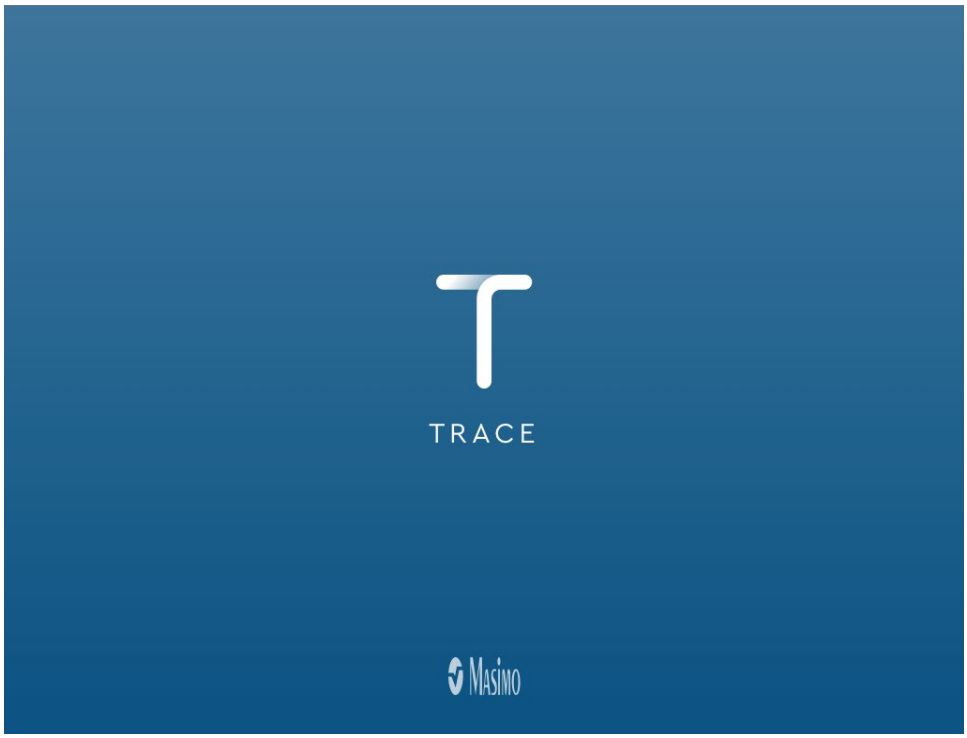
Operator's Manual

Masimo® Trace™



Masimo

These operating instructions provide the necessary information for proper operation of all models of Trace. There may be information provided in this manual that is not relevant for your system. General knowledge of pulse oximetry and an understanding of the features and functions of Trace are prerequisites for its proper use. Do not operate Trace without completely reading and understanding these instructions. If you encounter any serious incident with product, please notify the competent authority in your country and the manufacturer.

Notice: Purchase or possession of this device does not carry any express or implied license to use with replacement parts which would, alone or in combination with this device, fall within the scope of one of the relating patents.

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Contents

About This Manual

This manual explains how to set up and use the Masimo® Trace™. Important safety information relating to general use of Trace appears in this manual. Read and follow any warnings, cautions, and notes presented throughout this manual. The following are explanations of warnings, cautions, and notes.

A *warning* is given when actions may result in a serious outcome (for example, injury, serious adverse effect, death) to the patient or user.

WARNING: This is an example of a warning statement.

A *caution* is given when any special care is to be exercised by the patient or user to avoid injury to the patient, damage to this device, or damage to other property.

CAUTION: This is an example of a caution statement.

A *note* is given when additional general information is applicable.

Note: This is an example of a note.

Product Description and Intended Use

Product Description

Masimo® Trace™ is standalone PC software that can display, transfer, and store clinical data collected by Masimo technologies. The software allows a user to review clinical data, enter notes onto the cases, select a particular session, generate reports, and store a copy for the selected data.

Trace can be utilized to:

- Retrieve, transfer, and store data from compatible Masimo devices. See ***Appendix A: Compatible Masimo Devices*** on page 71.
- Create a data file for subsequent retrieval.
- Export data as raw data .csv file or generate graphical .pdf reports.

Intended Use

Masimo® Trace™ is a software tool intended for non-real time data retrieval from compatible Masimo devices and report generation. Trace can be used wherever compatible Masimo devices are used.

Safety Warnings and Cautions

CAUTION: The Trace is to be operated by, or under the supervision of, authorized personnel only. Read the manual, accessories directions for use, all precautionary information, and specifications before use.

Safety Warnings and Cautions

WARNING: Do not use Trace during patient monitoring to minimize risk of patient harm.

Performance Warnings and Cautions

WARNING: Trace should not be used as the sole basis for medical decisions. Trace must be used in conjunction with clinical signs and symptoms.

Note: Trace is designed to work with compatible devices. Verify the compatibility before use.

Chapter 1: Description

General System Description

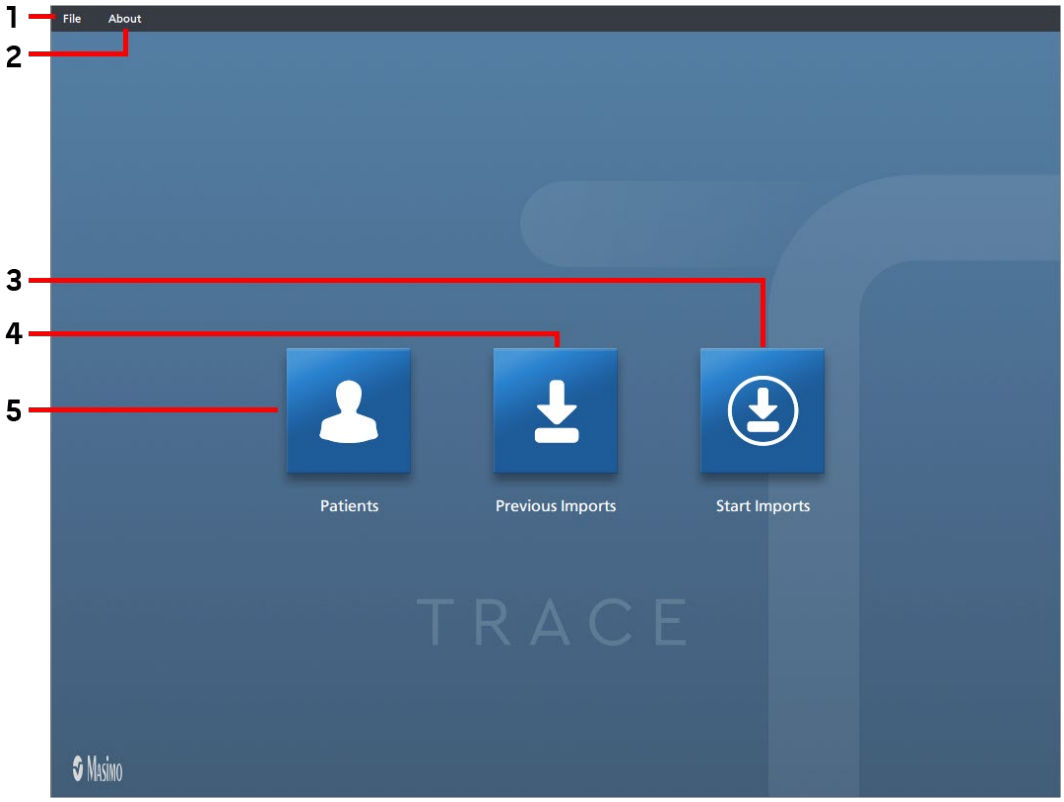
Trace includes the following:

- Trace software

Trace Home Screen

The Trace *Home* screen, displays the following options:

Note: If this is a first-time use case, the **Start Imports** option imports data into Trace for review. See ***Import Data*** on page 21.



Item	Name	Description
1	File	Access Trace Settings (see ***Settings*** on page 48) or Exit Trace.
2	About	Access the user license (see ***License Key*** on page 13) and view Trace software build information.
3	Start Imports	Import data for viewing on Trace. See ***Import Data*** on page 21.
4	Previous Imports	View previously imported data. See ***Imports (Previous Imports)*** on page 23.
5	Patients	View patient data available in Trace. See ***Patients*** on page 26.

Chapter 2: Installation and Setup

The following system requirements are needed to install Trace:

- Minimum Windows 7 (see ***Supported Platforms*** on page 69).
- Trace PC Software
- Compatible Masimo Device (see ***Appendix A: Compatible Masimo Devices*** on page 71).

Trace Installation

The same procedure applies to first-time installation or installation of a newer version of the software (upgrade).

To install Trace on the host computer, perform the following:

1. Remove the USB drive from the packaging.
2. Plug the USB drive into a USB port on the Trace host computer.
3. Locate the Trace installation (.exe) file  .
4. Double click the Trace *Setup.exe* file to start Trace the installation process.
5. Read the End User License Agreement. The use of Trace software is subject to the End Users License Agreement found on http://www.masimo.com/masimo-trace/activation/. You must accept the terms of this agreement before continuing with the installation.
   - Click *I accept the agreement,* then *Next* to continue.
6. If a Desktop Shortcut to Trace is desired, check the box next to "Create a desktop shortcut". Click *Next* to continue.
7. Click *Next* to perform the installation.
8. By default, the check box to "Launch Masimo Trace" is selected (de-select if desired). Once Trace is installed, click *Finish*. Trace opens.

   Note: *License expiring in 14 days* displays on the Trace Patient Data Screen and counts down until the trial license expires or a license key is generated by Masimo and entered into Trace. See ***License Key*** on page 13 to obtain and enter the license key into Trace.

License Key

The Trace trial license can be used for 14 days. The trial license expiration date is displayed on the *Trial License* screen under *VALID UNTIL*. During this trail period, a message indicating the number of days remaining on the trial license is displayed in the lower-left corner of the patient data screen. *TRIAL LICENSE* displays across the report preview screens during the trial period.

When the trial license expires, Trace indicates that the trial has expired and a license must be obtained to continue using Trace.

The license key is obtained from Masimo. This license key is entered into the Trace *Trial License* screen and allows the program to operate with all features and capabilities for the license period displayed under *Valid Until*.

Note: When installing a newer version of the software (upgrade), the existing software license key is used.

Obtaining a License Key

The license key is obtained by going to http://www.masimo.com/masimo-trace/activation/. Follow the web page instructions to obtain a license key.

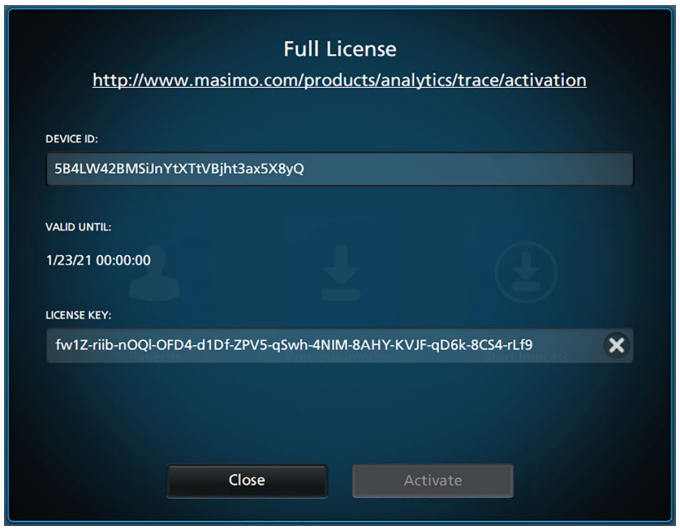
Note: If the same USB is used to install Trace on multiple computers, a separate license key is required for each installation of Trace. Go to http://www.masimo.com/masimo-trace/activation/ to obtain license keys for the additional installations.

Entering License Key

Once a license key is obtained from Masimo, perform the following:

1. Click on *About* at the top left of the Trace Patient Home Screen. See ***Trace Home Screen*** on page 11.
2. Click on *License.* The *Full License* window opens.

3. Enter the license key into the *License Key* field.



4. Click **Activate**. Trace will now operate with all features and capabilities for the license period displayed under *Valid Until*. Click **Close** to close the *Full License* window.

   Note: If an incorrect license key is entered, *This is not a valid license key* displays.

License Expiration

Starting at 30 days before the license expires, *License expiring in 30 days* displays in the lower left corner of the Trace Patient Data Screen and counts down until the license expires.

Once the license expires, Trace stops functioning and indicates that the license is expired. A valid license must be obtained and entered to continue using Trace.

Uninstall Trace

To remove (uninstall) Trace from the computer, perform the following procedure:

1. Locate the Trace uninstall *".exe"* file.
2. Double click the Trace uninstall *".exe"* file to start the process to uninstall Trace.
3. Follow the on-screen prompts to confirm uninstallation of Trace from the computer.

Connecting Trace to a Masimo Device to Transfer Files

This chapter explains how to decide on a connection type to use, and how to connect the Trace host computer to a Masimo device using serial connectivity. After establishing a connection, Trace can be used to download trends.

The following devices can be connected to the host computer to download trend data:

- Radical-7 (connected to RDS) - Serial or Network
- Root - Serial or Network
- Rad-97 - Serial or Network
- Rad-67 - Serial or Network
- Rad-G - Serial ONLY

When to Use Serial Connectivity with Trace

Note: Serial connectivity is required if a Masimo device is not connected to a wireless or hard-wired network.

- Using an available cable, connect the Trace host computer to a Masimo device. See ***Serial Connection Cables*** on page 15 and ***Serial Connectivity*** on page 15.
- After establishing a serial connection, Trace can download trend data from the device. See ***Serial Import*** on page 21.

When to Use Network Connectivity with Trace

- If a Masimo device is already connected to a wireless or hard-wired network, remotely connect the Trace host computer to a Masimo device. See ***Network Import*** on page 22.
- After establishing a network connection, Trace can download trend data from the device.

Serial Connection Cables

The cables listed below are used to connect Masimo devices to the Trace host computer. If an adapter is required, it must be purchased separately.

Description	Device	Image
USB-Null Modem Cable*	*Root, Rad-67 and Rad-97* ***Note:*** *For Rad-67, must be used with Data Transfer Download Cable*	
USB-to-Serial Adapter	*Radical-7 docked to RDS (Radical Docking Station)* *Adapts RS-232 to USB*	
Data Transfer Download Cable	*Rad-67* *Adapts Masimo Proprietary Port to USB* ***Note:*** *For Rad-67, must be used with the USB-Null Modem Cable*	
Data Transfer Cable	*Rad-G* *Adapts Patient Cable Connector to USB*	

* Requires driver download available at https://www.ftdichip.com/Drivers/VCP.htm.

Serial Connectivity

The following procedures are available for setting up serial connectivity:

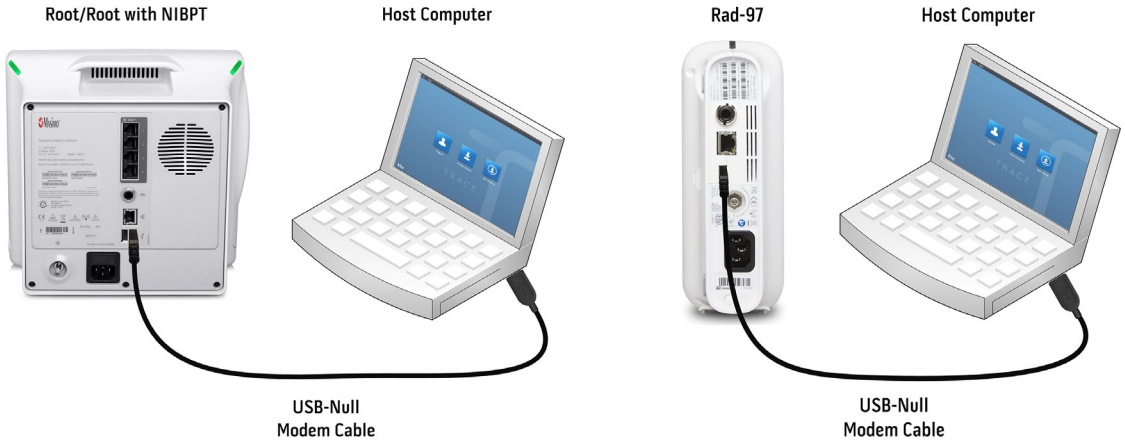
- See ***Root and Rad-97 Serial Connectivity*** on page 16.
- See ***Radical-7 Serial Connectivity*** on page 17.
- See ***Rad-67 Serial Connectivity*** on page 17.
- See ***Rad-G Serial Connectivity*** on page 18.

Root and Rad-97 Serial Connectivity

Complete the instructions below to connect Root or Rad-97 to the Trace host computer using serial connectivity. For more information, see ***Appendix A: Compatible Masimo Devices*** on page 71.

Note: This applies to Radical-7 and Radius-7 devices when docked to Root.

1. Download and install the USB-Null Modem Cable driver to the Trace host computer. For more information about cables, see ***Serial Connection Cables*** on page 15.
2. Connect the USB-Null Modem Cable between the Masimo device and the Trace host computer. See the example setups below.



3. On the Masimo device home screen, press the *Main Menu* options icon .
4. Select *Device Settings* .
5. Select *Device Output* .
6. In the *Device Output* menu, set the USB Port (1 or 2 on Root) to IAP, then press **OK**.
7. Set the baud rate:
   - Go back to the *Device Settings* menu.
   - Select *Access Control* .
   - Press the 123 key.

   - When the numeric screen displays, enter the following numbers: **6 2 7 4**
   - Press **Enter** .

8. In the *Access Control* menu, set the USB Port (1 or 2 on Root) baud rate, then press **OK**. See ***Appendix B: Device Baud Rates*** on page 73.

   Note: If the Root, or Rad-97 USB baud rate is changed, power-cycle the device for the newly selected baud rate to take effect.

9. Set the baud rate in the Serial option for Trace in ***Serial Import*** on page 21 to the same setting as the baud rate set for USB Port (1 or 2 on Root).

10. Open the Trace application and import trend data using the Serial Import procedure.

Radical-7 Serial Connectivity

Complete the instructions below to connect Radical-7 to the Trace host computer using serial connectivity. For more information, see ***Appendix A: Compatible Masimo Devices*** on page 71.

Note: For Radical-7 devices docked to Root, see ***Root and Rad-97 Serial Connectivity*** on page 16.

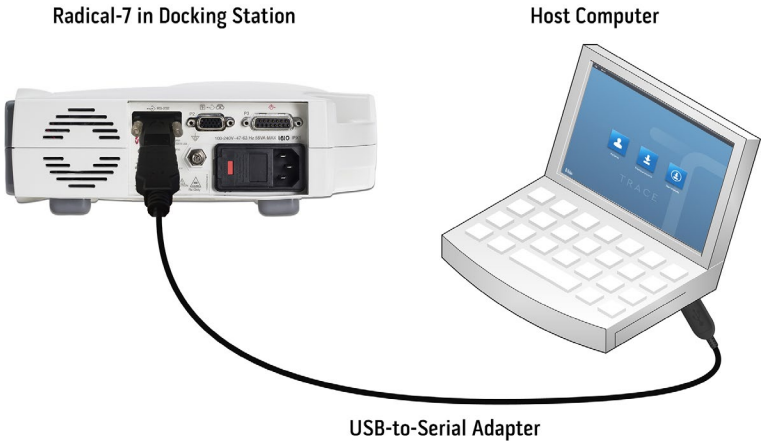
1. Power ON the Radical-7.

2. Snap the Radical-7 into the RDS Docking Station.

3. Determine the RDS Docking Station being used. With Radical-7 docked to RDS, select the *Main Menu* icon  , then select *About*  . The docking station field is located at the bottom of the About screen.

   - Docking station field indicates ASCII1 IAP FLEXPORT. In the Radical-7 Device Output menu, under Serial, select IAP.
   - Docking station field indicates DC. In the Radical-7 Device Output menu, Data Collection is the only available option.

4. Connect the USB-to-Serial Adapter between the docking station and the Trace host computer. See the example setup below. For more information about cables, see ***Serial Connection Cables*** on page 15.



5. On the Radical-7 home screen, press the *Main Menu* options icon  .

6. Select *Device Settings*  .

7. Select *Device Output*  .

8. Set the baud rate in the Serial option for Trace in ***Serial Import*** on page 21 to the same baud rate as selected in the Device Output settings.

   - For baud rate of each RDS Docking Station, see ***Appendix B: Device Baud Rates*** on page 73.

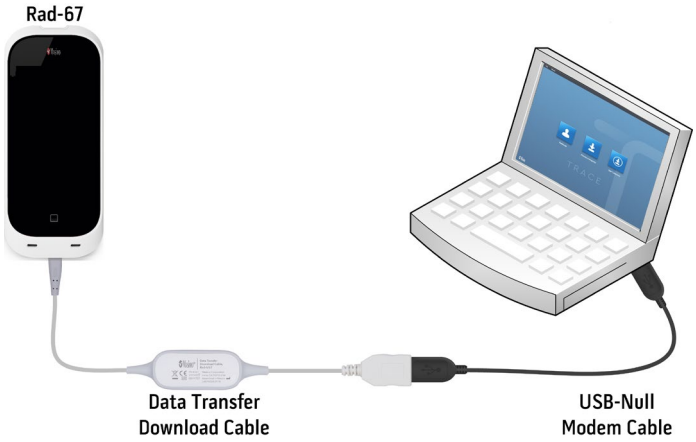
9. At the bottom of the *Device Output* screen, press **OK**.

10. Open the Trace application and import trend data using the Serial Import procedure.

Rad-67 Serial Connectivity

Complete the instructions below to connect Rad-67 to the Trace host computer using serial connectivity. For more information, see ***Appendix A: Compatible Masimo Devices*** on page 71.

1. Download and install the USB-Null Modem Cable driver to the Trace host computer. For more information about cables, see ***Serial Connection Cables*** on page 15.
2. Connect the Rad-67 to the Trace host computer using the Data Transfer Download Cable Rad-67 and USB-Null Modem Cable. See the example setup below.



3. On the Masimo device home screen, press the *Main Menu* options icon .
4. Select *Device Settings* .
5. Select *Access Control* .
6. Press the 123 key.

7. When the numeric screen displays, enter the following numbers: **6 2 7 4**
8. Press **Enter** .

9. In the *Access Control* menu, set the USB Port baud rate, then press **OK**. See ***Appendix B: Device Baud Rates*** on page 73.

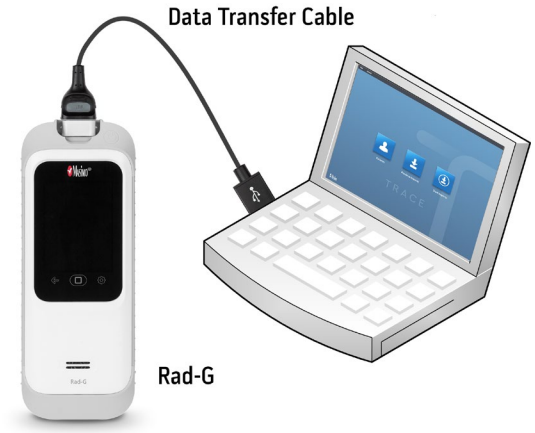
   Note: If the Rad-67 USB baud rate is changed, power-cycle the device for the newly selected baud rate to take effect.
10. Set the baud rate in the Serial option for Trace in ***Serial Import*** on page 21 to the same setting as the baud rate set for USB Port.
11. Open the Trace application and import trend data using the Serial Import procedure.

Rad-G Serial Connectivity

Complete the instructions below to connect Rad-G to the Trace host computer using serial connectivity. For more information, see ***Appendix A: Compatible Masimo Devices*** on page 71.

1. Connect the Rad-G to the Trace host computer using the Data Transfer Cable. See the example setup below. For more information about cables, see ***Serial Connection Cables*** on page 15.

   Note: The first time the Data Transfer Cable is connected to the host computer, the driver installs.



2. Open the Trace application and import trend data using the Serial Import procedure. See ***Serial Import*** on page 21.

   Note: After the data import is complete, Rad-G will turn off.

Chapter 3: Operation

Trace allows users to store multiple patient data files, to change the current Patient, by selecting from a list of previously created Patients or for filtering the Patient list based on Label, ID, and Doctor name. The information in this chapter explains how to use Trace.

Getting Started

Click the desktop icon 

to open the software and display the Trace *Home* screen. See ***Trace Home Screen*** on page 11.

The *Home* screen, displays the following options:

- Patients - View patient data. See ***Patients*** on page 26.
- Previous Imports - View previously imported data. See ***Imports (Previous Imports)*** on page 23.
- Start Imports - Import data to view. See ***Import Data*** on page 21.

Note: If this is a first-time use case, select the **Start Imports** option to import data into Trace for review. See ***Import Data*** on page 21.

Import Data

Patient data must first be imported into Trace to view. Data is imported by selecting the *Start Imports* icon on the *Home Screen*. See ***Trace Home Screen*** on page 11. Data can then be imported into Trace using one of the following methods:

Serial - This option imports data directly from a compatible Masimo device using a wired connection. See ***Serial Import*** on page 21.

Network - This option imports data from a device location on the network location using the device IP address. See ***Network Import*** on page 22.

Serial Import

Use the *Serial* method to import data from a compatible Masimo device using a wired connection.

1. Select the *Serial* tab **(1)**.
2. Select the compatible Masimo device from the *Device* **(2)** options.

   Note: When selecting Radical-7, determine the RDS Docking Station used. See Radical-7 Docked to RDS. Once RDS is determined, select device as follows:

   - DC = Radical-7 DC
   - Except DC = Radical-7

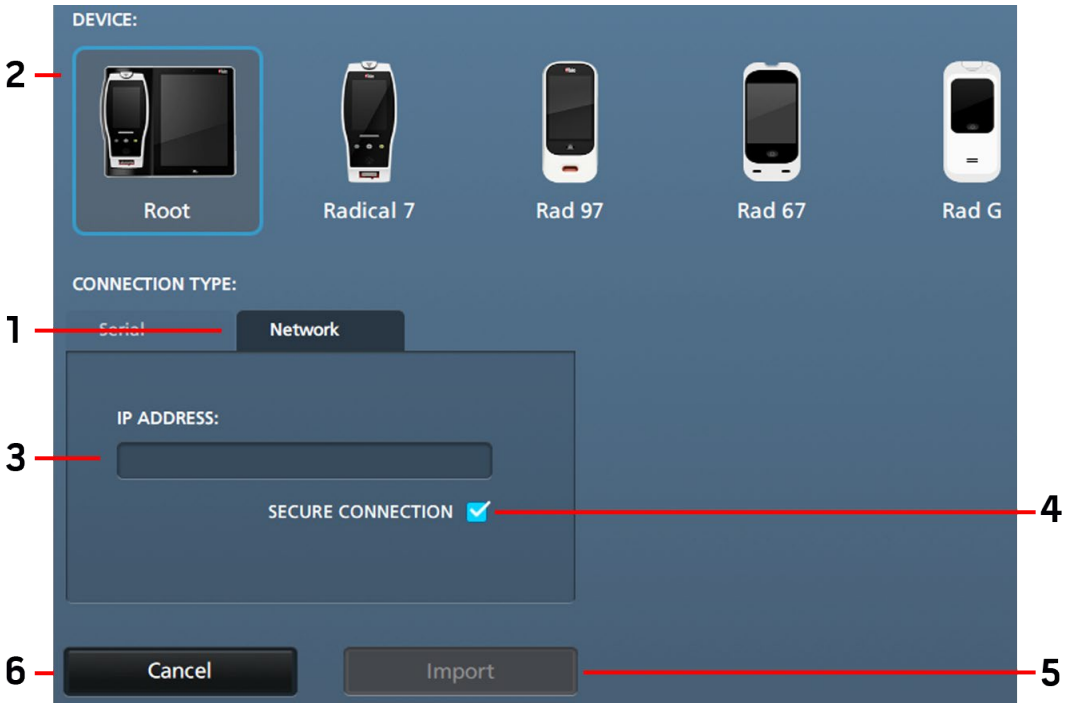
3. Configure the Device Output and Baud Rate. See ***Serial Connectivity*** on page 15.
4. Select the *COM Port* from the drop-down menu **(3)** on the Trace host computer that is used to connect to the device selected in the previous step. Click the icon **(4)** to refresh the available COM Port options.
5. Select a *Baud Rate* from the drop-down menu **(5)** on Trace that is the same as the baud rate for the device. See ***Appendix B: Device Baud Rates***.

   Note: Some devices will only have a single baud rate option available, select that baud rate.
6. Click the **Import** button **(6)** to import the data files. Select **Cancel (7)** to cancel the import.
7. Once imported, the *Read Success* window appears. See ***Import Successful*** on page 22. Select **OK** to continue.

Network Import

Use the *Network* method to import data from a device currently located on the network, using the device's IP address.

Note: Data from Rad-G can only be imported using the *Serial Import* method. See ***Serial Import*** on page 21.



1. Select the *Network* **(1)** tab.
2. Select the compatible Masimo device from the *Device* **(2)** options.
3. Enter the IP address **(3)** of the device for Trace to connect to. The Trace host computer **MUST** be on the same network as the Masimo device (wired or wireless). Secure Connection **(4)** is selected by default for Root, Rad-67 and Rad-97 devices. If Radical-7 is setup for a secure connection, place a checkmark in the box.

   Note: When using Radical-7 docked to Root, enter the IP address for Root. Refer to the Operator's Manual for the Masimo device to identify the device IP address.
4. Click the **Import** button **(5)** to import the data files. Select **Cancel (6)** to cancel the import.
5. Once imported, the *Read Success* window appears. See ***Import Successful*** on page 22. Select **OK** to continue.

Import Successful

The *Import Successful* window displays after importing data to Trace. Information displayed within the *Import Successful* window includes the following:

- The number of sessions linked to patients.
- The number of sessions not linked to patients. This data must be linked to a patient before it can be used. See ***Associate Session to Patient*** on page 25.

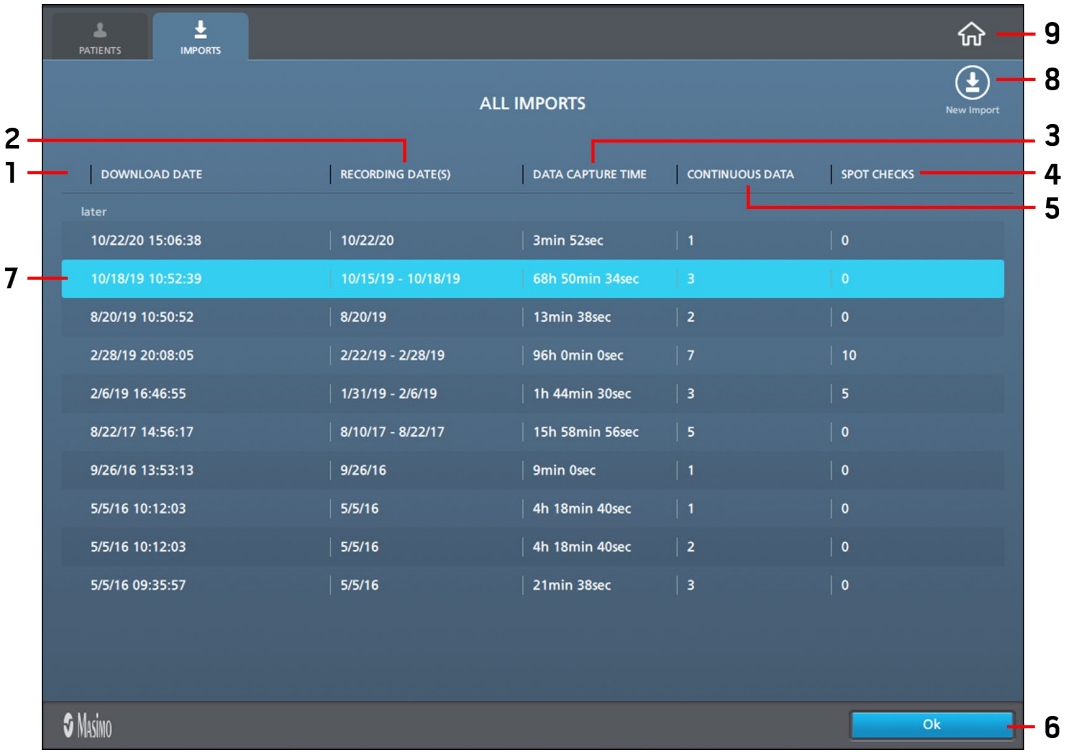
Select **OK** to close the window and view the *Imported Data Details*. See ***Imported Data Details*** on page 24.

Imports (Previous Imports)

The *Imports* screen lists all Trace data imports. To view the *Imports* screen, from the *Home* screen, select the *Previous Imports* option. See ***Trace Home Screen*** on page 11.

Note: The *Imports* screen can also be viewed after importing data. After importing data, the *Import Data Details* display. Select the **All Imports** arrow at the top of the screen to view the *Imports* screen.

