

**LABMASTER LUCIA™**  **Analyzer**  
**VET** Instructions for Use





# Contents

<b>1. Important information</b>	<b>4</b>
1.1 Intended Use	4
1.2 Disclaimer	4
1.3 Explanation of Symbols	4
1.4 Safety information	5
1.5 Disposal of the Labmaster LUCIA™ Vet Analyzer	5
1.6 Declaration of Conformity	6
1.7 Warranty	6
<b>2. Labmaster LUCIA™ Vet Analyzer</b>	<b>6</b>
2.1 Principle	6
2.2 Technical Specification	7
2.3 Delivery, transportation and Storage	7
2.4 Package contents	8
2.5 Installation procedure	8
<b>3. Graphical User Interface (GUI)</b>	<b>8</b>
3.1 Operation	8
3.2 Login with Operator ID	9
3.3 Home Screen	9
3.4 Settings Screen	9
3.5 Measurement History	10
<b>4. Sample measurement</b>	<b>11</b>
<b>5. Quality Control (QC) Measurement</b>	<b>14</b>
<b>6. Analyzer Cleaning</b>	<b>15</b>
6.1 Start/End of Daily Use Cleaning	15
6.2 Spillages	15
<b>7. Troubleshooting</b>	<b>16</b>
7.1 Reminder Message	16
7.2 Warning Message	16
7.3 Operational Issues	17
<b>8. Result Export</b>	<b>18</b>
8.1 Application Function Keys	18
8.2 Labmaster LUCIA™ Windows Application (Windows® 7 or higher)	18
8.3 Labmaster LUCIA™ Vet Android Application	20
8.4 Application Error Messages	22
<b>9. Contact Information</b>	<b>22</b>

# 1. Important information

Thank you for choosing Labmaster LUCIA™ Vet Products! Please read this manual thoroughly before operating the Labmaster LUCIA™ Vet Analyzer (LM127). Follow the instructions in this manual.


















## 1.1 Intended Use

Labmaster LUCIA™ Vet Analyzer is a semi-automated point-of-care device used in *in vitro* veterinary diagnostics by a healthcare professional or an adequately trained professional. Labmaster LUCIA™ Vet Analyzer is used together with Labmaster LUCIA™ Vet Test for quantitative or qualitative *in vitro* veterinary diagnostic analysis of analytes. LUCIA™ Vet Analyzer measures CECL (cathodic electrochemiluminescence) signals and calculates analyte concentrations based on emission signals emitted from LUCIA Vet cassettes. LUCIA Vet Tests are purchased separately.

## 1.2 Disclaimer

- Not for human diagnostic use.
- Use of LUCIA Vet Analyzer is compatible only with LUCIA Vet test manufactured by Labmaster Ltd.
- In order to obtain accurate results, LUCIA Vet tests should always be performed with LUCIA Vet Analyzer at temperature range of +18 °C to +30 °C (+64 °F to +86 °F) and a maximum relative humidity of 80%.
- Avoid exposure of LUCIA Vet Analyzer to dust, moisture or direct sunlight.
- Do not mishandle or disassemble your LUCIA Vet Analyzer in any event.

## 1.3 Explanation of Symbols

	Manufacturer		WEEE; waste electrical and electronic equipment
	Date of manufacture		Keep dry
	European Conformity		Keep away from sunlight
	Temperature limit		Fragile, handle with care
	Consult Instruction for Use		This side up
	Serial Number		Bluetooth
	Catalogue number		Caution
	Direct current		Biohazard
	Electrical hazard		

## 1.4 Safety information



The operator should ensure they have read the Safety Information below, before using the Labmaster LUCIA™ Vet Analyzer.

This also includes the Warnings and precautions, Health and safety Information, Disposal, Analytical precautions, Procedures and limitations referred to in the test Kit Instructions for Use.



- Ensure that LUCIA Vet Analyzer is in proper working condition before operating. Read and follow all instructions, warnings and cautions before using the LUCIA Vet Analyzer.
- Misuse of LUCIA Vet Analyzer can cause harm to user and/or surroundings.
- Do **NOT** allow LUCIA Vet Analyzer to come in contact with liquid. In case LUCIA Vet Analyzer comes in contact with liquid, unplug it immediately.
- Use LUCIA Vet Analyzer only for its intended use described in this manual.
- Never attempt to remove or open any parts of the LUCIA Vet Analyzer.
- The use of a damaged or faulty LUCIA Vet Analyzer can result in a personal injury.
- Never open LUCIA Vet Analyzer's door while measuring.
- Do not use any power supply unit other than provided with LUCIA Vet Analyzer.
- Do not use LUCIA Vet Analyzer with any other accessories than those instructed by Labmaster Ltd.
- Do not place anything on top of LUCIA Vet Analyzer.
- Do not use LUCIA Vet Analyzer outdoors.
- Keep LUCIA Vet Analyzer away from mechanical and magnetic interference.
- Refer to general and local Laboratory Procedures, Rules and Regulations for the correct level of Personal Protection Equipment (PPE) to wear.



### Labmaster LUCIA™ test kit Instructions for Use

Refer to the **LUCIA Vet Test kit Instructions for Use** for all Warnings and Cautions, Health and Safety Information, Disposal, Analytical Precautions, Procedures and Limitations.

## 1.5 Disposal of the Labmaster LUCIA™ Vet Analyzer



The Labmaster LUCIA™ Vet Analyzer **MUST** be disposed of in accordance with the Waste Electrical and Electronic Equipment Directive (WEEE Directive) which is the European Community Directive 2012/19/EU on waste electrical and electronic equipment (WEEE).



For other countries – refer to the Local Laws and Regulations



A decommissioned Labmaster LUCIA™ Vet Analyzer must be treated as a potentially biohazardous waste.

- Disinfect the analyzer before disposing: wipe exterior of the analyzer and the tray with 70% Iso-propanol (IPA).

For further LUCIA Vet Analyzer disposal information, please contact Labmaster Technical Support. [support@labmaster.fi](mailto:support@labmaster.fi)

## 1.6 Declaration of Conformity

Hereby, Labmaster Ltd. declares that LUCIA™ Vet Analyzer is in compliance with the RoHS directive (Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment 2011/65/EU) and with RED directive (Radio equipment directive 2014/53/EU).

The full text of the EU declaration of conformity is available at the following internet address:

[www.labmaster.fi](http://www.labmaster.fi)

The Labmaster LUCIA™ Vet Analyzer complies with the electromagnetic emission and immunity requirements described in the standard IEC 61326-2-6.

The analyzer fulfills the FCC class A requirements. This equipment is not intended for use in residential environments and may not provide adequate protection to radio reception in such environments.

