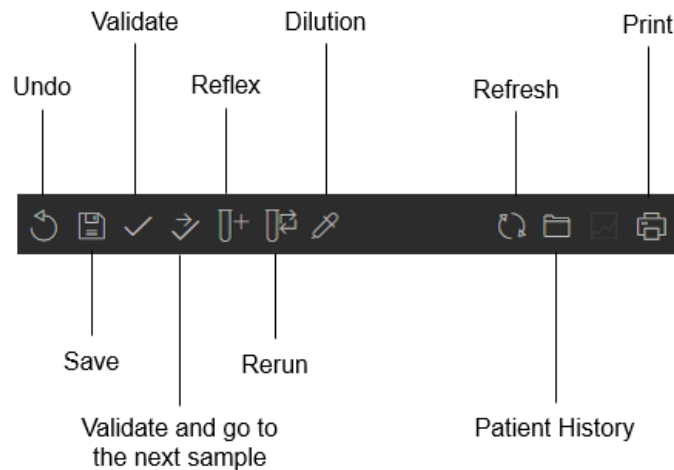
Detail

RE	Test	Qn.Result	Ql.Result	Comment	H	V	Device	Date	User
☐	Ethanolamin-G	6.54		COMMENT-1	☐	☒	T-Triturus	04/27/2018 10:49:59	DEMOR

Note If you don't save the data and try to leave the dashboard, a message remember you to save or undo  the data modification.

7.3.2 Result toolbar

The result toolbar is so organized:



-  The undo icon allows you to cancel the unsaved change that you performed in the results table.
-  The save icon allows you to save the change that you performed in the results table without validate the change. The data in this way are not sent to the LIS.
-  The validate icon allows you to save and validate the change that you performed in the results table. The validate data will be send to the LIS. After the validation, you stay on the sample results dashboard.
-  The icon allows you to save and validate the results and move to the next sample of the list.
-  The refresh icon allows you to refresh the data in the dashboard.
-  The print icon allows you to print the results report.

7.3.2.1 Dilution

The dilution icon allows you to know the programming dilution for the selected test of the sample and change it. The dilution will be change for all the device that can perform the test.

1. Select the test by clicking on the test row

The screenshot shows the top section of the results dashboard with patient information: Id: 2704201811, 27/04/2018, SIERO; Id: 2704RT, First Name Last Name, BirthDate: 30/03/1921, 97 Years; Id: 270411, 27/04/2018, ward 1, priority 1; and Celiac disease: Info. Below this is a 'Detail' section with a table. The table has columns: RE Test, Qn.Result, Ql.Result, Comment, H, V, Device, Date, and User. The first row of the table is 'ANA Hep2' with a hand cursor pointing at it.

2. Click on the dilution icon

This screenshot is identical to the previous one, but a hand cursor is now clicking on the dilution icon (a small square with a plus sign) located in the 'Detail' section of the table.

3. A pop-up shows you the dilution with which the test will be programmed to the device and the possible set of dilution for that test

The screenshot shows a pop-up window titled 'Dilution'. It contains the text 'ANA Hep2' and a list of dilution values: 80, 160, 320, 640, 1280, 2560, 5120, and 10240. The values are displayed in a grid-like format.

4. Close the popup if you don't want change the dilution or click on the wanted dilution value, in order to change the programming dilution.

This screenshot is identical to the previous one, showing the 'Dilution' pop-up window with the list of dilution values for 'ANA Hep2'.

5. Save the data.

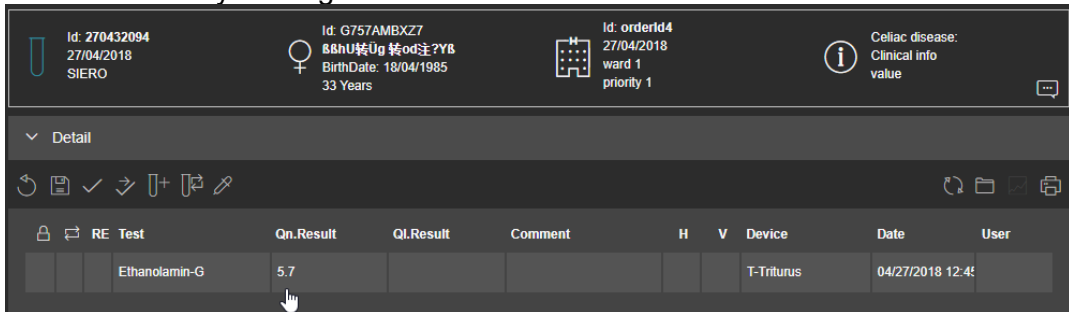
The screenshot shows the 'Dilution' pop-up window. A hand cursor is clicking on the 'Save' icon (a small square with a checkmark) located in the top right corner of the window.

6. The popup is closed and you are redirected on the results dashboard of the sample.

7.3.2.2 Rerun

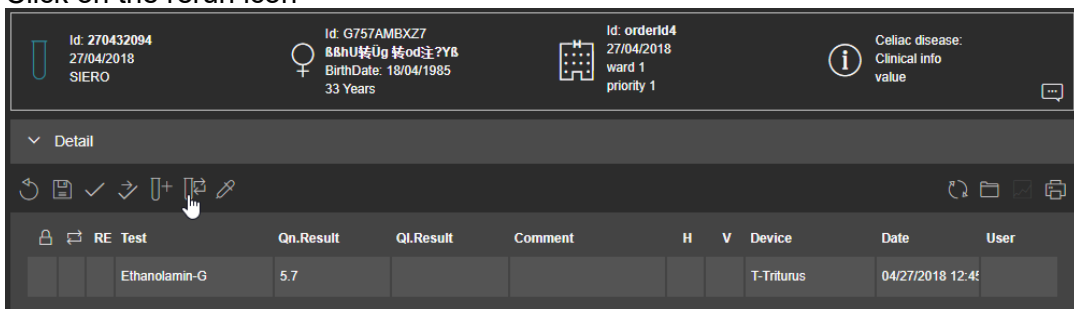
The rerun icon allows you to program a rerun for a test with already a result.

1. Select the test by clicking on the test row

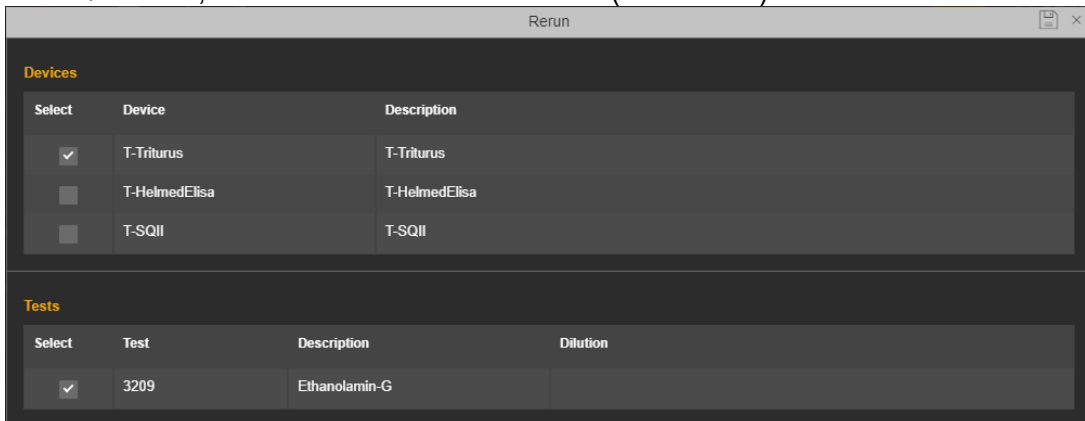


RE	Test	Qn.Result	Ql.Result	Comment	H	V	Device	Date	User
	Ethanolamin-G	5.7					T-Triturus	04/27/2018 12:45	

2. Click on the rerun icon



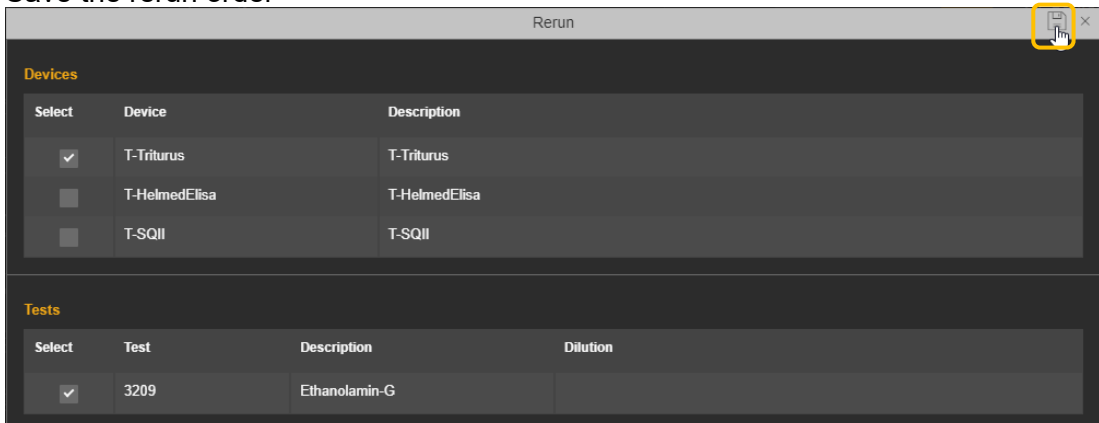
3. A pop-up shows you the devices on which the test rerun can be performed. Select the device/devices, select the test and the dilution (if available)



Select	Device	Description
☒	T-Triturus	T-Triturus
☐	T-HelmedElisa	T-HelmedElisa
☐	T-SQII	T-SQII

Select	Test	Description	Dilution
☒	3209	Ethanolamin-G	

4. Save the rerun order



- The popup is closed and you are redirected on the result dashboard of the sample. The orange rerun test light turns on.

Id: 270432094
27/04/2018
SIERO

Id: G757AMBXZ7
88hU转Ug 转od注?YB
BirthDate: 18/04/1985
33 Years

Id: orderid4
27/04/2018
ward 1
priority 1

Celiac disease:
Clinical info
value

Detail

RE Test Qn.Result Ql.Result Comment H V Device Date User

RE	Ethanolamin-G	5.7					T-Triturus	04/27/2018 12:45	
----	---------------	-----	--	--	--	--	------------	------------------	--

7.3.2.3 Reflex

The reflex icon allows you to program a reflex test.

- Click on the reflex icon

Id: 270432094
27/04/2018
SIERO

Id: G757AMBXZ7
88hU转Ug 转od注?YB
BirthDate: 18/04/1985
33 Years

Id: orderid4
27/04/2018
ward 1
priority 1

Celiac disease:
Clinical info
value

Detail

RE Test Qn.Result Ql.Result Comment H V Device Date User

RE	Ethanolamin-G	5.7					T-Triturus	04/27/2018 12:45	
----	---------------	-----	--	--	--	--	------------	------------------	--

- The following pop-up will be displayed

Reflex

Devices

Select	Device	Description
☐	T-Triturus	T-Triturus
☐	T-SQII	T-SQII
☐	T-HelmedElisa	T-HelmedElisa

Tests

Select	Test	Description	Lis test code
☐			

- Select the devices on which perform the reflex test. You can choose devices on which the sample is already present in the worklist or other device.

Reflex

Devices

Select	Device	Description
☒	T-Triturus	T-Triturus
☐	T-SQII	T-SQII
☐	T-HelmedElisa	T-HelmedElisa

Select Device Description

Tests

Select	Test	Description	Lis test code
☐	3236	Ethanolamin-A	LIS-3236
☐	3114	Rib-P	LIS-3114
☐	3703	LKM-1	LIS-3703
☐	3130	Nucleo-h	LIS-3130
☐	3810	25OH Vitamin D	LIS-3810

4. Select the reflex test (one or more)

Reflex

Devices

Select	Device	Description
☒	T-Triturus	T-Triturus
☐	T-SQII	T-SQII
☐	T-HelmedElisa	T-HelmedElisa

Select Device Description

Tests

Select	Test	Description	Lis test code
☐	3305	Elastase	LIS-3305
☒	3209M	Ethanolamin-M	LIS-3209M
☐	3707	AMA-M2-Check	LIS-3707
☐	3226	Serin-Prothrombin-GM	LIS-3226
☐	3402	Tg	LIS-3402

5. Save.

Reflex

Devices

Select	Device	Description
☐	T-HelmedElisa	T-HelmedElisa
☒	T-Triturus	T-Triturus
☐	T-SQII	T-SQII

Select Device Description

Tests

Select	Test	Description	Lis test code
☐	3305	Elastase	LIS-3305
☒	3209M	Ethanolamin-M	LIS-3209M
☐	3707	AMA-M2-Check	LIS-3707
☐	3226	Serin-Prothrombin-GM	LIS-3226
☐	3402	Tg	LIS-3402

- The popup is closed and you are redirected on the result dashboard of the sample. The reflex test is added to the sample.