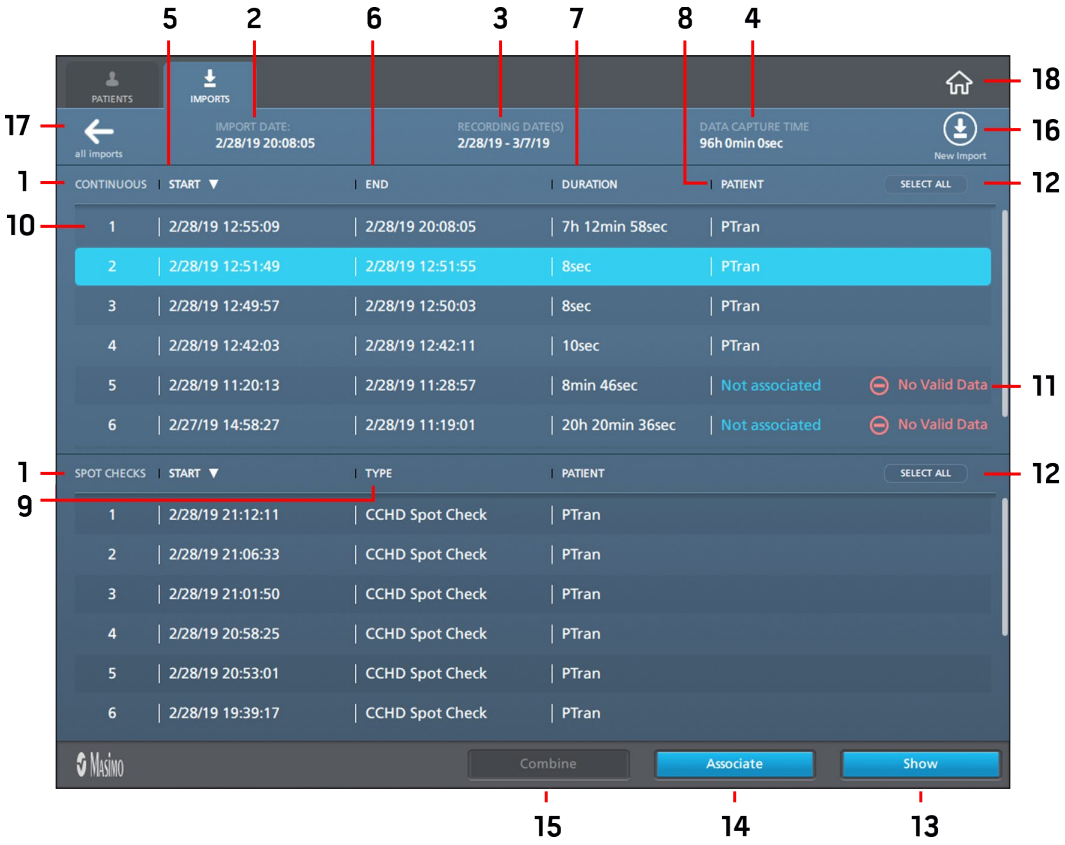
The *Imports* screen details are as follow:



Item	Description	Item	Description
1	Displays the date and time that the data was downloaded from the device.	6	After highlighting a download, select OK to view the data details. See ***Imported Data Details*** on page 24.
2	Displays the date that the data was recorded on the device.	7	• Double-click on a download to the view data details. See ***Imported Data Details*** on page 24. • Right-click on a download to the view data details or delete the import. See ***Delete Import*** on page 26.
3	Displays the total length of the imported data.	8	Select to import new data. See ***Import Data*** on page 21.
4	Indicates how many data files in the import are spot check data.	9	Select to view the *Home* screen. See ***Trace Home Screen*** on page 11.
5	Indicates how many data files in the import are continuous data.	-	--

Imported Data Details

The *Imported Data Details* displays information about the data that has been imported. Options available on-screen include:



Item	Description	Item	Description	Item	Description
1	Session type.	7	Displays the length of the session data.	13	Highlight a row and select **Show** to view patient trend data. See ***Continuous Data*** on page 31 or ***Spot Check Data*** on page 46.
2	Displays the date and time that the data was imported from the device.	8	Patient ID	14	Associate session(s) to a patient. See ***Associate Session to Patient*** on page 25.
3	Displays the date that the data was recorded on the device.	9	Type of Spot Check	15	Combine multiple sessions. See ***Combine/Un-Combine Sessions*** on page 25.
4	Displays the total length of the imported data.	10	Session data row: Double-click to view patient trend data. See ***Continuous Data*** on page 31 or ***Spot Check Data*** on page 46.	16	Select to import new data. See ***Import Data*** on page 21.
5	Date and time session began.	11	Session not associated with a patient. See ***Associate Session to Patient*** on page 25.	17	Return to the *All Imports* screen. See ***Import Data*** on page 21.
6	Date and time session ended.	12	Select all sessions under the data type.	18	Select to view the *Home* screen. See ***Trace Home Screen*** on page 11.

* Sessions must be associated with a patient to view. In the example shown, the data contains no valid data that can be displayed.

Associate Session to Patient

For session data to be viewed using Trace it must be associated with a patient. Sessions not associated with a patient display *Not Associated* in the *Patient* column on the *Imported Data Details* screen. See ***Imported Data Details*** on page 24.

Note: A session can also be unassociated with a patient. See ***Unassociate Data or Associate to a Different Patient*** on page 30.

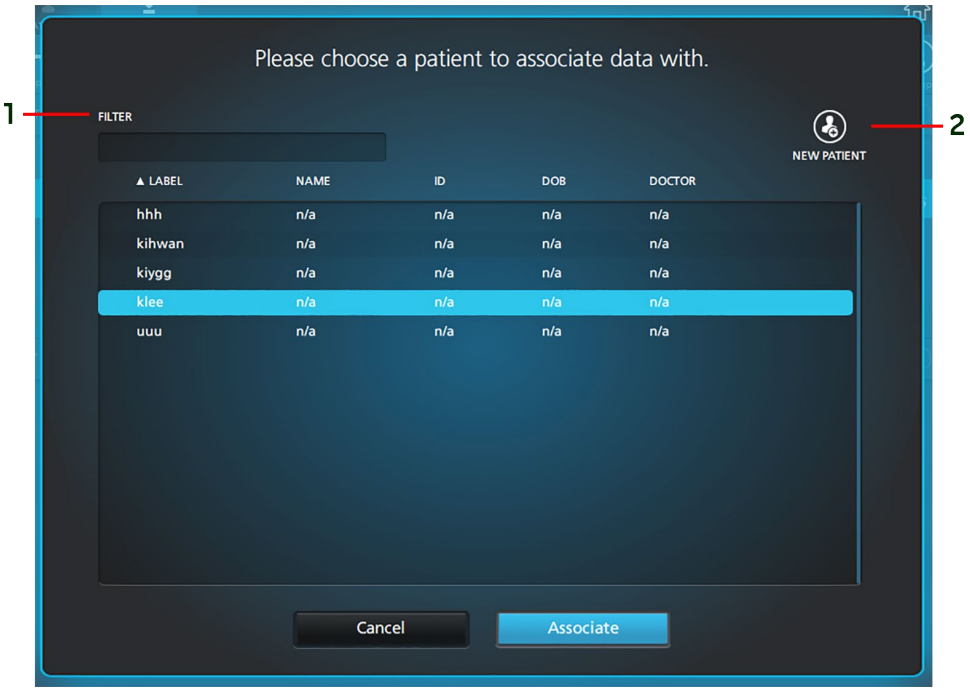
Additional functionality includes:

- Sessions already associated with a patient can be associated to a different patient.
- Multiple sessions can be associated to a single patient by selecting multiple session rows (including sessions already associated with a patient).

To associate a session to a patient:

1. From *Imported Data Details* screen highlight the session row that displays *Not Associated* in the *Patient* column, and select the **Associate** button at the bottom of the screen.
2. Select a patient from the list to associate the session with. The *Filter* field (1) can be used to search for a patient. Select the **Associate** button to associate the session with the patient, or **Cancel** to cancel.

   Note: To add a new patient to associate the session with, select the *New Patient* icon (2) and go to ***Associate Data and Add New Patient*** on page 29.



3. When complete, the *Patient* column on the *Imported Data Details* screen displays the associated patient label.

Combine/Un-Combine Sessions

Combine Sessions

Multiple sessions can be combined into a single session.

Note: Only sessions in sequence can be combined.

- When sessions for the same patient are combined, the combined session is associated to that patient.
- When sessions are combined, and one is not associated with a patient, the combined session will not be associated to a patient, and need to be associated to view. See ***Associate Session to Patient*** on page 25.
- When sessions associated to different patients are combined, the combined session will not be associated to a patient, and need to be associated to view. See ***Associate Session to Patient*** on page 25.

To combine sessions:

1. Highlight multiple session rows from the *Imported Data Details* and select the **Combine** button.

2. A pop-up appears. Confirm to combine by selecting **OK**, or **Cancel** to not combine the sessions.
3. On the *Imported Data Details*, the **Un-Combine** button appears for sessions that have been combined.

Un-Combine Sessions

Combined session can be un-combined back into individual sessions.

- When sessions are un-combined (even when associated to a patient), the individual sessions will not be associated to a patient, and need to be associated to view. See ***Associate Session to Patient*** on page 25.

To un-combine sessions:

1. Select the **Un-Combine** button for sessions that are combined.
2. A pop-up appears. Confirm to un-combine by selecting **OK**, or **Cancel** to not un-combine the sessions.
3. On *Imported Data Details*, the separate sessions appear and must be associated to a patient to view.

Delete Import

1. To delete a data import, select an import from the list on the *All Imports* screen.
2. Right-click on the highlighted import and select *Delete Import*.
3. Confirm the deletion by selecting OK (or Cancel to cancel the deletion process).
4. The data is deleted from Trace.

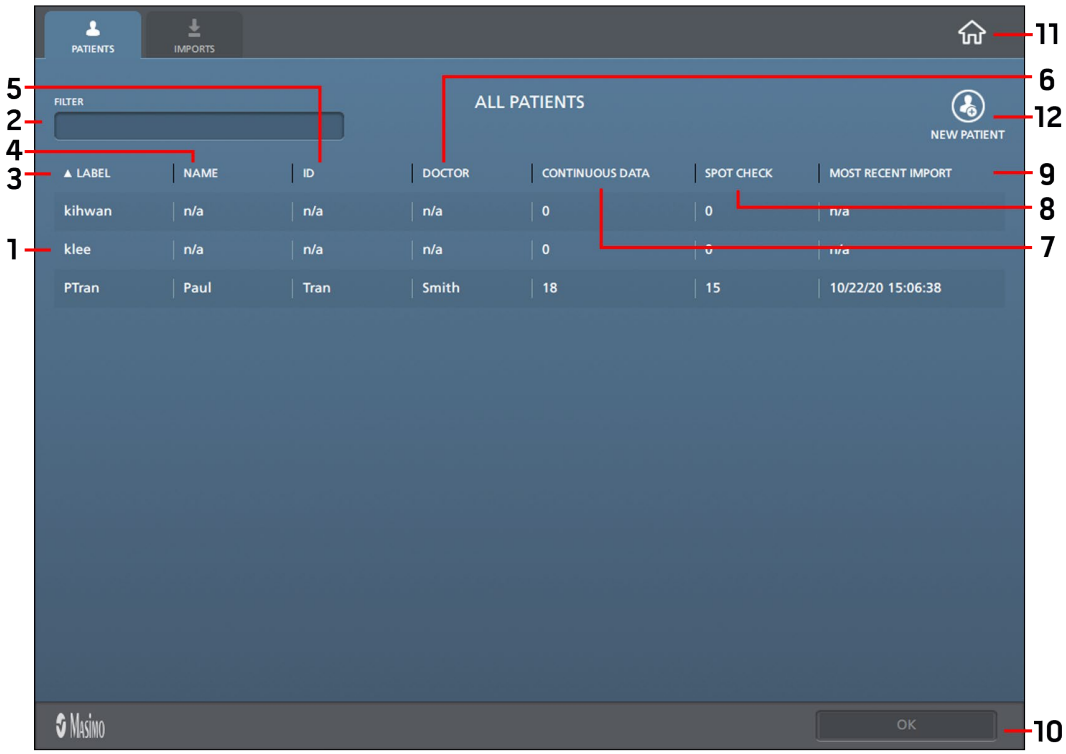
Patients

The *All Patients* screen lists all Trace patients. To view the *All Patients* screen, from the *Home* screen, select the *Patients* option. See ***Trace Home Screen*** on page 11.

Note: The *All Patients* screen can also be viewed after importing data. After importing data, the *Import Data Details* display. Select the **All Imports** arrow at the top of the screen to view the *Imports* screen, then select the *Patients* tab.

Note: When patient data is populated through session data on Root, this patient information displays when imported into Trace. The patient information can be edited.

The *All Patients* screen details are as follow:



Item	Description	Item	Description	Item	Description
1	Patient information.	5	Patient ID*	9	Most recent import information. Displays date and time when data was recorded on device.
2	Use *Filter* to search for and locate a specific patient.	6	Patient's Doctor*	10	Select a patient row, then **OK** to view patient data. See ***Patient Data*** on page 27.
3	Patient label*	7	Number of continuous data sessions for the patient. See ***Patient Data*** on page 27.	11	Select to view the *Home* screen. See ***Trace Home Screen*** on page 11.
4	Patients name*	8	Number of spot check sessions for the patient. See ***Patient Data*** on page 27.	12	Add new patient. See ***Add New Patient*** on page 29.

* Can be changed using the edit feature. See ***Edit Patient Information*** on page 30.

View Available Patient Data

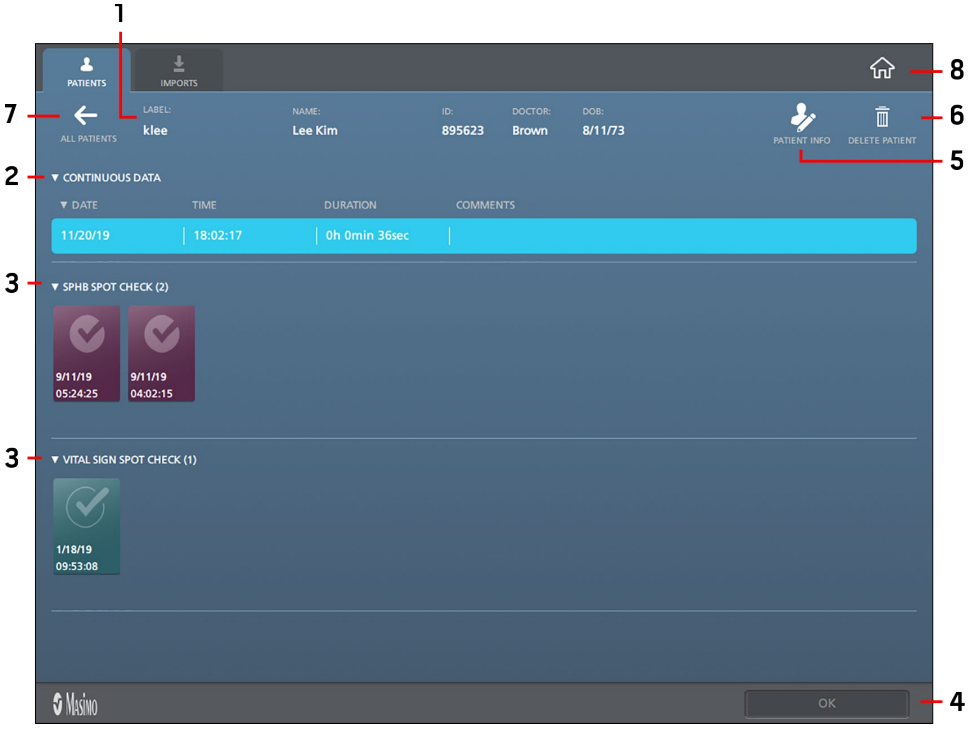
To view available data for a patient, use one of the following methods:

- Double-click in a patient row.
- Right-click on a patient row and select *View Patient's Data*.
- Select a patient row, then the **OK** button.

The patient data displays on the Patient Data screen. See ***Patient Data*** on page 27.

Patient Data

The *Patient Data* screen displays all sessions for the selected patient. The *Patient Data* screen details are as follow:



Item	Description	Item	Description	Item	Description
1	Patient information	4	Select to view all available patient spot checks as Scorecards. See ***Show All as Cards*** on page 28.	7	Delete the patient. See ***Delete a Patient*** on page 30.

Item	Description	Item	Description	Item	Description
2	Continuous monitoring data*. Click on a row to view data. See ***Continuous Data*** on page 31.	5	Highlight a continuous data row or spot check session and select **OK** to view the data. See ***Continuous Data*** on page 31 or ***Spot Check Data*** on page 46.	8	Return to the *All Patients* screen. See ***Patients*** on page 26.
3	Spot check session data*. Click on a session to view data. See ***Spot Check Data*** on page 46.	6	Edit the patient's information. See ***Edit Patient Information*** on page 30.	9	Select to view the *Home* screen. See ***Trace Home Screen*** on page 11.

* Data can be associated to a different patient or no patient at all. When associated to a different patient or no patient, they do not display under any patient and are only available under Imported Data. See ***Imports (Previous Imports)*** on page 23.

Show All as Cards

When the Show All as Card button is selected in the *Patient Data* view, all the available spot checks for the patient display in the Scorecard view as shown in the example. Swipe left or right to view all available Scorecards. See ***Trend and Scorecard View*** on page 47 for additional information for available functions and features. Reports can be accessed directly from the screen. See ***Spot Check Report Settings*** on page 65.

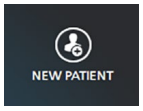
Item	Description	Item	Description
1	Displays the *Report Selection* screen. See ***Spot Check Report Settings*** on page 65.	3	Unassociate the data with a patient. See ***Unassociate Data or Associate to a Different Patient*** on page 30.
2	Swipe left or right to view all available Scorecards.	4	Return to the Patient Data screen. See ***Patient Data*** on page 27.

Add New Patient

New patients can be added to Trace for associating data.

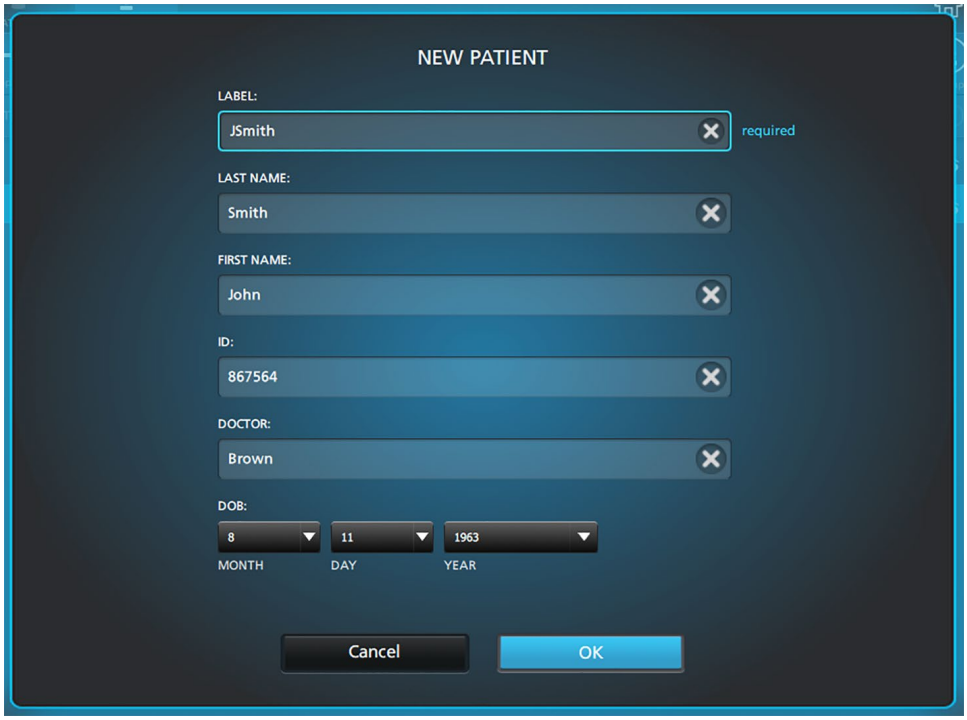
To add a new patient:

1. From the *Patients* tab select the *New Patient* icon.



2. Enter the patient information into the fields in the *New Patient* pop-up. When complete, select the **OK** to create the new patient, or **Cancel** to cancel.

   Note: A patient Label is required, all other information is optional.



3. The new patient appears on the patients screen.

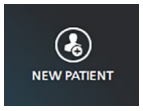
Associate Data and Add New Patient

New patients can be added when associating imported data.

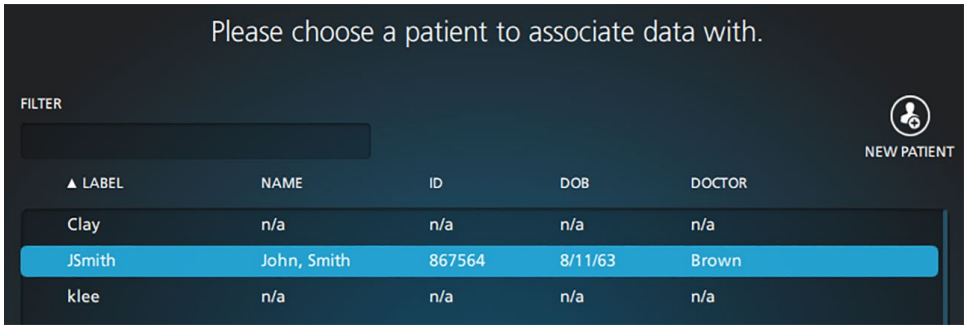
- Sessions already associated with a patient can be associated to the new patient.
- Multiple sessions can be associated to the new patient by selecting multiple session rows (including sessions already associated with a patient).

To add a new patient:

1. From *Imported Data Details* screen highlight the session row that displays *Not Associated* in the *Patient* column, and select the **Associate** button at the bottom of the screen.
2. When the *Associate* window open, select the *New Patient* icon at the top of the window.



3. Follow the instruction in ***Add New Patient*** on page 29 to add the patient.
4. The new patient now appears as an option for selecting from the list to associate the session with. Highlight the new patient row and select the **Associate** button to associate the session with the patient, or **Cancel** to cancel. See ***Associate Session to Patient*** on page 25 for additional information.



5. When complete, the *Patient* column on the *Imported Data Details* screen displays the associated patient.

Edit Patient Information

To Edit the Patient's Information

Note: A patient Label is required, all other information is optional.

1. From the *All Patients* screen, right-click on a patient row and select *Edit Patient's Info,* or double-click on the patient row and select *Patient Info* from the patient screen.
2. Make changes to the patient info.
3. When complete, select the **OK** to save the patient info, or **Cancel** to cancel.
4. The updated patient info displays on the *All Patients* screen.

Delete a Patient

A patient can be deleted from Trace. When a patient is deleted and they are associated to session data, the data becomes unassociated and must be associated to a patient to view. See ***Associate Session to Patient*** on page 25.

Note: When a patient is deleted, they must be added again manually. See ***Add New Patient*** on page 29.

To delete a patient:

1. From the *All Patients* screen, right-click on a patient row and select *Delete Patient,* or double-click on the patient row and select *Delete Patient* from the patient screen.
2. Confirm the deletion by selecting **OK** (or **Cancel** to cancel the deletion process).
3. The patient is deleted from Trace.

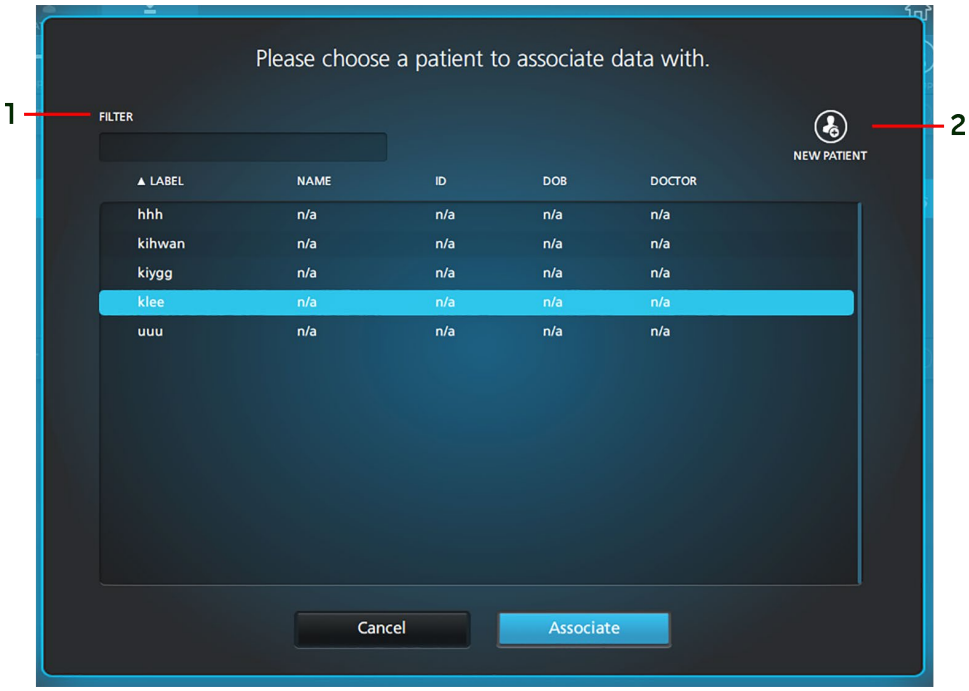
Unassociate Data or Associate to a Different Patient

Associate Session(s) to a Different Patient

To associate a session, or multiple sessions to a different patient, perform the following:

1. If multiple sessions are to be associated to another patient, select the desired sessions.
2. Right-click on a session and select *Associate to another patient*.
3. Select a patient from the list to associate the session with. See ***Associate Session to Patient*** on page 25. Select the **Associate** button to associate the session with the patient, or **Cancel** to cancel.

Note: To add a new patient to associate the session with, select the *New Patient* icon (2) and go to ***Add New Patient*** on page 29.



4. When complete, the session(s) will no longer appear on the *Patient Data* screen.

Unassociate Session(s) from a Patient

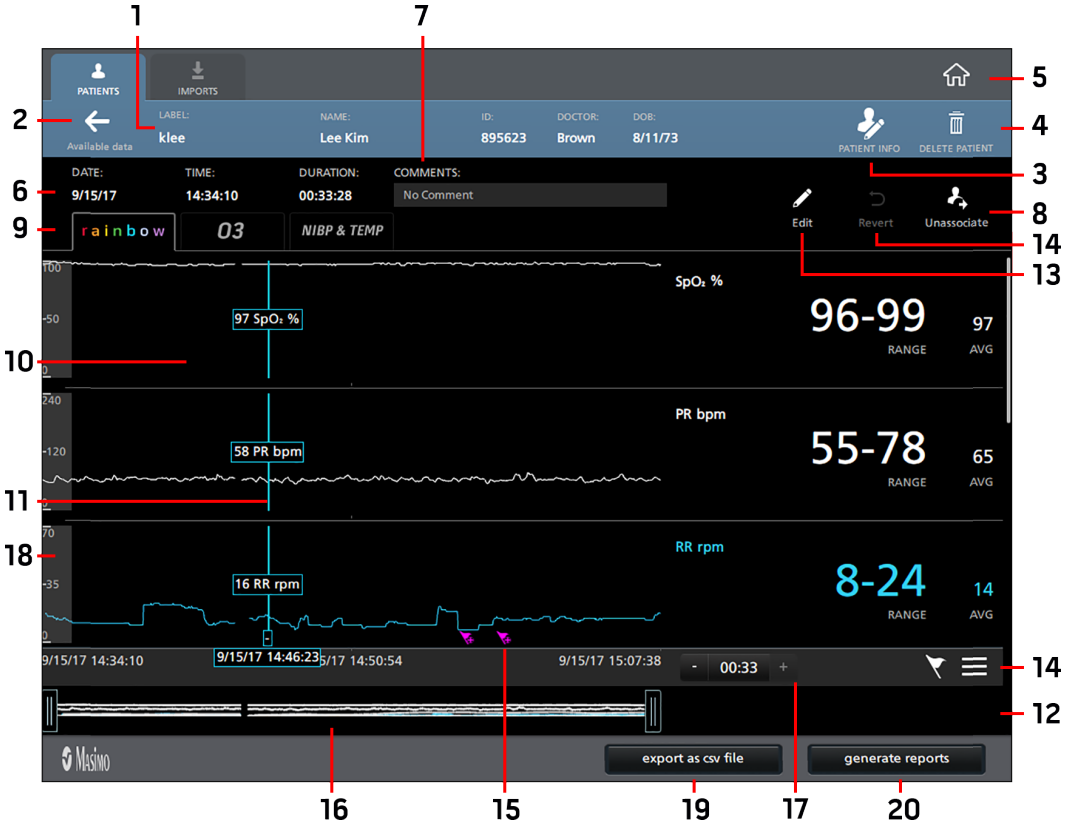
To unassociate a session, or multiple sessions from a patient, perform the following:

1. If multiple sessions are to be unassociated, select the desired sessions.
2. Right-click on a session and select *Unassociate from this patient*. See ***Patient Data*** on page 27.
3. A pop-up appears. Confirm to unassociate by selecting **OK**, or **Cancel** to not unassociate.
4. When complete, the session(s) will no longer appear on the *Patient Data* screen.

Continuous Data

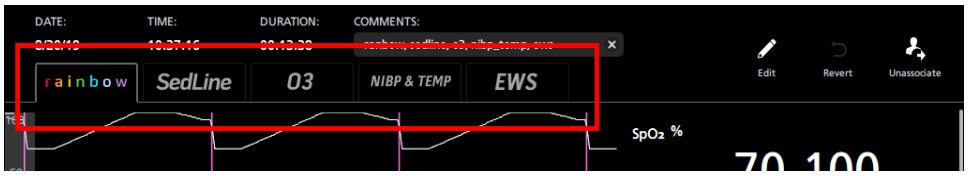
Continuous data sessions are viewed through the *Patients* screen. See ***Patient Data*** on page 27. Continuous data sessions must be associated to a patient to be able to be viewed in Trace. See ***Associate Session to Patient*** on page 25.

Below is an example of the *Continuous Data* screen, showing available features and functions:



Item	Description	Item	Description	Item	Description
1	Patient Information.	8	Unassociate the data with a patient. See ***Unassociate Data or Associate to a Different Patient*** on page 30.	15	Events. See ***Events*** on page 34.
2	Return to the *Patient Data* screen. See ***Patient Data*** on page 27.	9	Channel Tabs. See ***Channels*** on page 33.	16	Timeline controls. See ***Timeline Features*** on page 39.
3	Edit the patient's information. See ***Edit Patient Information*** on page 30.	10	Parameter Window/Timeline.	17	Increases or decreases the timeline zoom.
4	Delete the patient. See ***Delete a Patient*** on page 30.	11	Trend Snapshot. See ***Trend Snapshot*** on page 39.	18	The Min/Max of the parameter can be adjusted. See ***Parameter Y-Axis*** on page 39.
5	Select to view the *Home* screen. See ***Trace Home Screen*** on page 11.	12	Parameter Well. See ***Parameter Well*** on page 34.	19	Exports patient data to an Excel format. See ***Chapter 4: Reports*** on page 51.
6	Displays the date and time that the data was recorded on the device and the length (duration) of the data.	13	Edit the timeline displayed in the Parameter Window. See ***Edit Timeline*** on page 41.	20	Displays the *Report Selection* screen (PDF export). See ***Chapter 4: Reports*** on page 51.
7	Click to add comments to the patient data. See ***Patient Data Comments*** on page 33.	14	Undo edits to the timeline. See ***Edit Timeline*** on page 41.	-	--

Channels



Channels display on Trace as tabs above the parameter window. Available channel tabs are in direct relation to the imported data.

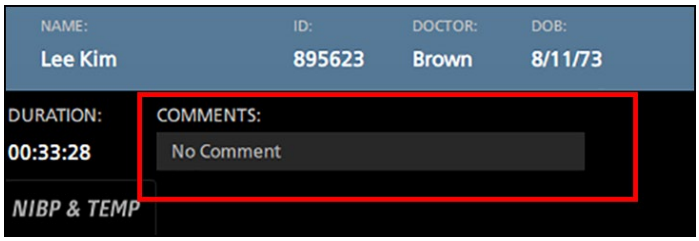
If imported data contains multiple channels, then multiple channel tabs display. If imported data contains *rainbow, SedLine, O3, NIBP & TEMP,* and *EWS* (as shown in the example), then the *rainbow, SedLine, O3, NIBP & TEMP,* and *EWS* channel tabs display. Select the desired channel to display data.

Note: Only one (1) channel can be selected to display at a time.

Channels include, but are not limited to the following:

- rainbow
- SedLine
- O3
- Capnography
- NIBP & Temperature
- Temperature
- EWS

Patient Data Comments

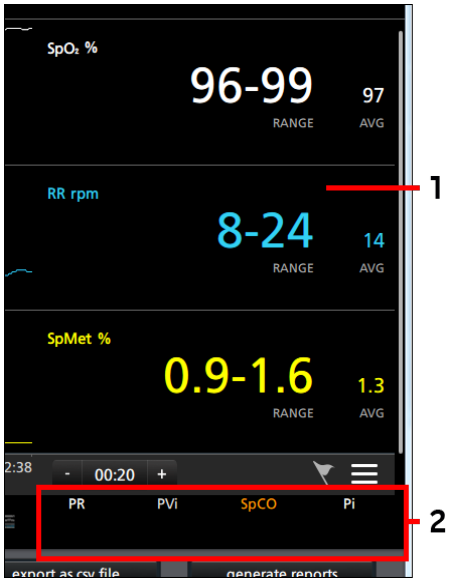


Patient data comments can only be made to continuous data. These comments display in the PDF reports header. See ***Report Header/Footer Information*** on page 101.

1. Click in the *Comments* field above the patient data.
2. Enter the desired comments to be included in the patient data on Trace.

   Note: The comments field is limited to 150 characters maximum.
3. After filling in the fields, the comments are automatically stored and can be edited or removed at any time.

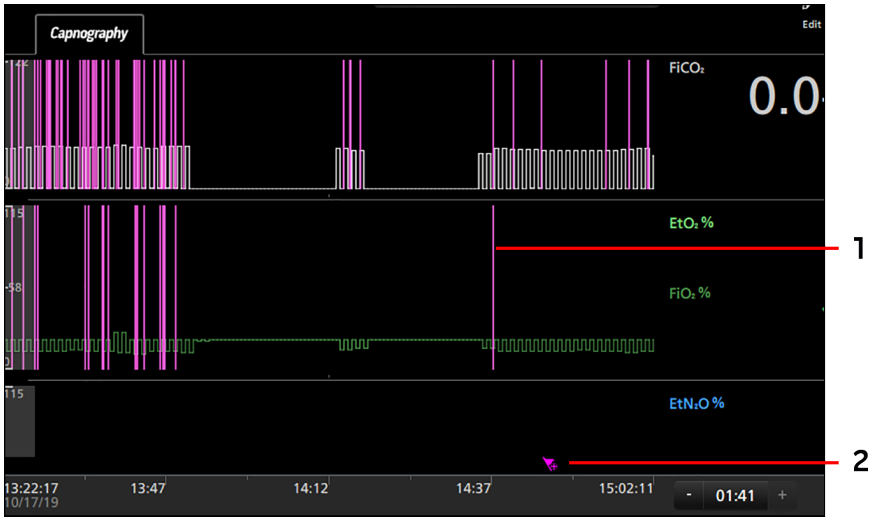
Parameter Well

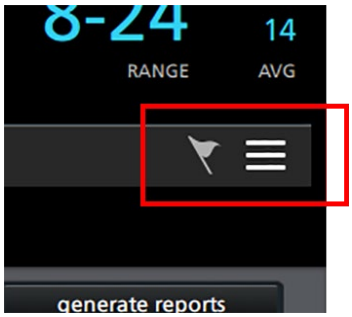


Parameters in can be moved between the *Parameter Window* (1) and the *Well* (2). To move parameters into and out of the well, click and hold on the parameter, and drag into or out of the well.