## 1.7 Warranty

Labmaster Ltd. offers the customer a 24-month limited warranty on a new Labmaster LUCIA™ Vet Analyzer. The warranty period starts within 1 month of dispatch.

- In a situation of manufacturing defect during warranty period, Labmaster Ltd. will repair or replace the system/components at its discretion.
- Contact Labmaster Support [support@labmaster.fi](mailto:support@labmaster.fi).



### Warranty Disclaimer

- In no event shall Labmaster Ltd. be liable for any consequential or incidental damages arising from the use or misuse of this product.
- The warranty will be invalidated if consumables not authorized by Labmaster Ltd. are used, or if unauthorized persons perform alterations or attempt repairs.
- The warranty does not cover consumable parts or carriage costs from the customer's address to Labmaster Ltd.
- For further information on Warranty, contact Labmaster Support:  
[support@labmaster.fi](mailto:support@labmaster.fi)

## 2. Labmaster LUCIA™ Vet Analyzer

### 2.1 Principle

The Labmaster LUCIA™ Vet Analyzer is an instrument based on cathodic electrochemiluminescence. The instrument is designed to be used only with Labmaster LUCIA™ Vet Test.

LUCIA Vet Test is based on a formation of immunochemical complex with the analyte to be measured and labelled antibody. The excess labeled antibody is washed away during an automatic step which need no user interaction. Exciting current is supplied to the labelled complex. Resulting electrochemiluminescence is measured and the on-board microprocessor calculates the result of the analyte using a pre-programmed calibration. The result is displayed on the screen of the LUCIA Vet Analyzer.

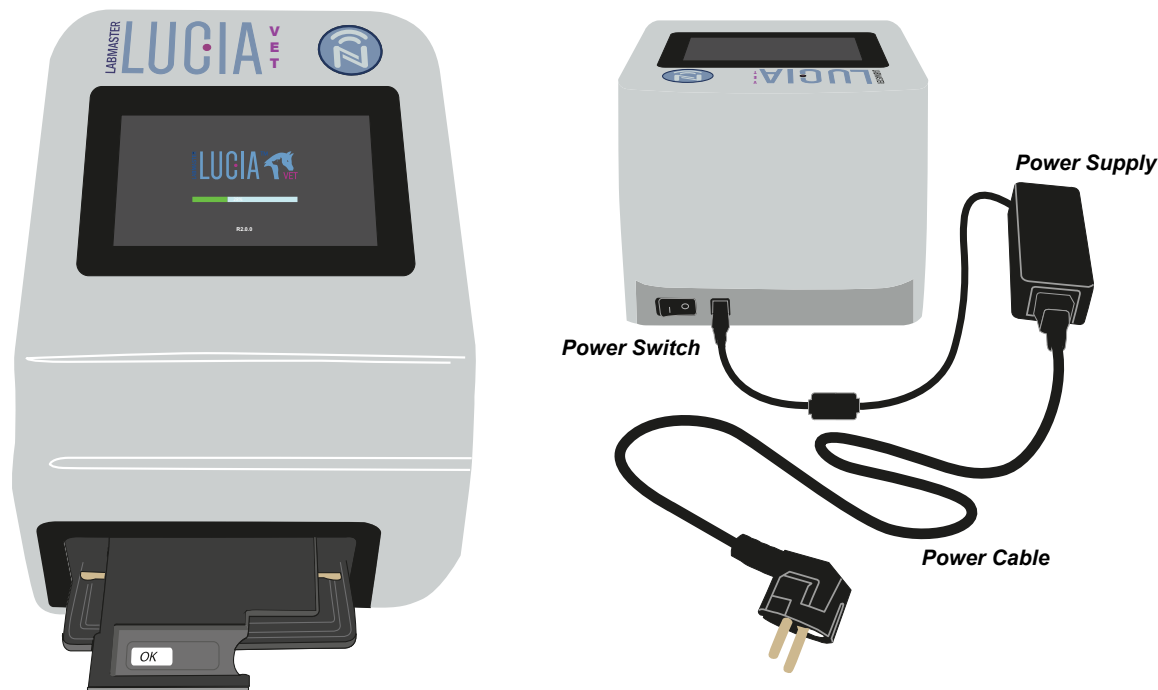


Figure 1. Labmaster LUCIA™ Vet Analyzer

## 2.2 Technical Specification

### Physical Description and Power Requirements

- Dimensions :- 255 mm (L) x 195 mm (W) x 160 mm (H)
- Weight :- 3.6 Kg
- Display :- 5" Touchscreen
- Power Supply :- 100-240 V AC (50/60 Hz)

### Operational environment

- Temperature :- +18 °C to +30 °C (+64 to +86 °F)
- Humidity :- Maximum relative humidity: 80%
- Location :- Dry, clean, levelled surface away from direct sunlight, mechanical and magnetic interference

## 2.3 Delivery, transportation and Storage



**Delivery:** -Inspect the analyzer for any signs of damage. If there are signs of damage to the Labmaster LUCIA™ Vet Analyzer, contact Labmaster Technical support: [support@labmaster.fi](mailto:support@labmaster.fi)

**Transportation:** -When transporting Labmaster LUCIA™ Vet Analyzer, keep dry, upright and protected from mechanical shocks. Use the original analyzer box for transportation. The transportation temperature range is +2 °C to +50 °C (+35° F to +122° F).

**Storage:** -Store Labmaster LUCIA™ Analyzer in dry, upright and protected from mechanical shocks. The original analyzer box should be used for storing the analyzer if needed for long term out of use. The storage temperature range is +2 °C to +50 °C (+35° F to +122° F).



Ensure the Labmaster LUCIA™ Vet Analyzer is decontaminated before transportation or Storage.

## 2.4 Package contents

To set-up LUCIA Vet Analyzer for the first time, unbox the contents of the package as listed below.

- Inspect the contents for any physical damage and/or missing component(s).

1. LUCIA™ Vet Analyzer 2. Power Cable 3. Power Supply unit (PSU) 4. Instructions for Use (IFU)

## 2.5 Installation procedure



Ensure that there is enough space at the front of the Labmaster LUCIA™ Vet Analyzer to allow the tray to move in and out. Min:- **6 cm**

Ensure the final location of the Labmaster LUCIA™ Vet Analyzer is dry, clean and on a level surface. The analyzer must **NOT** be placed in direct sunlight or be affected by mechanical or magnetic interference.