Id: 270432094
27/04/2018
SIERO

♀

Id: G757/AMBXZ7
88hU转Ug 转od注?YB
BirthDate: 18/04/1985
33 Years

Id: orderId4
27/04/2018
ward 1
priority 1

ⓘ

Celiac disease:
Clinical info
value

Detail

TEST	Unit: Lot ID:	DEVICE Rack/Position: - Flag:	Instrument Qn: Instrument Ql: Dilution:	PREVIOUS RESULT Test:
Ethanolamin-G				
Ethanolamin-M				

7.3.2.4 Patient History

HERA store every night the result of the sample in *Sent to LIS* status in order to build the patient clinical history. The patient history icon allows you to access to the HERA archive of the patient results.

The icon turns to orange  when the patient history is available; you can click on it in order to have access to the archive.

HERA

Sample Id

Search

Go

DEMOR

T-Helios 3 - Samples 14/17

Id: 2604test6
26/04/2018
SIERO

♀

Id: 2604RT
First Name Last Name
BirthDate: 30/03/1921
97 Years

Id: 26046
26/04/2018
ward 1
priority 1

ⓘ

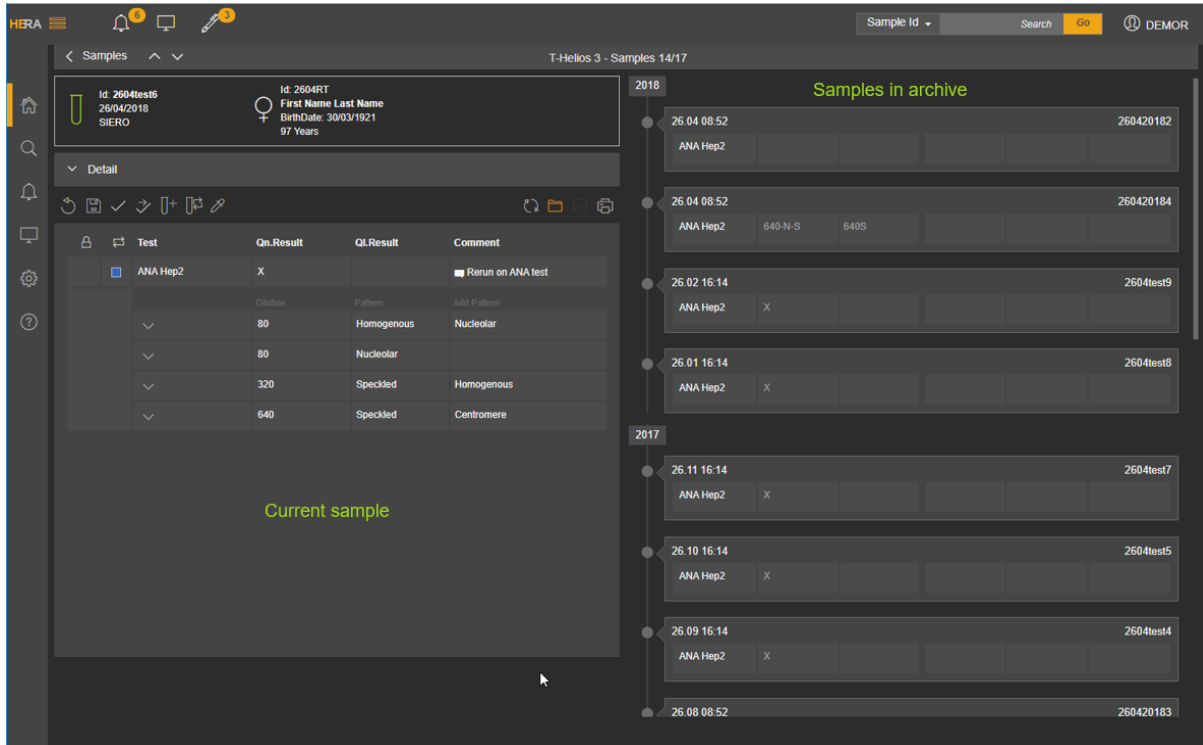
Celiac disease: Info

Detail

RE	Test	Qn.Result	Ql.Result	Comment	H	V	Device	Date	User		
	ANA Hep2	X		Rerun on ANA test		✓	T-Helios 3	04/27/2018 09:01:27	DEMOR		
▼		Dilution	Result	Pattern	Add Pattern	Technician	V	Device	Slide/Well	Data	User
▼		80	1	Homogenous	Nucleolar	admin	✓	T3-Helios	1 - 24	04/26/2018 13:00:00	DEMOR
▼		80	1	Nucleolar		admin	✓	T3-Helios	1 - 24	04/26/2018 14:30:00	DEMOR
▼		320	1	Speckled	Homogenous	admin		T3-Helios	1 - 24	04/26/2018 15:30:00	DEMOR
▼		640	1	Speckled	Centromere	frankie	✓	T3-Helios	1 - 24	04/26/2018 16:30:00	DEMOR

Page 66 / 98

V005: 2025-07-24



The dashboard is split into two main sections:

- Current sample (Left side):** Displays patient information (Id: 2604test6, 26/04/2018, SIERO, 97 Years) and a table of test results for ANA Hep2.
- Patient history time line (Right side):** Shows a chronological list of previous samples, grouped by year (2018, 2017).

Test	Qn.Result	Ql.Result	Comment
ANA Hep2	X		Rerun on ANA test
	80	Homogenous	Nucleolar
	80	Nucleolar	
	320	Speckled	Homogenous
	640	Speckled	Centromere

Current sample

Samples in archive

2018

- 26.04 08.52 ANA Hep2 260420182
- 26.04 08.52 ANA Hep2 640-N-S 640S 260420184
- 26.02 16.14 ANA Hep2 X 2604test9
- 26.01 16.14 ANA Hep2 X 2604test8

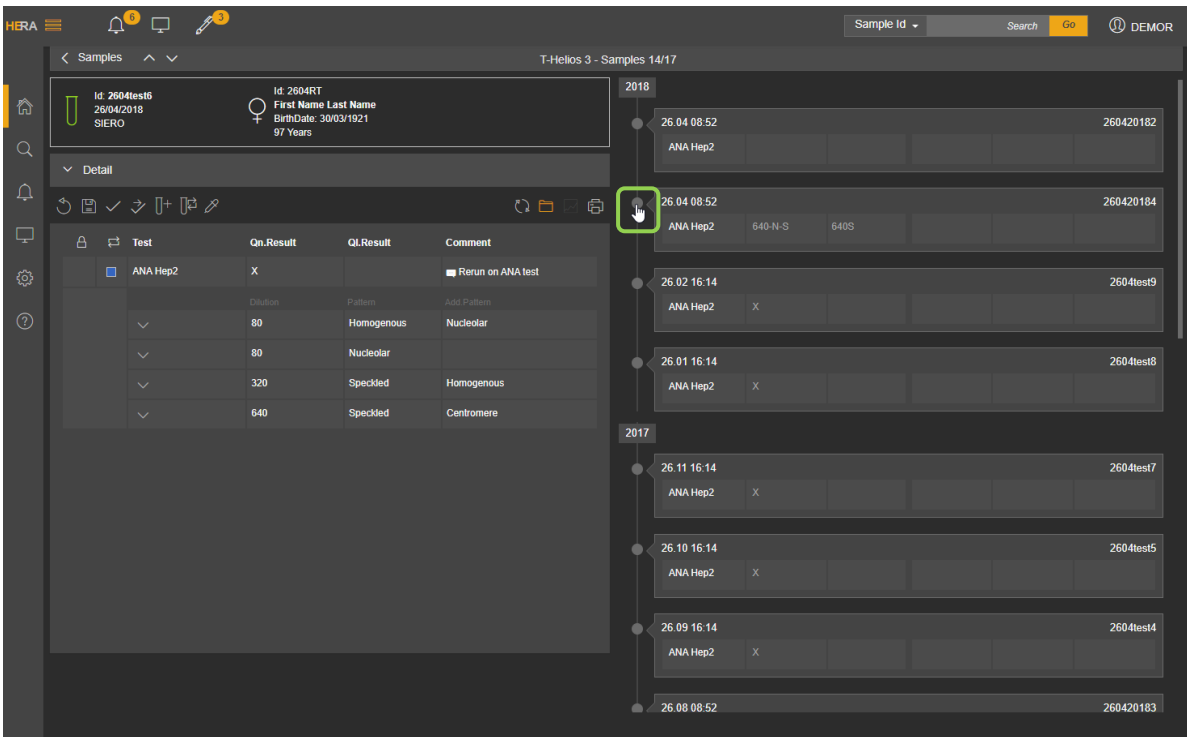
2017

- 26.11 16.14 ANA Hep2 X 2604test7
- 26.10 16.14 ANA Hep2 X 2604test5
- 26.09 16.14 ANA Hep2 X 2604test4
- 26.08 08.52 260420183

The panel is splitted in two section:

- Current result on the left side
- Patient history time line on the right side

The previous sample results are grouped by year in decrescending order. For each sample there is a section with the preview of order date, sample Id and results. To select a sample, click on the related circle or on the shown box result.



The dashboard is split into two main sections:

- Current sample (Left side):** Displays patient information (Id: 2604test6, 26/04/2018, SIERO, 97 Years) and a table of test results for ANA Hep2.
- Patient history time line (Right side):** Shows a chronological list of previous samples, grouped by year (2018, 2017).

Test	Qn.Result	Ql.Result	Comment
ANA Hep2	X		Rerun on ANA test
	80	Homogenous	Nucleolar
	80	Nucleolar	
	320	Speckled	Homogenous
	640	Speckled	Centromere

Current sample

Samples in archive

2018

- 26.04 08.52 ANA Hep2 260420182
- 26.04 08.52 ANA Hep2 640-N-S 640S 260420184
- 26.02 16.14 ANA Hep2 X 2604test9
- 26.01 16.14 ANA Hep2 X 2604test8

2017

- 26.11 16.14 ANA Hep2 X 2604test7
- 26.10 16.14 ANA Hep2 X 2604test5
- 26.09 16.14 ANA Hep2 X 2604test4
- 26.08 08.52 260420183

The selected previous result will be displayed.

The dashboard displays sample information for 'Id: 2604RT' and 'Sample Id: 260420184'. It includes a horizontal timeline with dates 26/04/2018, 26/04/2018, 26/02/2018, and 26/0 ANU. Two result panels are shown, each with a table of test results.

Test	Qn.Result	Ql.Result	Comment
ANA Hep2	X		Rerun on ANA test
	80	Homogenous	Nucleolar
	80	Nucleolar	
	320	Speckled	Homogenous
	640	Speckled	Centromere

Test	Qn.Result	Ql.Result	Comment
ANA Hep2	640-N-S	640S	Rerun on ANA test
	640	1	Nucleolar
	80	1	Homogenous
	80	1	Nucleolar
	160	1	Speckled

The form is organized in three section:

- Header: with sample information, order information, clinical info, sample comments.
- Horizontal time line: the selected point is highlighted in orange.
- Result.

The dashboard displays sample information for 'Id: 2604RT' and 'Sample Id: 260420184'. It includes a horizontal timeline with dates 26/04/2018, 26/04/2018, 26/02/2018, and 26/0 ANU. Two result panels are shown, each with a table of test results and expanded details.

Test	Qn.Result	Ql.Result	Comment
ANA Hep2	X		Rerun on ANA test
	80	Homogenous	Nucleolar
	80	Nucleolar	
	320	Speckled	Homogenous
	640	Speckled	Centromere

Test	Qn.Result	Ql.Result	Comment
ANA Hep2	640-N-S	640S	Rerun on ANA test
	640	1	Nucleolar
	80	1	Homogenous
	80	1	Nucleolar
	160	1	Speckled

The result panel shows the most important info and by clicking on the “info” icon, will be display the complete results panel.



Result

 Id: 260420184
26/04/2018
SIERO

 Id: 2604RT
First Name Last Name
BirthDate: 30/03/1921
97 Years

 Id: 26044
26/04/2018
ward 1
priority 1

 Cellac disease: Info

Test	Qn.Result	Ql.Result	Comment	H	Device	Rack/Pos	F	Date	User
 ANA Hep2	640-N-S	640S	 Rerun on ANA test		T-Helios 3	-		04/26/2018 14:45	Hera
	640	1	Nucleolar	Speckled	frankie	T3-Helios	1 - 24	12/18/2017 13:56	Hera
	80	1	Homogenous	Nucleolar	admin	T3-Helios	1 - 24	12/18/2017 13:56	Hera
	80	1	Nucleolar		admin	T3-Helios	1 - 24	12/18/2017 13:56	Hera
	160	1	Speckled	Homogenous	admin	T3-Helios	1 - 24	12/18/2017 13:56	Hera

Click on the X top right to close the result details.
By clicking on another point of the horizontal time line, the relative results will be displayed.

To return to the vertical time-line of the patient history, the user must to click on the selected orange sample or on the related below box detail (order date and preview test name).