Events

Actual events are indicated as vertical pink lines (1) and manual events are indicated as pink flags at the bottom of the timeline (2). Click on the event icon or vertical line to view the event type.





Events can be manipulated in the following ways using the *Events* icons:

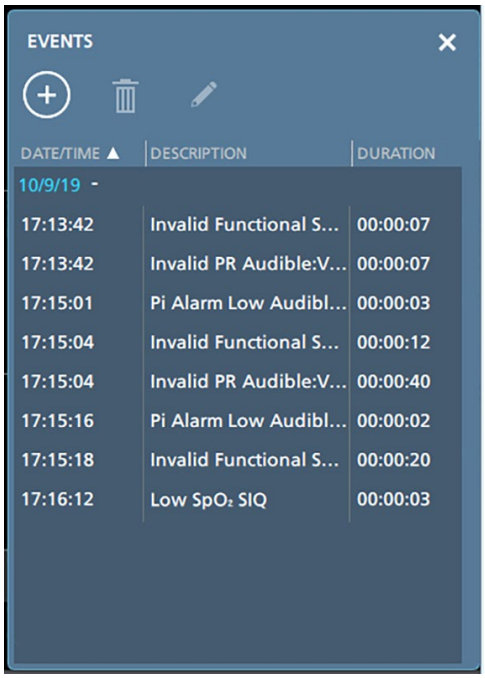
- Display or hide **ALL** events on the timeline.
- Display the *Events* menu.

Display/Hide ALL Events on the Timeline

To toggle events to be displayed or hidden on the timeline, click on the *Events Show/Off* icon .

Actual Events

A pink vertical line on the timeline indicates each actual event. Actual events can only be hidden or displayed and cannot be edited or deleted. The following image shows examples of actual events as displayed in the *Events* menu. Select the *Events* icon to open the *Events* menu. Note that the delete and edit icons are grayed out, indicating the actual events cannot be edited or deleted.



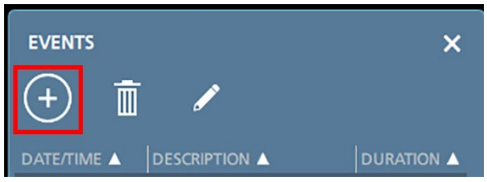
Manual Events

Manual events can be added, edited, deleted, hidden, and displayed. An icon for each manual event displays at the bottom of the timeline.

Add a New Manual Event

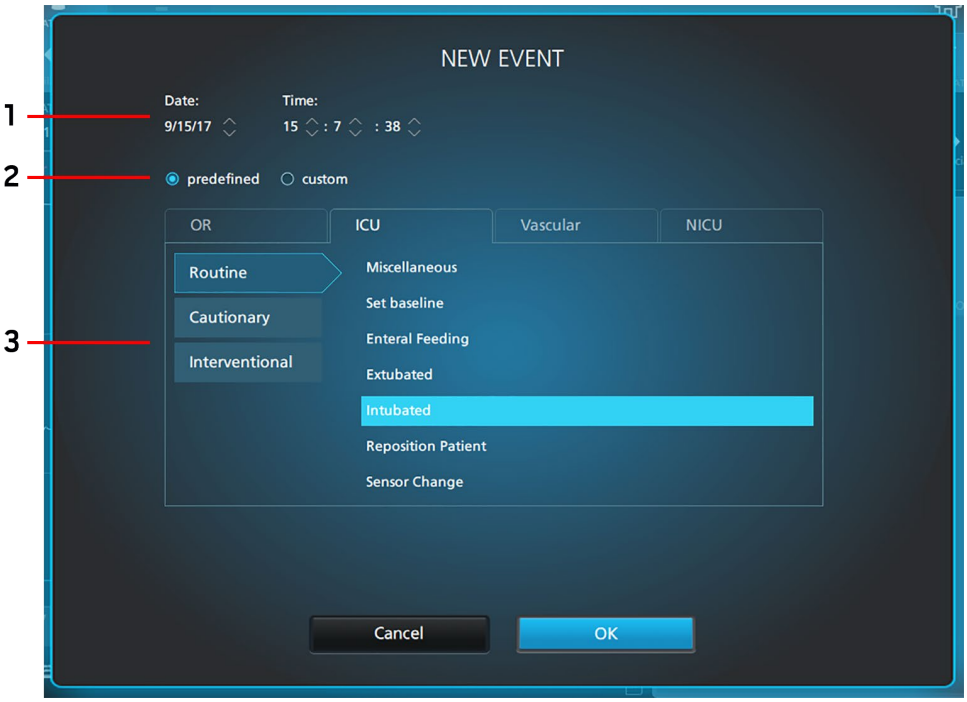
To add an event to the current patient file:

1. Select the *Events* icon to open the *Events* menu.
   Note: Performing a right-click on the timeline also allows the option to add a manual event.
2. Select the *Add Event* icon in the *Events* menu to add a new event.

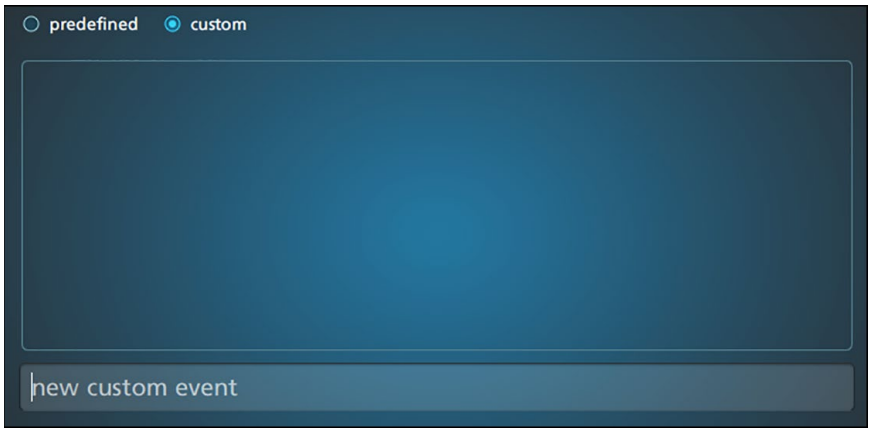


3. Select the event date and time (1), predefined or custom event (2).

- When **predefined** is selected, choose an even from the available events (3).

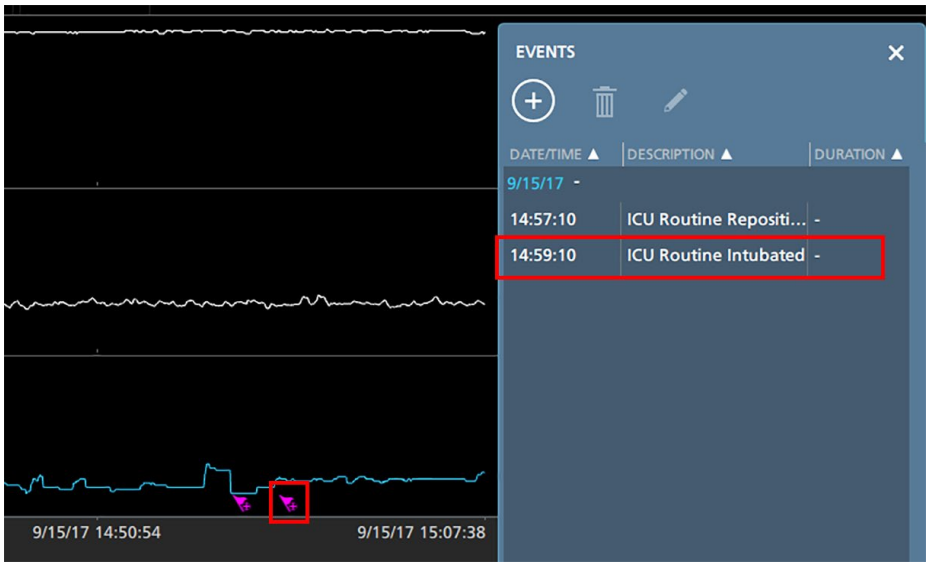


- When custom is selected, enter a name for the event in the *new custom event* field.



4. Select **OK** to create the event, or **Cancel** to not create the event.

5. After the new event is created, the event is listed and displayed on the timeline.

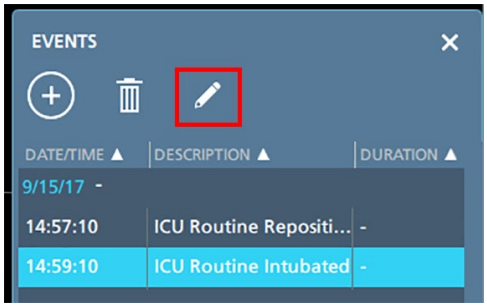


Edit a Manual Event

Note: Only manual events with the icon can be edited.

To edit an event, view the *Event* menu as described previously.

1. Select the event from the list and select the *Edit* icon.



2. Edit the event information in the same manner as adding an event discussed previously.
3. Select **OK** to save the edits, or **Cancel** to not save the event edits.

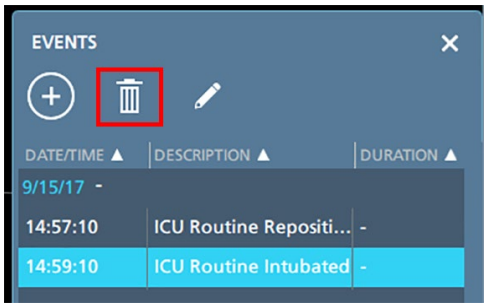
Delete a Manual Event

Note: Only manual events with the icon can be deleted.

To delete an event, view the *Event* menu as described previously.

1. Select the event from the list and select the *Delete* icon.

Note: The event is deleted without any confirmation.



2. The event is deleted from the patient data.

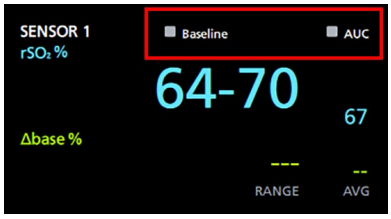
O3 Channel Settings

Changes can be made to the Baseline and AUC Limit settings within the O3 timeline for reporting purposes.

Available O3 channel settings include:

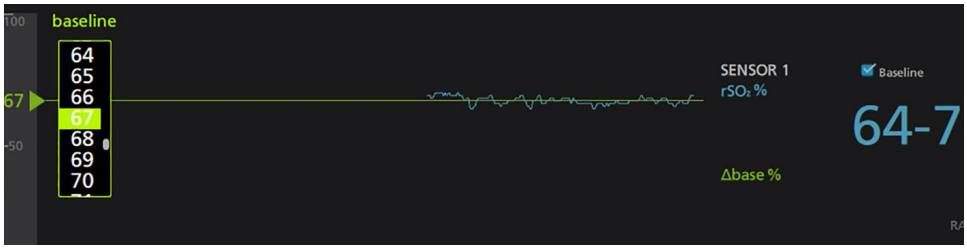
Options	Description	Factory Default Settings	Configurable Options
Baseline	Set the baseline.	Off (Un-checked)	10 to 90 in steps of 1, or Off
AUC Limit	Set the AUC Limit.	Off (Un-checked)	1 to 97 in steps of 1, or Off

To enable either setting, place a checkmark in the Baseline or AUC box.

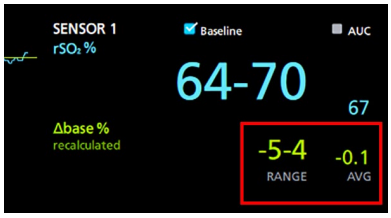


Baseline

The baseline is seen as a horizontal green line across the entire trend display and indicates the baseline rSO_2 value selected by the user. To enable the baseline, select the Baseline box. When selecting the Baseline box, the Baseline value options appear and can be set. The Baseline setting allows the Delta cHbi indices to be changed for reporting purposes only. After selecting a Baseline, click anywhere on the screen to close the settings.

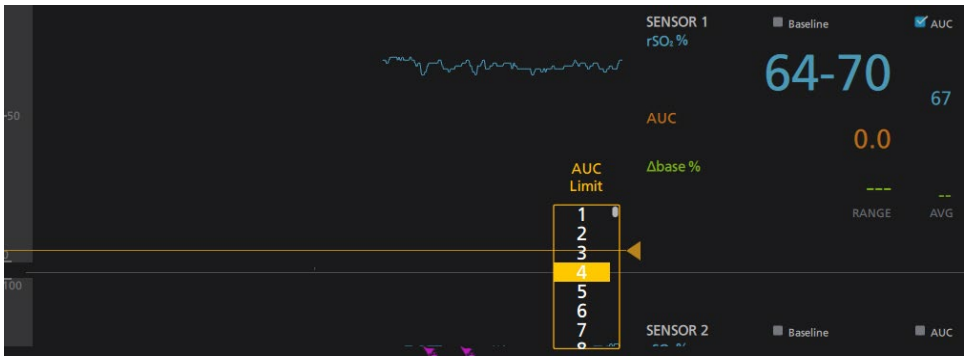


After setting a Baseline value, the Baseline displays in the timeline and the Range and Average values are populated.

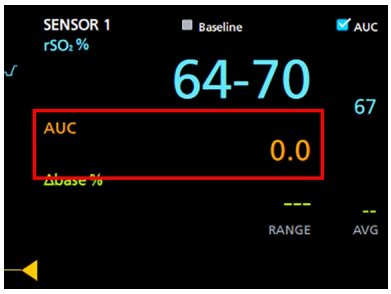


AUC Limit

The AUC Limit is seen as a horizontal orange line across the entire trend display that displays the Area Under the Curve cumulative index. When selecting the AUC box, an AUC Limit value options appear and can be set. This limit can be set for reporting purposes only. After selecting an AUC Limit, click anywhere on the screen to close the settings.



After setting an AUC limit value, the AUC Limit displays in the timeline and a value for AUC appears on the screen.

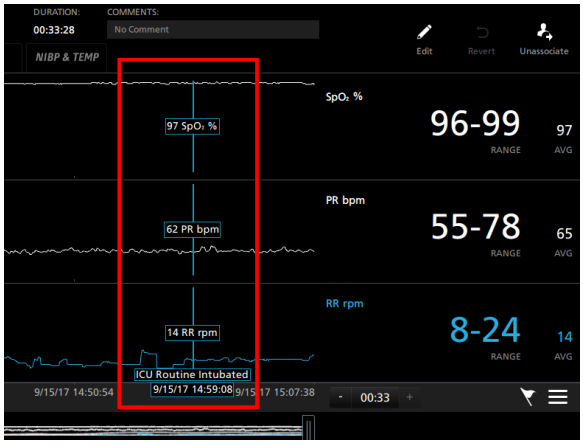


Timeline Features

The timeline display can be adjusted directly on the Continuous data screen, or edited and set using the *Edit Mode* screen.

Trend Snapshot

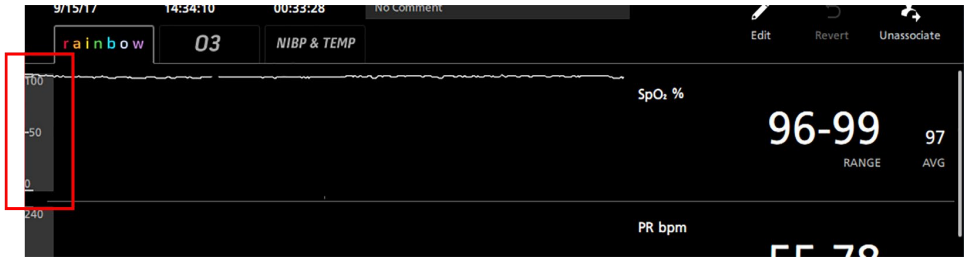
Click on the timeline to view a snapshot of the trend data. At the bottom of the snapshot is the date and time. Select another location on the timeline or drag the snapshot left or right to change the position. When selected over an event, the name of the event also displays at the bottom of the snapshot. The snapshot disappears after approximately 5 seconds after selecting.



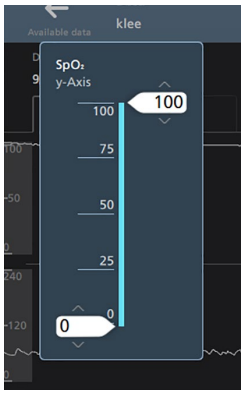
Parameter Y-Axis

The *Parameter Window* allows modifications to the Graph Min/Max (Y-axis) for each parameter available in the displayed data.

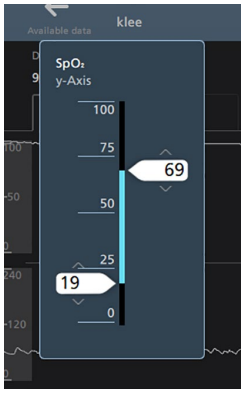
1. Click on the graph min/max at the far left of the parameter row.



2. The *y-Axis Settings* display.



3. Click and drag the settings to change the settings for *graph min* and *graph max*.



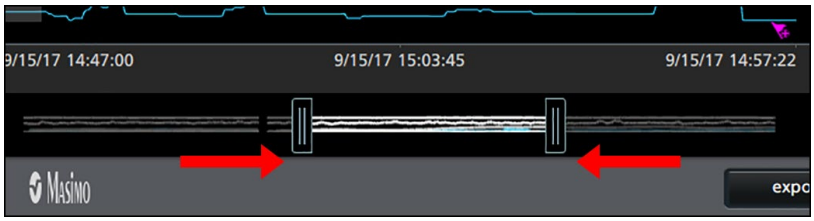
4. After changing the settings, click anywhere outside of the *y-Axis Settings* to close the settings. The changes are reflected in the timeline.

Adjust Timeline Display

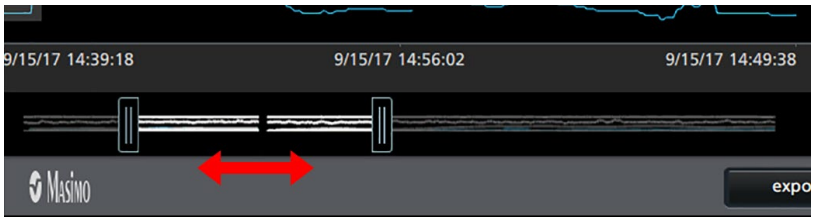
The timeline view can be changed on the Continuous screen using the drag handles to crop the data view. This method of cropping is not saved or exported when reporting. See ***Edit Timeline*** on page 41 to make make changes to the timeline for reporting purposes.

Note: These changes to the timeline can be saved by going to the *Edit* feature and selecting the *Crop* or *Cut* option. See ***Edit Timeline*** on page 41.

1. Adjust the start and end times for the timeline data by dragging the drag handles at the ends of the timeline. Note that the times in the timeline above change as the handles are adjusted.



2. The cropped length can be dragged within the timeline to change the position as well.

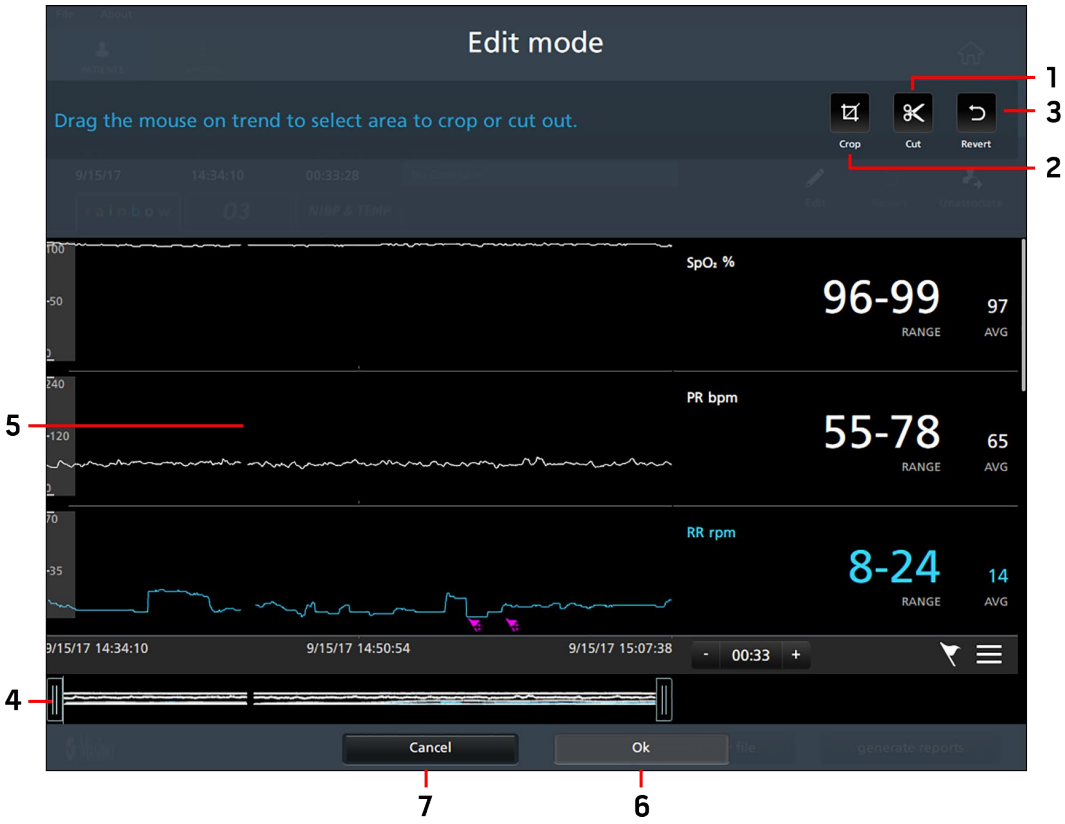


3. To undo the timeline crop, drag the handles back to the ends of the timeline to view the original length.

Edit Timeline

Select the *Edit* icon on the *Continuous* data screen to view the *Edit Mode* screen. Changes made to the data are never permanent and can be reverted at any time. These edits are designed for use in reporting purposes.

Edit Mode screen details are shown:



Item	Description	Item	Description
1	Cut (remove) the selected timeline data.	5	Click in the timeline to select timeline data to crop or trim.
2	Crop (trim) the selected timeline data.	6	Save the changes made to the timeline.
3	Revert (undo) changes made to the timeline data.	7	Discard changes to the timeline.
4	Change the length of the timeline data using the drag handles.	-	--

Crop/Cut Timeline

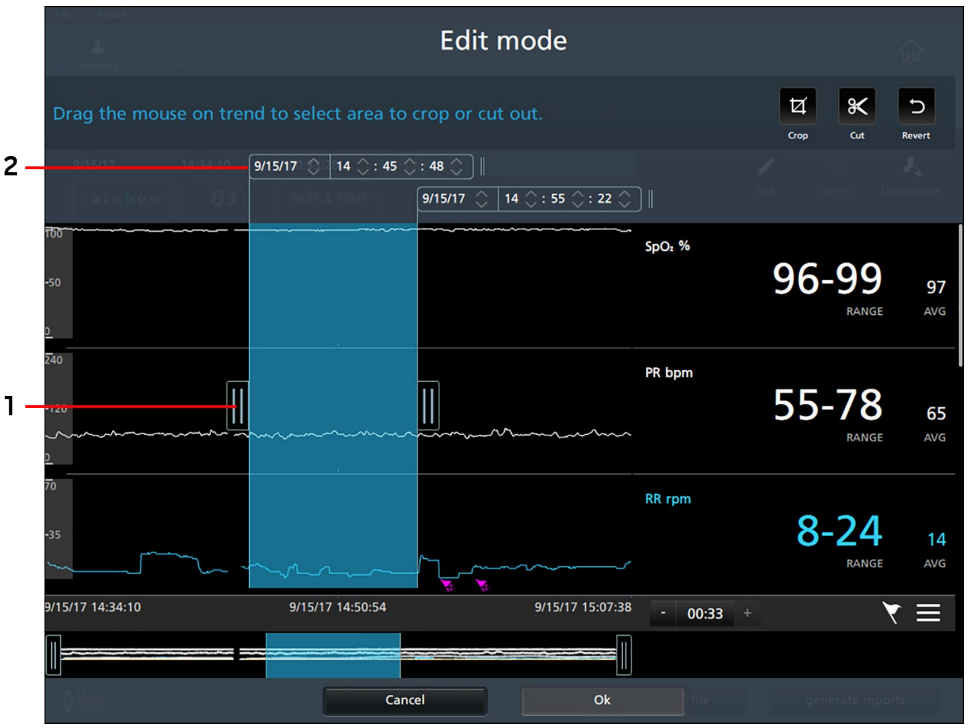
Crop - When cropping the timeline, you are selecting trend data to remove from the beginning, the end or both the beginning and the end of the timeline.

Cut - When cutting the timeline, you are selecting trend data to remove from the middle portion of the timeline.

Note: The ability to perform a crop or a cut of the data is for reporting purposes only. The actual data is not deleted.

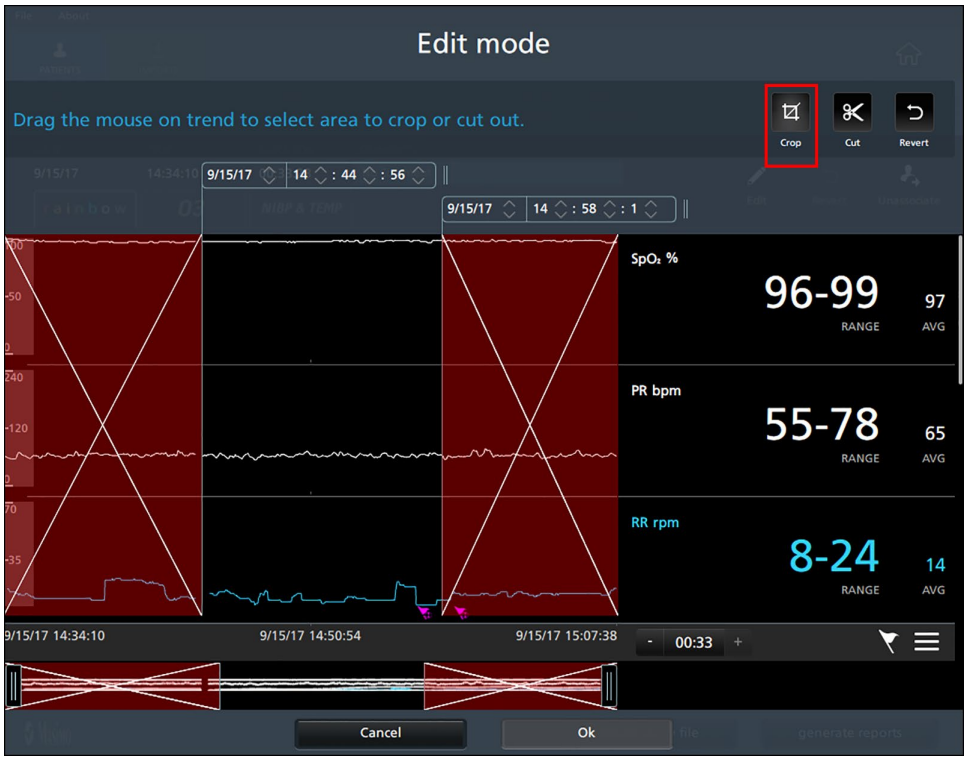
To select trend data on the timeline, perform the following:

1. Click on the trend data and drag left or right to display the selection tool.
2. Adjust the start and end times for the data using one of the following methods:
   - Moving the drag handles (1) at the ends of the selection tool to the desired locations.
   - Adjusting the dates and times (2) in the selection tool.

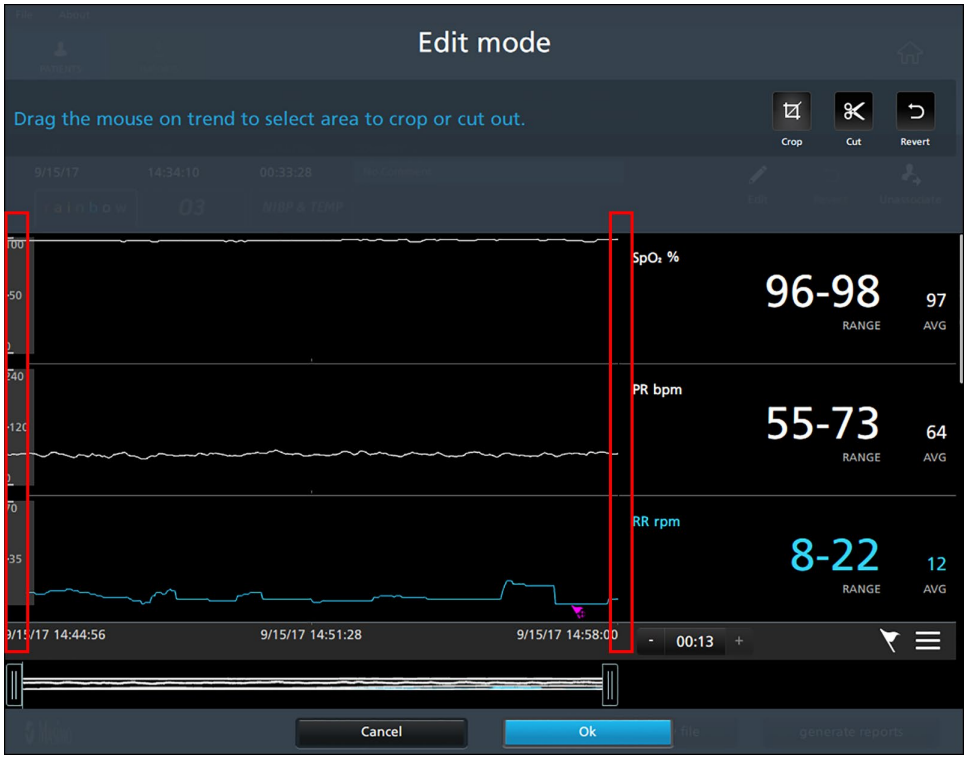


Crop Timeline

1. Before cropping the timeline, hover over the *Crop* icon. The selected trend data to be cropped from the timeline is shown.



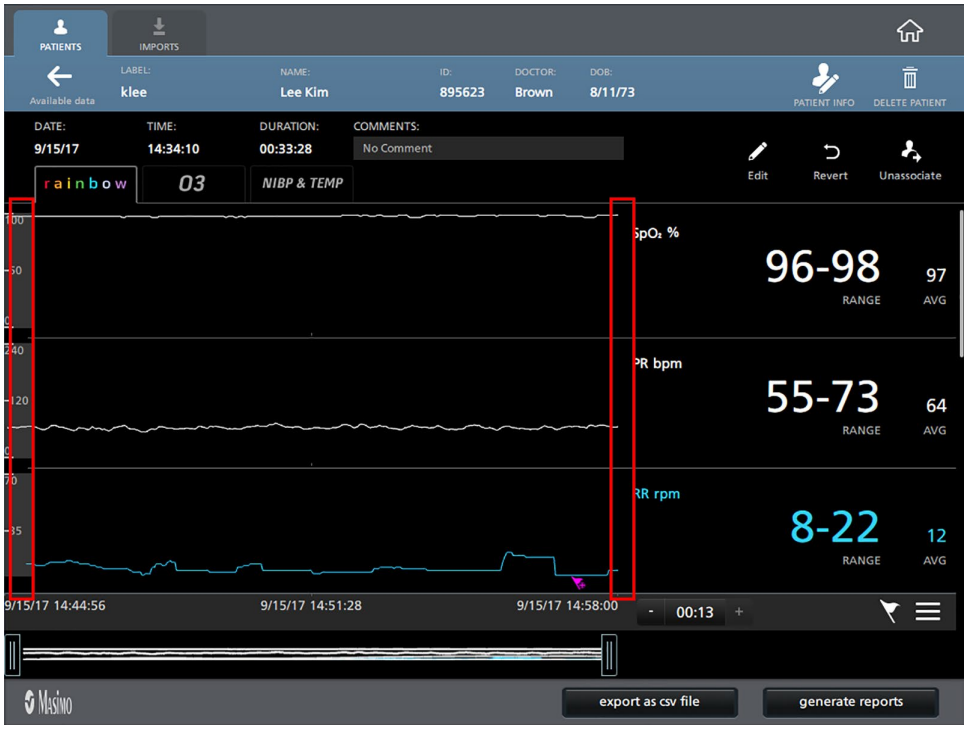
2. Make additional changes to the selected crop area if necessary. Select the *Crop* icon to crop the timeline for review. Click *Revert* to discard changes.