- Connect the power cable into the PSU.
- Connect the PSU's output lead to the Labmaster LUCIA™ Vet Analyzer
- Plug the power input cable from PSU to the external AC power outlet.
- Power on the analyzer by using the power switch at the rear of the Labmaster LUCIA™ Vet Analyzer.
  - While powering, the Labmaster LUCIA™ Vet Analyzer will execute a series of self-check routines.
  - The tray will move out and back in.
  - Upon successful completion, the Operator ID screen will be displayed.
- The Analyzer must be powered on for 30 minutes before use.

## 3. Graphical User Interface (GUI)

### 3.1 Operation

The Labmaster LUCIA™ Vet Analyzer is operated with Primary Functions Icons. Each Primary Function icon is represented and controlled by corresponding keys on the touch screen. The primary function icons of the Labmaster LUCIA™ Analyzer are described below.



Accept



Cancel



Return



Settings



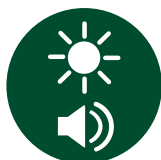
Lock



Language



Time and Date



Brightness and Volume



Sample measurement



Measurement history



Quality Control



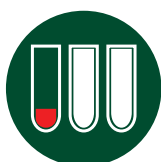
Light Control measurement



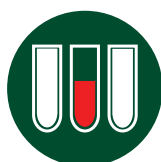
Error Log



Quality Control measurement



QC Low measurement



QC Mid measurement



QC High measurement






**NOTE:-** Screen images shown in this instructions for use are representative of those displayed by the system.

## 3.2 Login with Operator ID

The Labmaster LUCIA™ Vet Analyzer returns to the Operator ID screen after completion of automatic self-check routines. The operator will be required to enter their Operator ID.

**Note:- The Operator ID should be no longer than 10 characters.**

1. Tap on the Operator ID window. See Figure 2.
  - This will launch the virtual keyboard.
2. Enter Operator ID using virtual keyboard.
3. Tap the Accept icon  .
  - Once the operator ID is entered and accepted, the analyzer moves to the Home Screen. See Figure 3.

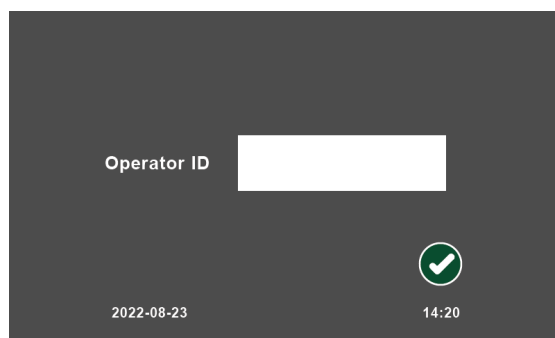


Figure 2. Operator ID Screen

## 3.3 Home Screen

In the Home Screen, see Figure 3, the operator can perform the following:


1. Go to Settings
2. Sample measurement
3. Quality control measurements
4. View Measurement history
5. Change the Operator ID




Figure 3. Home Screen

### 3.3.1. Change the Operator ID

To change the Operator ID, carry out the following procedure:

1. Tap on the Lock icon in the Home screen.
  - A text box will appear next to the Operator ID.
2. Reselect the text box.
  - This will allow the operator to edit the Operator ID using the virtual keyboard.
3. Enter the Operator ID and tap Accept  .

## 3.4 Settings Screen

By tapping the Settings icon  in the Home Screen, the Settings screen will appear, see Figure 4, allowing the operator to carry out the following:

1. View Error Log.
2. Change Time / Date.
3. Change Brightness / Volume
4. Change Language

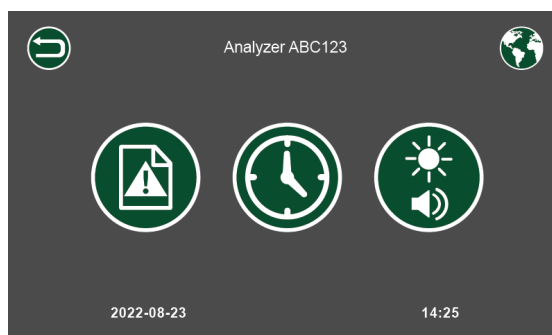


Figure 4. Settings Screen

### 3.4.1. View Error Log

By tapping the Error Log icon, the information of the faulty measurement can be viewed on the error log page. See Figure 5.



- The error log enables analyzer diagnosis and tracking of unsuccessful measurements.

No	Kit batch	Operator	Time	Date	EXIC	EMIS
1	51122	NURSE 1	10:10	04-10-2021	871	2500
2	35177		10:15	04-10-2021	2011	4500
3	10267	NURSE1	08:30	05-10-2021	371	7875
4	98811		10:12	05-10-2021	671	9562
5	17855	NURSE 2	15:21	05-10-2021	554	3548
6	26598	NURSE 2	09:45	06-10-2021	390	2200

### 3.4.2. Time and Date

By tapping on the Time and Date icon, the operator will be taken to the Time and Date screen. See Figure 6.

The time and date can be changed by selecting the corresponding arrow keys and by tapping on the calendar.

- When the correct Time and Date have been selected, the operator can tap the **Accept** icon  to save.
- The operator can tap the **Cancel** icon  at any stage to exit without saving.

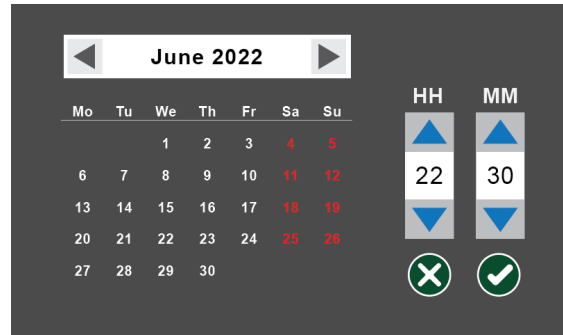




Figure 5. View Error Log Screen

Figure 6. Time and Date Screen

### 3.4.3. Brightness and Volume

By tapping on the 'Brightness and Volume' icon, the brightness can be adjusted by tapping on the slider and volume can be set to 'on' or 'off'. See Figure 7.

- When the desired brightness and volume have been selected, the operator can tap the **Accept** icon  to save the setting.
- The operator can tap the **Return** icon  at any stage to exit without saving.

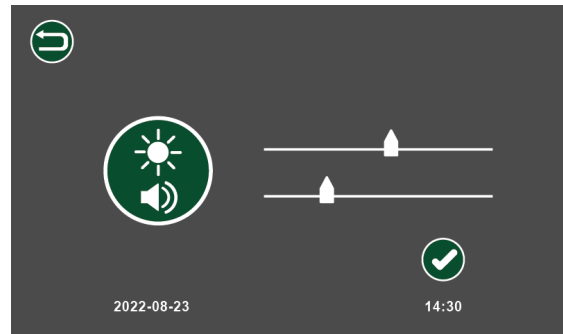


Figure 7. Brightness and Volume Screen

### 3.4.4. Language Options

The language can be changed by selecting the Language icon. See Figure 8.