26/04/2018
ANA Hep2

 26/04/2018
ANA Hep2

26/02/2018
ANA Hep2



2018

26.04 08:52

ANA Hep2

260420182

26.04 08:52

ANA Hep2 640-N-S 640S

260420184

26.02 16:14

ANA Hep2 X

2604test9

26.01 16:14

ANA Hep2 X

2604test8

2017

26.11 16:14

ANA Hep2 X

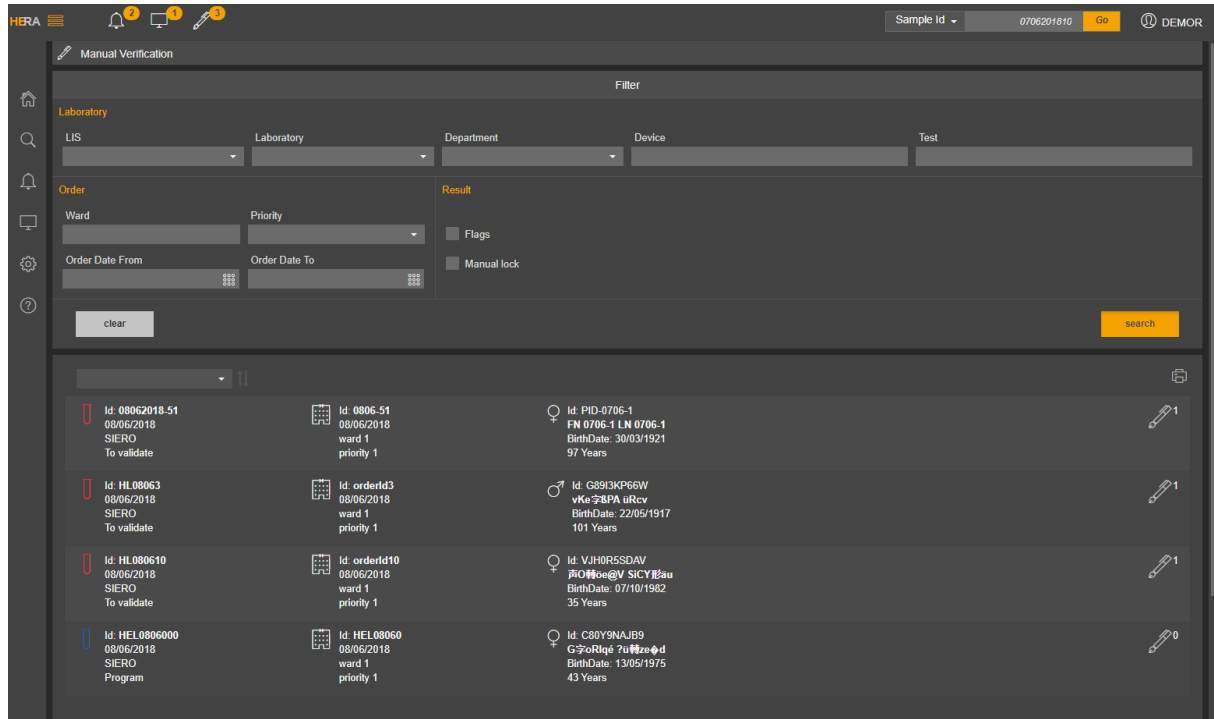
2604test7

To return to the validation panel, click on the orange “Patient History” folder.

V005: 2025-07-24

8 Manual verification dashboard

The manual verification dashboard gives you the list of the samples that have at least one test to manually validate, because locked by the rules system implemented in your laboratory.



Order	Result
Id: 08062018-51 08/06/2018 SIERO To validate	Id: 0806-51 08/06/2018 ward 1 priority 1
Id: HL08063 08/06/2018 SIERO To validate	Id: orderId3 08/06/2018 ward 1 priority 1
Id: HL080610 08/06/2018 SIERO To validate	Id: orderId10 08/06/2018 ward 1 priority 1
Id: HEL0806000 08/06/2018 SIERO Program	Id: HEL08060 08/06/2018 ward 1 priority 1

You can access to the manual verification dashboard in the following way.

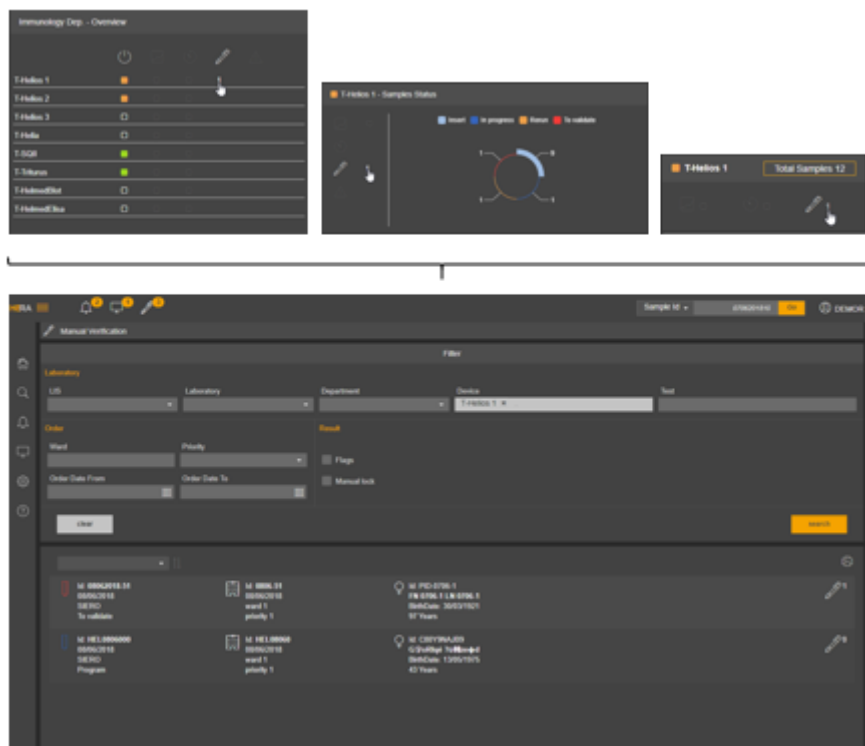
- Clicking the icon in the main toolbar , you will be redirect on the manual verification dashboard, where will be shown you the list of samples that have at least one test to validate for devices on which you have right. You don't see the alarm for the devices on which you have no right.

Note The number displayed near the icon is the sum of the sample that have test to validate on each device.

Ex.

If a sample has a test1 to manually validate on device A and a test2 to manually validate on device B, the sample is counted twice in the alarm icon. But in the list of samples to manually validate you will be found only a sample.

- Clicking the icon  in the department overview of the laboratory dashboard, in the device overview of the department dashboard or in the device button in the device dashboard you will be redirect on the manual verification dashboard. The field device in the dashboard is precompiled and so you have the list of samples with tests to manually validate for that device.



The manual verification form is organized in two part:

- Filter**
 You can always tune your list of sample to manually validate filling the field in the filter section. You can filter by: LIS, laboratory, department, device, test, ward, priority, order date, with or without flag, manual block. The button *Search* allows you to start the search; the button *Clear* allows you to clean the field.
- To validate samples list**
 Each element of the list has on the right side of the row the number of element (results, immunology results, comment...) that must be validate. Clicking on the row you have access to the [results dashboard](#) for that element.
 The result manually blocked count zero.

Note Sample and/or test to manually validate are notified also by the bar chart and/or the pie chart in the laboratory/department/device dashboard. Clicking on these element of the chart, the sample list will be shown right in the samples list section of the dashboard.

9 Search

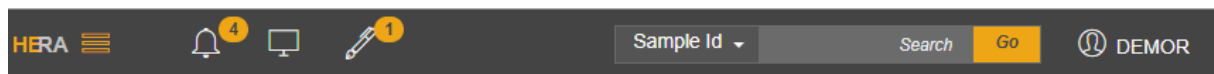
HERA offers you several option in order to search a sample or group of samples responding to some requirement.

When you have quickly to look for a specific sample/order/patient, you can use the quick search in the software toolbar, otherwise you can use the search functionality accessible from the software menu or from the toolbar of the sample list.

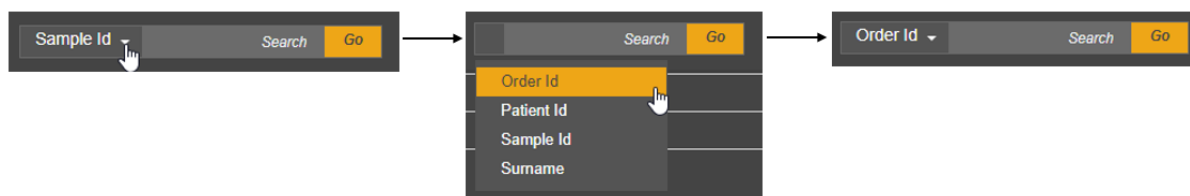
The following paragraph will be provide you information.

9.1 Quick search

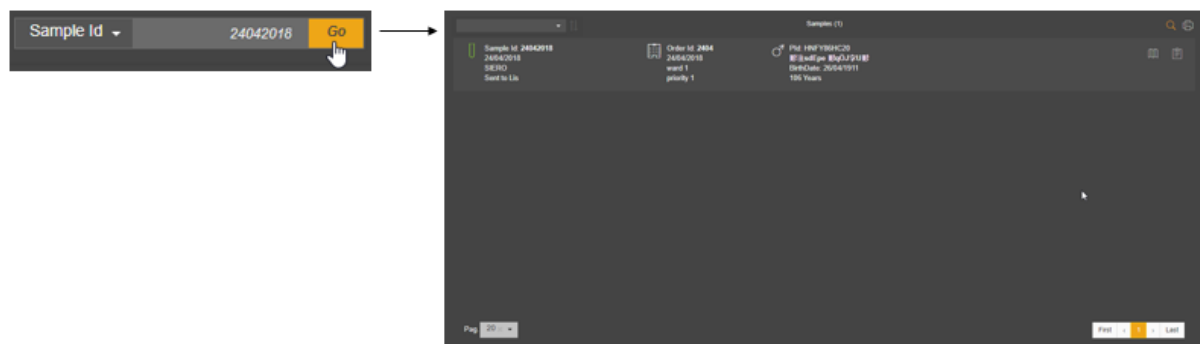
You can use this option in the software main toolbar when you are in the software HOME (laboratory dashboard, department dashboard, device dashboard) and you have quickly to look for a specific sample/order/patient.



By default the quick search look for *Sample Id* but you can also look for *Order Id*, *Patient Id* and *Surname*. Click on the arrows in order to select the wanted parameter.



Insert the value to search and click on Go or press enter key. The output of you search will be displayed on the samples list section of the home dashboard. You can access to the sample log, to the result preview by clicking on the relative icon or you can access to the result dashboard by clicking on the row.



Note The icon “search” in the toolbar of the samples list section is orange, in order to remember you that the list is the result of a search. If you click on the icon you can know the search parameter. If you click on one of the interactive section of the HOME the search parameter will be automatically cleared.

9.2 Main search

The search option in the software menu give you the possibility to search filtering more parameter.

The panel is organized into three main section:

1. Laboratory
2. Patient-Order
3. Sample-Device-Result

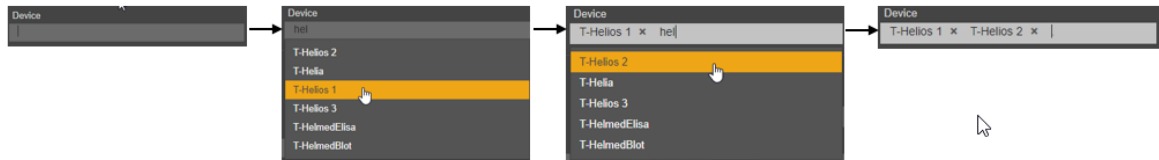
In the 1st section you can select:

- **LIS:** a drop down menu helps you in the choice. Only a value can be insert.

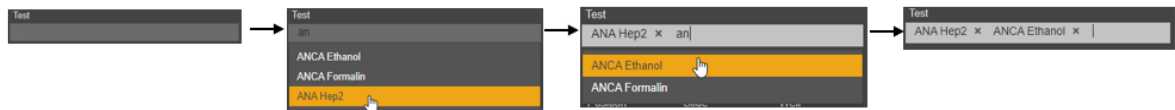
- **Laboratory:** a drop down menu helps you in the choice. Only a value can be insert. If you have a default laboratory, this field is precompiled with that value.

- **Department:** a drop down menu helps you in the choice. Only a value can be insert. If you have a default department, this field is precompiled with that value.

- **Device:** you can write in the field and a drop down menu shows you all the devices responding to what you write, so that you can choose from the list the device. You can insert more than one device.



- **Test:** you can write in the field and a drop down menu shows you all the tests responding to what you write, so that you can choose from the list the test. You can insert more than one test.