3. Select **OK** to save the crop to the timeline or **Cancel** to discard the changes.

4. The *Continuous Data* screen displays the timeline with the cropped data removed.

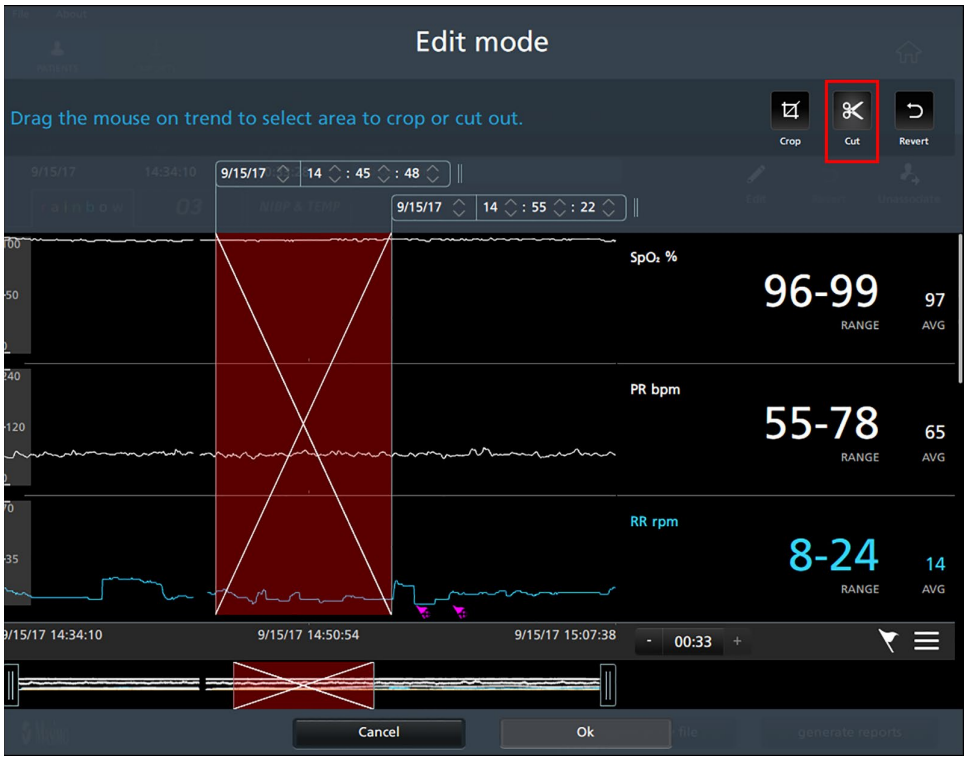
   Note: The duration displayed at the top of the *Continuous Data* screen does not change when cropping a timeline.



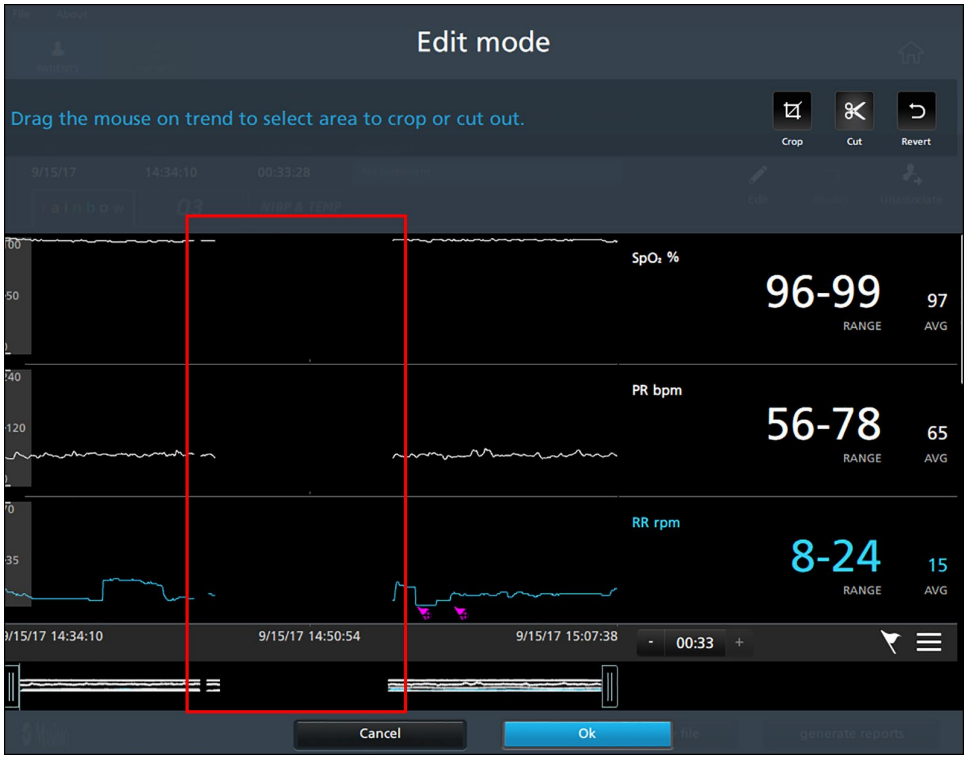
5. To undo the timeline crop, click *Revert*. See ***Revert Timeline*** on page 46.

Cut Timeline

1. Before cutting the timeline, hover over the *Cut* icon. The selected trend data to be cut out of the timeline is shown.



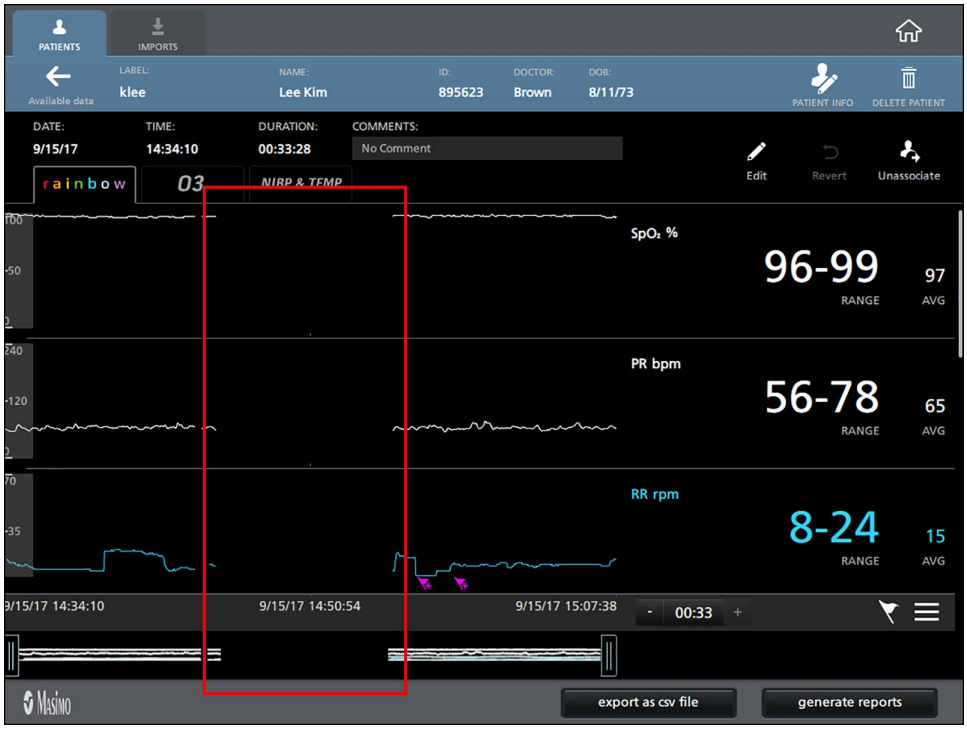
2. Make additional changes to the selected cut area if necessary. Select the *Cut* icon to cut the data from the timeline for review. Click *Revert* to discard changes.



3. Select **OK** to save the cut to the timeline or **Cancel** to discard the changes.

4. The *Continuous Data* screen displays and the timeline reflects the cut data showing as a blank area.

   Note: The duration displayed at the top of the *Continuous Data* screen does not change when cutting a timeline.



5. To undo the timeline cut, click *Revert*. See ***Revert Timeline*** on page 46.

Revert Timeline

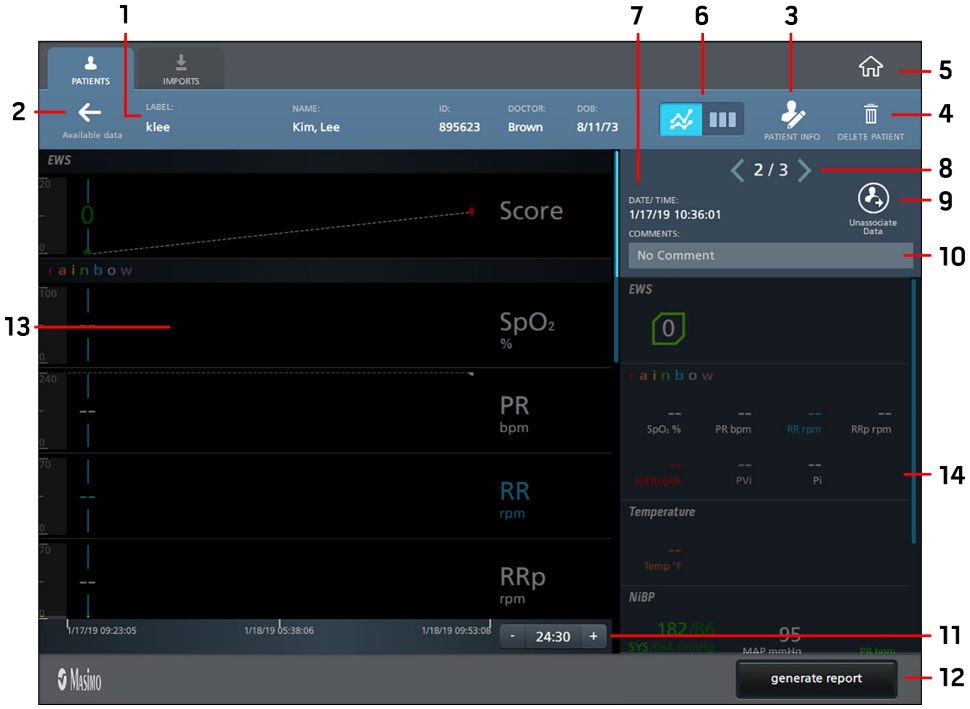
To revert (undo) the changes made to the timeline, perform one of the following:

- **From the *Edit Mode* screen -** Select the *Revert* icon at the top of the screen to discard all changes made.
- **From the *Continuous* data screen -** Select the *Revert* icon at the top of the screen. When the pop-up appears, select **OK** to discard all changes made or **Cancel** to keep the changes.

Spot Check Data

Spot check data is viewed through the *Patients* screen. See ***Patient Data*** on page 27. Spot check data must be associated to a patient to be able to be viewed in Trace. See ***Associate Session to Patient*** on page 25.

Below is an example of the *Vital Signs Spot Check Data* screen, showing only the available features and functions. Spot check data from other sources are laid out in a similar fashion.



Item	Description	Item	Description	Item	Description
1	Patient Information.	6	View spot check in trend or card (scorecard) view. See ***Trend and Scorecard View*** on page 47.	11	Increases or decreases the timeline zoom.
2	Return to the *Patient Data* screen. See ***Patient Data*** on page 27.	7	Displays the date and time that the data was recorded on the device and the length (duration) of the data.	12	Displays the *Report Selection* screen (PDF export). See ***Chapter 4: Reports*** on page 51.
3	Edit the patient's information. See ***Edit Patient Information*** on page 30.	8	View available spot checks by selecting the arrows.	13	Parameter Window/Timeline.
4	Delete the patient. See ***Delete a Patient*** on page 30.	9	Unassociate the data with a patient. See ***Unassociate Data or Associate to a Different Patient*** on page 30.	14	Spot check scorecard.

Item	Description	Item	Description	Item	Description
5	Select to view the *Home* screen. See ***Trace Home Screen*** on page 11.	10	Click to add comments to the patient data. See ***Patient Data Comments*** on page 33.	-	--

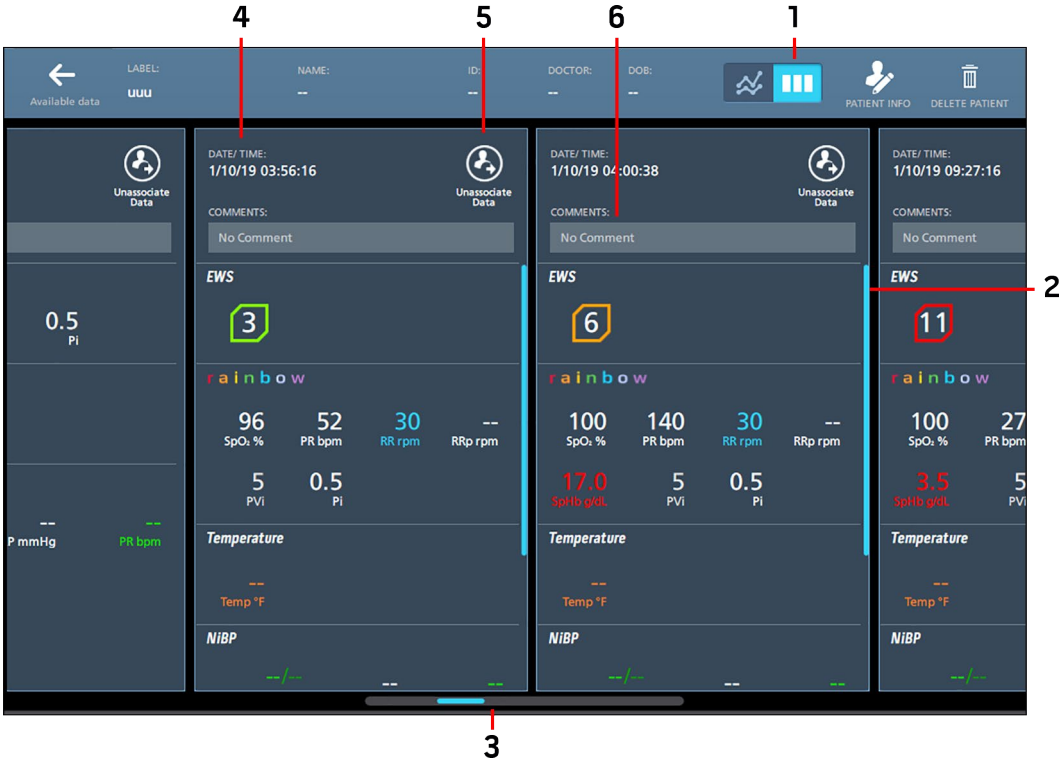
Trend and Scorecard View

Below are examples of the spot check data displayed in both trend view and card view using *Vital Signs Spot Check Data*. Spot check data from other sources are laid out in a similar fashion.

Trend View

Item	Description
1	Trend View selected.
2	When multiple spot checks are available, they display on the trend view as data points. Select the data point to view the data and scorecard.
3	Parameter data displayed when a data point is selected.

Card View



Item	Description	Item	Description
1	Scorecard View selected.	4	Displays the date and time that the data was recorded on the device.
2	Vertical scroll bar to view scorecard data.	5	Unassociate the data with a patient. See ***Unassociate Data or Associate to a Different Patient*** on page 30.
3	Horizontal scroll bar to view scorecards.	6	Click to add comments to the patient data. See ***Patient Data Comments*** on page 33.

Settings

Settings can only be accessed while viewing the Trace Home Screen. See ***Trace Home Screen*** on page 11.

Change Data Library

Trace uses a default location to save data. This location can be changed by selecting the **Change** button and selecting a new location for the library. The new location is automatically saved when selected.

- If the location cannot be changed, see ***Data Library Status Messages*** on page 67.

Move Data Library

Trace uses a default location to store the data library. This library can be moved to a different location by selecting the **Change** button and selecting a new location for the library. The new location is automatically saved when selected.

- If the data cannot be moved, see ***Data Migration Status Messages*** on page 68.

Report Output Location

Trace uses a default location to save reports. This location can be changed by selecting the **Change** button and selecting a new location for the reports. The new location is automatically saved when selected.

Date & Time Format

Trace uses a default date and time format. This date format can be changed by selecting from the available options listed. The time format can be set to 12 hour or 24 hour. When complete, the selected options are automatically saved.

Threshold Format

This setting determines the format of the parameter's thresholds that are displayed on reports. Select between the following options:

- "Greater than or equal to" (≥) and "less than or equal to" (≤) for example: $SpO_2 \leq 70\%$
- "Greater than" (>) and "less than" (<) for example: $SpO_2 < 70\%$

Hospital Information

Hospital information can be entered or edited using this setting. Up to 100 characters can be entered. This information appears on the reports. See ***Chapter 4: Reports*** on page 51. After entering the desired information or editing the existing information, the information is automatically saved.

Data Export Format

This setting allows the format of the non-pdf report to export as either a *.csv* file (default) or a *.xlsx* file. See ***Export as CSV or XLSX Data File*** on page 51.

Chapter 4: Reports

Overview

Trace allows the exporting of patient data by two (2) methods available on the Patient Screen:

- Export raw data in .csv format. See ***Export as CSV or XLSX Data File*** on page 51.
- Generate customizable PDF reports for Continuous or Spot Check sessions. See ***Export Continuous Sessions as PDF Graphical Report*** on page 51 or ***Export Spot Check Sessions as PDF Graphical Report*** on page 64.

If the timeline for the data has been cropped, only the data within that cropped portion of the timeline is included in the reports. See ***Edit Timeline*** on page 41.

Note: Clicking *Settings > Report Preferences* in the upper left corner of the Trace Home Screen offers the ability to define a Facility Name and Facility Description for the report as well as a default location for the report to be saved when created. See ***Settings*** on page 48.

Export as CSV or XLSX Data File

Using this option, a .csv or .xlsx spreadsheet is generated with patient data that can be opened using Excel. To select the type of report to export, see ***Data Export Format*** on page 49.

1. From the Patient Home Screen click the 

button.
2. A pop-up window appears briefly and indicates the report is being generated.
3. When the explorer window opens and prompts for a location to save the file, navigate to the desired location for saving the file and click Save.

   Note: To set a default report output location, see ***Report Output Location*** on page 49.
4. The file is saved to the selected location. For an example of a .csv report, see ***CSV/XLSX Reports*** on page 79.

Export Continuous Sessions as PDF Graphical Report

Trace can capture and export patient data in a report that is customizable. Trace allows users to create patient parameter data graphs in varying time intervals ranging from 1 minute to 24 hours.

Report Preview

To generate a report preview, perform the following:

1. From the Data Screen click the **Generate Reports** button. See ***Continuous Data*** on page 31.
2. The *Reports Selection* window appears allowing customization of the report to be generated. Reports are available for each channel in continuous data sessions.

   Note: When generating reports from data that includes more than one (1) channel, open the tab for each channel to customize or de-select reports for each individual channel.

   - See ***rainbow Report Settings*** on page 53.
   - See ***SedLine Report Settings*** on page 56.
   - See ***O3 Report Settings*** on page 58.
   - See ***Capnography Report Settings*** on page 60.
   - See ***NIBP & Temp Report Settings*** on page 62.
   - See ***Temp Report Settings*** on page 62.
   - See ***Position Report Settings*** on page 63.
   - See ***EWS Report Settings*** on page 64.

   Note: At least one (1) report must be selected to generate a report for the channel. If there are multiple channels in the continuous data, each channel must have at least one (1) report selected if a report containing all available channels is required.
3. After selecting the desired report options, click the **Preview Reports** button at the bottom of the *Reports Selection* window.

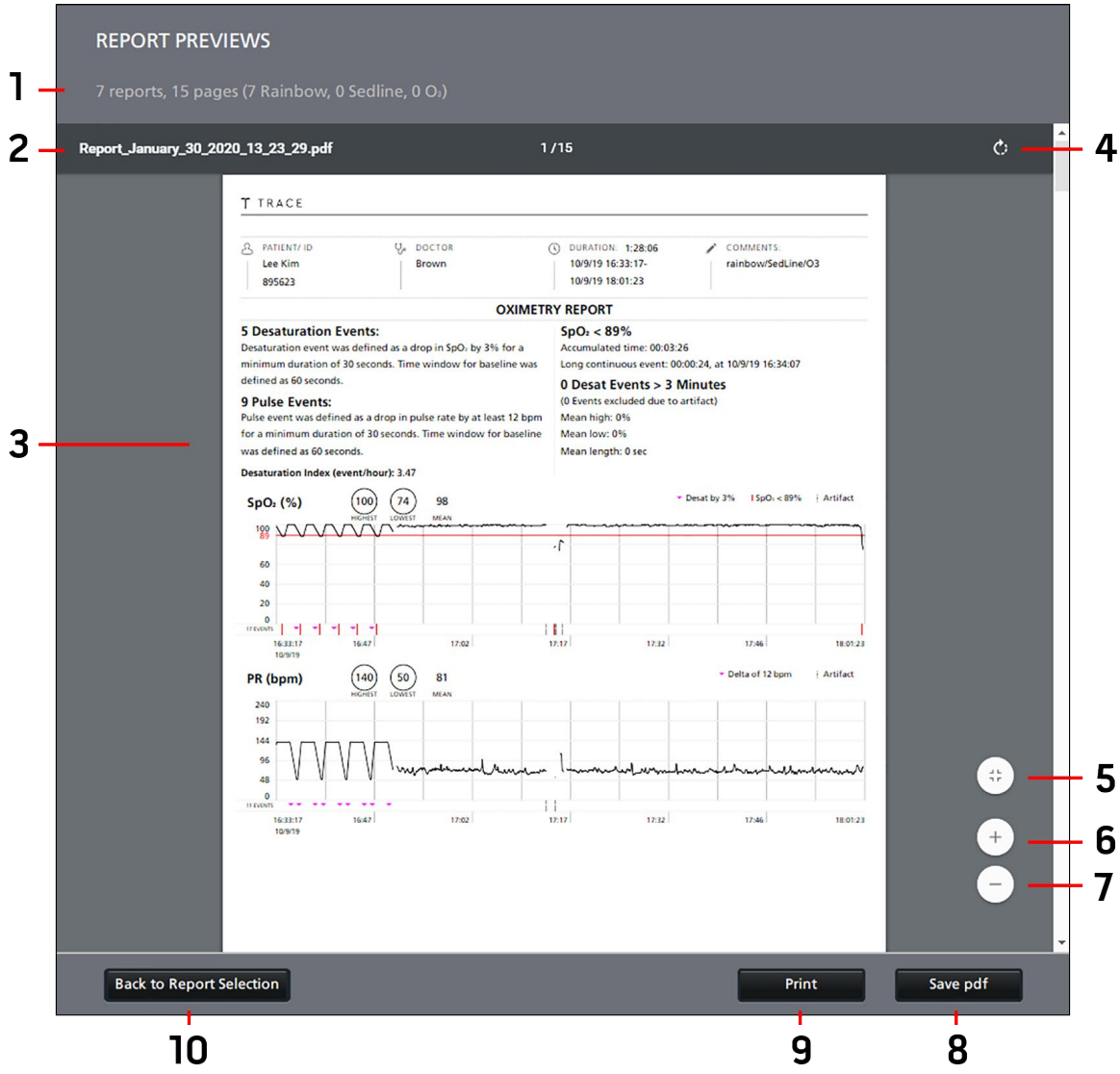
   Note: Parameter calculations and statistics do not include data segments without measurement.

   Note: The more parameters that are selected in the *Reports Selection* window, the longer the report will be and the longer it will take to generate the report.

4. A pop-up window appears briefly and indicates the report is being generated.
5. A preview of the report displays with the selected options.

   Note: *TRIAL LICENSE* displays across the report preview screens until a valid license key is entered. See ***License Key*** on page 13.
6. To generate the PDF file of the report, click the **Save PDF** button. To print the report directly from Trace to a printer, click the **Print** button.
   - To return to the *Reports Selection* window to change options, click the **Back to Report Selection** button.
7. When generating a PDF, a pop-up window appears briefly and indicates the PDF file is being generated.
8. When the explorer window opens and prompts for a location to save the PDF file, navigate to the desired location for saving the PDF file and click Save. All reports contain a header and a footer displaying patient information. For complete report information and available settings, see ***Appendix D: Report Information*** on page 79.

The following example shows details of the *Report Previews* screen for *rainbow Data*:



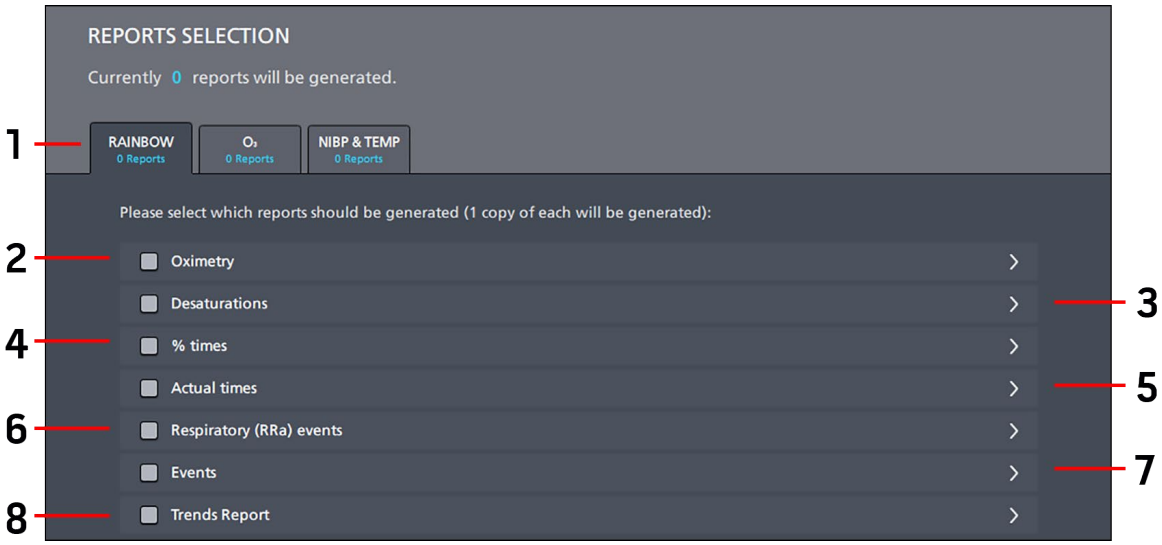
Item	Description	Item	Description
1	Number of reports displayed on how many pages (description of reports by channel).	6	Zoom in on the report in the preview display area.
2	Default name of report, can be changed when saving PDF.	7	Zoom out of the report in the preview display area.

Item	Description	Item	Description
3	Report preview display.*	8	Save report as a PDF file.
4	Rotate report in the preview display area.	9	Print the report to a connected printer.
5	Click to toggle report preview between full width display and full screen display.	10	Return to the *Reports Selection* screen.

* For detailed information on report settings, see ***Report Types and Details*** on page 80.

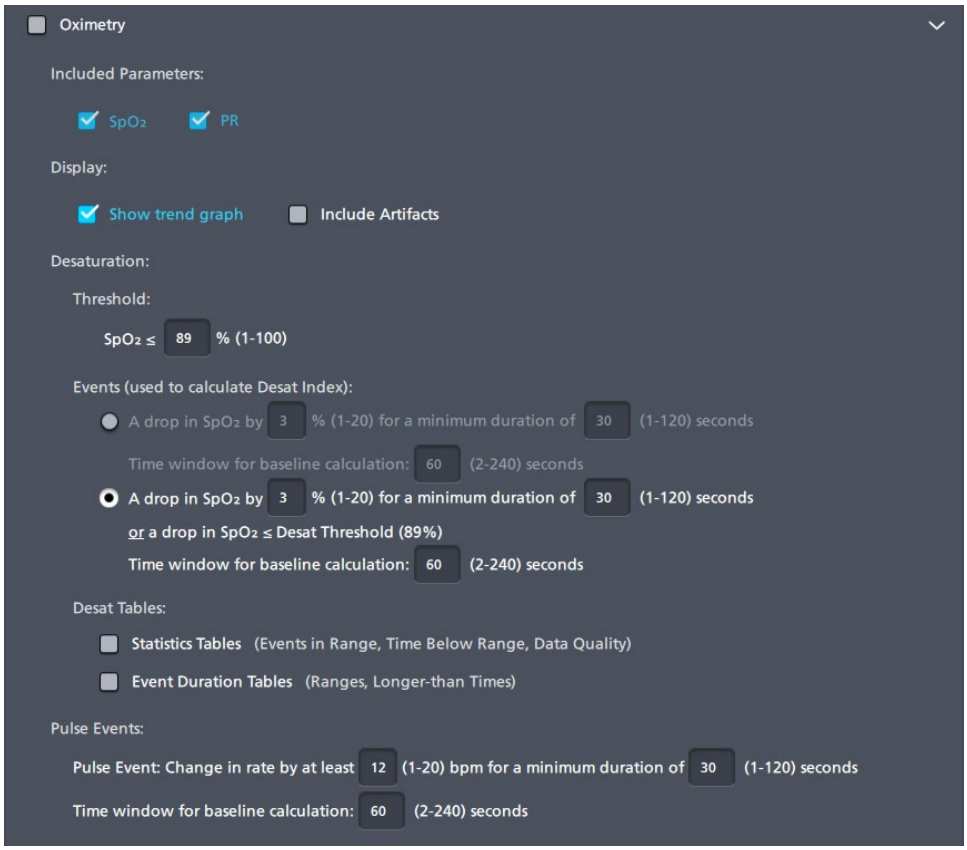
rainbow Report Settings

At least one (1) item in a channel must be selected to display data in the report for that channel. The numbers in the image correspond to the numbered steps that follow below. For additional information on rainbow data reports and settings, see ***Report Types and Details*** on page 80.

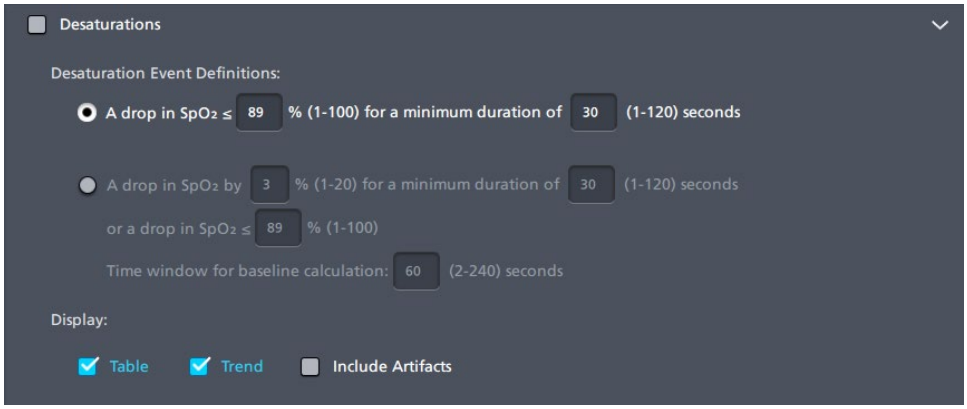


1. Select the rainbow channel tab and select the desired report options and settings contained within the options as described in the next steps.

2. Select *Oximetry* to add this report or de-select to not include this report. This is a summary of the oximetry data where desaturation and pulse rate events can be defined.

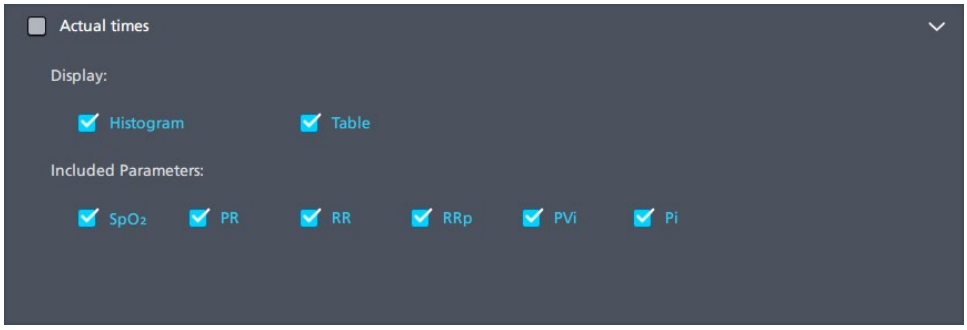


3. Select *Desaturations* to include desaturations or de-select to not include. Configure the desired saturation event and the threshold and time spent under that threshold as well as a display mode for the desaturation events.

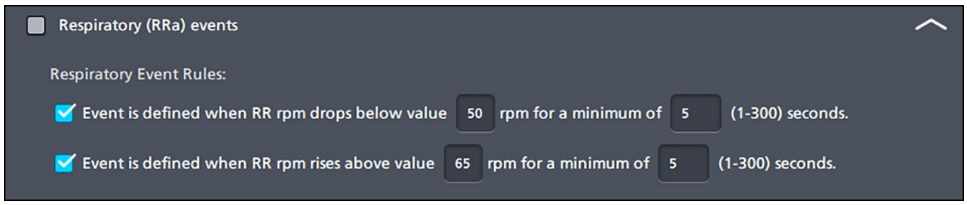


4. Select *% Times* to add this report or de-select to not include this report. Select the desired display format to display a breakdown of the actual times for each selected parameter in the report.

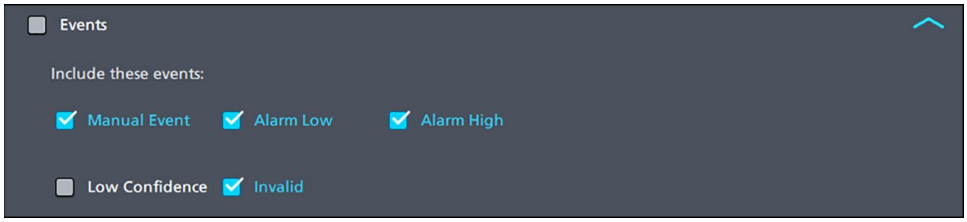
5. Select *Actual Times* to add this report or de-select to not include this report. Select the desired display format to display a breakdown of the actual times for each selected parameter in the report.