1. Tap on Settings icon  in the Home Screen.
2. Tap on the Language Icon  at the top right of the screen.
3. Tap on the language required.
4. Tap on the Accept icon  or tap the Cancel icon  to keep original language.



Figure 8. Language Options Screen

## 3.5 Measurement History

The Measurement History of the last 200 sample measurements, see Figure 9, can be accessed by selecting the history icon .

- By tapping on the Individual data and then tapping the Accept icon, detailed information of the measurement is displayed. See Figure 10.
- Results can be transferred to a Windows PC or an android device via the Bluetooth application.

Measurement history			
No	Patient ID	Analyte	Value
1	3268-555C	SAA	300 mg/L
2	2647-828D	SAA	<10 mg/L
3	1278-121X	SAA	1700 mg/mL
4	7814-365V	SAA	200 mg/L




Figure 9. Measurement History Screen

Figure 10. Detailed Information Screen

## 4. Sample measurement

- Turn on Labmaster LUCIA™ Vet Analyzer 30 minutes before use.
  - If the Labmaster LUCIA™ Vet Analyzer has already been turned on for more than 30 minutes, measurements can be started immediately.
  - Follow the Labmaster LUCIA™ test Kit instructions for analyte specific instructions.



**NOTE:** - If the Labmaster LUCIA™ Vet Analyzer needs “Operator ID” change, follow step 3.3.1




- Check that the Labmaster LUCIA™ Vet Test Kit's NFC Card and test components have the same LOT number.
- Collect and prepare the sample to be tested according to the Labmaster LUCIA™ Vet Test Kit Instructions.
- Unwrap the Labmaster LUCIA™ Vet cassette from the sealed pouch.
- Select the Sample measurement icon  on the Home Screen.
  - A new page will appear. See Figure 11.
  - The operator will then be prompted to enter the Patient ID.
  - The operator can tap the Cancel icon  at any stage to exit without saving.
- Tap on the Text box.
  - The virtual keyboard will appear.
- Enter the Patient ID.
  - To edit the Patient ID, re-select the ID text box.
- Once the correct Patient ID has been entered, tap the Accept icon .
  - The NFC screen will appear showing NFC icon. See Figure 12.

Figure 11. Sample Measurement Screen

Figure 12. NFC Screen

9. Place the NFC Card on the NFC icon on the Labmaster LUCIA™ Vet Analyzer. See Figure 13

- There is a timeout limit of **30 seconds** for reading the NFC Card.

10. After a successful read, place the NFC card back into the corresponding Labmaster LUCIA™ Vet Test Kit box.

11. Upon successfully reading of the NFC Card, the tray from the analyzer will come out and the screen in Figure 14 will appear.



Figure 13. NFC Card read



### Adding Sample to the Labmaster LUCIA™ Vet cassette

The operator must ensure that as soon as the NFC card is read, the Labmaster LUCIA™ Vet cassette should be placed onto the tray and apply the sample within **1 MINUTE**.

- This will be shown on the screen. See Figure 15.
- If nothing is done, after one minute the tray will close and the process will be terminated automatically.



Figure 14. Load cassette screen

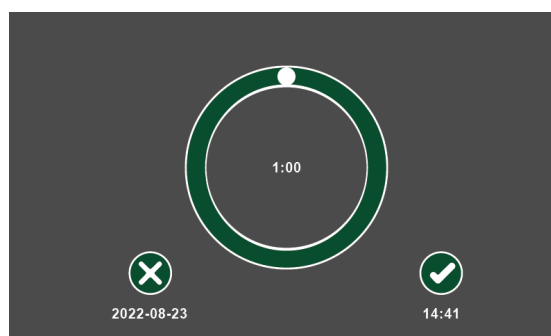


Figure 15. Sample application time out screen



### Labmaster LUCIA™ Vet test cassette

The Labmaster LUCIA™ Vet test cassette must be used immediately after removal from its packaging.

12. Slide the Labmaster LUCIA™ Vet test cassette onto the tray. See Figure 16.

- When the Labmaster LUCIA™ Vet test cassette is loaded correctly onto the tray, the OK text (highlighted in red oval) can be seen under the Labmaster LUCIA™ Vet test cassette with a sample application hole facing upwards.
- If the **OK** text is not visible, the Labmaster LUCIA™ Vet test cassette has been wrongly loaded onto the tray. Remove the Labmaster LUCIA™ Vet test cassette and re-load correctly.

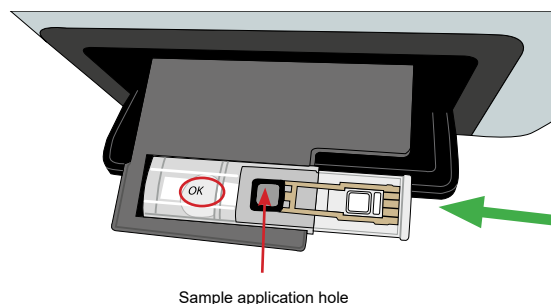





Figure 16. Labmaster LUCIA™ cassette loading

13. Transfer the test sample to the Labmaster LUCIA™ Vet Test cassette. A sample transfer device (in Figure 17) is shown as an example. Follow the LUCIA Test kit Instructions for Use for suitable transfer devices for the test.
14. Place the tip of the sample transfer device into the sample application hole of the Labmaster LUCIA™ Vet cassette so that it contacts the membrane. See Figure 18.
15. Hold the tip of the sample transfer device against the membrane until the sample has spread over the entire membrane.
16. After adding the sample, tap the Accept  icon on the sample application time out screen. See Figure 15.
  - The Labmaster LUCIA™ Vet Analyzer will automatically proceed to the measurement stage. The tray will move in and the Measurement Timer screen in Figure 19 will appear.
  - Once the measurement is completed, the analyte test result with the Patient ID will appear. See Figure 20.
  - At the same time, the tray will come out with the used cassette.
17. Remove the used cassette from the tray.
18. Tap on the Accept icon  on the test result screen's pop-up window message.
  - The tray will move in into its normal position.
19. Tap Accept icon  when the result is read on the screen in Figure 21.
20. Dispose of the used Labmaster LUCIA™ Vet cassette in accordance with local rules and regulations.