In the 2nd section can be selected:

- **Patient Id:** the unique patient identifier.
- **Birth date:** you must insert the data in the format DD-MM-YYYY or you can select the data from the calendar.



- **Name.**
- **Surname.**
- **Order Id.**
- **Ward:** you can write in the field and a drop down menu shows you all the ward responding to what you write, so that you can choose from the list the ward. You can insert more than one ward.
- **Priority:** a drop down menu helps you in the choice. Only a value can be insert.
- **Order date:** you must insert the data in the format DD-MM-YYYY or you can select the data from the calendar.

In the 3rd section can be selected:

- **Sample Id.**
- **With or without check-in:** in this version no check-in are traced.
- **Rack and position.**
- **Slide and well.**
- **Program date (from - to):** you must insert the data in the format DD-MM-YYYY or you can select the data from the calendar. You can specify the time.
- **Result date (from – to):** you must insert the data in the format DD-MM-YYYY or you can select the data from the calendar. You can specify the time.
- **Sample status:** you can select the sample status check box.

Clicking on *Search* the search will be performed and the list will be displayed in the lower part of the mask. The focus moves automatically on the list. From the list you can access to the sample log and to the result preview by clicking on the relative icon or you can access to the result dashboard by clicking on the row.

Clicking on *Search in Archive* the search will be performed in the HERA archive and the list (max 1000 elements) will be displayed in the lower part of the mask. The focus moves automatically on the list. From the list you can access to the sample log and to the result preview by clicking on the relative icon.

Clicking on *Clear* the search panel will be cleared.

9.3 Search from the samples list

You can find a search option also in the toolbar of the samples list section, in the upper right corner. The field of the search panel are the same as those present in the [main search](#) dashboard but from this filter the search in archive is not available

Insert the search parameter and click on search.

The search results will be displayed on the samples list section and the search icon turn on orange, in order to remember you that search parameters are settings.

Samples (12)					
 Id: 23B00004745T 14/06/2023 SERUM To LIS	 Id: 23B00004745T 14/06/2023 10:10 UNKRW R	 Id: 3113495 TEST 2 CLINISYS Date of Birth: 08/07/1975 50 years	 HARRY	  	
 Id: 23B00004746T 14/06/2023 SERUM To LIS	 Id: 23B00004746T 14/06/2023 10:11 UNKRW R	 Id: 3113495 TEST 2 CLINISYS Date of Birth: 08/07/1975 50 years	 HARRY	  	
 Id: 23B00004747T 14/06/2023 SERUM To LIS	 Id: 23B00004747T 14/06/2023 10:11 UNKRW R	 Id: 3113495 TEST 2 CLINISYS Date of Birth: 08/07/1975 50 years	 HARRY	  	
 Id: 23B00004825T 14/06/2023 SERUM To LIS	 Id: 23B00004825T 14/06/2023 10:44 UNKRW R	 Id: 3113495 TEST 2 CLINISYS Date of Birth: 08/07/1975 50 years	 HARRY	  	

Page 20

First < 1 > Last

If you click on the search icon the search pop-up will be displayed with the current search parameter.

Filter

Laboratory

LIS

Laboratory

Department

Device

Test

LAB2

Immunology Dep.

T-Helios 1

ANA Hep2

Patient-Order

Patient Id

BirthDate

Surname

Name

Order Id

Ward

Priority

Order Date From

Order Date To

Sample-Device-Result

Sample Id

Check in

Rack

Position

Slide

Well

Program date from

Program date to

Result date from

Result date to

Insert

In progress

Completed

Validated

Rerun

To validate

Sent to Lis

Clear

Search

You can clear the panel to perform a new search or you can just close the pop-up from the X in the upper right corner.

By clicking on one of the interactive section of the HOME the search parameter will be automatically cleared.

10 Connections dashboard

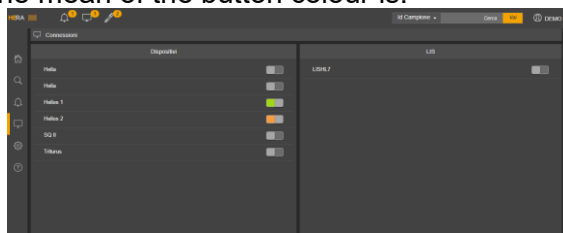
You can access to the driver dashboard:

- by clicking on  in the **HERA** software menu.
- by clicking, in case of error, in the driver icon in the main toolbar



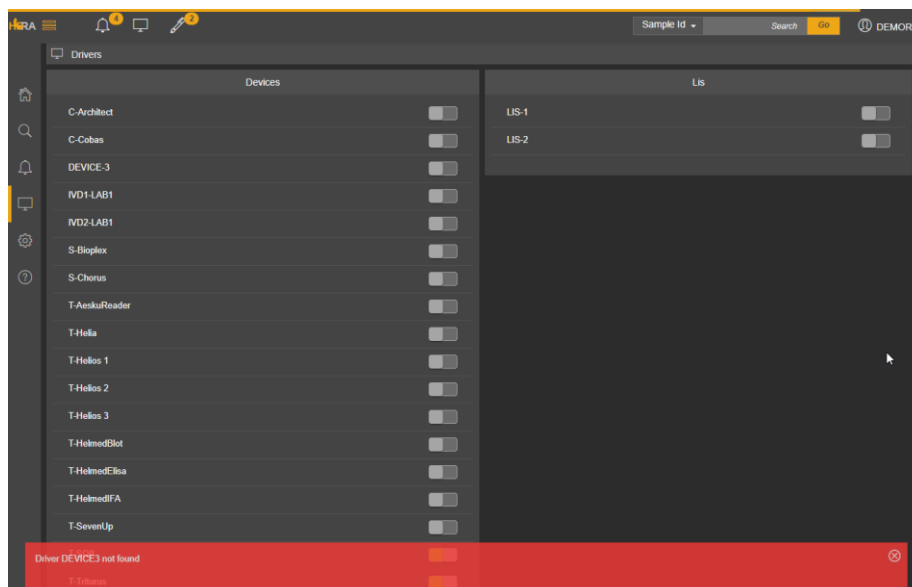
In this dashboard, you can start and stop the communication between **HERA** software and devices and/or LIS depending of your rights, by clicking on the respective button.

The mean of the button colour is:



-  **HERA** disconnected
-  **HERA** waiting device/LIS connection
-  **HERA** and device/LIS connected
-  driver error

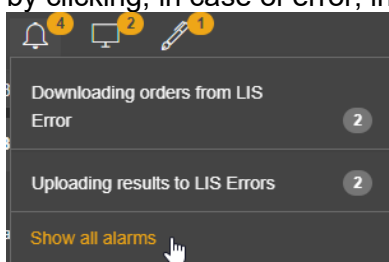
If during the driver start/stop an error happens, an error message will be raised. You can have a details of the error, by clicking on the message.



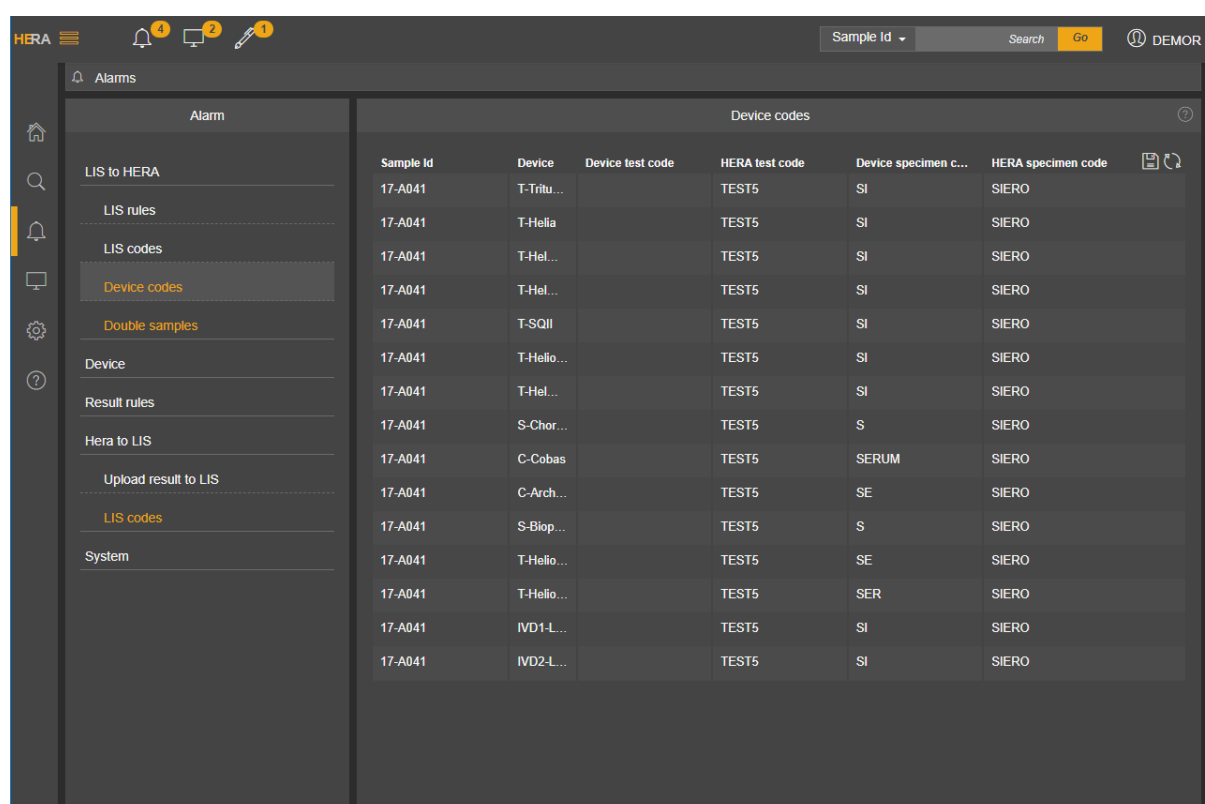
11 Alarms dashboard

You can access to the driver dashboard:

- by clicking on  in the **HERA** software menu.
- by clicking, in case of error, in the driver icon in the main toolbar



In this dashboard, you can see configuration error, system error and rule error.



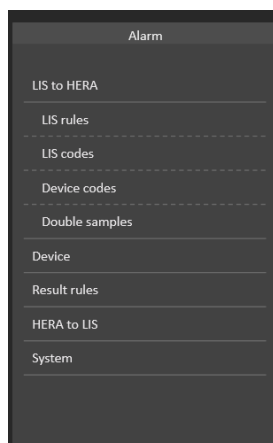
Sample Id	Device	Device test code	HERA test code	Device specimen c...	HERA specimen code
17-A041	T-Trilu...		TEST5	SI	SIERO
17-A041	T-Hella		TEST5	SI	SIERO
17-A041	T-Hel...		TEST5	SI	SIERO
17-A041	T-Hel...		TEST5	SI	SIERO
17-A041	T-SQII		TEST5	SI	SIERO
17-A041	T-Helio...		TEST5	SI	SIERO
17-A041	T-Hel...		TEST5	SI	SIERO
17-A041	S-Chor...		TEST5	S	SIERO
17-A041	C-Cobas		TEST5	SERUM	SIERO
17-A041	C-Arch...		TEST5	SE	SIERO
17-A041	S-Biop...		TEST5	S	SIERO
17-A041	T-Helio...		TEST5	SE	SIERO
17-A041	T-Helio...		TEST5	SER	SIERO
17-A041	IVD1-L...		TEST5	SI	SIERO
17-A041	IVD2-L...		TEST5	SI	SIERO

The panel is organized in two section:

1. **Alarm:** on the left side of the panel. In this section all the possible alarms type are shown. The process name change to orange in case of alarm for that type.
The type of alarms reported are:
 - LIS to HERA: alarm about the download from LIS.
 - Device: alarm about the sending order to device.
 - Result rules: alarm about result rule application.
 - HERA to LIS: alarm about the sending of result to LIS.
 - System: system alarm.
2. **Details:** on the right side of the panel. Clicking on a process in alarm in the alarm section, the error details will be shown in that section.
For each detail section there is the possibility:

-  To access to an info button, in order to have a short description about the error that are collected in the selected section.
-  To refresh the shown list.
-  To reprocess the process in order to eliminate the alarm.

11.1 LIS to HERA



This section contains alarms about the download process from LIS.

Errors are organized in:

- LIS rules: alarms about LIS rules application.
- LIS codes: missing test/specimen coding.
- Device codes: missing device test/specimen coding.
- Double samples: the LIS sends a sample with the same Order Id and the same Sample Id but different Patient Id of another sample already send by the same LIS or by another LIS (in case of multi LIS laboratory).

11.1.1 LIS rules

In the detail section of the *LIS rules alarm* you can find the list of samples affected by an error generated by the application of one or more LIS rules.