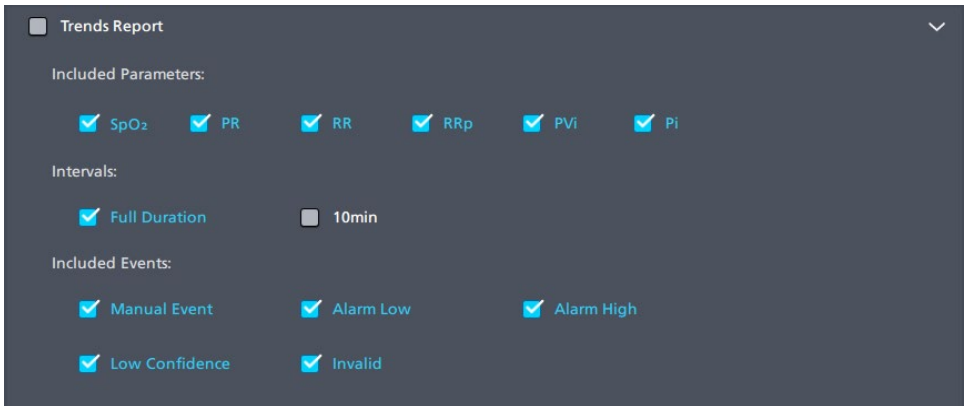
6. If RR is available as a parameter to display in the report, the option to add *Respiratory (RRa) Events* is displayed. Select *Respiratory (RRa) Events* to add this report. Configure the desired definition a respiratory event by selecting the RR threshold and time spent under that threshold.



7. Select *Events* to add this report or de-select to not include this report. Select the events to be included in the report.



8. Select *Trends Report* to add this report or de-select to not include this report. Select the desired parameters, time interval and events to be included in the report.

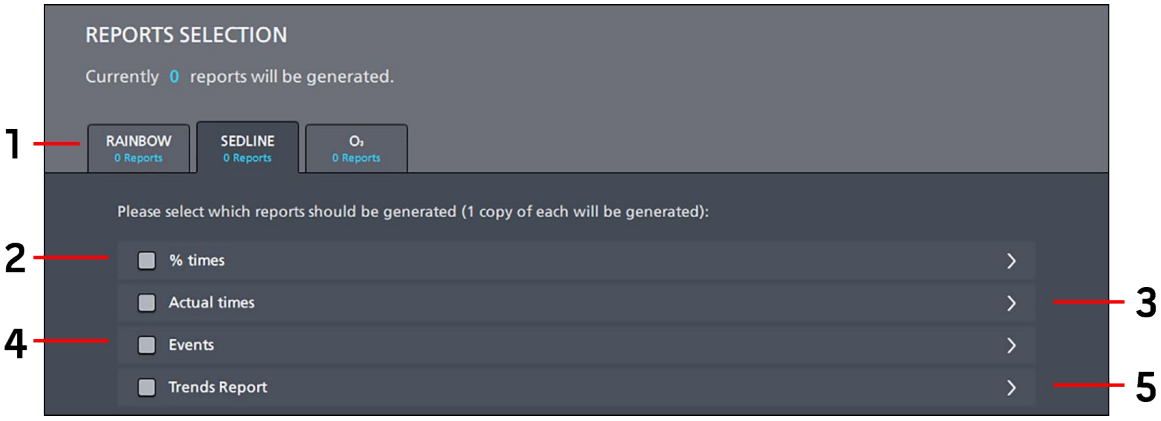


9. If data for other channels have been downloaded, select the tabs for these channels to configure reports as desired.

10. Click the **Preview Reports** button at the bottom of the *Reports Selection* screen.

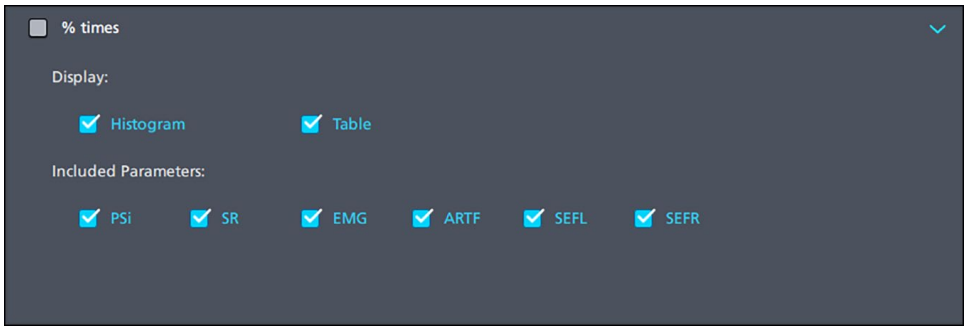
SedLine Report Settings

At least one (1) item in a channel must be selected to display data in the report for that channel. The numbers in the image correspond to the numbered steps that follow below. For additional information on SedLine reports and settings, see ***Report Types and Details*** on page 80.

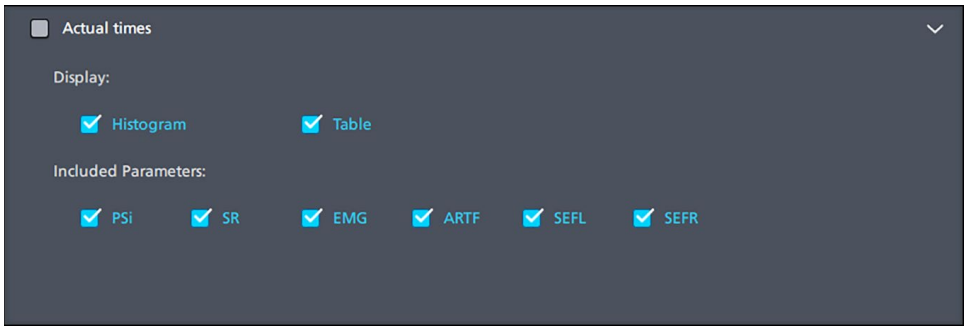


1. Select the SedLine channel tab.

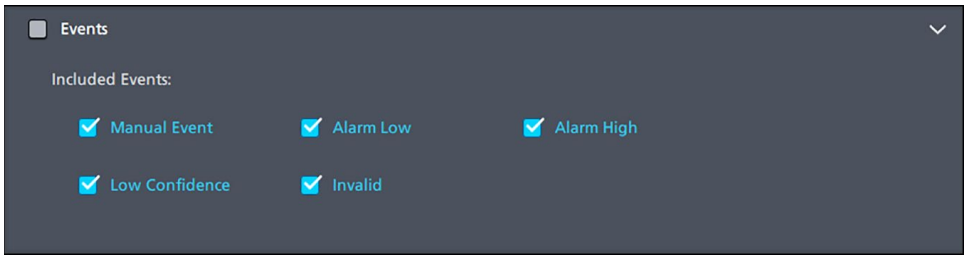
2. Select *% Times* to add this report or de-select to not include this report. Select the desired display format and parameters to display a breakdown of the % times for each selected parameter in the report.



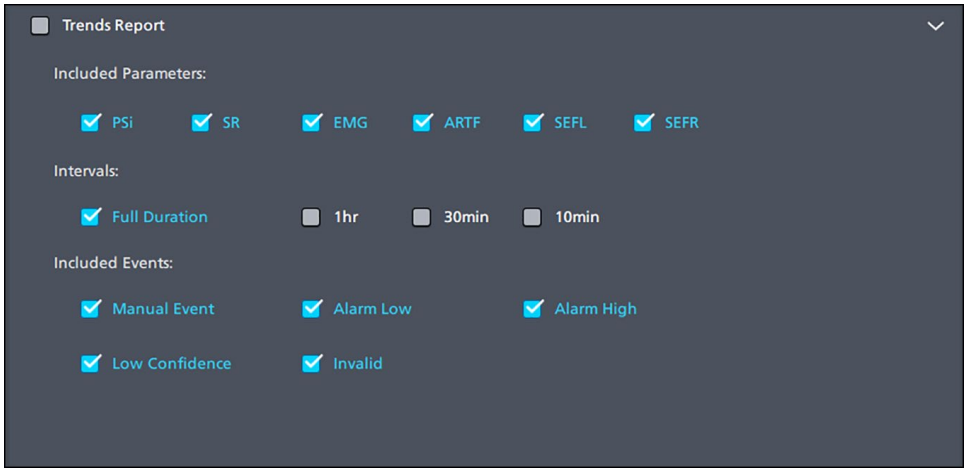
3. Select *Actual Times* to add this report or de-select to not include this report. Select the desired display format and parameters to display a breakdown of the actual times for each selected parameter in the report.



4. Select *Events* to add this report or de-select to not include this report. Select the events to be included in the report.



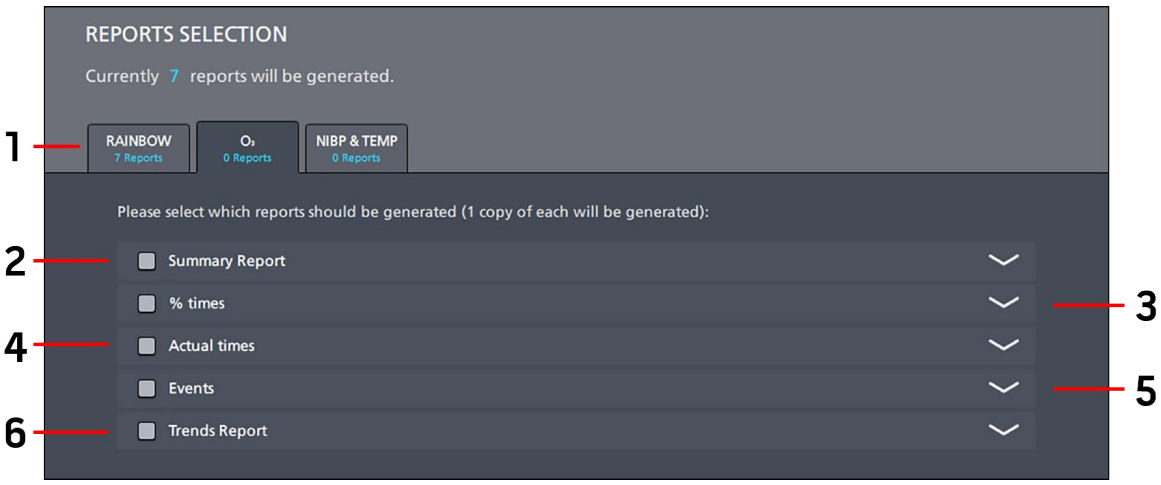
5. Select *Trends Report* to add this report or de-select to not include this report. Select the parameters, events and time interval to be included in the report.



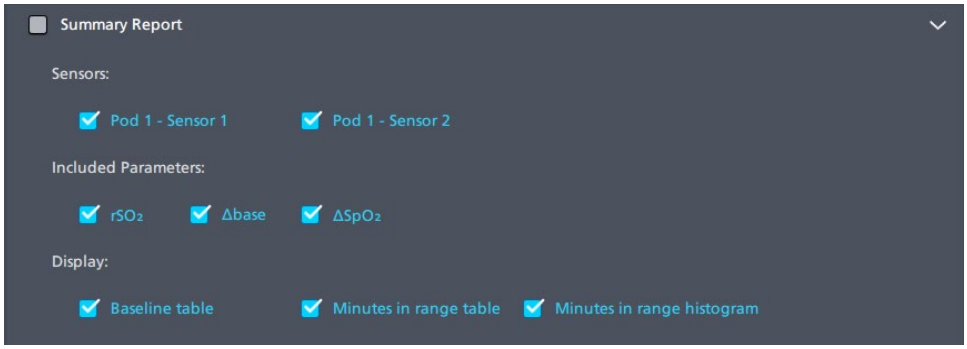
6. If data for other channels have been downloaded, select the tabs for these channels to configure reports as desired.
7. Click the **Preview Reports** button at the bottom of the *Reports Selection* screen.

O3 Report Settings

At least one (1) item in a channel must be selected to display data in the report for that channel. The numbers in the image correspond to the numbered steps that follow below. For additional information on O3 reports and settings, see ***Report Types and Details*** on page 80. Baseline and AUC Limit settings can also be changed. See ***O3 Channel Settings*** on page 38.

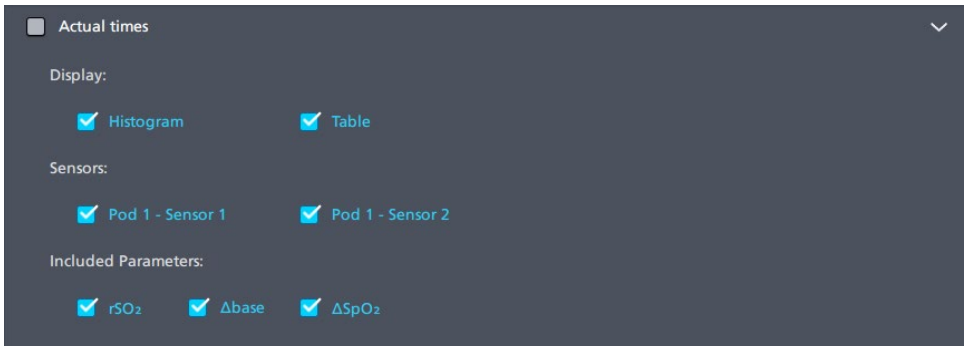


1. Select the O3 channel tab.
2. Select *Summary Report* to add this report or de-select to not include this report. Select the desired sensors, parameters and display format to display a breakdown of the % times for each selected sensor and parameter in the report.

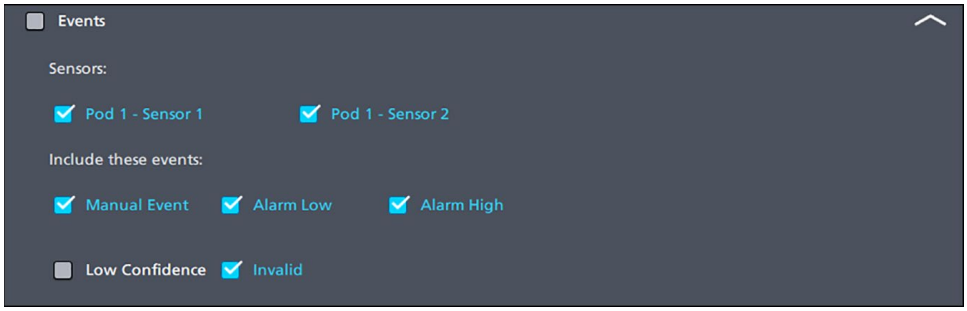


3. Select *% Times* to add this report or de-select to not include this report. Select the desired display format, sensors and parameters to display a breakdown of the % times for each selected sensor and parameter in the report.

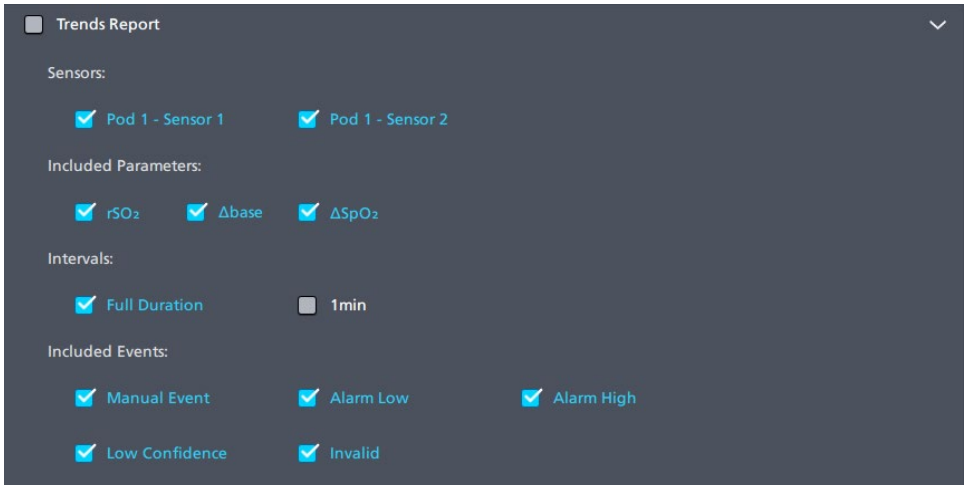
4. Select *Actual Times* to add this report or de-select to not include this report. Select the desired display format, sensors and parameters to display a breakdown of the actual times for each selected sensor and parameter in the report.



5. Select *Events* to add this report or de-select to not include this report. Select the sensor and events to be included in the report.



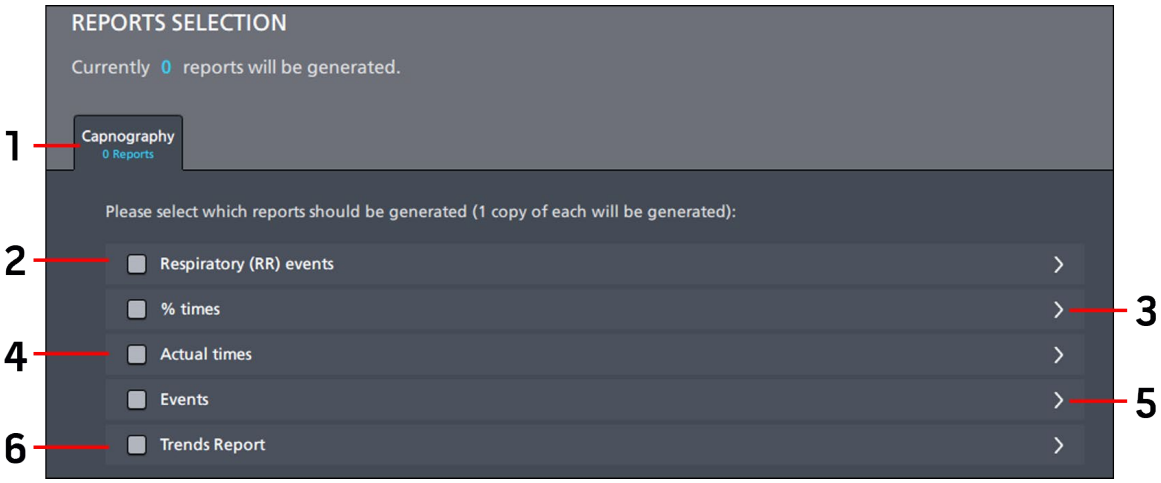
6. Select *Trends Report* to add this report or de-select to not include this report. Select the sensors, parameters, events and time interval to be included in the report.



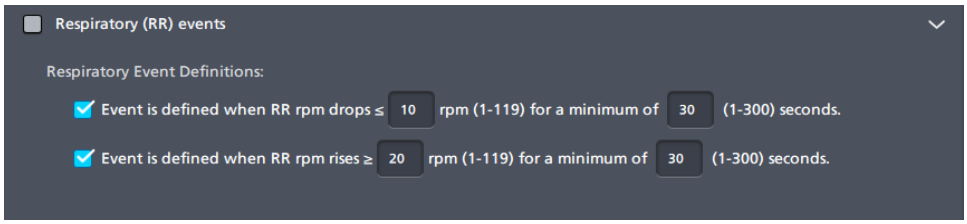
7. If data for other channels have been downloaded, select the tabs for these channels to configure reports as desired.
8. Click the **Preview Reports** button at the bottom of the *Reports Selection* screen.

Capnography Report Settings

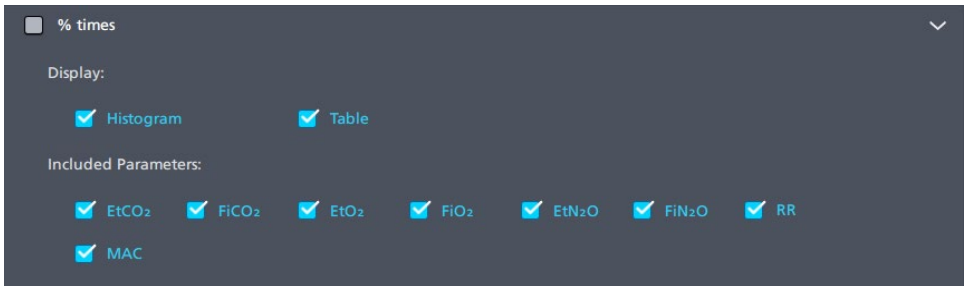
At least one (1) item in a channel must be selected to display data in the report for that channel. The numbers in the image correspond to the numbered steps that follow below. For additional information on Capnography reports and settings, see ***Report Types and Details*** on page 80.



1. Select the Capnography channel tab.
2. If RR is available as a parameter to display in the report, the option to add *Respiratory (RR) Events* is displayed. Select *Respiratory (RR) Events* to add this report or de-select to not include this report. Configure the desired definition a respiratory event by selecting the RR threshold and time spent under that threshold.

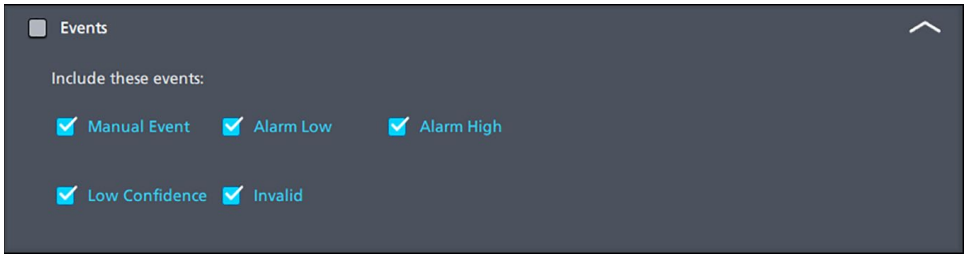


3. Select *% Times* to add this report or de-select to not include this report. Select the desired display format and parameters to display a breakdown of the % times for each selected parameter in the report.

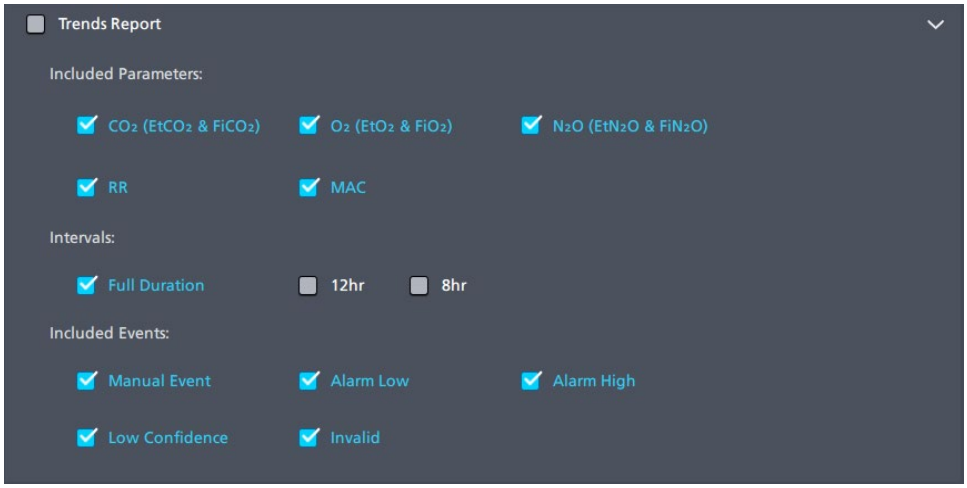


4. Select *Actual Times* to add this report or de-select to not include this report. Select the desired display format and parameters to display a breakdown of the actual times for each selected parameter in the report.

5. Select *Events* to add this report or de-select to not include this report. Select the events to be included in the report.



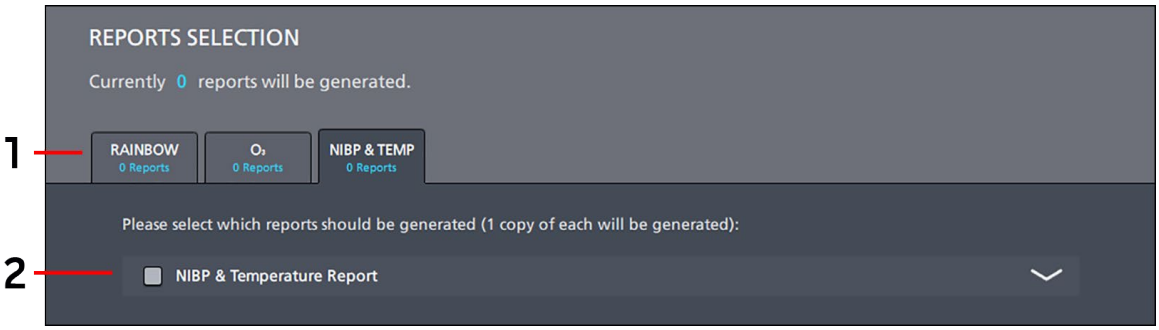
6. Select *Trends Report* to add this report or de-select to not include this report. Select the parameters, events and time interval to be included in the report.



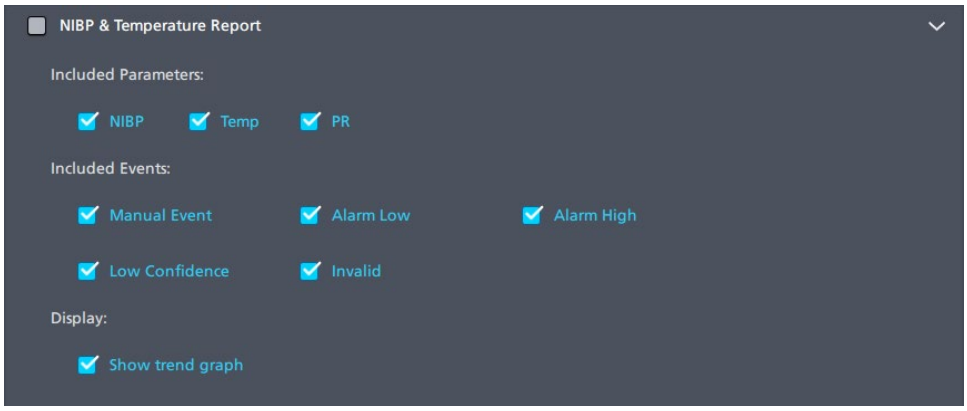
7. If data for other channels have been downloaded, select the tabs for these channels to configure reports as desired.
8. Click the **Preview Reports** button at the bottom of the *Reports Selection* screen.

NIBP & Temp Report Settings

At least one (1) item in a channel must be selected to display data in the report for that channel. The numbers in the image correspond to the numbered steps that follow below. For additional information on NIBP & Temp reports and settings, see ***Report Types and Details*** on page 80.



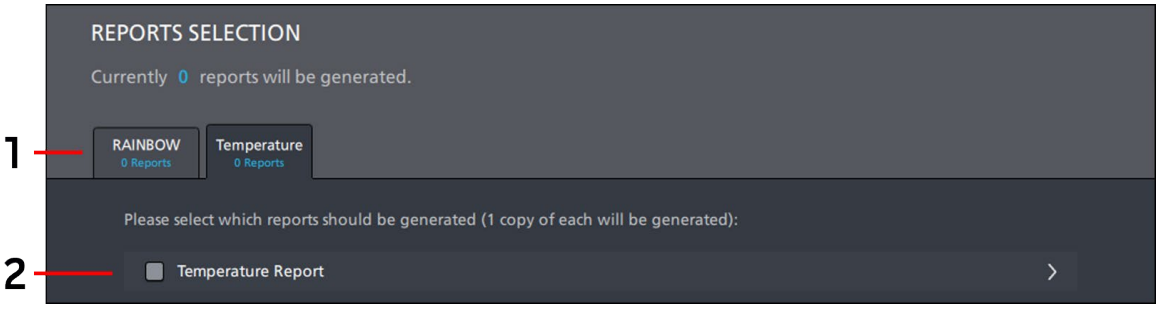
1. Select the NIBP + Temp channel tab.
2. Select *NIBP & Temperature Report* to add this report or de-select to not include this report. Select parameters, events and display style to include in the report.



3. If data for other channels have been downloaded, select the tabs for these channels to configure reports as desired.
4. Click the **Preview Reports** button at the bottom of the *Report Selection* screen.

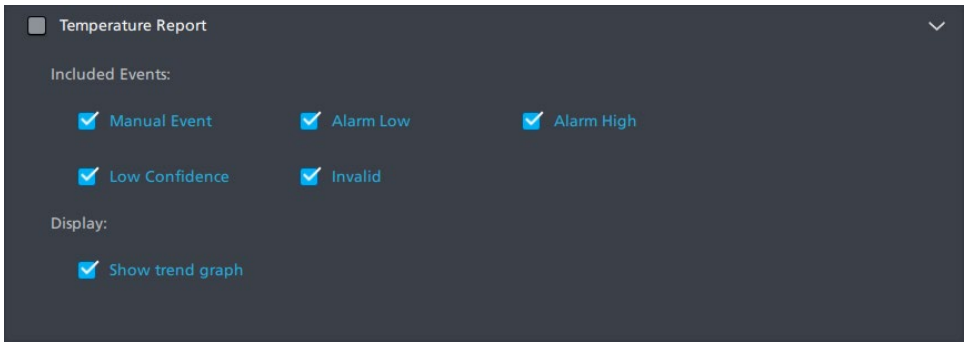
Temp Report Settings

At least one (1) item in a channel must be selected to display data in the report for that channel. The numbers in the image correspond to the numbered steps that follow below. For additional information on Temp reports and settings, see ***Report Types and Details*** on page 80.



1. Select the Temp channel tab.

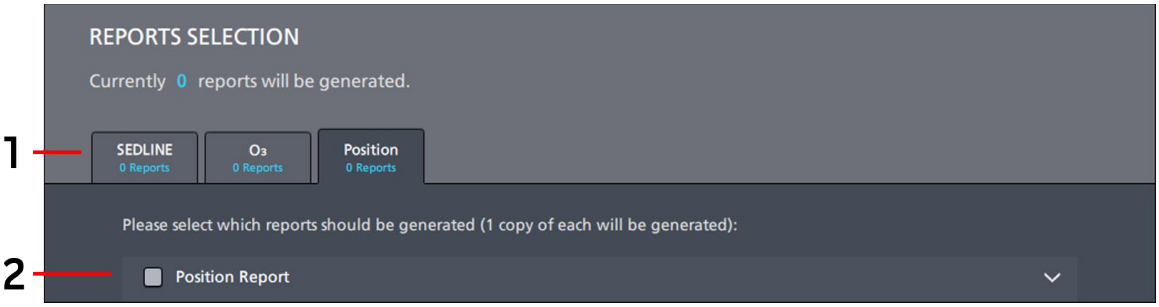
2. Select *Temperature Report* to add this report or de-select to not include this report. Select events and display style to include in the report.



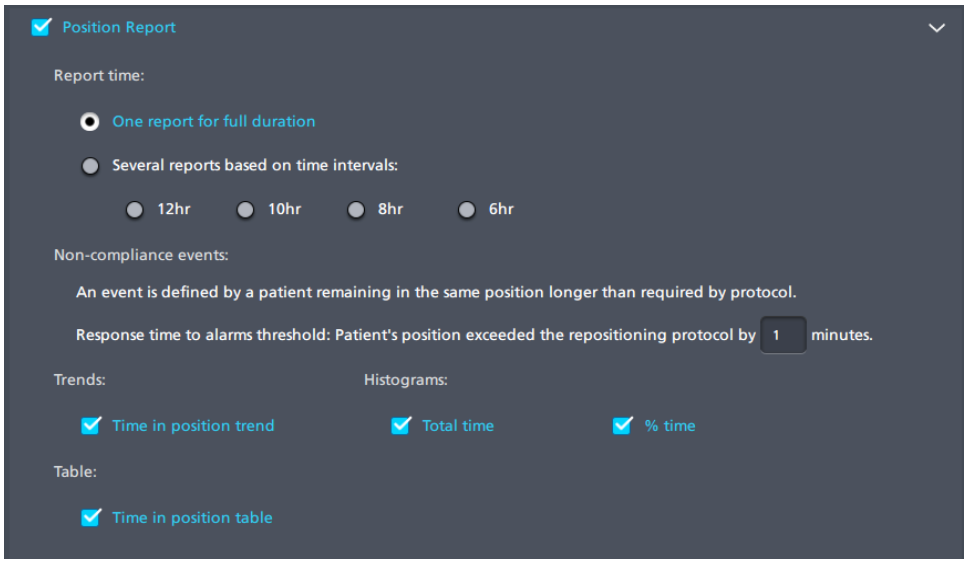
3. If data for other channels have been downloaded, select the tabs for these channels to configure reports as desired.
4. Click the **Preview Reports** button at the bottom of the *Report Selection* screen.

Position Report Settings

At least one (1) item in a channel must be selected to display data in the report for that channel. The numbers in the image correspond to the numbered steps that follow below. For additional information on Position reports and settings, see ***Report Types and Details*** on page 80.



1. Select the *Position* channel tab.
2. Select *Position Report* to add this report or de-select to not include this report. Select Report Time, Non-Compliance Events, Trends, Histograms and Table options to include in the report.

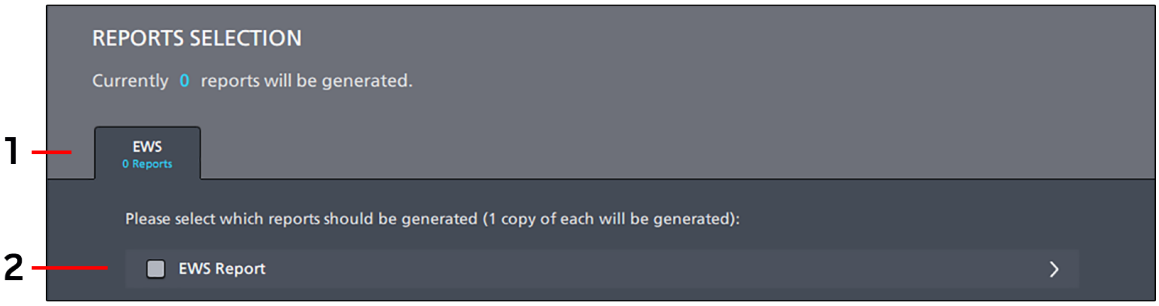


3. If data for other channels have been downloaded, select the tabs for these channels to configure reports as desired.

4. Click the **Preview Reports** button at the bottom of the *Report Selection* screen.

EWS Report Settings

At least one (1) item in a channel must be selected to display data in the report for that channel. The numbers in the image correspond to the numbered steps that follow below. For additional information on EWS reports and settings, see ***Report Types and Details*** on page 80.



1. Select the EWS channel tab.
2. Select *EWS Report* to add this report or de-select to not include this report. Select the display style to include in the report.

3. If data for other channels have been downloaded, select the tabs for these channels to configure reports as desired.
4. Click the **Preview Reports** button at the bottom of the *Report Selection* screen.