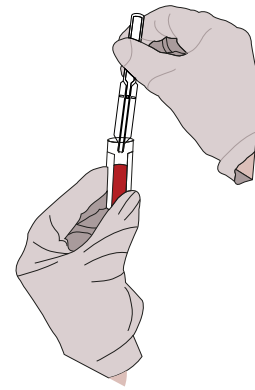


Figure 17. Sample transfer method (only an example)

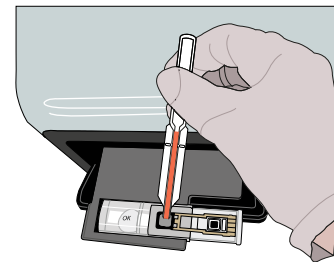


Figure 18. Sample transfer to cassette

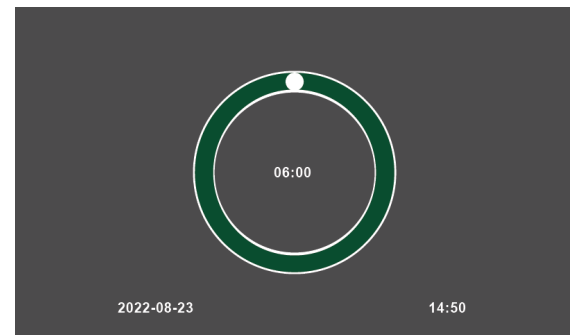


Figure 19. Measurement Timer screen

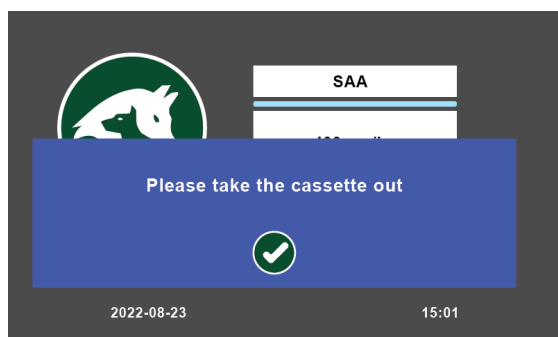


Figure 20. Pop up Message screen

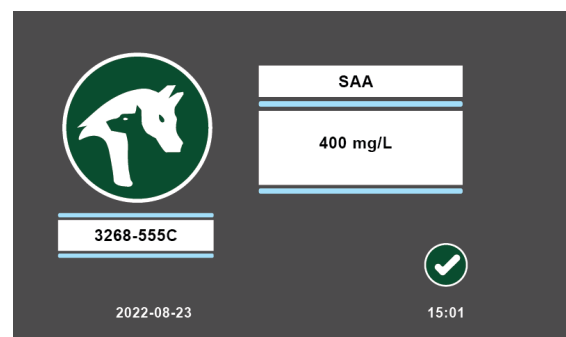


Figure 21. Test result screen



**Note:-** Once all daily measurements are completed, ensure that the cassette is removed from the tray.

## 5. Quality Control (QC) Measurement

The Labmaster LUCIA™ Vet Analyzer is factory calibrated.

- Turn on the Labmaster LUCIA™ Vet Analyzer 30 minutes before use.
- Follow the Labmaster LUCIA™ Vet test kit instructions for analyte specific quality assurance.



**NOTE:** - If the Labmaster LUCIA™ Vet Analyzer is already operating, but the operator has been changed for the next round of measurements (i.e. next shift), the on-coming operator will be required to enter their operator ID.



**CAUTION:** - Light Control Measurement Icon

Light control measurement on the QC screen is used for verifying the functionality of the analyzer and is used only by personnel authorized by Labmaster Ltd.

1. Tap the Quality Control icon on the homescreen. The QC screen will appear. See Figure 22.
2. Tap the QC icon again.
  - The operator will be presented with a screen that will have options for measuring quality controls with different concentration levels. See Figure 23.
  - By selecting any of the control sample icons, the QC measurement screen will appear. See Figure 24.
  - The Quality Control measurement icon is for running a QC test sample.
  - The View Measurement History icon allows the operator to view and have access to the previous 200 measurements in each level.



Figure 23. QC low, mid and high concentration



Figure 22. QC screen

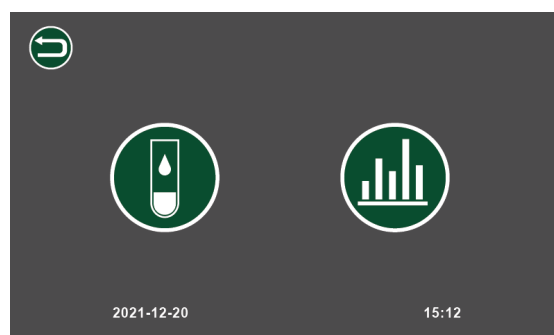


Figure 24. QC measurement screen

**NOTE:** - If the operator selects a QC measurement, the measurement will follow the same transitional stages as described in section 4 with any regular sample measurements.

For each of the measurements, the operator can choose either to accept or reject the result. See Figure 25.

The operator is then directed to the comparable QC History Screen. See Figure 26.

3. To return to the Home Screen, tap Accept

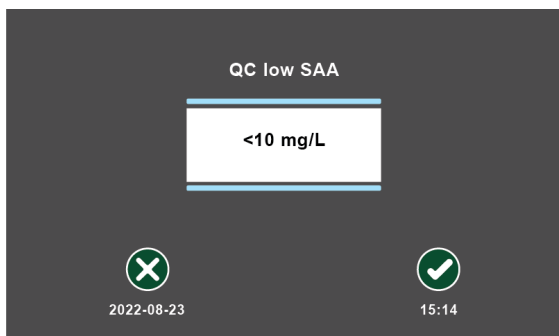


Figure 25. QC measurement screen

History from low QC sample						
Operator	Kit batch	Analyte	Value	Status	Date	Time
1	PR122	SAA	218 mg/L	Accepted	16-10-2021	09:45
2	PR681	SAA	<10 mg/L	Accepted	07-10-2021	10:15
3	PR5461	SAA	760 mg/L	Accepted	07-10-2021	11:30
4	PR7948	SAA	210 mg/L	Accepted	09-10-2021	10:12



Figure 26. QC history of selected concentration screen



**Note:-** Once all daily measurements are completed, ensure that the cassette is removed from the tray.

## 6. Analyzer Cleaning



### **WARNING: - ELECTRICAL HAZARD**

Ensure that the device is powered down and the mains electrical switch is set to off and the mains plug removed from electrical supply or PSU before cleaning.



Ensure that the Labmaster LUCIA™ Vet Analyzer is decontaminated before transportation or Storage.

### 6.1 Start/End of Daily Use Cleaning

1. Ensure the device is switched off and the power cable is removed.
2. Moisten a Lint Free Cloth with 70% Ethyl Alcohol and wipe all external surfaces. Allow to dry.
3. Plug the power cable in and Power on.