Sample Id	Admission Date	Priority
280400	24/04/2018 10:01:21	LIS1PRIOR1
TESTINFO	24/04/2018 09:54:22	LIS1PRIOR1
28042018-10	24/04/2018 09:49:39	LIS1PRIOR1
28042018-11	24/04/2018 09:49:39	LIS1PRIOR1
28042018-13	24/04/2018 09:49:39	LIS1PRIOR1

HERA LIS rules act on input data received from LIS (Tests, Demographic Info, Patient Info) and they can remove or add test from a LIS order.

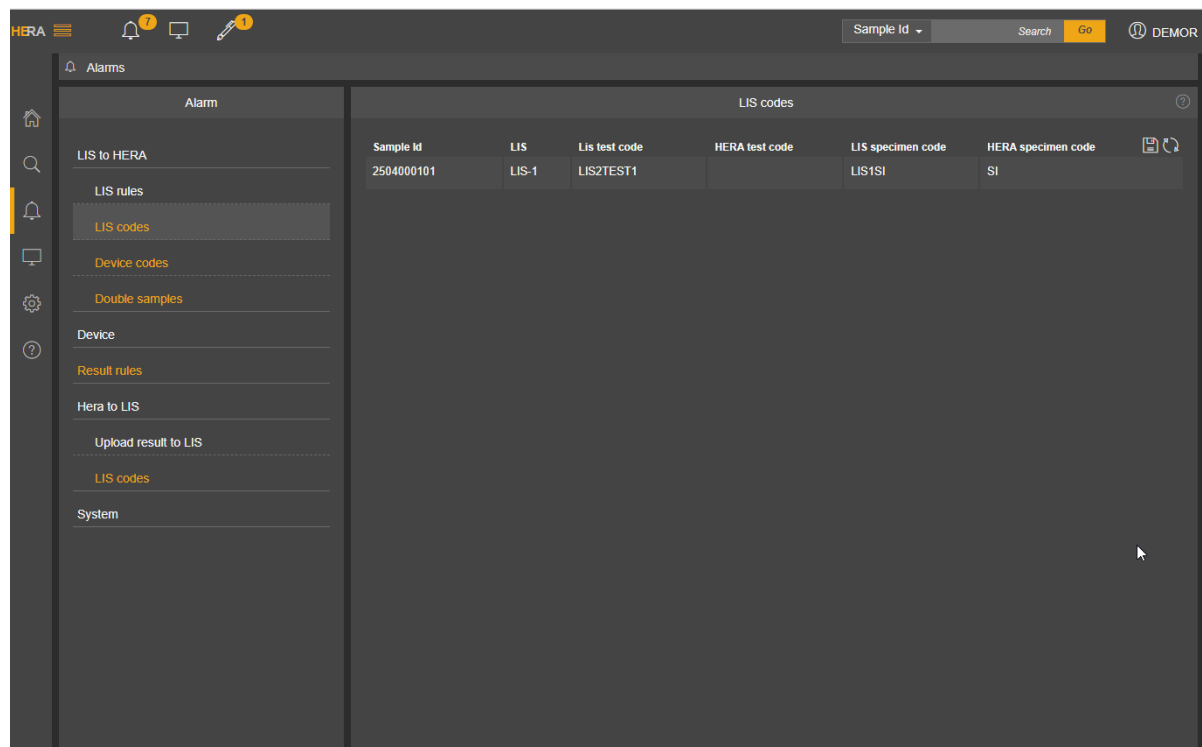
In order to solve the problem, a user with rule configuration rights shall check the LIS rules configuration (Section Control Panel\Configuration\Rule, module "Rule LIS"). After any rule configuration change, by clicking on the *reprocess* icon (diskette icon) of this panel, the LIS rules will be applied again on the listed samples.

By clicking on the refresh icon, the list will be actualized.

Note In this release only Aesku.Diagnostics staff have access to the **HERA** rule system.

11.1.2 LIS codes

In the detail section of the *LIS codes alarm* you can find list of samples and LIS test code sent by the LIS to HERA without a test code and/or a specimen code translation on HERA. The fields 'HERA test code' and/or 'HERA specimen code' will be empty if the respective code configuration is missing. Additional information are available as LIS name and LIS test code to properly identify each case.



Sample Id	LIS	Lis test code	HERA test code	LIS specimen code	HERA specimen code
2504000101	LIS-1	LIS2TEST1		LIS1SI	SI

In order to solve the problem, a user with HERA test configuration rights shall check the configuration between LIS and HERA test/specimen codes.

After any configuration change, by clicking on the *reprocess* icon (diskette icon) of this panel, the new configuration settings will be applied again on the listed samples.

By clicking on the refresh icon, the list will be actualized.

Note For further information about the change to the configuration, please refer to the "Configuration Manual".

11.1.3 Device codes

In the detail section of the *Device codes alarm* you can find the list of samples without a device test code and/or a device specimen code translation on HERA.

The fields 'Device test code' or 'Device specimen code' will be empty if the respective code configuration is missing.

Additional information are available as "Device", "Hera Test Code", "Hera Specimen code" to properly identify each case.

Sample Id	Device	Device test code	HERA test code	Device specimen...	HERA specimen ...
17-A041	T-Trit...		TEST5	SI	SIERO
17-A041	T-Helia		TEST5	SI	SIERO
17-A041	T-Hel...		TEST5	SI	SIERO
17-A041	T-Hel...		TEST5	SI	SIERO
17-A041	T-SQII		TEST5	SI	SIERO
17-A041	T-Hel...		TEST5	SI	SIERO
17-A041	T-Hel...		TEST5	SI	SIERO
17-A041	S-Ch...		TEST5	S	SIERO
17-A041	C-Co...		TEST5	SERUM	SIERO
17-A041	C-Ar...		TEST5	SE	SIERO
17-A041	S-Bio...		TEST5	S	SIERO
17-A041	T-Hel...		TEST5	SE	SIERO
17-A041	T-Hel...		TEST5	SER	SIERO
17-A041	IVD1...		TEST5	SI	SIERO
17-A041	IVD2...		TEST5	SI	SIERO

In order to solve the problem, a user with HERA Device configuration rights shall check the configuration between HERA and Device test/specimen codes.

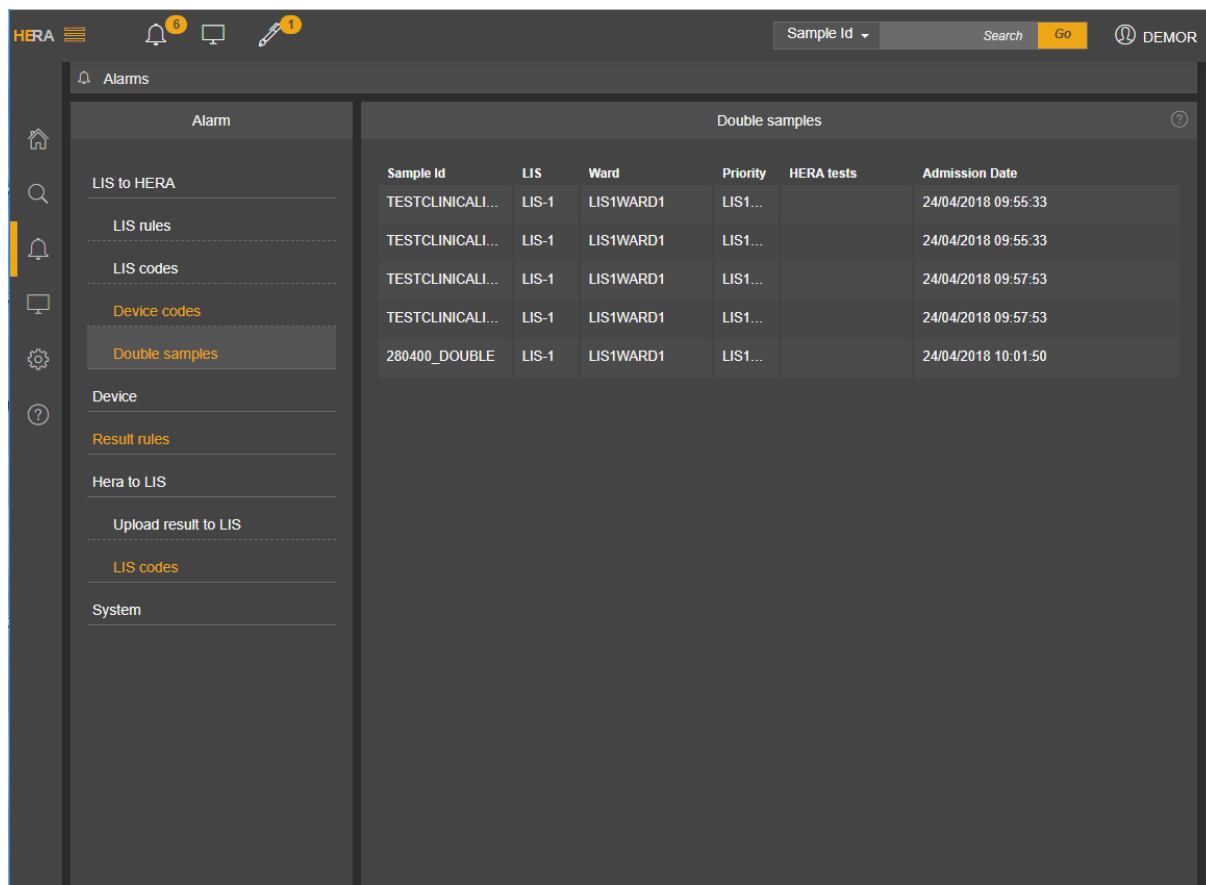
After any configuration change, by clicking on the *reprocess* icon (diskette icon) of this panel, the new configuration settings will be applied again on the listed samples.

By clicking on the refresh icon, the list will be actualized.

Note For further information about the change to the configuration, please refer to the "Configuration Manual".

11.1.4 Double samples

In the detail section of the *Double samples* you can find the list of samples with the same Order Id and the same Sample Id sent by the same LIS (or even by another LIS in case of multi LIS configuration) for different Patient IDs. You have the detail of sample and LIS.

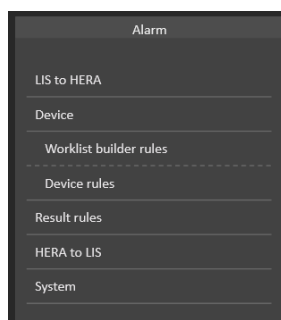


The screenshot shows the 'Alarms' dashboard with a sidebar on the left containing various alarm categories. The 'Double samples' category is selected and highlighted in orange. The main area displays a table of double samples.

Sample Id	LIS	Ward	Priority	HERA tests	Admission Date
TESTCLINICALI...	LIS-1	LIS1WARD1	LIS1...		24/04/2018 09:55:33
TESTCLINICALI...	LIS-1	LIS1WARD1	LIS1...		24/04/2018 09:55:33
TESTCLINICALI...	LIS-1	LIS1WARD1	LIS1...		24/04/2018 09:57:53
TESTCLINICALI...	LIS-1	LIS1WARD1	LIS1...		24/04/2018 09:57:53
280400_DOUBLE	LIS-1	LIS1WARD1	LIS1...		24/04/2018 10:01:50

This sample are not added to the device worklist.

11.2 Device



The screenshot shows the 'Device' section in the 'Alarms' dashboard. The sidebar on the left lists various alarm categories, and the 'Device' category is selected and highlighted in orange. The main area displays a table of device-related alarms.

Alarm
LIS to HERA
Device
Worklist builder rules
Device rules
Result rules
HERA to LIS
System

This section contains alarms about the sending orders to devices. Errors are organized in:

- Worklist builder rules: alarm about builder rules application.
- Device rules: alarm about device rules application.

11.2.1 Worklist builder rules

In the detail section of the *Worklist builder rules alarm* you can find the list of samples affected by an error generated by the application of one or more worklist building rules.

Worklist builder rules		
Sample Id	Admission Date	Priority
280400	24/04/2018 10:01:21	LIS1PRIOR1
TESTINFO	24/04/2018 09:54:22	LIS1PRIOR1
28042018-10	24/04/2018 09:49:39	LIS1PRIOR1
28042018-11	24/04/2018 09:49:39	LIS1PRIOR1
28042018-13	24/04/2018 09:49:39	LIS1PRIOR1

HERA Builder Rules act on the output of the LIS rules. Based on the device configuration, this process creates the HERA work-list for the configured devices and allows to move element from a work list to another.

In order to solve the problem a user with rule configuration rights shall check the configuration of the worklist builder rules (Section Control Panel \Configuration\Rule, module “Rules sample work list”).

After any rule configuration change, by clicking on the *reprocess* icon (diskette icon) of this panel, the worklist building rules will be applied again on the listed samples.

By clicking on the refresh icon, the list will be actualized.

Note In this release only Aesku.Diagnostics staff have access to the **HERA** rule system.

11.2.2 Device rules

In the detail section of the *Device rules alarm* you can find the list of samples affected by an error generated by the application of one or more Device rules.