Export Spot Check Sessions as PDF Graphical Report

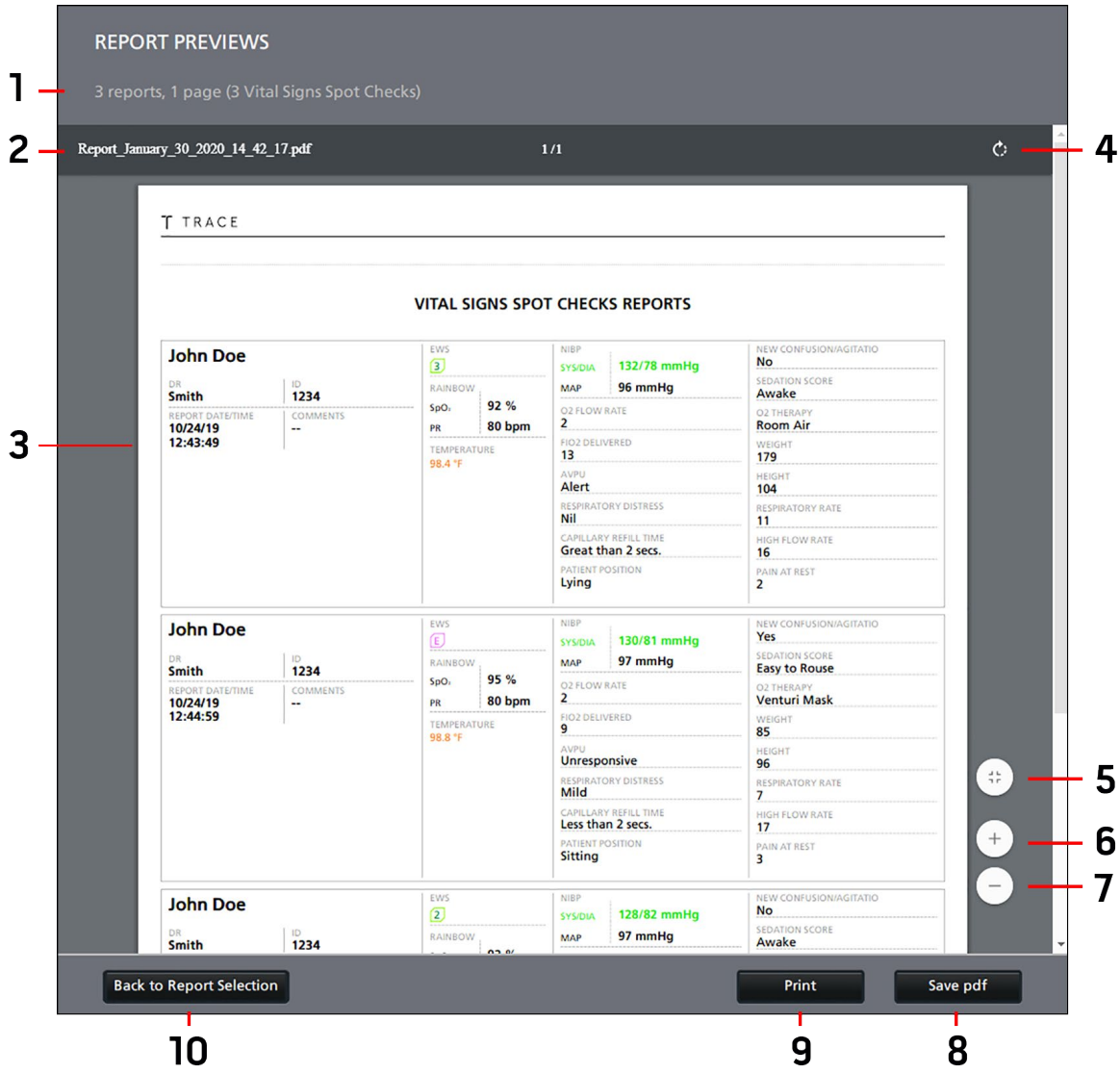
Trace can export patient spot-check data in reports that are customizable. Reports for the following Spot-Checks are available:

Report Preview

To generate a report preview, perform the following:

1. From the Data Screen click the **Generate Report** button. See ***Spot Check Data*** on page 46.
2. The *Report Settings* window appears allowing customization of the report to be generated.
   - See ***Spot Check Report Settings*** on page 65.
3. After selecting the desired report options, click the **Preview Reports** button at the bottom of the *Report Settings* window.
4. A pop-up window appears briefly and indicates the report is being generated.
5. A preview of the report displays using the selected options.
6. To generate the PDF file of the report, click the **Save PDF** button. To print the report directly from Trace to a printer, click the **Print** button.
   - To return to the *Report Settings* window to change options, click the **Back to Report Selection** button.
7. When generating a PDF, a pop-up window appears briefly and indicates the PDF file is being generated.
8. When the explorer window opens and prompts for a location to save the PDF file, navigate to the desired location for saving the PDF file and click **Save**. All reports contain a header and a footer displaying patient information. For additional report information, see ***Appendix D: Report Information*** on page 79.

The following example shows details of the *Report Previews* screen for *Vital Signs Check Data*:

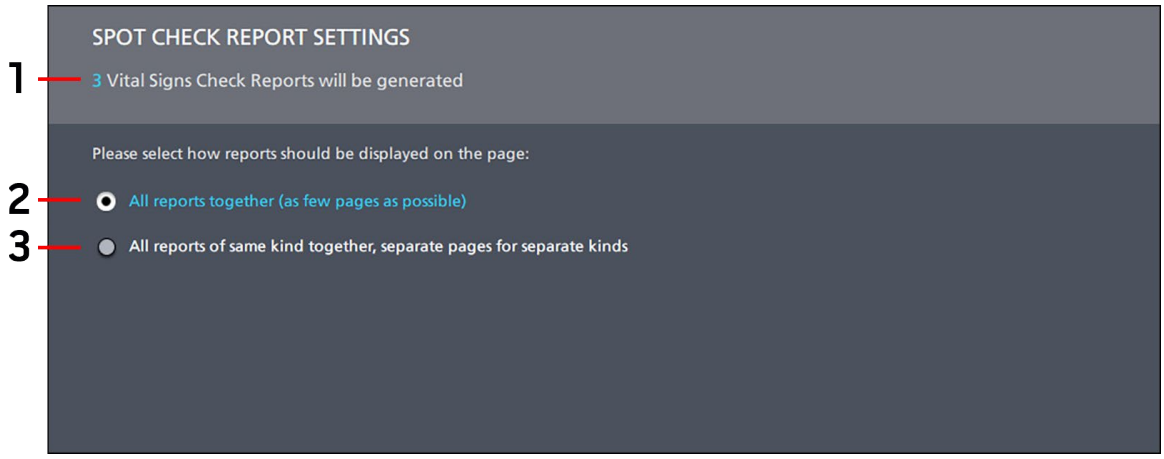


Item	Description	Item	Description
1	Number of reports displayed on how many pages (description of spot check type).	6	Zoom in on the report in the preview display area.
2	Default name of report, can be changed when saving PDF.	7	Zoom out of the report in the preview display area.
3	Report preview display.	8	Save report as a PDF file.
4	Rotate report in the preview display area.	9	Print the report to a connected printer.
5	Click to toggle report preview between full width display and full screen display.	10	Return to the *Spot Check Report Settings* screen. See ***Spot Check Report Settings*** on page 65.

Spot Check Report Settings

The example below shows the available options for all spot check reports. These options apply to Vital Signs, SpHb, and CCHD (Eve) Spot Checks.

For additional information on spot check reports and settings, see ***Report Types and Details*** on page 80.



Item	Description
1	Number and type of reports (based on available data) that will be generated.
2	All reports will be together to limit the number of pages in the report.
3	Reports will be grouped together on separate pages, based on the type of report.

Chapter 5: Troubleshooting

COM Port and Baud Rate Not Detected Automatically

After connecting the device to the Trace host computer, a compatible com port on the host computer may be identified automatically. If Trace does not detect a compatible COM port, contact your system administrator to access the COM Port for the Trace host computer.

Note: If the Root, Rad-67, or Rad-97 USB baud rate is changed, power-cycle the device for the newly selected baud rate to take effect.

Error Messages

Message	Code	Next Steps
Trend Database version not supported.	208	Connect a compatible device.
This is not a Valid License Key	NA	Enter a valid license key provided by Masimo. See ***License Key*** on page 13.
License Key not Valid for this Device		
License Key is Expired		
Cant' Read License, Enter a Valid License Key		
Cant' Read License, Access Denied to License File	NA	Ensure user has read/write permissions to C:\ProgramData
Unable to obtain unique device ID, please contact support	NA	Contact Masimo support. Go to **http://service.masimo.com**

Data Retrieval Status Messages

Message	Code	Next Steps
Unable to communicate to device	400	Attempt to reconnect by restarting connection process.
Unable to communicate to device	401	Check connection ports, ensure correct serial port cable connection, ensure Baud rates match within Trace and Device, Ensure network connection, ensure correct IP address.
Device protocol version not supported	402	Device Not supported, requires revision 1022 or higher.
Unable to communicate to device	405	Check connection ports, ensure correct serial port cable connection, ensure Baud rates match within Trace and Device, Ensure network connection, ensure correct IP address.
Trend file version not supported	406	Trend file not supported by Trace.
Unable to communicate to device	407	Check connection ports, ensure correct serial port cable connection, ensure Baud rates match within Trace and Device, Ensure network connection, ensure correct IP address.
Lost communication to the device	408	Check connection ports, ensure correct serial port cable connection, ensure Baud rates match within Trace and Device, Ensure network connection, ensure correct IP address.
Data transfer canceled	409	Check connection ports, ensure correct serial port cable connection, ensure Baud rates match within Trace and Device, Ensure network connection, ensure correct IP address.

Data Library Status Messages

The following section lists data library status messages, their potential causes, and next steps. These messages may occur when selecting a data transfer location.

Message	Potential Causes	Next Steps
This process may take a while. Please wait after clicking OK.	• Confirmation of data library selection.	• N/A
New file location successfully loaded.	• Successful data library location change.	• N/A
Selected file location doesn't have data. Create new location here?	• Confirmation to create new data library.	• N/A
New file location successfully created.	• Successful creation of new data library.	• N/A
You don't have access to the selected file location.	• Host computer is not connected to the network. • User does not have permission to use the data library location.	• Save data transfer files in an accessible data library location. • Check network connections. • Contact IT administrator.

Message	Potential Causes	Next Steps
You don't have access to current data location. Please change location.	• Server where data library location resides is inaccessible. • Host computer is not connected to the network. • User does not have permission to use the data library location. • Data library location permissions have changed. • Data library location has been moved or deleted.	• Select an accessible data library location. • Check network connections. • Contact IT administrator.
The selected location cannot be loaded because it is being used by another user. Please change location.	• Data library location in use by other user upon launch.	• Select a different data library location to save files. • Request other user to exit Trace.
The selected location cannot be loaded because it is being used by another user.	• Data library location in use by other user.	• Select a different data library location to save files. • Request other user to exit Trace.
The selected location cannot be found.	• The data library location has been deleted. • The data library location has been moved. • Server where data library location resides is not inaccessible. • Host computer is not connected to the network. • Network location is down.	• Select a different data library location to save files. • Check network connections. • Contact IT administrator.
The selected location cannot be found. Please change location.	• The data library location has been deleted. • The data library location has been moved. • Server where data library location resides is not inaccessible. • Host computer is not connected to the network. • Network location is down.	• Select a different data library location to save files. • Check network connections. • Contact IT administrator.
The selected location doesn't have enough space. Please change location.	• Less than 150Mb of storage space available at data library location upon launch. • Less than 150Mb of storage space available at data library location upon import.	• Save files in a different data library location.

Data Migration Status Messages

The following section lists data migration messages, their potential causes, and next steps. These messages may occur when moving data transfer files to a new location.

Message	Potential Causes	Next Steps
Moving data to new location may take a while. Please wait after clicking OK.	• Confirmation of data migration in progress.	• N/A
Data was moved to new location.	• Confirmation of successful data migration to new data library location.	• N/A
Data already exists in this location. Your data cannot be moved.	• Transfer data already exists in desired data library location.	• Select a different data library location to move data transfer files.
You don't have access to selected location. Please choose a different location or cancel to keep data at current location.	• Host computer is not connected to the network. • User does not have permission to use the data library location.	• Move data transfer files to an accessible data library location. • Check network connections. • Contact IT administrator.
The selected location doesn't have enough space. Your data cannot be moved.	• Less than 150Mb of storage space available at data migration destination location.	• Move files in a different data library location.

Chapter 6: Specifications

Operating System Requirements

Operating System Requirements*
Windows 7 (Minimum Requirement)
Windows 8
Windows 10 (Recommended)

* Windows 64 bit

Supported Parameters

Supported Channel Parameters

Select parameters to include in the report. Only parameters contained in the imported data display in the Trace *Report Selection* window.

Type	Channel	Default	Available Parameters (May Include)	Trend Display
Parameters to Display in Reports	rainbow	All Selected	SpO_2, $SpfO_2$, Pulse Rate (PR), Perfusion Index (Pi), Respiratory Rate (RR), Pleth Variability Index (PVi), Carboxyhemoglobin (SpCO), Methemoglobin (SpMet), Total Oxygen Content (SpOC), Total Hemoglobin (SpHb), Oxygen Reserve Index (ORi)*, Rainbow Pleth Variability Index (RPVi)	Line Series
	SedLine	All Selected	Patient State Index (PSi), Suppression Ratio (SR), Electromyography (EMG), Artifact (ARTF), Spectral Edge Frequency Right (SEFR), Spectral Edge Frequency Left (SEFL)	Line Series
	Capnography	All Selected	MAC, Respiratory Rate (RR)	Line Series
	ISA, OR+, AX+	All Selected	End-tidal CO_2 ($EtCO_2$), Fractional Concentration of Inspired CO_2 ($FiCO_2$), EtN_2O, FiN_2O, EtO_2, FiO_2, EtENF, FiENF, EtDES, FiDES, EtHAL, FiHAL, EtISO, FiISO, EtSEV, FiSEV, N_2O, O_2	Compressed Capnogram
	O3**	All Selected	rSO_2, Delta cHbi (ΔcHbi), Delta HHbi (ΔHHbi), Delta Hbi (ΔHbi),	Line Series
			Delta Baseline (Δbase), Delta SpO_2 (ΔSpO_2)	Not displayed
	NIBP	All Selected	Systolic (SYS), Diastolic (DIA)	Scatter Plot
			MAP, Pulse Rate (PR)	Connected Scatter Plot
	Temperature	All Selected	Temperature	Connected Scatter Plot
	EWS	All Selected	EWS Score	Connected Scatter Plot
			EWS Risk	Color of Scatter Plot Point
	MOA	All Selected	Based on vendor defined parameters.	Line Series

* Parameter currently not available in the U.S.A. and territories relying on FDA market clearance.

** Data for up to four (4) sensors can be displayed at one time.

Supported SpHb Spot Check Parameters

Below are parameters supported for SpHb Spot Check.

Type	Parameter
SpHb Spot Check	SpO_2, PR , Pi , SpCO , SpMet, $SpfO_2$, SpHb (g/dL), SpHb Value, SpHb Value, SpHb Pi Quality, SpHb Signal Stability, SpHb Interference, SpHb Sensor Placement, SpOC, PVi , RRa, ORi, SpHb LoA (Upper/Lower), SpHb Range (Upper/Lower)

Supported Languages

Language	Language and Locale Code
English	en_US

Symbols

Symbols	Definition
	Follow Instructions for use
	Non-Sterile
	Not made with natural rubber latex
	Instructions/Directions for Use/Manuals are available in electronic format @http://www.Masimo.com/TechDocs **Note:** eIFU is not available in all countries.

Appendix A: Compatible Masimo Devices

The following Masimo devices are compatible with Trace:

Device	Minimum Software Level Requirement
Radical-7	v1.4.5.1 or above
Radius-7*	N/A
RDS	v5.1.3.2 or above
Root and Root with noninvasive blood pressure and temperature (NIBPT)	v1.6.2.1 or above
Rad-67	v1.0.3.7 or above
Rad-G	v1.2.1.3 or above
Rad-97	v1.0.3.5 or above
SedLine (MOC-9)**	N/A
O3 (MOC-9)**	N/A
Capnography (MOC-9)**	N/A

* Only when docked and paired to Root or Root NIBPT.

** Only when connected to Root or Root NIBPT.

Appendix B: Device Baud Rates

Device	Communication Protocol	RDS Version*	Available Maximum Baud Rates
Radical-7 docked to RDS	IAP	V1	9600**
		V2	9600, 19200, 28800***, 38400, 57600
	Data Collection	NA	57600**
Root, Rad-67, Rad-97	IAP	NA	9600, 19200, 38400, 57600, 115200, 230400***, and 921600
Rad-G	NA	NA	9600**

* Radical-7 must have software v1.5.5.8 or higher to allow identification of the RDS version.

** Baud rate is non-adjustable.

*** Baud rate is displayed on the Masimo device, but is not supported by Trace.

Appendix C: Clinical Events

The following tables contain available clinical events for specific report descriptions by care area and event types.

Care Area - OR Event Types

Routine	Cautionary	Intervention
Miscellaneous	Arrhythmia	Afterload Reduction
Set Baseline	Circulatory Arrest	Blood Transfusion
Intubated	Hypocapnia	Cardioversion
Sternotomy	Hypotension	Cell saver blood
Cannulate	One Lung Ventilation	Cerebral Perfusion O
DeCannulate	Pump Flow Down	ECLS On
On CPB	Reduced Venous Return	FFP/Platelets
Cross Clamp On		Fluid/Volume Expander
Cooling		Hemoconcentrate /MUF
Cardioplegia		Inotrope
Warming		Increase Anesthetic
Cross Clamp Off		Increase CO_2
Off CPB		Increase FiO_2
Closing Sternum		Increase Pump Flow
Induction		Paced
		Reposition Cannula
		Reposition Clamp
		Reposition Head
		Reposition Heart
		Vasopressor

Care Area - ICU Event Types

Routine	Cautionary	Intervention
Miscellaneous	Apnea	Afterload Reduction
Set Baseline	Arrhythmia	Anti-Arrhythmic
Enternal Feeding	Bradycardia	Anti-Epileptic
Extubated	Cardia Arrest	Anti-Pyretic
Cannulate	ICP Changes	Blood Transfusion
Intubated	Painful Procedure	Chest Closed
Reposition Patient	Seizure Activity	Dialysis/CRRT
Sensor Change	Tamponade	Diuretic
		ECLS On
		ECLS Circuit Change
		ECLS Off
		ET Tube Suctioned
		Fluid Bolus
		FFP / Platelets
		Hi Frequency Vent
		Hypothermia

Routine	Cautionary	Intervention
		Inotrope
		Nitric Oxide
		Paralytic
		PDA Ligated
		Protaglandin
		Sedation
		Vaspopressor
		Ventilator Change

Care Area - Vascular Event Types

Routine	Cautionary	Intervention
Miscellaneous	Arrhythmia	Balloon Inflated
Set Baseline	Blood Loss	Balloon Deflated
Intubated	Contrast Dye Injected	Blood Transfusion
Incision	Hypotension	EPD Deployed
Heparin Given	Hypocapnia	Fogarty Catheter In
Cannulate	Shunt Clamped	FFP/Platelets
Clamp On Vessel	Thrombus Suspected	Hemostasis Device In
Suturing Vessel/Graft		IAB Catheter In/On
Clamp Off Vessel		IAB Catheter Out/Off
Dcannulate		Increase Anesthetic
Induction		Increase $EtCO_2$
Extubated		Increase FiO_2
		Shunt Flushed
		Shunt Open
		Shunt Repositioned
		Stent Deployed
		Thrombus Removed
		Vasopressor
		Vasodilator
		Vessel Repaired

Care Area - NICU Event Types

Routine	Cautionary	Intervention
Miscellaneous	Apnea	Afterload Reduction
Set Baseline	Arrhythmia	Anti-Arrhythmic
Enternal Feeding	Bradycardia	Anti-Epileptic
Extubated-Intubated	Cardia Arrest	Anti-Pyretic
Bag Mask Ventilation	ICP Changes	Blood Transfusion
Conventional Vent	Painful Procedure	Chest Closed
Hi Frequency Vent	Seizure Activity	Dialysis/CRRT
Position Change	Tamponade	Diuretic

Appendix D: Report Information

The following tables list available report formats, PDF report settings, PDF report types, and PDF report header/footer information details.

Report Formats

Data can be exported in the formats shown in the table below.

Type	File Name	Information	Trend Data Type
.csv or .xlsx raw data file	[PATIENT_NAME] [DATE_OF_REPORT].csv To select the type of report to export, see ***Data Export Format*** on page 49.	Spreadsheet Columns: • Epoch Time • Date • Time • [PARAM_NAME] Value* • Score Value** • Risk Value** • Events*** See ***Overview*** on page 51.	Continuous Data
.pdf graphical report	[PATIENT_NAME] [DATE_OF_REPORT].pdf	See ***PDF Report Information*** on page 80. See ***Overview*** on page 51.	Continuous Data, Spot Check Data

* For parameters, see ***Supported Parameters*** on page 69.

** Display when EWS Data is present.

*** For events, see ***Appendix C: Clinical Events*** on page 75.

CSV/XLSX Reports

Below is an example of a .csv report.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	
1	Epoch Time	Date	Time	SpO2 % Value	PR bpm Value	RR rpm Value	SpMet % Value	PVi Value	SpCO % Value	Pi Value	rSO2 % (sensor 1) Value	rSO2 % (sensor 2) Value	Temp Value	SYS mmHg Value	DIA mmHg Value	MAP mmHg Value	PR bpm Value	Events
2	1.50551E+12	Sep.15.20	14:34:10	97	63	-	-	-	-	3	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
3	1.50551E+12	Sep.15.20	14:34:12	97	62	-	-	-	-	3	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
4	1.50551E+12	Sep.15.20	14:34:14	97	63	-	-	-	-	3.1	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
5	1.50551E+12	Sep.15.20	14:34:16	97	62	-	-	-	-	3.1	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
6	1.50551E+12	Sep.15.20	14:34:18	97	61	-	-	-	-	3.5	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
7	1.50551E+12	Sep.15.20	14:34:20	97	60	-	-	-	-	3.7	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
8	1.50551E+12	Sep.15.20	14:34:22	97	60	-	-	-	-	3.8	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
9	1.50551E+12	Sep.15.20	14:34:24	97	59	18	-	-	-	3.8	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
10	1.50551E+12	Sep.15.20	14:34:26	97	59	17	1.6	-	1	4	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
11	1.50551E+12	Sep.15.20	14:34:28	97	58	17	1.6	21	1	4	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
12	1.50551E+12	Sep.15.20	14:34:30	97	58	16	1.6	21	1	4.1	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
13	1.50551E+12	Sep.15.20	14:34:32	97	58	16	1.6	21	1	4	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
14	1.50551E+12	Sep.15.20	14:34:34	97	58	16	1.6	21	1	5.6	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
15	1.50551E+12	Sep.15.20	14:34:36	97	57	16	1.6	21	1	5.4	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
16	1.50551E+12	Sep.15.20	14:34:38	98	57	16	1.6	21	1	5	-	-	98.5	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
17	1.50551E+12	Sep.15.20	14:34:40	98	57	16	1.6	21	1	4.8	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
18	1.50551E+12	Sep.15.20	14:34:42	99	57	16	1.5	21	1	4.8	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
19	1.50551E+12	Sep.15.20	14:34:44	99	57	16	1.5	21	1	4.9	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
20	1.50551E+12	Sep.15.20	14:34:46	99	57	16	1.4	21	2	4.9	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
21	1.50551E+12	Sep.15.20	14:34:48	99	57	16	1.4	21	2	5.2	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
22	1.50551E+12	Sep.15.20	14:34:50	99	58	15	1.3	21	2	5.2	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
23	1.50551E+12	Sep.15.20	14:34:52	99	60	15	1.3	21	2	5.1	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
24	1.50551E+12	Sep.15.20	14:34:54	99	65	15	1.3	21	2	5	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
25	1.50551E+12	Sep.15.20	14:34:56	99	67	15	1.2	21	2	5.1	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
26	1.50551E+12	Sep.15.20	14:34:58	99	70	14	1.2	21	2	5.4	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
27	1.50551E+12	Sep.15.20	14:35:00	98	70	14	1.2	21	2	5.2	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
28	1.50551E+12	Sep.15.20	14:35:02	98	71	15	1.2	21	2	4.8	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
29	1.50551E+12	Sep.15.20	14:35:04	98	69	15	1.2	21	2	4.4	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
30	1.50551E+12	Sep.15.20	14:35:06	98	69	14	1.2	21	2	3.9	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
31	1.50551E+12	Sep.15.20	14:35:08	98	66	14	1.1	21	2	3.5	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
32	1.50551E+12	Sep.15.20	14:35:10	98	66	14	1.1	21	2	3.4	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
33	1.50551E+12	Sep.15.20	14:35:12	98	65	14	1.1	21	2	3.6	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
34	1.50551E+12	Sep.15.20	14:35:14	98	65	14	1.1	21	2	4.1	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
35	1.50551E+12	Sep.15.20	14:35:16	98	63	14	1.1	21	2	4.2	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
36	1.50551E+12	Sep.15.20	14:35:18	98	63	14	1.1	21	2	4.7	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
37	1.50551E+12	Sep.15.20	14:35:20	98	64	14	1.1	21	2	5.2	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
38	1.50551E+12	Sep.15.20	14:35:22	99	63	15	1.1	21	2	5.7	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
39	1.50551E+12	Sep.15.20	14:35:24	99	62	15	1.1	21	2	5.9	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
40	1.50551E+12	Sep.15.20	14:35:26	98	62	15	1.1	21	2	6.2	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
41	1.50551E+12	Sep.15.20	14:35:28	98	60	15	1	21	2	6.1	-	-	-	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
42	1.50551E+12	Sep.15.20	14:35:30	98	60	14	1	22	2	5.1	-	-	99	-	-	-	-	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT
43	1.50551E+12	Sep.15.20	14:35:32	98	58	14	1	22	2	5.1	-	-	-	126	70	89	60	DS_HAWK_EAGLE_DOCKED;SPHB_UNIT

PDF Report Information

The following information provides report types, available settings and descriptions.

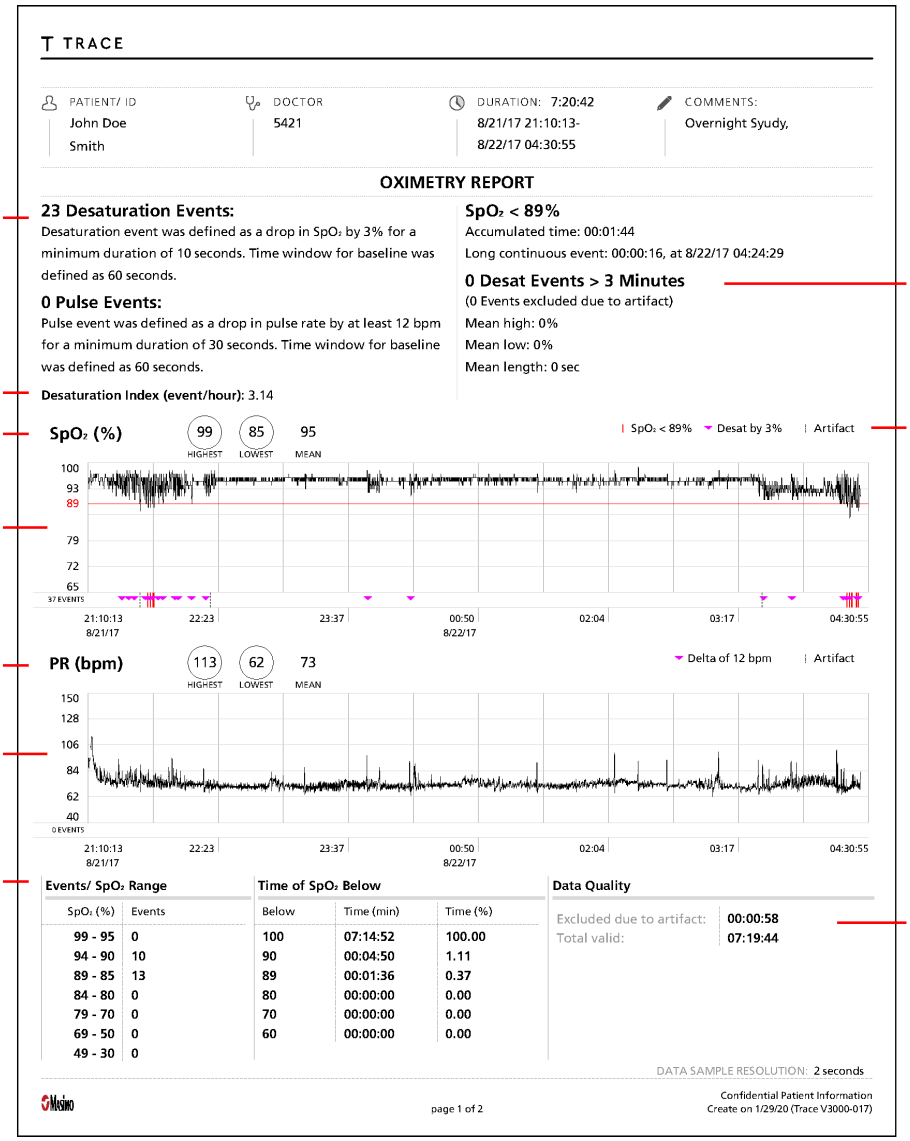
Report Types and Details

The following report types are available through Trace. Some reports apply to multiple channels. At least one (1) report must be selected to generate a report for the channel. If there are multiple channels in the continuous data, each channel must have at least one (1) report selected if a report containing all available channels is required.

Report	Applicable Channels	Report Details
Oximetry	rainbow	See ***Oximetry Report*** on page 81.
Desaturation	rainbow	See ***Desaturation Report*** on page 83.
% Times	rainbow, O3, SedLine, Capnography	See ***% Times Report*** on page 85.
Actual Times	rainbow, O3, SedLine, Capnography	See ***Actual Times Report*** on page 86.
Respiratory (RR) Events	rainbow, Capnography	See ***Respiratory (RRa) Events Report*** on page 87.
Events	rainbow, O3, SedLine, Capnography	See ***Events Report*** on page 89.
Trends	rainbow, O3, SedLine, Capnography	See ***Trends Report*** on page 90.
Summary	O3	See ***O3 Summary Report*** on page 91.
NiBP and Temperature	NiBP and Temperature	See ***NiBP and Temperature Report*** on page 93.
Temperature	Temperature	See ***Temperature Report*** on page 95.
Position	Centroid	See ***Position Report*** on page 96.
EWS	EWS	See ***EWS Report*** on page 99.
Spot Check	Vital Signs, SpHb, CCHD (Eve) Spot Checks	See ***Spot Check Report*** on page 100.

Oximetry Report

The Oximetry Report is a summary of the oximetry data, desaturation and pulse rate events. The report is generated using the available options in the rainbow report menu.