### 6.2 Spillages

Ensure any spillages are removed and the area affected cleaned immediately.

- Carry out the procedure in Section 6.1 Start/End of Daily Use Cleaning.
- For spillages in the tray, see Section 7.3 Operational Issues.

# 7. Troubleshooting

## 7.1 Reminder Message

The following reminder messages appear on the screen during the measurements.

Please enter patient ID

This reminder message appears when the operator does not enter the patient ID. In order to exit the message and enter patient ID, select the accept icon and enter the ID.

Please take the cassette out

This reminder message appears after the measurement cycle is complete and tray with cassette is out. Take the cassette out and select "Accept" icon to exit the message.

## 7.2 Warning Message

The following warning messages appear on the screen depending on the issues related to the measurements.

The door was not closed properly.

The LUCIA Vet Analyzer's door was not closed properly. Check for any visible obstacles in the doorway obstructing the door from closing properly. Discard the cassette and re-measure with a new one.

Kit expired.

LUCIA kit has expired. Remeasure the sample with a valid batch of LUCIA Vet Test components.

Rejected measurement/Reading NFC card failed.

Restart the LUCIA Vet Analyzer and remeasure the sample. If warning reoccurs, contact [support@labmaster.fi](mailto:support@labmaster.fi)

Temperature of the device is colder/warmer than allowed. This may affect the results.

Ensure that the device is at the operational temperature range and that the device has been exposed to an ambient temperature for at least 30 minutes. Repeat the measurement with a new cassette.

Ignoring and continuing with the measurement may lead to false result. For traceability purpose, + or - will be added to the operator ID for the measurements outside of the recommended measuring temperature range.



## 7.3 Operational Issues

In case of operational issues, refer to the following table for corrective measures:

Indication	Probable cause	Corrective action
Liquid droplets on the tray.	Leakage of the cassette.	<ul style="list-style-type: none"> <li>Blot the liquid into soft paper or cloth.</li> </ul>
No power in LUCIA Vet Analyzer.	Power and / or connection failure.	<ul style="list-style-type: none"> <li>Confirm that the electrical outlet is on. If it is not on, switch it on.</li> <li>Turn the LUCIA Vet Analyzer on.</li> <li>Disconnect and firmly reconnect the power cable.</li> </ul>
No test results.	Computational difficulty.	<ul style="list-style-type: none"> <li>Restart the LUCIA Vet Analyzer and remeasure.</li> <li>If the problem reoccurs, contact <a href="mailto:support@labmaster.fi">support@labmaster.fi</a>.</li> </ul>
Failure of opening and closure of door.	Power and / or connection failure. Mechanical malfunction.	<ul style="list-style-type: none"> <li>Switch off the power and restart LUCIA Vet Analyzer.</li> <li>If the problem reoccurs, contact <a href="mailto:support@labmaster.fi">support@labmaster.fi</a>.</li> </ul>
Tray with cassette stuck inside LUCIA Vet Analyzer	Mechanical malfunction or misplaced cassette.	<ul style="list-style-type: none"> <li>Switch off the power and restart LUCIA Vet Analyzer.</li> <li>Repeat the measurement using a new LUCIA cassette.</li> <li>If the problem reoccurs, contact <a href="mailto:support@labmaster.fi">support@labmaster.fi</a>.</li> </ul>
Abnormal noise from LUCIA Vet Analyzer.	Mechanical malfunction or misplaced cassette.	<ul style="list-style-type: none"> <li>Restart LUCIA Vet Analyzer.</li> <li>Repeat the measurement using a new LUCIA cassette.</li> <li>If the problem reoccurs, contact <a href="mailto:support@labmaster.fi">support@labmaster.fi</a>.</li> </ul>
LUCIA Vet Analyzer screen flashing.	Electrical / GUI problem.	<ul style="list-style-type: none"> <li>Restart your LUCIA Vet Analyzer.</li> <li>If the problem reoccurs, contact <a href="mailto:support@labmaster.fi">support@labmaster.fi</a>.</li> </ul>
LUCIA Vet Analyzer screen freezing.	Hardware error.	<ul style="list-style-type: none"> <li>Restart LUCIA Vet Analyzer. (If there was a LUCIA Vet cassette inside LUCIA Vet Analyzer, take it out during the series of self-check routines as the tray will be automatically exposed.)</li> <li>Repeat the measurement using a new LUCIA Vet cassette.</li> <li>If the problem reoccurs, <a href="mailto:support@labmaster.fi">support@labmaster.fi</a>.</li> </ul>

# 8. Result Export



Results from the LUCIA Vet Analyzer can be exported to a Windows® PC by the LUCIA Vet Analyzer Windows application. For Android devices, this is done by the means of an Android application.

- All communications are by Bluetooth® Version 4 or higher short-range wireless technology.
- The installation and operation of these applications are described in this section.

## 8.1 Application Function Keys

The Labmaster LUCIA™ Vet Analyzer Windows application and android application are based on the functionality described by their corresponding function keys in the application. These function keys are listed below.



Bluetooth



Print



Connect



Export



Syncing



Patient



Previous



Next


## 8.2 Labmaster LUCIA™ Windows Application (Windows® 7 or higher)

The LUCIA Vet Analyzer Windows application enables to export results from LUCIA Vet Analyzer to the Windows PC via Bluetooth. The application can be downloaded from Labmaster’s official website.

### 8.2.1. Windows Application Installation

1. Download the Labmaster LUCIA™ Vet Analyzer Windows application to your PC.
2. Extract the zipped file and double-click LUCIA™ Setup.
3. Follow the application installation instruction to install the application on device.

### 8.2.2. Pairing with Labmaster LUCIA™ Vet Analyzer

1. Go to Bluetooth & other devices in PC.
2. Click Add Bluetooth or another device.
3. Select Bluetooth.
4. Click on the LUCIA™ Analyzer Bluetooth device name you want to pair with. The bluetooth ID can be found from “settings”  screen or the plate label under the analyzer.
5. Click Connect on the prompted message.
  - In LUCIA™ Vet Analyzer, the same code will be prompted.
6. Tap the Accept icon to accept the connection.
  - If connection is not accepted within 20 seconds, timeout will occur.

### 8.2.3. PC Application Use

1. Search Labmaster LUCIA™ Vet Application in your PC and open the application.
  - The application starts with Home screen as shown in Figure 27.



**NOTE:** - The Labmaster LUCIA™ Vet Analyzer must be on the Home screen for proper functioning of Bluetooth communication.