Device rules		
Sample Id	Admission Date	Priority
280400	24/04/2018 10:01:21	LIS1PRIOR1
TESTINFO	24/04/2018 09:54:22	LIS1PRIOR1
28042018-10	24/04/2018 09:49:39	LIS1PRIOR1
28042018-11	24/04/2018 09:49:39	LIS1PRIOR1
28042018-13	24/04/2018 09:49:39	LIS1PRIOR1

HERA Driver Rules can act on a single sample of a work list to manipulate samples attributes (test state, dilution, etc.).

In order to solve the problem a user with rule configuration rights shall check the configuration of the Device rules (Section Control Panel \Configuration\Rule, module “Rules device”).

After any rule configuration change, by clicking on the *reprocess* icon (diskette icon) of this panel, the device rules will be applied again on the listed samples.

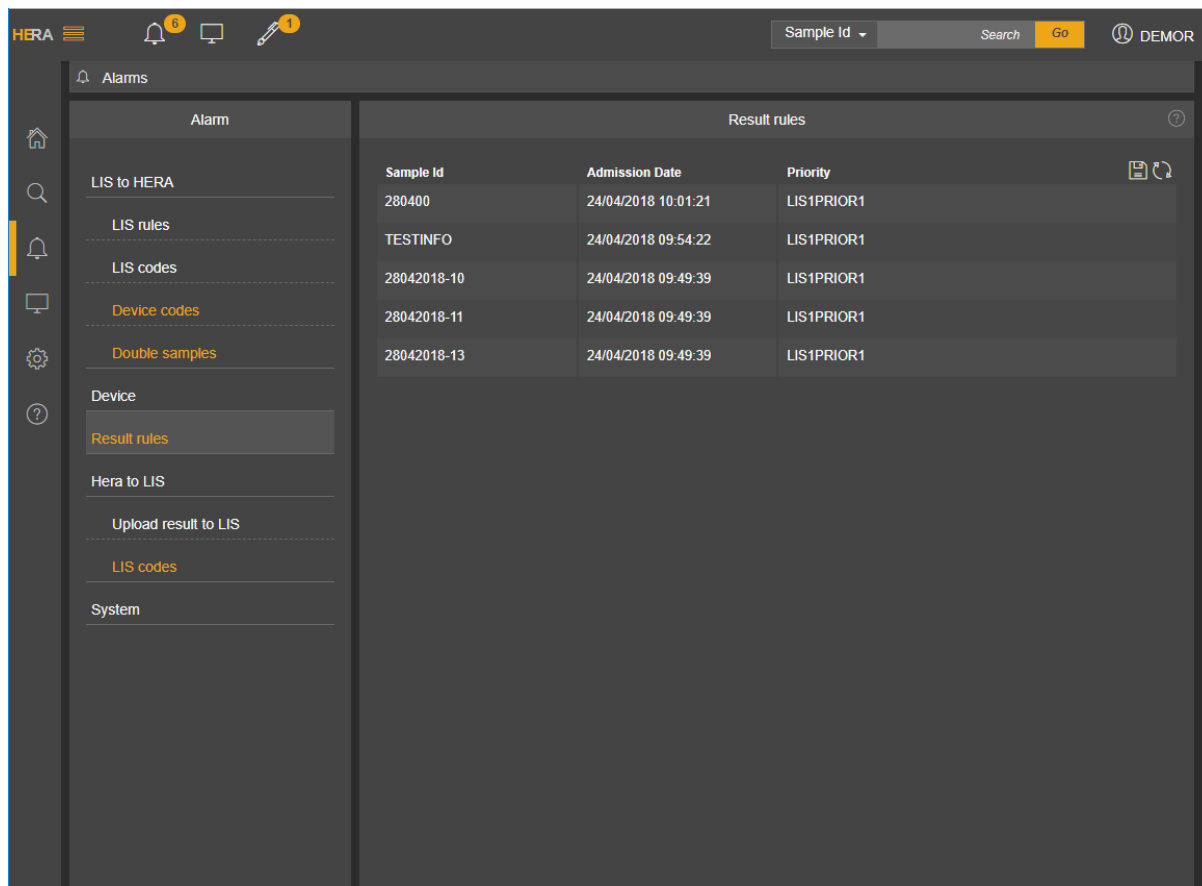
By clicking on the refresh icon, the list will be actualized.

Note In this release only Aesku.Diagnostics staff have access to the **HERA** rule system.

11.3 Result rules

This section contains alarms about results rule application.

In the detail section of the *Result rules alarm* you can find the list of samples affected by an error generated by the application of one or more Result rules.



Alarm	Sample Id	Admission Date	Priority
LIS to HERA	280400	24/04/2018 10:01:21	LIS1PRIOR1
LIS rules	TESTINFO	24/04/2018 09:54:22	LIS1PRIOR1
LIS codes	28042018-10	24/04/2018 09:49:39	LIS1PRIOR1
Device codes	28042018-11	24/04/2018 09:49:39	LIS1PRIOR1
Double samples	28042018-13	24/04/2018 09:49:39	LIS1PRIOR1

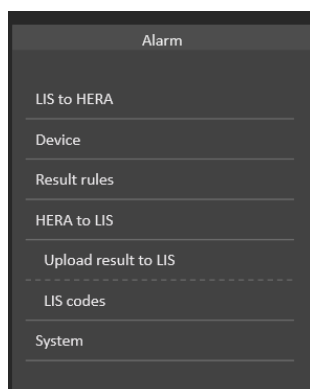
HERA Result Rules act on the data received from the connected instruments. Combining these data with sample information, patient information, demographic information and others. It's possible to trigger different consequences/actions like rerun, reflex, block, results translations, etc.

In order to solve the problem a user with rule configuration rights shall check the configuration of the Rules result (Section Control Panel \Configuration\Rule, module "Rules result"). After any rule configuration change, by clicking on the *reprocess* icon (diskette icon) of this panel, the Results rules will be applied again on the listed samples.

By clicking on the refresh icon, the list will be actualized.

Note In this release only Aesku.Diagnostics staff have access to the **HERA** rule system.

11.4 HERA to LIS



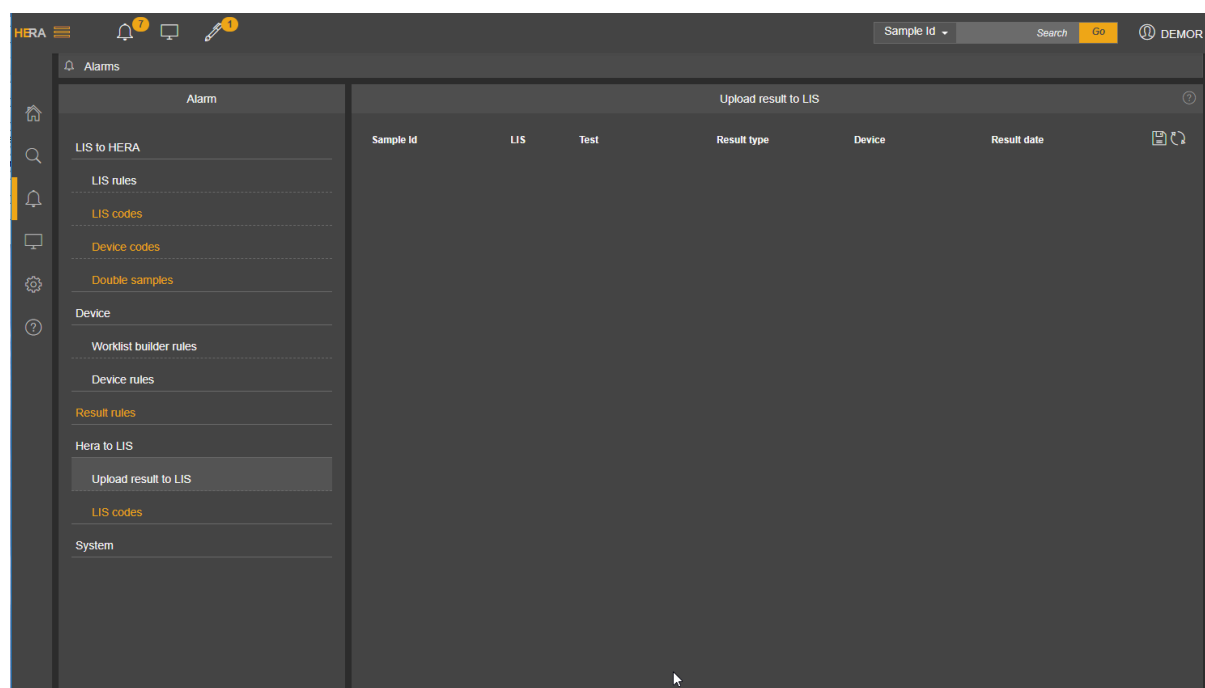
This section contains alarms about the sending of result to LIS. Errors are organized in:

- Upload result to LIS: alarms about the sending of result to LIS.
- LIS code: alarms about the missing test coding.

11.4.1 Upload result to LIS

In the detail section of the *Upload result of LIS alarm* you can find the list of samples with results that are not being uploaded to the LIS.

You have the detail of sample, LIS, test, device and result in error.



The problem must be investigated on different levels, from the HERA configuration side to the communication level side.

This panel shows several details about the samples in Upload to LIS error as LIS destination, test, device and result date.

After any corrective action, by clicking on the *reprocess* icon (diskette icon) of this panel, HERA will try again to send these results to the LIS.

By clicking on the refresh icon, the list will be actualized.

11.4.2 LIS codes

In the detail section of the *LIS codes alarm* you can find the list of samples with results not uploaded to the LIS because related to test not ordered by the LIS, but anyway these tests were performed on a device connected to HERA.

HERA

6

1

Sample Id

Search

Go

DEMOR

Alarms

Alarm

LIS to HERA

LIS rules

LIS codes

Device codes

Double samples

Device

Result rules

Hera to LIS

Upload result to LIS

LIS codes

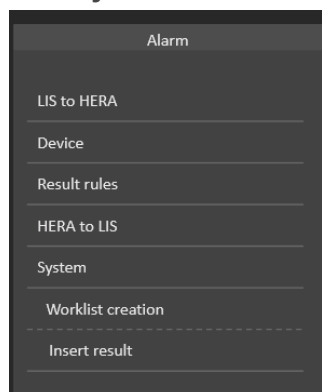
System

LIS codes

Sample Id	LIS	Test	Lis test code	Result type	Device
20040001013	LIS-1			Result	T-Triturus
20040001015	LIS-1			Result	T-Triturus
20040001014	LIS-1			Result	T-Triturus
20040001017	LIS-1			Result	T-Triturus
20040001016	LIS-1			Result	T-Triturus
20040001019	LIS-1			Result	T-Triturus
20040001018	LIS-1			Result	T-Triturus
1904000301	LIS-1	Ethanolamin-M		Result	T-Triturus
1904000301	LIS-1			Result	T-Triturus
20040001011	LIS-1			Result	T-Triturus
20040001010	LIS-1			Result	T-Triturus

In order to solve the problem, the test must be ordered on the LIS side and then must be sent to HERA. After the corrective action, by clicking on the reprocess icon (diskette icon) of this panel, HERA will try again to send these results to the LIS. By clicking on the refresh icon, the list will be actualized.

11.5 System



Alarm
LIS to HERA
Device
Result rules
HERA to LIS
System
Worklist creation
Insert result

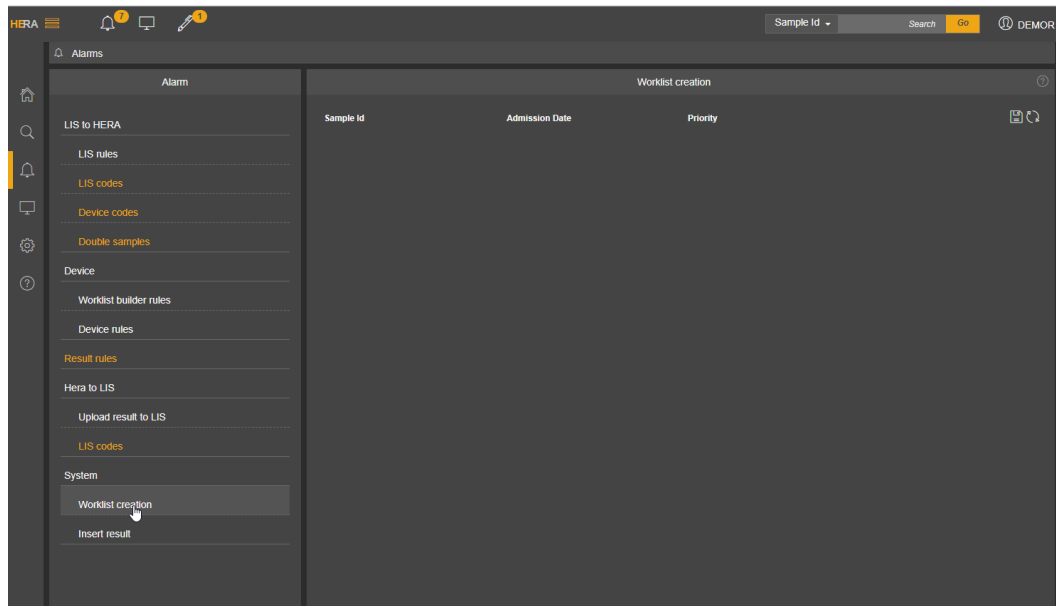
This section contains system alarms.