Item	Description	Item	Description
1	Summary information, including settings used for report	5	Trend (SpO_2 shows baseline in red)
2	Desaturation event statistics	6	Events Legend
3	Desaturation Index information	7	Events at each range/Time below value table
4	Parameter and High/Low/Mean Value	8	Time for all excluded events (due to artifact)/total time for valid events

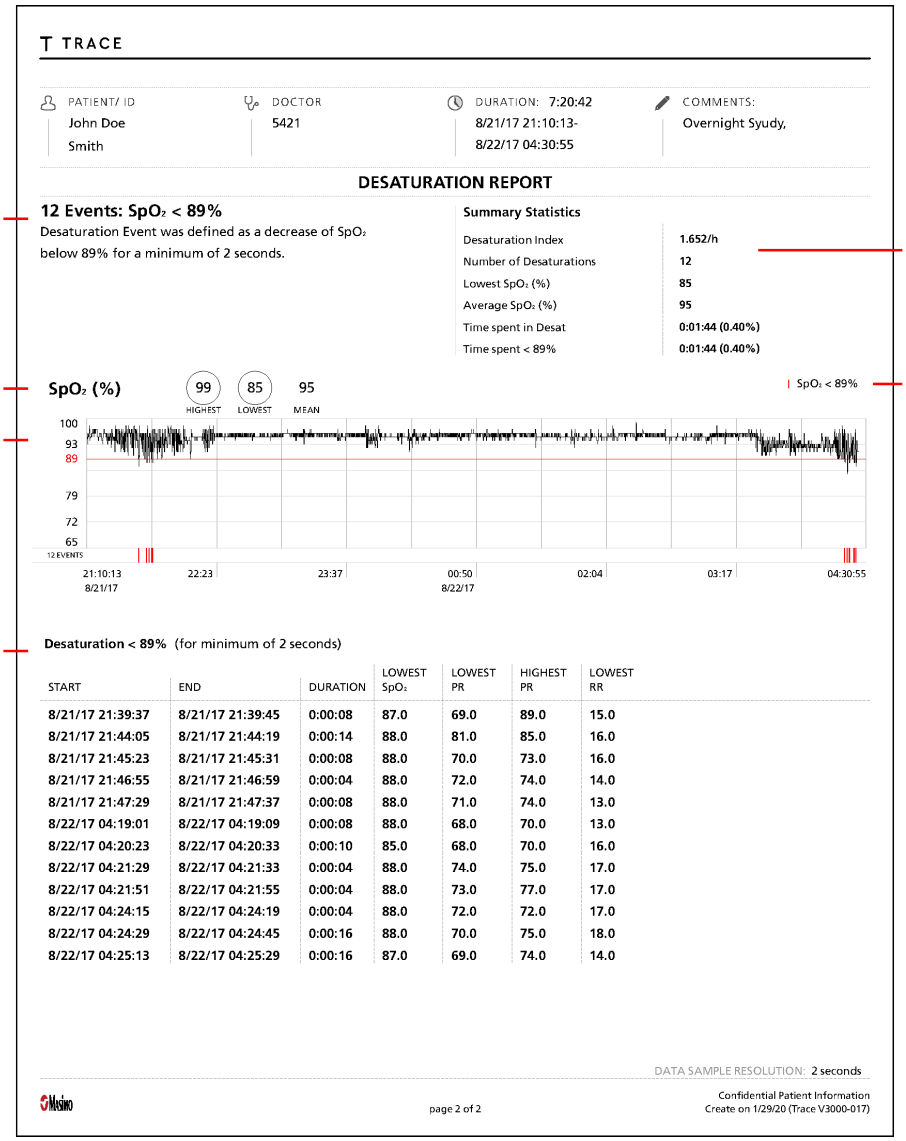
Oximetry Report Settings*

Setting	Description	Value	Default	Available Settings
Included Parameters	Parameters to be included in the report.	SpO2, PR	All Checked	Check or Unchecked
Display				
Show Trend Graph	Selection to display Trend graphs	NA	Checked	Check or Unchecked
Include Artifacts	Selection to not exclude desaturation events when artifact is present (artifact is defined as low confidence on the SpO2 parameter)	NA	Checked	Check or Unchecked
Desaturation Threshold	SpO2 data must be below the specified threshold for event to qualify	SpO2	89 %	1 to 120
Event Definitions				
Saturation drops by a specified percent value within a specified amount of time	SpO2 data drops from a baseline value by the specified value within the time window specified for event to qualify. * Baseline is determined by a moving average with the number of samples included in the time window specified.	SpO2 Percentage Drop %	3	1 to 20
		SpO2 Drop Duration	30 sec	1 to 120 sec
		Time Window	60 sec	2 to 240
Saturation drops by a specified percent value within a specified amount of time or Saturation drops below a specified SpO2 value for a minimum amount of time.	SpO2 data drops from a baseline value by the specified value within the time window specified for event to qualify. * Baseline is determined by a moving average with the number of samples included in the time window specified.	SpO2 Percentage Drop %	3	1 to 20
		SpO2 Percentage Drop Duration	30 sec	1 to 120 sec
		SpO2 Saturation Drop %	89	1 to 100
		Time Window	60 sec	2 to 240 sec
Pulse Rate change by a specified bpm value within a specified amount of time.	Pulse Rate data drops from a baseline value by the specified value within the time specified for event to qualify. * Baseline is determined by a moving average with the number of samples included in the time specified.	Change in Pulse Rate	12 bpm	1 to 20 bpm
		Change in Pulse Rate Duration	30 sec	1 to 120 sec
		Time Window	120 sec	2 to 240 sec
Saturation drops by a specified percent value within a specified amount of time or Saturation drops below a specified SpO2 value for a minimum amount of time.	SpO2 data drops from a baseline value by the specified value within the time window specified for event to qualify. * Baseline is determined by a moving average with the number of samples included in the time window specified.	SpO2 Percentage Drop %	3	1 to 20
		SpO2 Percentage Drop Duration	30 sec	1 to 120 sec
		SpO2 Saturation Drop %	89	1 to 100
		Time Window	60 sec	2 to 240 sec
Pulse Rate change by a specified bpm value within a specified amount of time.	Pulse Rate data drops from a baseline value by the specified value within the time specified for event to qualify. * Baseline is determined by a moving average with the number of samples included in the time specified.	Change in Pulse Rate	12 bpm	1 to 20 bpm
		Change in Pulse Rate Duration	30 sec	1 to 120 sec
		Time Window	120 sec	2 to 240 sec
Desat Tables				
Statistics Tables	Selection for statistics and desaturation event duration tables	NA	Checked	Check or Unchecked
Event Duration Tables		NA	Checked	Check or Unchecked

* When deselected, the oximetry data is not included in the report.

Desaturation Report

The Desaturation Report displays SpO_2 desaturation event information. The report is generated using the available options in the rainbow report menu. If no desaturation events occurred, the report will display a statement indicating that.



Item	Description	Item	Description	Item	Description
1	Summary information, including settings used for report	3	SpO_2 and High/Low/Mean Value	5	Desaturation event information table
2	Desaturation summary statistics	4	SpO_2 Trend, showing baseline in red	6	Events Legend

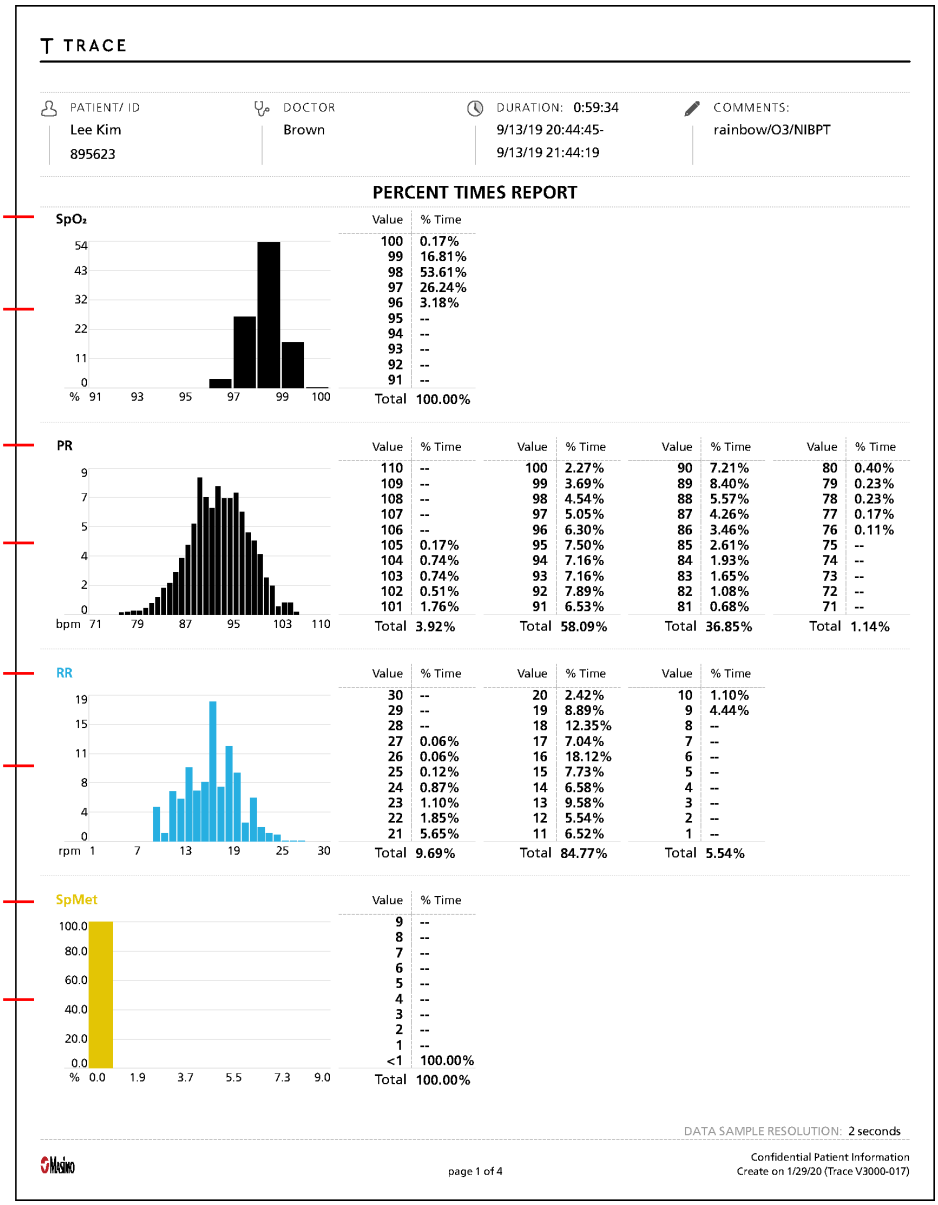
Desaturation Report Settings*

Setting	Description	Value	Default Setting	Available Settings
Desaturation Event Definitions				
Saturation drops below a specified SpO_2 value for a minimum amount of time.	SpO_2 data must be below the specified threshold for the time specified for event to qualify.	Drop %	89	1 to 100
		Time	30 sec	1 to 120 sec
Saturation drops by a specified percent value within a specified amount of time.	SpO_2 data drops from a baseline value by the specified value within the time specified for event to qualify. * Baseline is determined by a moving average with the number of samples included in the time specified. Select to enable and include in the report.	Drop %	3	1 to 20
		Saturation Drop %	89	1 to 100
		Time	60 seconds	2 to 240 sec
Display				
Table	Selection to display a table	NA	Checked	Check or Unchecked
Trend	Selection to display Trend	NA	Unchecked	Check or Unchecked
Include Artifacts	Selection to not exclude desaturation events when artifact is present (artifact is defined as low confidence on the SpO_2 parameter)	NA	Checked	Check or Unchecked

* When deselected, the desaturations are not included in the report.

% Times Report

The % Times Report displays a histogram chart and/or table of the percent times each parameter spent at different values. The report is generated using the available options in the report menu for all channels. The following report example is from rainbow data.



Item	Description	Item	Description
1	Parameter (Displays sensor information for O3 reports)	2	Histogram and table displaying percent of time at parameter value.

% Times Report Settings*

Setting	Description	Value	Default Setting	Available Settings
Display as	Selection for display type	Histogram, Table	All Checked	Checked or Unchecked
Sensors**	Selection for which sensors to include in report.	Pod 1 - Sensor 1, Pod 1 - Sensor 2, Pod 2 - Sensor 1, Pod 2 - Sensor 2	All Checked	Checked or Unchecked

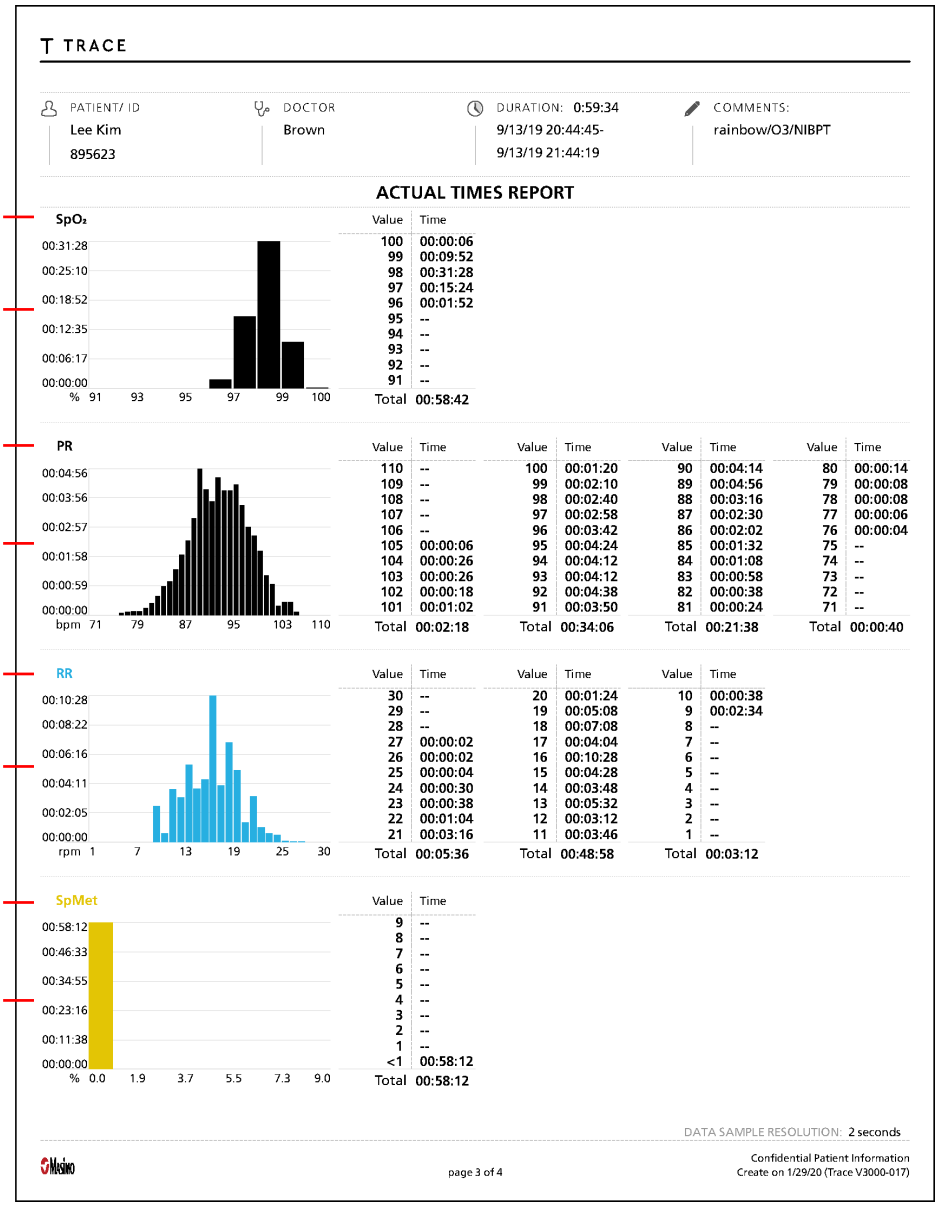
Setting	Description	Value	Default Setting	Available Settings
Included Parameters	Selection for which parameters to include in report	Parameters per ***Supported Parameters*** on page 69 and what is available in selected session.	All Selected	Checked or Unchecked

* When deselected, the % times for the channel are not included in the report.

** This option appears for O3 data reporting only.

Actual Times Report

The Actual Times Report displays a histogram chart and/or table of the actual times each parameter spent at different values. The report is generated using the available options in the report menu for all channels. The following report example is from rainbow data.



Item	Description	Item	Description
1	Parameter (Displays sensor information for O3 reports)	2	Histogram and table displaying actual time at parameter value.

Actual Times Report Settings*

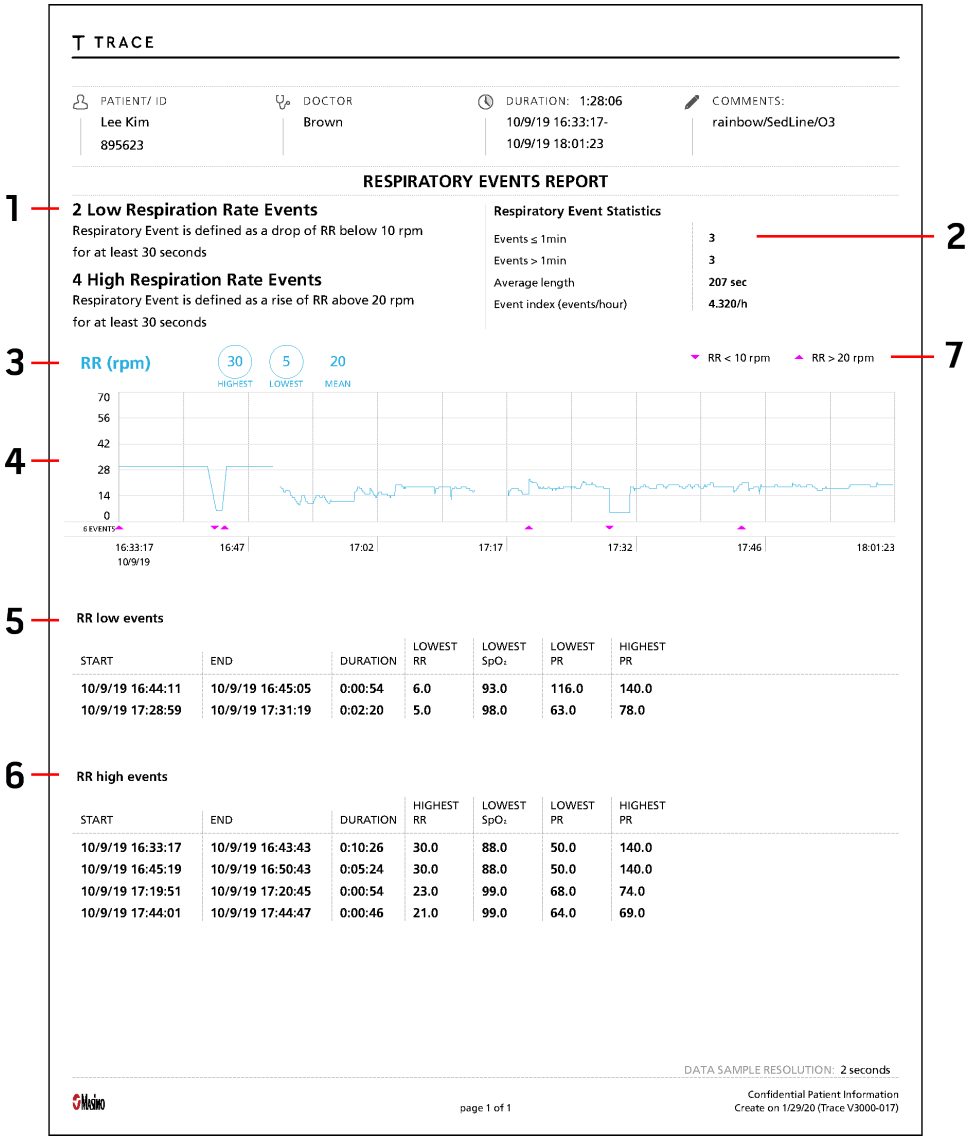
Setting	Description	Value	Default Setting	Available Settings
Display as	Selection for display type	Histogram, Table	All Checked	Checked or Unchecked
Sensors**	Selection for which sensors to include in report.	Pod 1 - Sensor 1, Pod 1 - Sensor 2, Pod 2 - Sensor 1, Pod 2 - Sensor 2	All Checked	Checked or Unchecked
Included Parameters	Selection for which parameters to include in report	Supported Parameters per ***Supported Parameters*** on page 69 and what is available in selected session.	All Selected	Checked or Unchecked

* When deselected, the actual times for the channel are not included in the report.

** This option appears for O3 data reporting only.

Respiratory (RRa) Events Report

The Respiratory Event Report displays events for RR. The report is generated using the available options in the rainbow report menu.



Item	Description	Item	Description
1	Summary information, including settings used for report	5	RR Low Event information
2	Event statistics	6	RR High Event information
3	Parameter and High/Low/Mean Value	7	Events Legend
4	Histogram	-	--

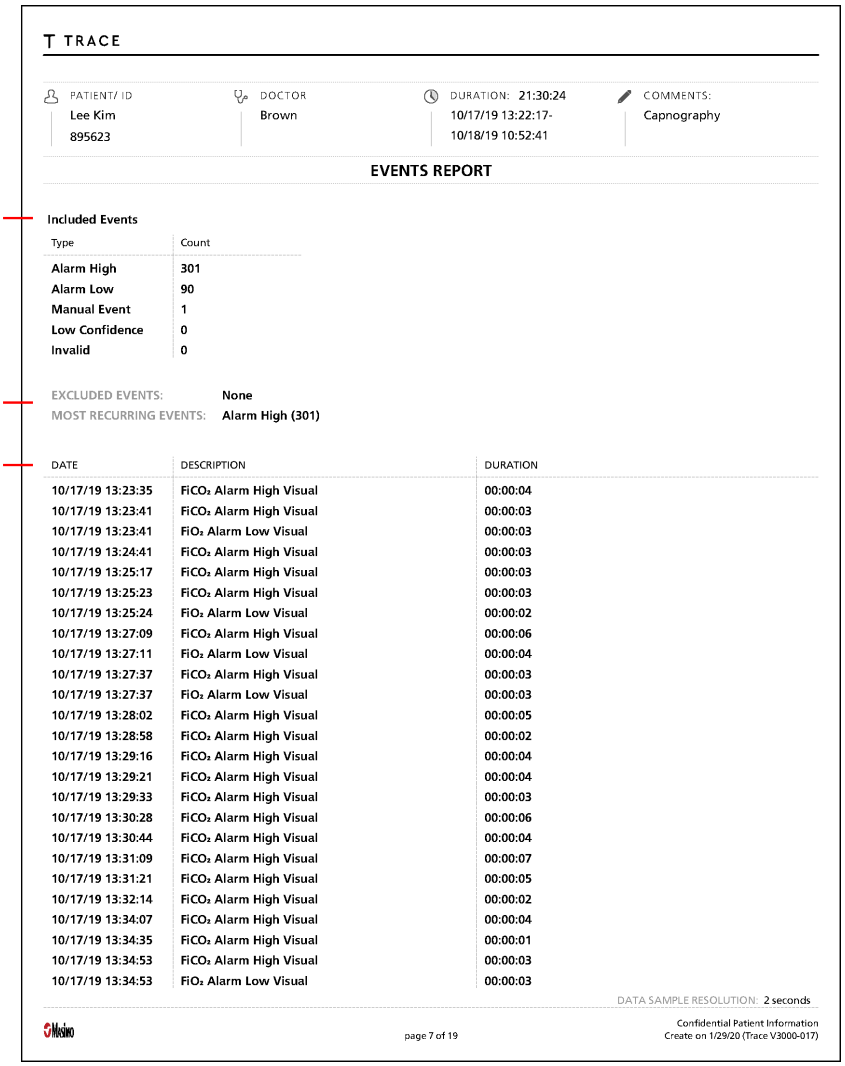
Respiratory Event Report Settings*

Setting	Description	Value	Default Setting	Available Settings
Respiratory Event Definitions				
Respiratory Rate drops below a specified RR value for a minimum amount of time	RR data must be below the specified threshold for the time specified for event to qualify	RR Value	10	1 to 119
		Time	5 sec	1 to 300 sec
Respiratory Rate rises above a specified RR value for a minimum amount of time	RR data must be above the specified threshold for the time specified for event to qualify	RR Value	20	1 to 119
		Time	30 sec	1 to 300 sec

* When deselected, the RR events are not included in the report.

Events Report

The Events Report displays the selected events. The report is generated using the available options in the report menu for all channels. The following report example is from Capnography data.



TRACE

PATIENT/ ID: Lee Kim, 895623 | DOCTOR: Brown | DURATION: 21:30:24, 10/17/19 13:22:17- 10/18/19 10:52:41 | COMMENTS: Capnography

EVENTS REPORT

1 **Included Events**

Type	Count
Alarm High	301
Alarm Low	90
Manual Event	1
Low Confidence	0
Invalid	0

2 EXCLUDED EVENTS: None
MOST RECURRING EVENTS: Alarm High (301)

3

DATE	DESCRIPTION	DURATION
10/17/19 13:23:35	FiCO₂ Alarm High Visual	00:00:04
10/17/19 13:23:41	FiCO₂ Alarm High Visual	00:00:03
10/17/19 13:23:41	FiO₂ Alarm Low Visual	00:00:03
10/17/19 13:24:41	FiCO₂ Alarm High Visual	00:00:03
10/17/19 13:25:17	FiCO₂ Alarm High Visual	00:00:03
10/17/19 13:25:23	FiCO₂ Alarm High Visual	00:00:03
10/17/19 13:25:24	FiO₂ Alarm Low Visual	00:00:02
10/17/19 13:27:09	FiCO₂ Alarm High Visual	00:00:06
10/17/19 13:27:11	FiO₂ Alarm Low Visual	00:00:04
10/17/19 13:27:37	FiCO₂ Alarm High Visual	00:00:03
10/17/19 13:27:37	FiO₂ Alarm Low Visual	00:00:03
10/17/19 13:28:02	FiCO₂ Alarm High Visual	00:00:05
10/17/19 13:28:58	FiCO₂ Alarm High Visual	00:00:02
10/17/19 13:29:16	FiCO₂ Alarm High Visual	00:00:04
10/17/19 13:29:21	FiCO₂ Alarm High Visual	00:00:04
10/17/19 13:29:33	FiCO₂ Alarm High Visual	00:00:03
10/17/19 13:30:28	FiCO₂ Alarm High Visual	00:00:06
10/17/19 13:30:44	FiCO₂ Alarm High Visual	00:00:04
10/17/19 13:31:09	FiCO₂ Alarm High Visual	00:00:07
10/17/19 13:31:21	FiCO₂ Alarm High Visual	00:00:05
10/17/19 13:32:14	FiCO₂ Alarm High Visual	00:00:02
10/17/19 13:34:07	FiCO₂ Alarm High Visual	00:00:04
10/17/19 13:34:35	FiCO₂ Alarm High Visual	00:00:01
10/17/19 13:34:53	FiCO₂ Alarm High Visual	00:00:03
10/17/19 13:34:53	FiO₂ Alarm Low Visual	00:00:03

DATA SAMPLE RESOLUTION: 2 seconds

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Item	Description	Item	Description	Item	Description
1	Included events information	2	Number of events not included in the report/event occurring the most	3	Event information table

Events Report Settings*

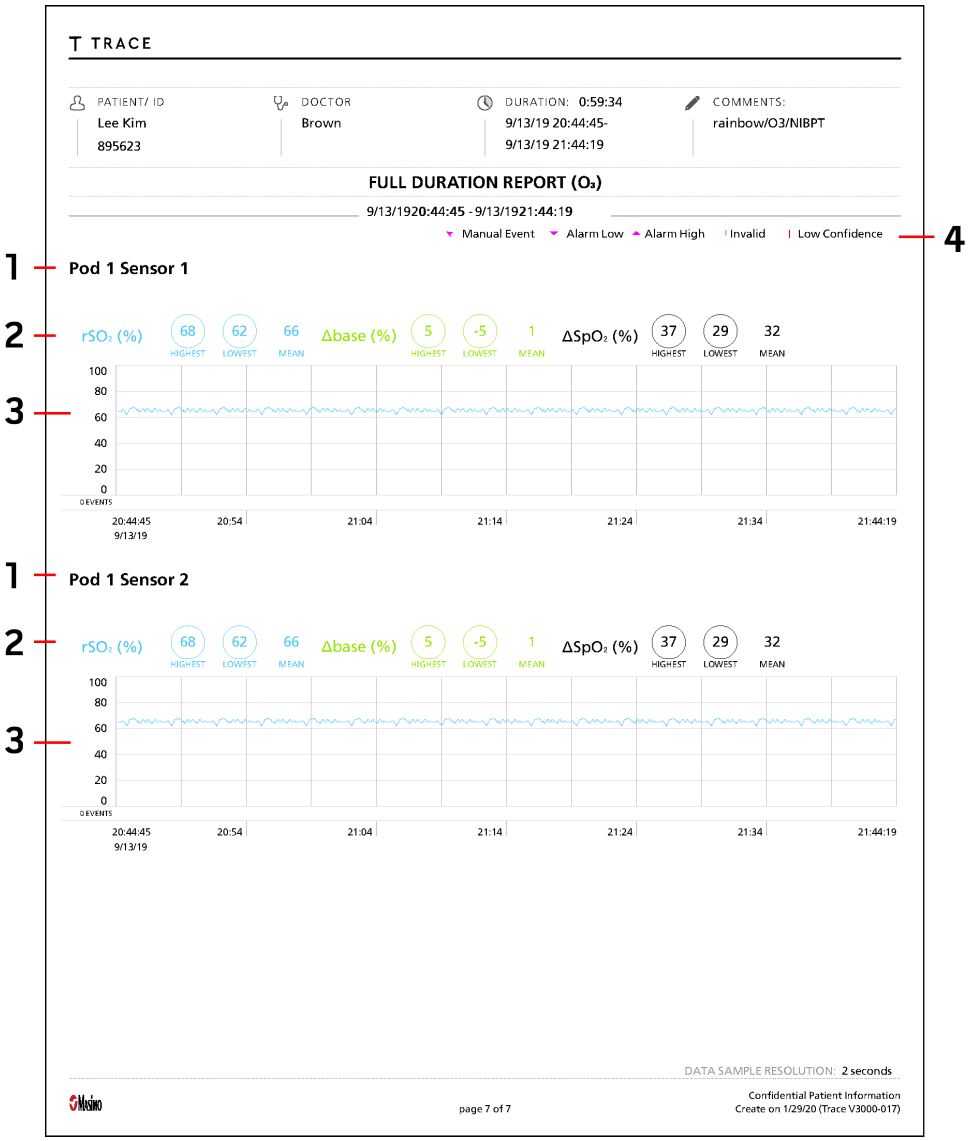
Setting	Description	Value	Default Setting	Available Settings
Sensors**	Selection for which sensors to include in report.	Pod 1 - Sensor 1, Pod 1 - Sensor 2, Pod 2 - Sensor 1, Pod 2 - Sensor 2	All Checked	Checked or Unchecked
Include these events	Selection for events to include in report	Manual Event, Alarm Low, Alarm High, Low Confidence, Invalid	All Checked	Checked or Unchecked

* When deselected, the events for the channel are not included in the report.

** This option appears for O3 data reporting only.

Trends Report

The Trends Report displays trend data and events. The report is generated using the available options in the report menu for all channels. The following report example is a Full Duration Trends Report from O3 data.



Item	Description	Item	Description
1	Sensor Information	3	Trend
2	Parameter and High/Low/Mean Value	4	Events Legend

Trends Report Settings*

Setting	Description	Value	Default Setting	Available Settings
Sensors**	Selection for which sensors to include in report.	Pod 1 - Sensor 1, Pod 1 - Sensor 2, Pod 2 - Sensor 1, Pod 2 - Sensor 2	All Checked	Checked or Unchecked
Included Parameters	Selection for which parameters to include in report.	Parameters per ***Supported Parameters*** on page 69 and what is available in selected session.	All Checked	Checked or Unchecked

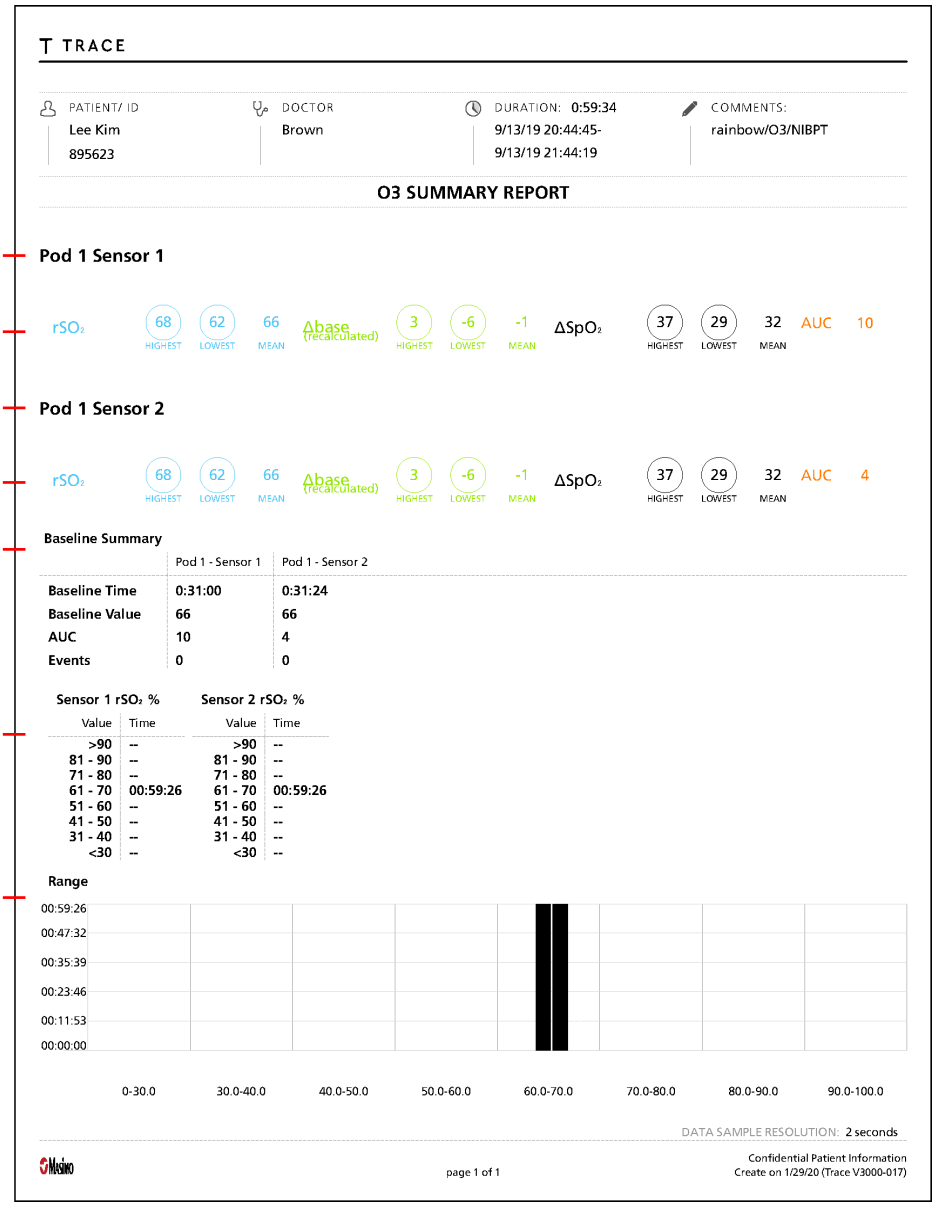
Setting	Description	Value	Default Setting	Available Settings
Intervals	Selection of time interval for trend graphs.	NA	Full Duration	Full Duration, 24hr, 12hr, 8hr, 2hr, 1hr, 30min, 10min, 1min
Include these events	Selection for events to include in report.	Manual Event, Alarm Low, Alarm High, Low Confidence, Invalid	All Checked	Checked or Unchecked

* When deselected, trends for the channel are not included in the report.

** This option appears for O3 data reporting only.

O3 Summary Report

The Summary Report displays O3 sensor values. The report is generated using the available options in the O3 report menu.