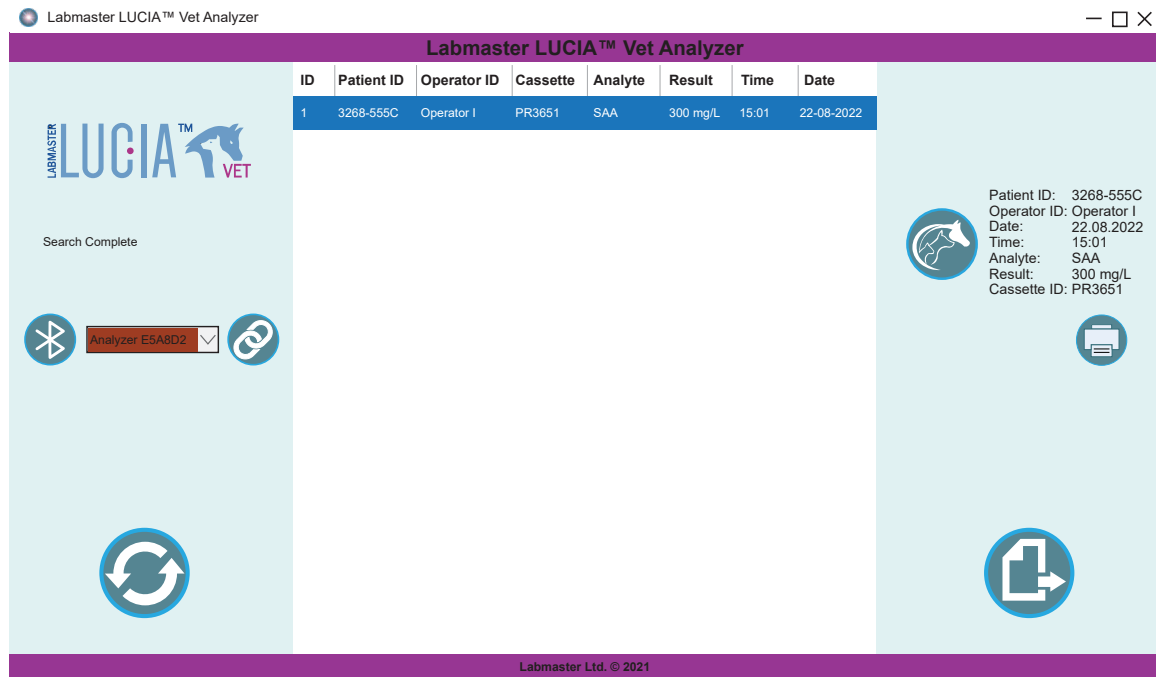


Figure 27. Labmaster LUCIA™ Vet Analyzer Windows Application Home screen

2. Tap the correct analyzer from the drop-down menu and tap the connect button. See Figure 28.
  - The PC application will attempt to connect to the analyzer.
  - The drop-down menu will turn green when connected. See Figure 29.

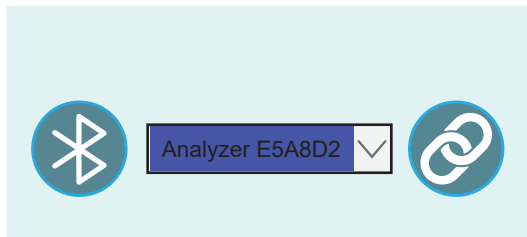


Figure 28. Drop Down Menu

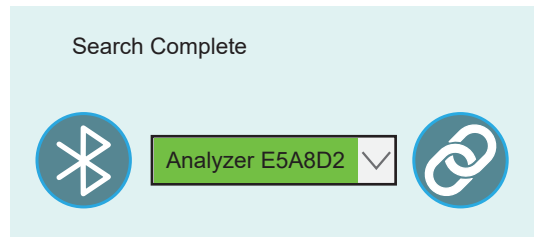


Figure 29. Successful Connection



If the Labmaster LUCIA™ Vet Analyzer is not available in drop-down menu, follow the procedure in the section 8.2.2 to pair the PC and the LUCIA Vet Analyzer.

3. Tap the Synchronize icon to import data from connected LUCIA Vet Analyzer. See Figure 30.
  - **Syncing with Analyzer** message will be displayed above drop-down menu. See Figure 30.
  - After the application is successfully synced, the **Syncing Complete! Device Disconnected!** message will be displayed and the result table will be updated.

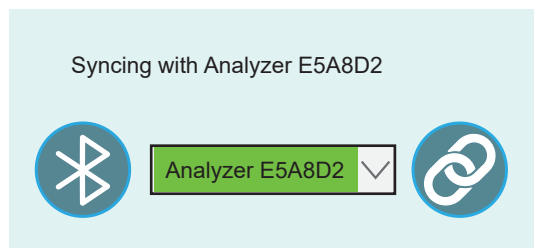


Figure 30. Syncing with Labmaster LUCIA™ Vet Analyzer

## 8.2.4. Data Handling and Printing

1. To retrieve a detailed view of a specific result, tap on the specific data. See Figure 31.
  - This will highlight the entire patient data row.
  - The detailed information is shown on the right side of the window. See red box.
2. To print a specific data, tap on the data that you require to print.
3. Tap on the Print icon. See Figure 31.
4. Tap on the Export icon at the bottom right corner to export all the data in .csv format.

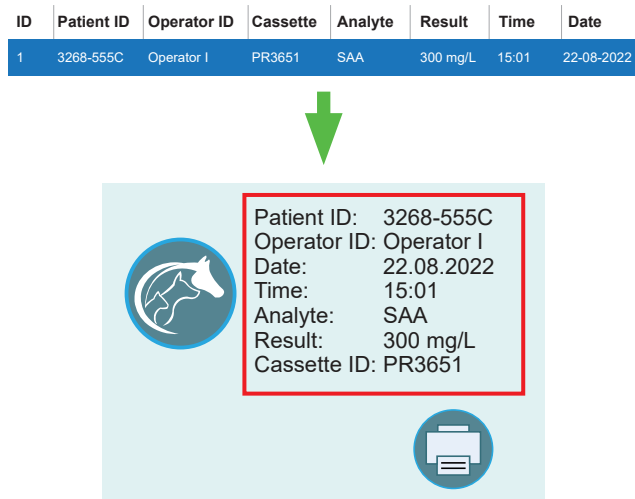


Figure 31. Retrieve a detailed view of a specific result

## 8.3 Labmaster LUCIA™ Vet Android Application

The Labmaster LUCIA™ Vet Analyzer Android Application allows the operator to save, print and export results from LUCIA™ Vet Analyzer to android devices via Bluetooth.