Errors are organized in:

- Worklist creation: errors in the worklists creation.
- Insert results: error in the insert and or validation of results.

11.5.1 Worklist creation

In the detail section of the *Worklist creation alarm* you can find the list of samples that the system could not insert in devices worklist. You have the detail of samples.



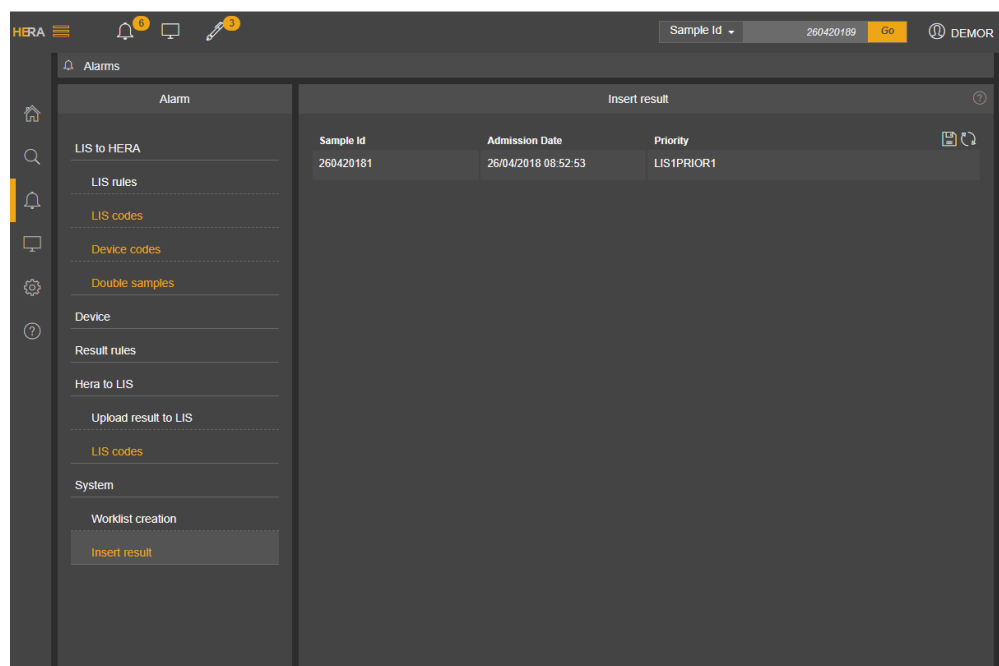
The investigation must be addressed to HERA development team.

After any corrective action, by clicking on the *reprocess* icon (diskette icon) of this panel, HERA will reprocess the listed samples in order to build again its worklists.

By clicking on the refresh icon, the list will be actualized.

11.5.2 Insert result

In the detail section of the *Insert result alarm* you can find the list of samples for which the system could not save or validate automatically result. You have the detail of each samples in error.



The screenshot shows the HERA Alarms dashboard. On the left is a sidebar with navigation links: Home, Search, Alarms (selected), LIS rules, LIS codes, Device codes, Double samples, Device, Result rules, Hera to LIS, Upload result to LIS, LIS codes, System, Worklist creation, and Insert result (highlighted). The main area is titled 'Alarms' and contains a section for 'Insert result'. This section displays a table with the following data:

Sample Id	Admission Date	Priority
260420181	26/04/2018 08:52:53	LIS1PRIOR1

At the top right of the dashboard, there is a 'Sample Id' dropdown menu with the value '260420181', a 'Go' button, and a 'DEMOR' button. A 'reprocess' icon (diskette) is visible next to the table header.

The investigation must be addressed to HERA development team.

After any corrective action, by clicking on the *reprocess* icon (diskette icon) of this panel, HERA will reprocess the listed samples in order to save or validate the results.

By clicking on the refresh icon, the list will be actualized.

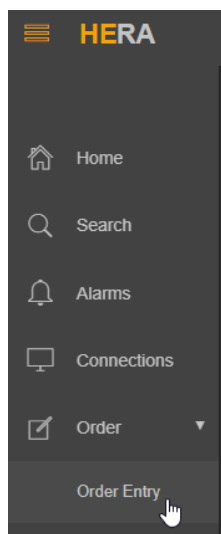
12 Order Module

HERA provide you with an order module that has two main functionalities:

- **Order entry:** to insert manually sample on HERA.
- **Order query:** to query the sample/order information from an external LIS.

Note The order query mode is not available in this release.

12.1 Order Entry



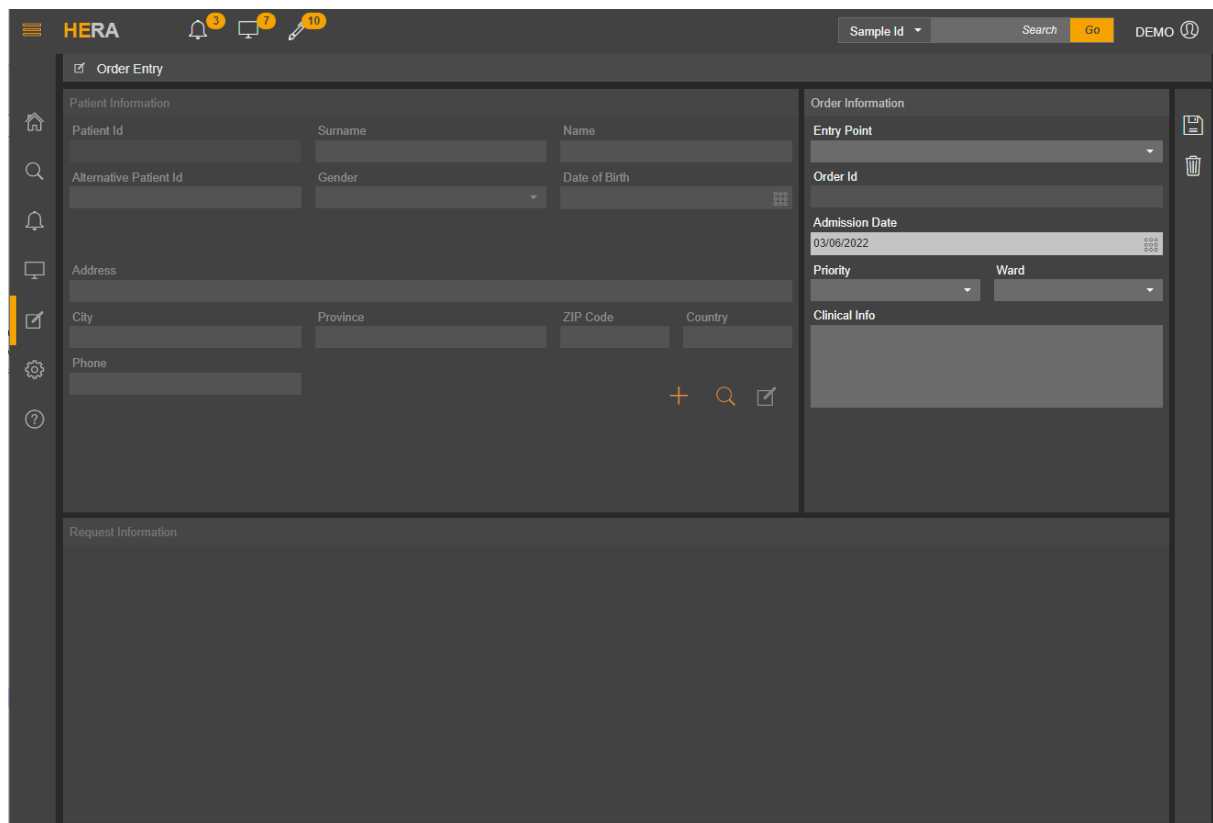
If you have the rights, you can access to the “order entry” panel from the main menu.

The panel is organized in three sections:

- **Patient information:** contains the patient information. You can search for an existing patient, modify it, or insert a new patient.
- **Order Information:** contains the order information and the entry point information.
- **Request:** contains the panel to order the samples/tests belonging to the specific order entry.

On the right side of the panel are available the following icons:

- Order saving
- Order deleting


 The screenshot shows the 'Order Entry' panel in the HERA application. The panel is divided into three main sections: 'Patient Information', 'Order Information', and 'Request Information'.

 - **Patient Information:** Includes fields for Patient Id, Surname, Name, Alternative Patient Id, Gender, Date of Birth, Address, City, Province, ZIP Code, and Country.

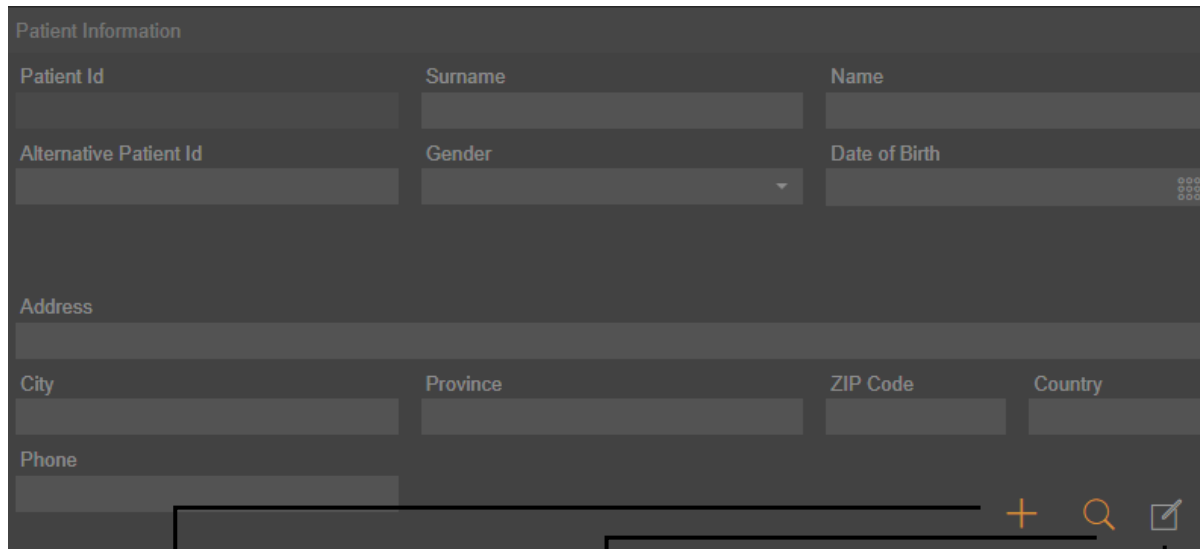
 - **Order Information:** Includes fields for Entry Point, Order Id, Admission Date (03/06/2022), Priority, and Ward.

 - **Request Information:** A large empty area for entering request details.

 On the right side of the panel, there are icons for saving (a plus sign) and deleting (a trash can) the order. The top of the panel has a header with the HERA logo, notification icons, and a search bar.

12.1.1 Patient information

From this section you can:



INSERT A NEW PATIENT.

**SEARCH FOR
AN EXISTING PATIENT.**

**MODIFY AN
EXISTING PATIENT.**

Clicking on the “add” icon, the editable field of the patient section will be highlighted, and you can insert the information.

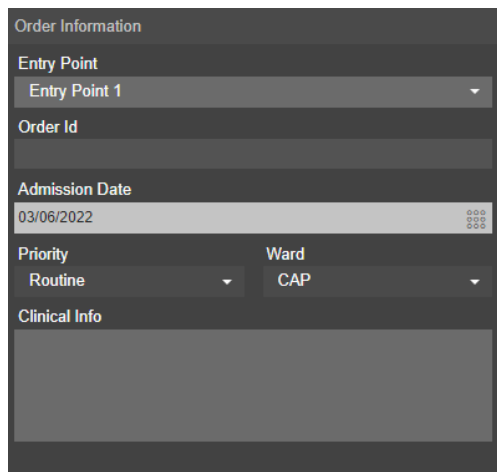
Clicking on the “magnifying glass” icon, you can insert the search parameter and click again on the search icon. A pop up will display the list of the HERA patients responding to the specified patient info. You can select the wanted patient and the information will be loaded on the patient section, or close and insert a new patient, if the wanted one is not present.

This option makes sense only after the loading of an existing patient, so will be enabled (orange colour) only after a search. At the beginning is disabled (grey colour). The patient data changes will be saved when the new request will be saved.

Note

In case of new patient, the Patient ID is automatic calculate during the saving operation on the base of the first available number responding to the patient sequences range defined in the entry point configuration.