Item	Description	Item	Description	Item	Description
1	Sensor Information	3	Baseline, AUC and Events summary information	5	Histogram
2	Parameter and High/Low/Mean Value	4	Actual time at each value.	-	--

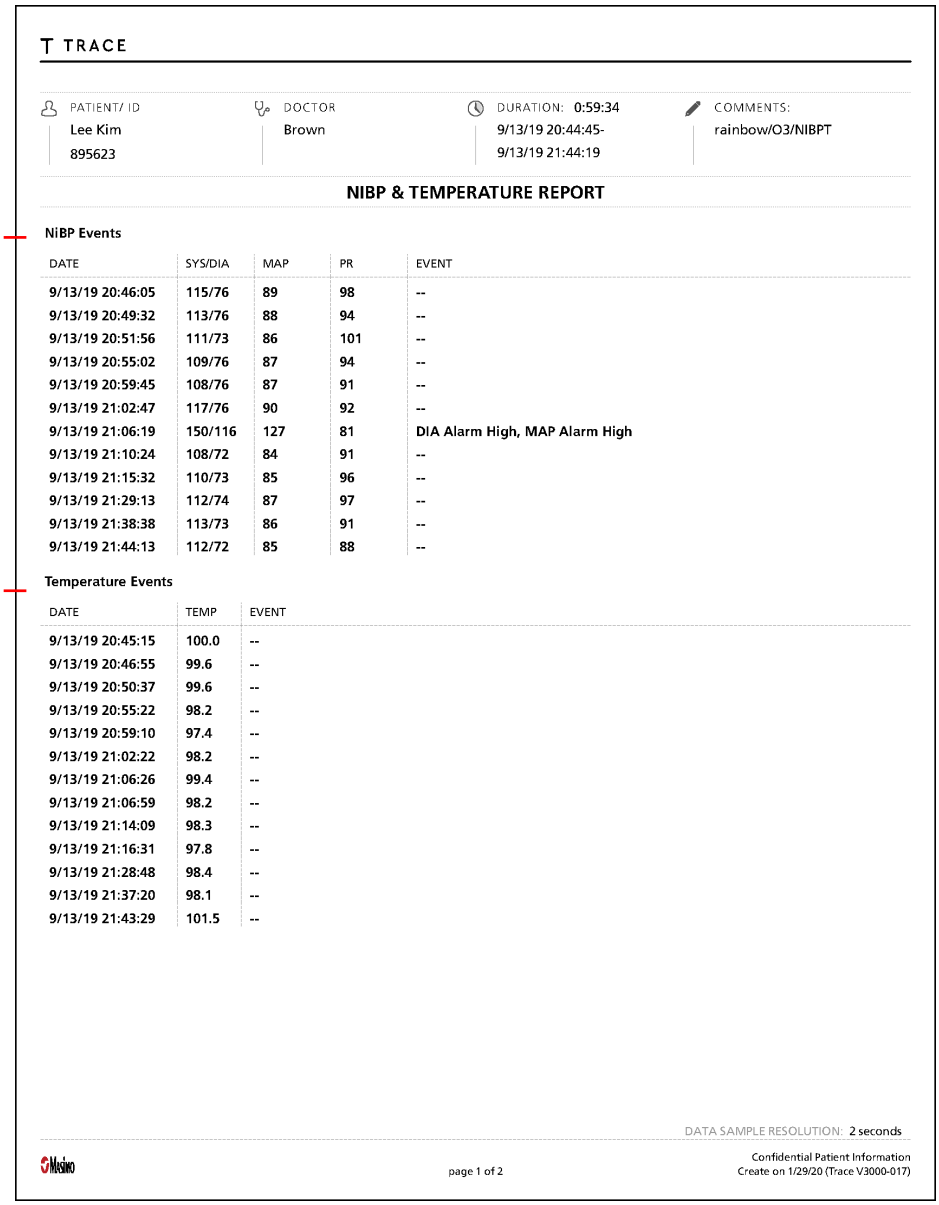
O3 Summary Report Settings*

Setting	Description	Value	Default Setting	Available Settings
Sensors	Selection for which sensors to include in report	Pod 1 - Sensor 1, Pod 1 - Sensor 2, Pod 2 - Sensor 1, Pod 2 - Sensor 2	All Checked	Checked or Unchecked
Included Parameters	Selection for which parameters to include in report	Parameters per ***Supported Parameters*** on page 69 and what is available in selected session.	All Checked	Checked or Unchecked
Display	Selection for display type	Baseline table, Minutes in range table, Minutes in range histogram	All Checked	Checked or Unchecked

* When deselected, the summary items are not included in the report.

NiBP and Temperature Report

The NIBP & Temperature Report displays data and events for NIBP and Temperature. The report is generated using the available options in the NIBP & Temperature report menu.



TRACE

PATIENT/ ID: Lee Kim, 895623 | DOCTOR: Brown | DURATION: 0:59:34, 9/13/19 20:44:45- 9/13/19 21:44:19 | COMMENTS: rainbow/O3/NIBPT

NIBP & TEMPERATURE REPORT

1 **NiBP Events**

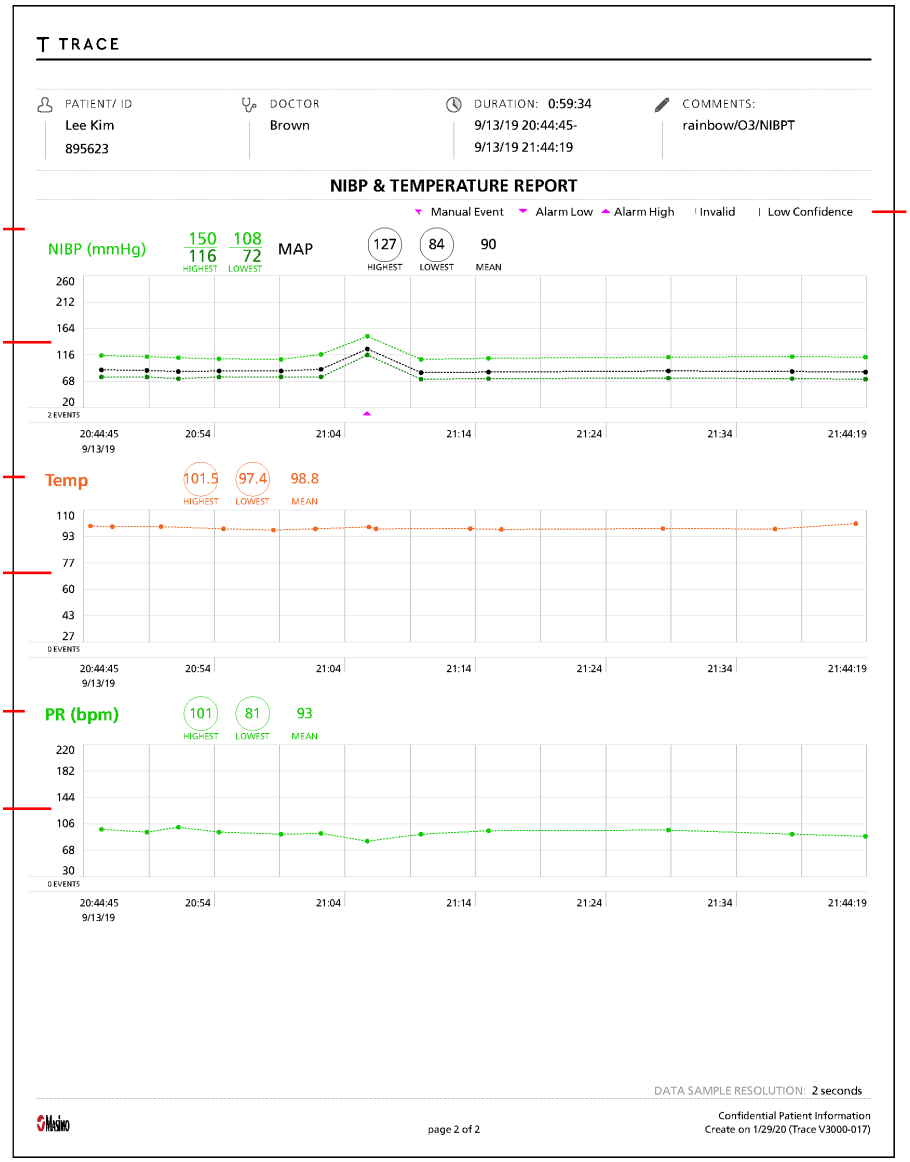
DATE	SYS/DIA	MAP	PR	EVENT
9/13/19 20:46:05	115/76	89	98	--
9/13/19 20:49:32	113/76	88	94	--
9/13/19 20:51:56	111/73	86	101	--
9/13/19 20:55:02	109/76	87	94	--
9/13/19 20:59:45	108/76	87	91	--
9/13/19 21:02:47	117/76	90	92	--
9/13/19 21:06:19	150/116	127	81	DIA Alarm High, MAP Alarm High
9/13/19 21:10:24	108/72	84	91	--
9/13/19 21:15:32	110/73	85	96	--
9/13/19 21:29:13	112/74	87	97	--
9/13/19 21:38:38	113/73	86	91	--
9/13/19 21:44:13	112/72	85	88	--

1 **Temperature Events**

DATE	TEMP	EVENT
9/13/19 20:45:15	100.0	--
9/13/19 20:46:55	99.6	--
9/13/19 20:50:37	99.6	--
9/13/19 20:55:22	98.2	--
9/13/19 20:59:10	97.4	--
9/13/19 21:02:22	98.2	--
9/13/19 21:06:26	99.4	--
9/13/19 21:06:59	98.2	--
9/13/19 21:14:09	98.3	--
9/13/19 21:16:31	97.8	--
9/13/19 21:28:48	98.4	--
9/13/19 21:37:20	98.1	--
9/13/19 21:43:29	101.5	--

DATA SAMPLE RESOLUTION: 2 seconds

Masimo page 1 of 2 Confidential Patient Information Create on 1/29/20 (Trace V3000-017)



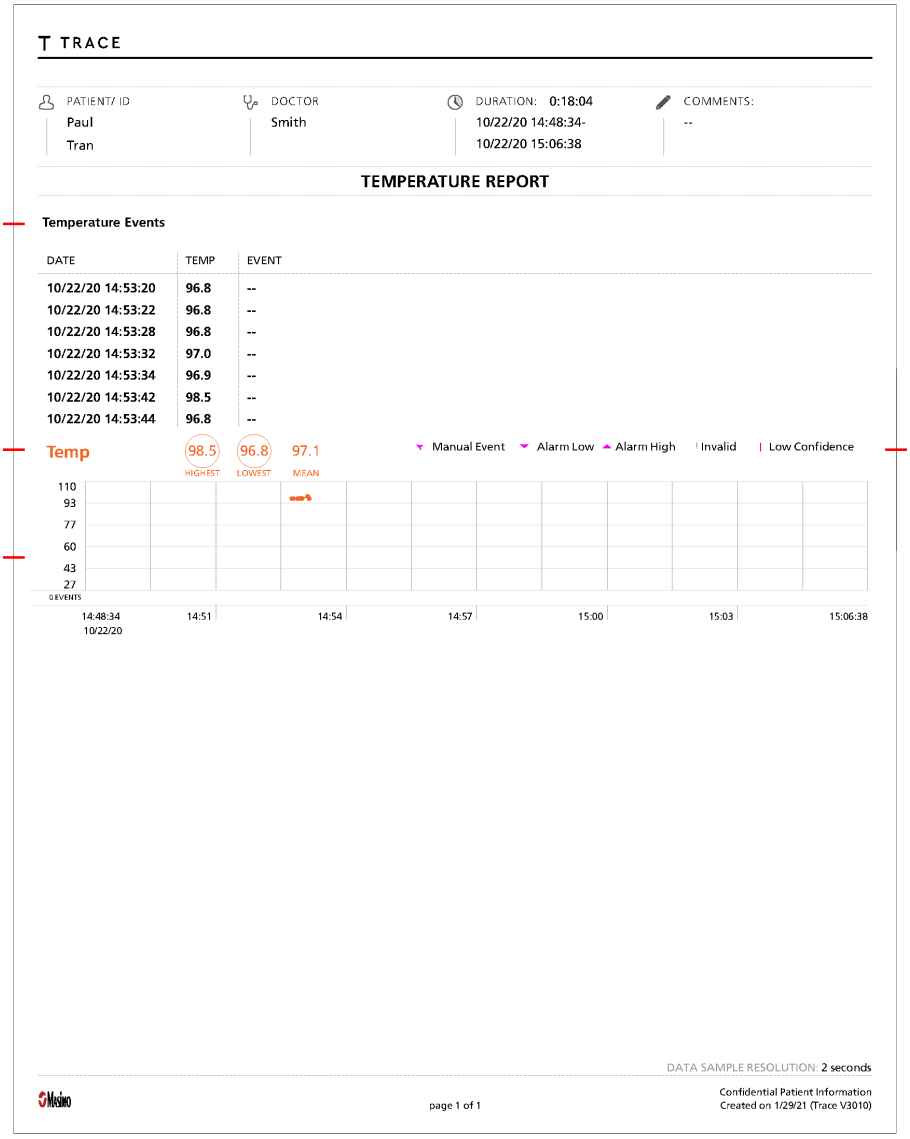
Item	Description	Item	Description
1	Event Information	3	Trend (dots represent measurement spot checks)
2	Parameter and High/Low/Mean Value	4	Events Legend

NIBP and Temperature Report Settings

Setting	Description	Value	Default Setting	Available Settings
Included Parameters	Selection for which parameters to include in report	Parameters per ***Supported Parameters*** on page 69 and what is available in selected session.	All Checked	Checked or Unchecked
Included events	Selection for events to include in report	Manual Event, Alarm Low, Alarm High, Low Confidence, Invalid	All Checked	Checked or Unchecked
Display	Selection for display type	Show trend graph	Checked	Checked or Unchecked

Temperature Report

The Temperature Report displays data and events for Temperature for Rad-G with temperature devices. The report is generated using the available options in the Temperature report menu.



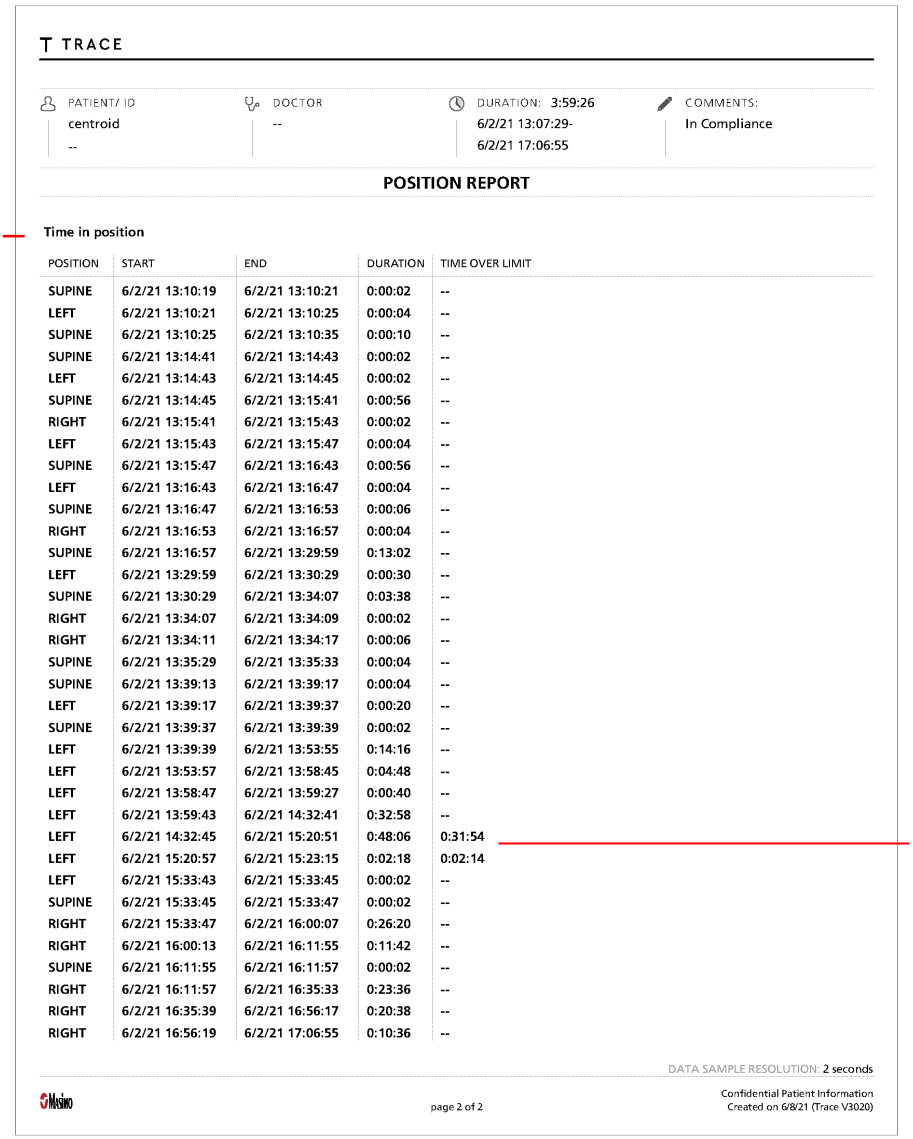
Item	Description	Item	Description
1	Event Information	3	Trend (dots represent measurement spot checks)
2	Parameter and High/Low/Mean Value	4	Events Legend

Temperature Report Settings

Setting	Description	Value	Default Setting	Available Settings
Included events	Selection for events to include in report	Manual Event, Alarm Low, Alarm High, Low Confidence, Invalid	All Checked	Checked or Unchecked
Display	Selection for display type	Show trend graph	Checked	Checked or Unchecked

Position Report

The Position Report displays data and events for Centroid. The report is generated using the available options in the Position report menu.



TRACE

PATIENT/ ID: centroid --
DOCTOR: --
DURATION: 3:59:26 6/2/21 13:07:29- 6/2/21 17:06:55
COMMENTS: In Compliance

POSITION REPORT

7 **Time in position**

POSITION	START	END	DURATION	TIME OVER LIMIT
SUPINE	6/2/21 13:10:19	6/2/21 13:10:21	0:00:02	--
LEFT	6/2/21 13:10:21	6/2/21 13:10:25	0:00:04	--
SUPINE	6/2/21 13:10:25	6/2/21 13:10:35	0:00:10	--
SUPINE	6/2/21 13:14:41	6/2/21 13:14:43	0:00:02	--
LEFT	6/2/21 13:14:43	6/2/21 13:14:45	0:00:02	--
SUPINE	6/2/21 13:14:45	6/2/21 13:15:41	0:00:56	--
RIGHT	6/2/21 13:15:41	6/2/21 13:15:43	0:00:02	--
LEFT	6/2/21 13:15:43	6/2/21 13:15:47	0:00:04	--
SUPINE	6/2/21 13:15:47	6/2/21 13:16:43	0:00:56	--
LEFT	6/2/21 13:16:43	6/2/21 13:16:47	0:00:04	--
SUPINE	6/2/21 13:16:47	6/2/21 13:16:53	0:00:06	--
RIGHT	6/2/21 13:16:53	6/2/21 13:16:57	0:00:04	--
SUPINE	6/2/21 13:16:57	6/2/21 13:29:59	0:13:02	--
LEFT	6/2/21 13:29:59	6/2/21 13:30:29	0:00:30	--
SUPINE	6/2/21 13:30:29	6/2/21 13:34:07	0:03:38	--
RIGHT	6/2/21 13:34:07	6/2/21 13:34:09	0:00:02	--
RIGHT	6/2/21 13:34:11	6/2/21 13:34:17	0:00:06	--
SUPINE	6/2/21 13:35:29	6/2/21 13:35:33	0:00:04	--
SUPINE	6/2/21 13:39:13	6/2/21 13:39:17	0:00:04	--
LEFT	6/2/21 13:39:17	6/2/21 13:39:37	0:00:20	--
SUPINE	6/2/21 13:39:37	6/2/21 13:39:39	0:00:02	--
LEFT	6/2/21 13:39:39	6/2/21 13:53:55	0:14:16	--
LEFT	6/2/21 13:53:57	6/2/21 13:58:45	0:04:48	--
LEFT	6/2/21 13:58:47	6/2/21 13:59:27	0:00:40	--
LEFT	6/2/21 13:59:43	6/2/21 14:32:41	0:32:58	--
LEFT	6/2/21 14:32:45	6/2/21 15:20:51	0:48:06	0:31:54
LEFT	6/2/21 15:20:57	6/2/21 15:23:15	0:02:18	0:02:14
LEFT	6/2/21 15:33:43	6/2/21 15:33:45	0:00:02	--
SUPINE	6/2/21 15:33:45	6/2/21 15:33:47	0:00:02	--
RIGHT	6/2/21 15:33:47	6/2/21 16:00:07	0:26:20	--
RIGHT	6/2/21 16:00:13	6/2/21 16:11:55	0:11:42	--
SUPINE	6/2/21 16:11:55	6/2/21 16:11:57	0:00:02	--
RIGHT	6/2/21 16:11:57	6/2/21 16:35:33	0:23:36	--
RIGHT	6/2/21 16:35:39	6/2/21 16:56:17	0:20:38	--
RIGHT	6/2/21 16:56:19	6/2/21 17:06:55	0:10:36	--

8

DATA SAMPLE RESOLUTION: 2 seconds

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Confidential Patient Information
Created on 6/8/21 (Trace V3020)

Item	Description	Item	Description
1	Summary	5	Events Legend
2	Event Information	6	Total Time in position Histogram in hours/minutes/seconds and percentage
3	Position	7	Time in position and duration table
4	Trend	8	Time over limit (after turn due)

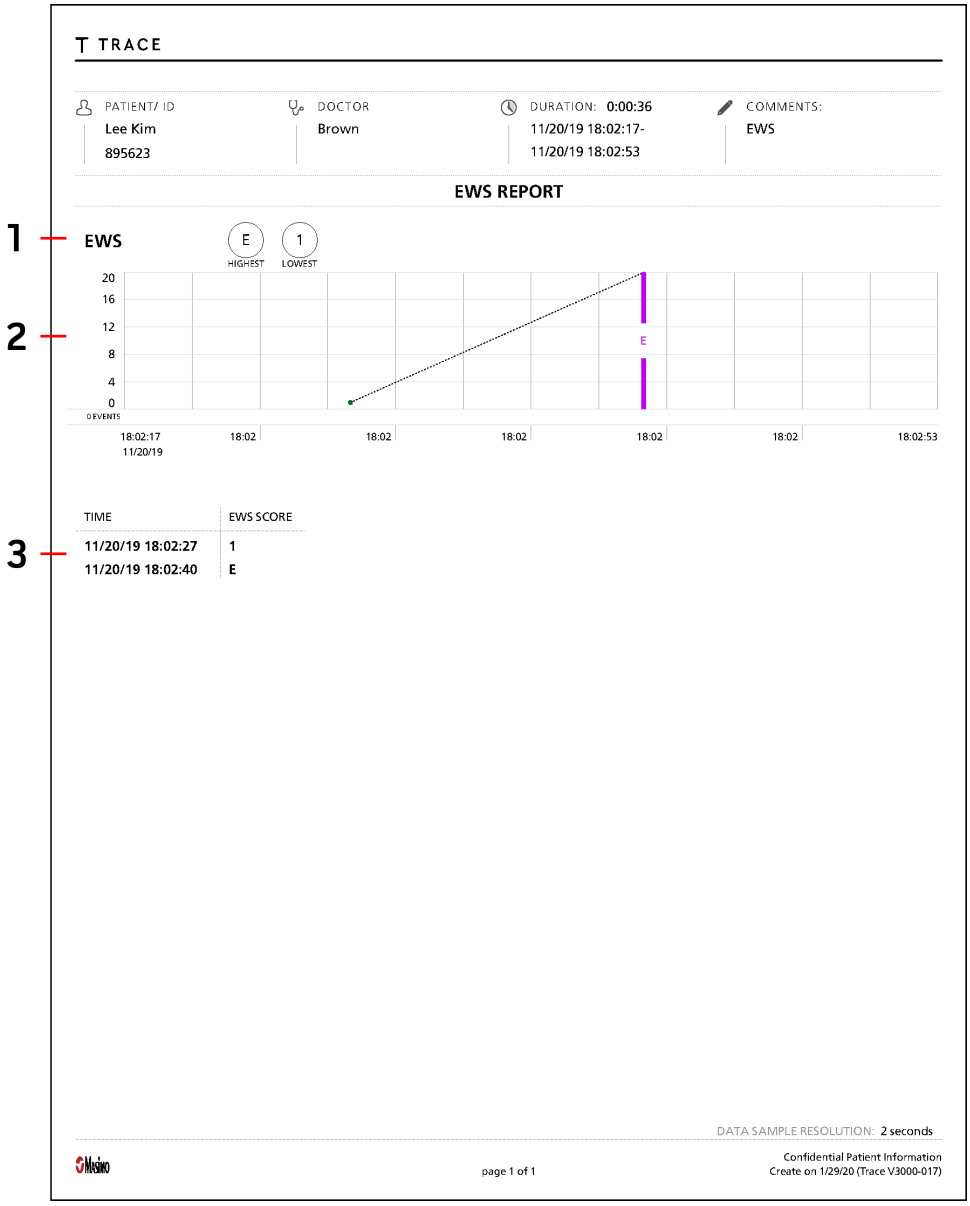
Position Report Settings

Setting	Description	Value	Default Setting	Available Settings
Report Time				
One Report Duration	Generates one report for the duration of monitoring.	NA	Checked	Checked or Unchecked
Several Reports Based on Intervals	Generates separate reports in the time selected for the duration of monitoring.	NA	Unchecked	Checked or Unchecked When Checked: 12hr, 10hr, 8hr, or 6hr

Setting	Description	Value	Default Setting	Available Settings
Non-Compliant Events	Response time to alarms threshold	Patient's position exceeded the repositioning protocol by XX minutes.	30 minutes	1 to 999 minutes
Trends	Include the trend data in the report	Time in position trend	Checked	Checked or Unchecked
Histograms				
Total Time	Include the Total Time in position in hours/minutes/seconds	NA	Checked	Checked or Unchecked
% Time	Include the Total Time in position in percentage	NA	Checked	Checked or Unchecked
Table	Include the Time in position table	Time in position table	Checked	Checked or Unchecked

EWS Report

The EWS Report shows EWS scores information in trend and/or table format. The report is generated using the available options in the EWS report menu.



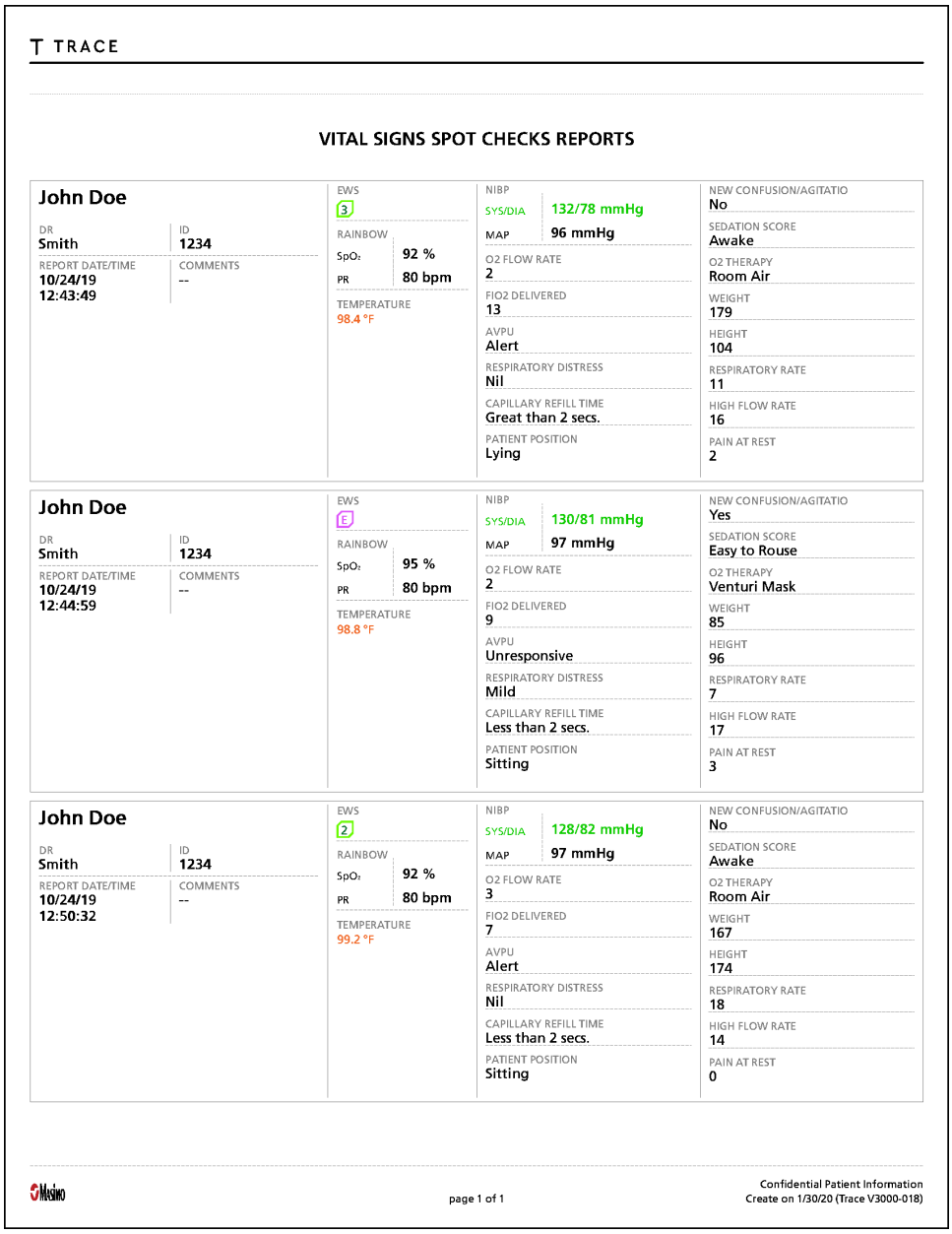
Item	Description	Item	Description	Item	Description
1	Highest and Lowest EWS scores	2	EWS Trend Information	3	EWS score information table

EWS Report Settings

Setting	Description	Value	Default Setting	Available Settings
Display as	Selection for display type	Table, Trend	All Checked	Checked or Unchecked

Spot Check Report

The Spot Check Report displays the results for all available spot checks. Spot check data can include Vital Signs, SpHb and CCHD (Eve). The report is generated using the available options in the Spot Check report menu. The following report example is from Vital Signs Spot Check data.



TRACE

VITAL SIGNS SPOT CHECKS REPORTS

John Doe

DR: Smith | ID: 1234
REPORT DATE/TIME: 10/24/19 12:43:49 | COMMENTS: --

EWS: 3
RAINBOW: SpO2 92 % | PR 80 bpm
TEMPERATURE: 98.4 °F

NIBP: SYS/DIA 132/78 mmHg | MAP 96 mmHg
O2 FLOW RATE: 2
FIO2 DELIVERED: 13
AVPU: Alert
RESPIRATORY DISTRESS: Nil
CAPILLARY REFILL TIME: Great than 2 secs.
PATIENT POSITION: Lying

NEW CONFUSION/AGITATIO: No
SEDATION SCORE: Awake
O2 THERAPY: Room Air
WEIGHT: 179
HEIGHT: 104
RESPIRATORY RATE: 11
HIGH FLOW RATE: 16
PAIN AT REST: 2

John Doe

DR: Smith | ID: 1234
REPORT DATE/TIME: 10/24/19 12:44:59 | COMMENTS: --

EWS: E
RAINBOW: SpO2 95 % | PR 80 bpm
TEMPERATURE: 98.8 °F

NIBP: SYS/DIA 130/81 mmHg | MAP 97 mmHg
O2 FLOW RATE: 2
FIO2 DELIVERED: 9
AVPU: Unresponsive
RESPIRATORY DISTRESS: Mild
CAPILLARY REFILL TIME: Less than 2 secs.
PATIENT POSITION: Sitting

NEW CONFUSION/AGITATIO: Yes
SEDATION SCORE: Easy to Rouse
O2 THERAPY: Venturi Mask
WEIGHT: 85
HEIGHT: 96
RESPIRATORY RATE: 7
HIGH FLOW RATE: 17
PAIN AT REST: 3

John Doe

DR: Smith | ID: 1234
REPORT DATE/TIME: 10/24/19 12:50:32 | COMMENTS: --

EWS: 2
RAINBOW: SpO2 92 % | PR 80 bpm
TEMPERATURE: 99.2 °F

NIBP: SYS/DIA 128/82 mmHg | MAP 97 mmHg
O2 FLOW RATE: 3
FIO2 DELIVERED: 7
AVPU: Alert
RESPIRATORY DISTRESS: Nil
CAPILLARY REFILL TIME: Less than 2 secs.
PATIENT POSITION: Sitting

NEW CONFUSION/AGITATIO: No
SEDATION SCORE: Awake
O2 THERAPY: Room Air
WEIGHT: 167
HEIGHT: 174
RESPIRATORY RATE: 18
HIGH FLOW RATE: 14
PAIN AT REST: 0

page 1 of 1

Confidential Patient Information
Create on 1/30/20 (Trace V3000-018)

Spot Check Report Settings

Setting	Description	Value	Default Setting	Available Settings
Parameters	Selection for which parameters to include in report	Supported Parameters per ***Supported Parameters*** on page 69 and what is available in selected session.	All Checked	Checked or Unchecked
Include these events	Selection for events to include in report	Manual Event, Alarm Low, Alarm High, Low Confidence, Invalid	All Checked	Checked or Unchecked
Display as	Selection for display type	Show trend graph	Checked	Checked or Unchecked

Report Header/Footer Information

Header

Label	Location	Value
Report Name	Header	The name of the report
Patient Label	Header	First and Last name or Label of the patient if First and Last Name was not populated
Patient ID	Header	Value representing the ID number of the Patient
Doctor	Header	Physician Name
Start Date/Time	Header	Date and time reflecting the start of the data set
End Date/Time	Header	Date and time reflecting the end of the data set
Duration	Header	Duration of the data set (end date – start date)
Comment	Header	Comments added for the patient file data (if applicable)
Facility Name	Header	Name of the facility
Facility Description	Header	Description of the facility

Footer

Label	Location	Value
Report Created	Footer	Date and time report was created.
Page Number	Footer	Page number and total number of pages.
Data Sample Resolution *	Footer	--
Masimo Logo	Footer	--

* Not displayed on Spot Check reports.

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