Labmaster LUCIA™ Vet android application can be found in Google Play Store or by scanning the QR code in Figure 32.

### 8.3.1. Pairing with Labmaster LUCIA™ Analyzer

1. Go to Settings.
2. Select Bluetooth.
3. Select Scan for devices.
4. Select the Labmaster LUCIA™ Vet Analyzer's Bluetooth device name you want to pair with.
5. Select Connect on the prompted message.
  - In LUCIA™ Vet Analyzer, the same code will be prompted.
6. Select the Accept icon to accept the connection.



Figure 32. Labmaster LUCIA™ Vet Android Application QR Code

### 8.3.2. Android Application Use

1. Open the application.
  - If Bluetooth is off, the application will prompt the operator with a message to turn on the device's Bluetooth.
  - Tap allow to turn on the Bluetooth. See Figure 33.
2. When installing the application for the first time, tap Allow to access the Android device as shown in Figure 34.
3. After successfully launching the application, see Figure 36, tap the Bluetooth icon to

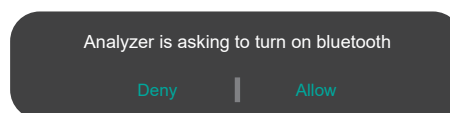


Figure 33. Allow Analyzer to turn on Bluetooth

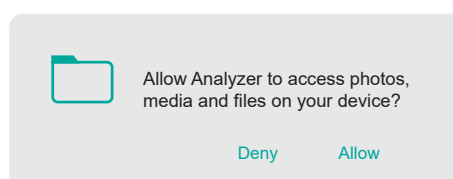


Figure 34. Allow Analyzer to Access to Device

- connect with the LUCIA Vet Analyzer.
- From the drop down list, tap the correct analyzer/device to connect to. See Figure 35.
  - Tap the Sync icon to import data from the connected analyzer. See Figure 36.
  - During syncing, **Analyzer syncing in progress** will be shown on the analyzer screen.

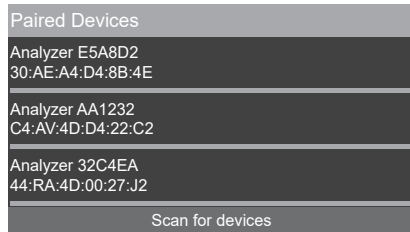


Figure 35. Select a Device/Analyzer to connect

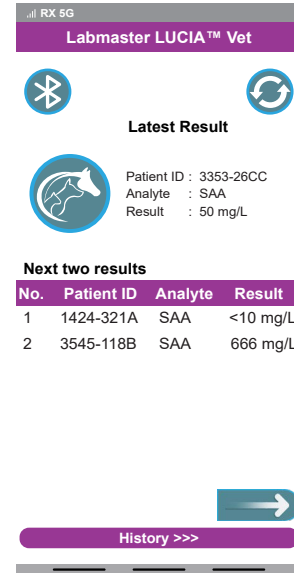


Figure 36. Vet Android Application Main Screen



**NOTE:** - After data is synced successfully, a message will be displayed on the application and the Bluetooth will be disconnected automatically.

### 8.3.3. Data Handling and Printing

The Home screen will display the result of the latest measurement and two prior measurements simultaneously. See Figure 37.

- Tap on the applicable result to view.
  - The complete result will be displayed.
  - Any measurement history of that particular animal patient stored in the device will also be displayed.
- To view the next two results in the home screen, tap the **NEXT** icon. See Figure 38.
- To view the previous two results in the home screen, tap the **PREVIOUS** icon. See Figure 38.
- To view all the results, tap 'History' as shown in Figure 38.

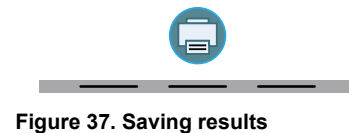
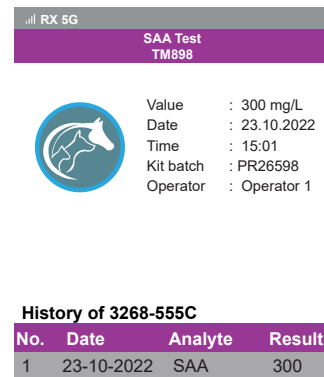



Figure 37. Saving results

#### Print or save particular result

- Choose a particular result and tap print icon  to print or save the result.
- Follow the instructions shown on the smart phone.
  - You can save the data in your phone in pdf format or print it if printer is available.
- To print the result, tap the printer from the drop-down menu. To export in pdf format, select **save as pdf**.
- Follow the instructions on the smart phone.

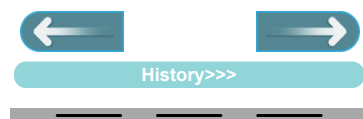


Figure 38. Previous and next Icons

#### Save whole result history

9. To export all the results, tap 'History' in the home screen. Next tap "Export" and enter the name for the file and tap "OK".

- A message "File is successfully saved" will be displayed. The data will be saved in the internal storage of your android device in folder named "Lucia".

## 8.4 Application Error Messages

The following error messages may appear on the screen during result export.

### Device not found

This error message appears if there is not any paired LUCIA Vet Analyzer available.

### Bluetooth turned off

Bluetooth in your PC/Android is turned off. Please turn on and try again.

### Bluetooth already connected

Application is already connected to the LUCIA Vet Analyzer.

### Timeout

Desired action is not completed in given time.

### Can not connect

Application is not able to connect to the LUCIA Vet Analyzer.

### Make sure the device is in Home screen

This error message appears if the LUCIA Vet Analyzer is not in the Home screen. Please return to the Home screen in the analyzer.

### Data not available to export

This error message appears if there is not any patient data available. Please sync with the LUCIA Vet Analyzer.

### Something went wrong. Please try again later

Desired action is not completed. Please try the action again.

## 9. Contact Information

### Labmaster Ltd

Rauhalinnantie 31,  
20780 KAARINA, FINLAND

[www.labmaster.fi](http://www.labmaster.fi)

[info@labmaster.fi](mailto:info@labmaster.fi)

### Labmaster Sales

Email: [sales@labmaster.fi](mailto:sales@labmaster.fi)

Tel. +358 22 760 555

### Labmaster Technical Support

Email: [support@labmaster.fi](mailto:support@labmaster.fi)





**Labmaster Ltd.**

Rauhalinnantie 31, 20780 KAARINA FINLAND

Tel. +358 22 760 555

Email. [info@labmaster.fi](mailto:info@labmaster.fi)

[www.labmaster.fi](http://www.labmaster.fi)



Labmaster LUCIA™ is a trademark of Labmaster Ltd.