12.1.2 Order information



Order Information

Entry Point
Entry Point 1

Order Id

Admission Date
03/06/2022

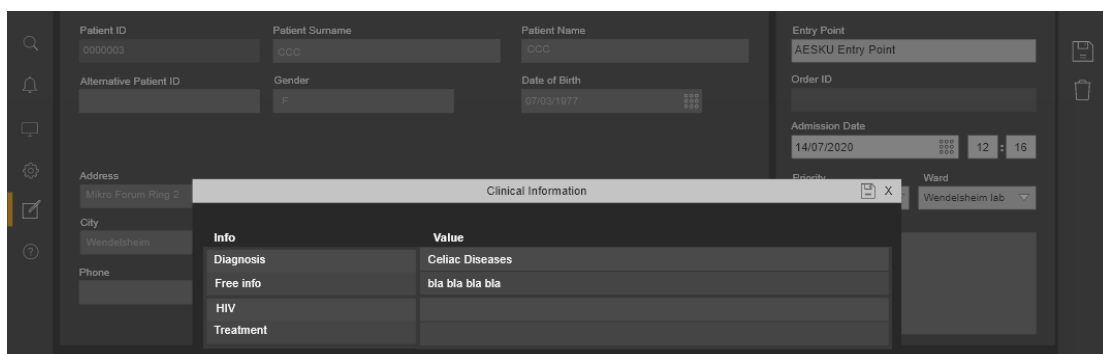
Priority
Routine

Ward
CAP

Clinical Info

In this section you can specify:

- Entry Point**
 If you have rights only on an Entry Point, the entry point will be shown as default; otherwise you can select the wanted entry point.
- Admission Date**
 By default is shown the current date.
- Priority**
 If a default value is configured for the priority of the specific entry point, the default value is already shown in the section. You can change manually the priority value if needed.
- Ward**
 If a default value is configured for the ward of the specific order entry, the default value is already shown in the section. You can change manually the ward if needed.
- Clinical Info**
 Click on the field to open the list of the available clinical info and specify a value for it.



Patient ID: 0000003, Patient Surname: CCC, Patient Name: CCC, Entry Point: AESKU Entry Point

Alternative Patient ID, Gender: F, Date of Birth: 07/03/1977, Order ID, Admission Date: 14/07/2020 12:16

Address: Mikro Forum Ring 2, City: Wendelsheim, Phone, Ward: Wendelsheim lab

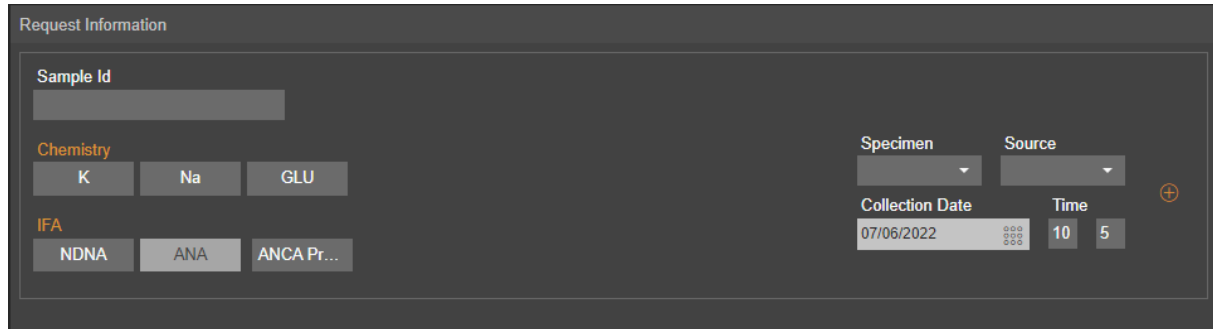
Clinical Information

Info	Value
Diagnosis	Celiac Diseases
Free info	bla bla bla bla
HIV	
Treatment	

After saving, the inserted clinical info will be visible in the panel. To cancel a wrong clinical info, click again on the box in order to open the pop-up and delete from there the inserted information.

Note The order ID is automatic calculated during the saving operation on the base of the first available number responding to the order sequences range defined in the entry point configuration.

12.1.3 Request information



From this section you can:

- **Sample ID**
You can specify in this field the sample id. If you don't specify it, it will be automatically calculated, during the saving, in according to the configuration.
- **Test**
Select tests to perform. If a default value is configured, the button is pre-selected.
- **Specimen**
Clicking on the specimen field, all the configured values will be shown in a drop down menu. You can select the wanted one, that will be loaded in the field.
If a default value is configured, the default value is already shown in the section. You can change manually the value if needed.
- **Source**
Optional field.
Clicking on the source field, all the configured values will be shown in a drop down menu. You can select the wanted one, that will be loaded in the field.
If a default value is configured, the default value is already shown in the section. You can change manually the value if needed.
- **Collection Date**
By *default* is shown the *current date*. Specify the sample collection date, if it is different from the proposed one.
- **+ icon**
Allow you to add another sample to the order.
Clicking on the "add" icon a new sample section will be generated and you can add an other sample.

You have to select at least a test and the specimen, in order to save the new order.

12.1.4 Buttons

The order entry module has two buttons available:

- Save order
- Cancel order

The screenshot shows the order entry module interface. On the right side, there are two buttons: a green 'Save' button and a red 'Cancel' button. Arrows point from these buttons to the text 'Save the data' and 'Cancel the data' respectively.

Patient Information

Patient Id	Surname	Name
100004	test2	test
Alternative Patient Id	Gender	Date of Birth
LISPAT0000003	Male	08/11/2021

Address

Mikroforum Ring 3

City: Wendelsheim, Province: , ZIP Code: 55234, Country: Germany

Phone: +49 6734 11111

Order Information

Entry Point: Entry Point 1

Order Id:

Admission Date: 07/06/2022

Priority: Routine, Ward: CAP

Clinical Info

INFO1: clinical info

Request Information

Sample Id:

Chemistry: K, Na, GLU

IFA: NDNA, ANA, ANCA Pr...

Specimen: SIERO, Source:

Collection Date: 07/06/2022, Time: 10:05

12.1.4.1 Save order

Clicking on the **save** button, a popup shows you the summary of the request.

The 'Summary' popup window displays the following information:

Patient Information:

- Id: 100004
- test2 test
- Date of Birth: 08/11/2021

Order Information:

- Id: will be generated
- Admission Date: 07/06/2022
- CAP
- R

Clinical Info:

- INFO1: clinical info

Barcode	Specimen	Test	Collection Date
Will be generated	SI	ANA	07/06/2022 10:5

Buttons: Save, Save and Print

If some value has to be change, you can click on the X (top right) and modify the order from the order entry panel.

If the data are ok, you can:

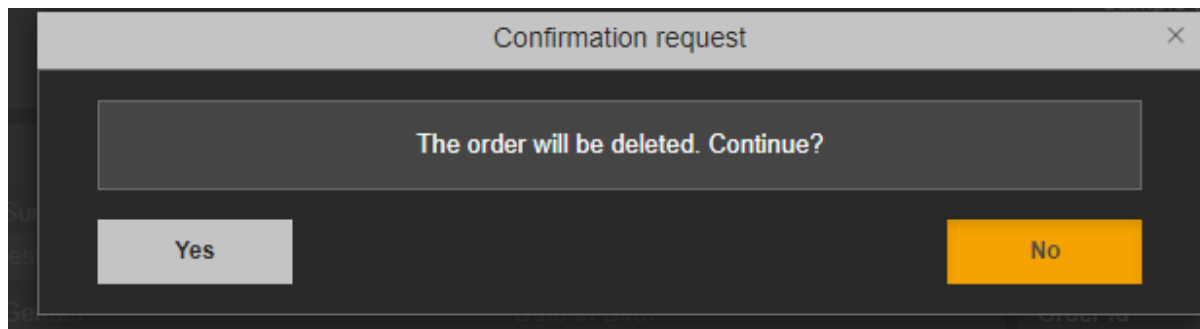
- Save the order
- Save the order and print the barcode labels.

After clicking on the “save” or “save and print” button, the panel is cleared and a confirmation message will be raised.

- Note** The saving button raises an info message if mandatory fields are missing.
- Patient panel: patient name, patient surname.
 - Request section: test, specimen.
 - Order panel: entry point.

12.1.4.2 Cancel order

Clicking on the delete icon the order will be not saved.
A popup message asks to confirm the operation:

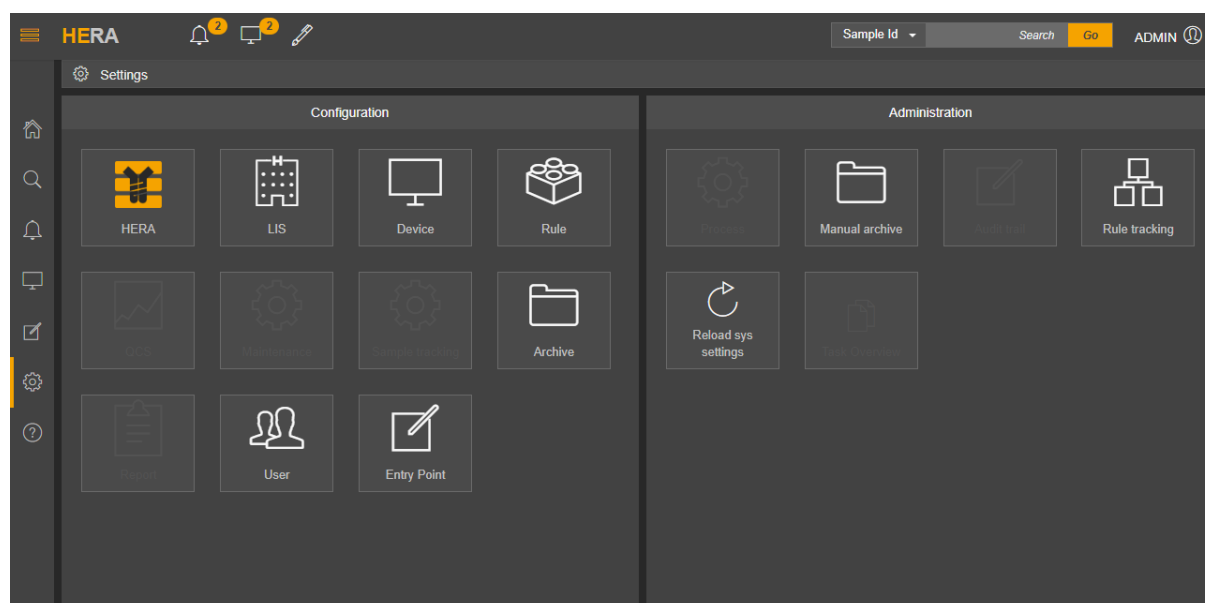


↑
you are redirected to the
cleaned order panel.

↑
you are redirected to the
compiled order panel.

13 Settings dashboard

You can access to the settings dashboard clicking on the settings icon in the **HERA** menu software.



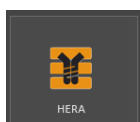
The panel is organized in two section:

- configuration section;
- administration section.

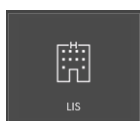
Only the user with configuration and administration right can have access to the functionality of this dashboard.

13.1 Configuration

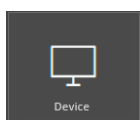
The configuration section allows you to configure the **HERA** software in all his features.



From this button you have access to the configuration of the HERA entities: laboratory, department, device, priority, ward, clinical info, test specimen, dilution and comment.



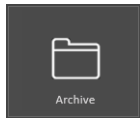
From this button you have access to the configuration of the LIS communication driver/channel and to the coding configuration between LIS and HERA entities.



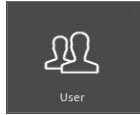
From this button you have access to the configuration of the devices communication driver/channel and to the coding configuration between devices and HERA entities.



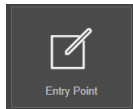
From this button you have access to the rules configuration.



From this button you have access to the configuration of the archive time for samples and operation log.



From this button you can have access to the user configuration and you can manage roles and security parameter (ex. password expiration).



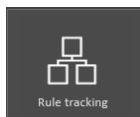
From this button you have access to the entry point configuration needed for the order entry module.

Note Please refer to the “Configuration Manual” to have information about how configure all the **HERA** software features.

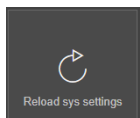
Note The disabled buttons are not available in this release: QC, maintenance, sample tracking, report.

13.2 Administration

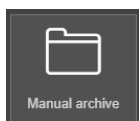
The administration section contains the following functionality.



From this button you can access to the dashboard in which you can investigate which rules have been applied to a sample.



From this button you can reload sys settings.
Available only for root user.



From this button you can archive/delete manually samples and patients.
Only the authorized users can have access to the archive/delete samples page. Only admin users can have access to the delete patients page.

Note The disabled buttons are not available in this release: process, audit trail, task overview.

14 Help dashboard

The help dashboard contains information on the installed software version and contact information of the manufacturer. Additionally, you will find a PDF version of the user manuals.

14.1 Software information

The label of the product give you information on:



14.2 User manuals

In this panel you will find a link to access to the user manuals.



By clicking on the manual name the PDF version will be displayed.