

***syngo*[®].via**

**Release Information – Post-Processing Applications for Siemens
Healthineers CT Scanners**

VB40

●	1 Release Information	5
	1.1 Scope	5
●	2 Safety information	7
	2.1 General safety information	8
	2.2 Additional and updated safety information	8
	2.2.1 Updated safety information on modified images	8
	2.2.2 Additional safety information on usage of incomplete data	9
●	3 Useful hints	11
	3.1 Acrobat Reader installation	11
	3.2 Missing snapshot	11
	3.3 Scanner integration	11
	3.4 Naming of findings	11
	3.5 CT Perfusion maps	12
	3.6 Use of a monochrome monitor	12
	3.7 Use of a high resolution monitor	12
●	4 Known issues	13
	4.1 General information on <i>syngo</i> .CT applications	13
	4.1.1 Required Online Help contents are not displayed	13
	4.1.2 The shortcut key to show or hide full image text does not work in all <i>syngo.via</i> CT applications	13
	4.1.3 Windowing cannot be adjusted for CT presets	13
	4.1.4 Logging information is missing when using FastTransfer	14
	4.1.5 Client installation on <i>syngo</i> MMWP	14
	4.1.6 Blurred image text	14
	4.1.7 Vessel labels are not displayed while printing with “Save as result series”	15
	4.1.8 An exception occurs during a printing job	15
	4.1.9 No mouse interactions if the Ctrl key is pressed before editing	15
	4.2 <i>syngo</i> .CT CaScoring	15
	4.2.1 Calcium scoring report template	15

Table of contents

4.3	<i>syngo</i> .CT Dual Energy	16
4.3.1	Exception occurs when opening an assigned study with the CT Dual Energy workflow	16
4.3.2	Unsupported voltage combinations are displayed when configuring an application class	16
4.3.3	Data sets not changing to Ready state	16
4.3.4	Display of the isolated lung	16
4.3.5	Reassigning data	17
4.3.6	Changing the monitor setup	17
4.3.7	Patient data contains several valid scans/reconstructions	17
4.3.8	Reconstruction parameters for single source Dual Energy scans	18
4.3.9	Incorrect data set is displayed when enlarging a segment	18
4.3.10	Segments remain empty when opening the CT Dual Energy workflow	18
4.3.11	Measurement values are not updated when the Dual Energy ROI is repositioned	19
4.4	Rapid Results Technology	19
4.4.1	Creation of Ranges Preset	19
	Index	21

1 Release Information

Dear Customer, we would appreciate your feedback regarding this software version. If you have any suggestions for future improvements, please forward them to your local Siemens Healthineers representative.

Thank you for placing your trust in us. We wish you lots of success using your *syngo*.CT applications VB40.

© Siemens Healthcare GmbH, 2019 All rights reserved.

1.1 Scope

For the following listed medical devices, you can find useful hints and know issues in this Release Information:

- *syngo*.CT CaScoring
- *syngo*.CT Dental
- *syngo*.CT Dual Energy



1 Release Information

2 Safety information

Follow the safety information in this document.



To ensure the safe use of your product and the safety of people, you must adhere to the safety information provided in the Instructions for use documents. In addition, also observe your country-specific regulations and guidelines.

Safety information is located in the safety section and repeated within context where a hazardous situation may occur. To make sure safety information is understood, always read it in context of the situation.

WARNING and CAUTION are highlighted in the text:

 WARNING	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
 CAUTION	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

WARNING and CAUTION have the same structure. The following example CAUTION instructs you how to read a WARNING or a CAUTION:

 **CAUTION**

This text describes the hazardous situation: Images with lossy compression are used for diagnosis!

This text describes the hazard: Wrong diagnosis.

- ◆ **This text describes how to avoid the hazardous situation:**
 - Always verify your evaluation results with the original DICOM images (first reader duty).
 - ◆ Never use lossy ...

2 Safety information

2.1 General safety information

For the secure operation of your medical device, it is the responsibility of the system owner to ensure that each person who operates the system reads and understands the provided Instructions for Use.

 WARNING
<p>Not observing the Instructions for Use and the safety information of the medical device!</p> <p>Injury to the patient.</p> <ul style="list-style-type: none">◆ Always observe the Instructions for Use and follow the safety instructions of the medical device.◆ Always use this Instructions for Use document in conjunction with all Instructions for Use documents provided.

2.2 Additional and updated safety information

The following safety information replaces or complements the safety information as provided in the Instructions for Use.

2.2.1 Updated safety information on modified images

This updated safety information is valid for the following medical device and replaces the corresponding safety information in the Instructions for Use document:

- *syngo*.CT Dual Energy

⚠ CAUTION

Diagnosis is based on modified images only!

Wrong basis for diagnosis.

- ◆ Use modified images as supplemental information only. Make sure that your diagnosis is based on original acquired images. These are images that are not modified in any regard.

2.2.2 Additional safety information on usage of incomplete data

This additional safety information is to be observed for the following medical devices:

- *syngo*.CT CaScoring
- *syngo*.CT Dental
- *syngo*.CT Dual Energy

⚠ CAUTION

Incomplete data used for diagnosis!

Wrong basis for diagnosis.

- ◆ When working with *syngo*.via applications or Rapid Results Technology, verify the sufficient completeness of input data and the validity of results.
- ◆ Use your interpretation skills independent from automatically generated results.

2 Safety information

3 Useful hints

3.1 Acrobat Reader installation

Install the Acrobat Reader only from the *syngo* installation package and not from any other source.

3.2 Missing snapshot

Snapshots that are manually added to an existing finding are automatically removed if the related measurement itself is changed, for example, by moving or resizing the ROI.

3.3 Scanner integration

Update the mapping rules for the CT Scanner Integration, which are supplied in your mapping table.

These mapping rules are based on the following DICOM attribute:
ProcedureCodeSequence (0008,1032) : CodeValue
(0008,0100)

3.4 Naming of findings

The names of findings are unique for each workflow step. For example, the first marker of a workflow is always named **[1] Marker**. As a result, several **[1] Marker** findings may exist in a combined workflow.

To avoid a defective attribution of findings, consider not only the name of a finding but also its source attribute that is an element of the **Findings details** window.

3.5 CT Perfusion maps

When reading CT Perfusion maps, check the images for bones, body fluids, or vessels, especially when you are using tools, such as ROI, VOI, or Pixel Lens. These regions have to be excluded from the CT Perfusion calculation.

If regions with bones, body fluids, or vessels are still part of the evaluated area, they could strongly affect the statistical values of the images, such as mean value and standard deviation.

3.6 Use of a monochrome monitor

To achieve an optimal display of results, Siemens strongly recommends to use a color monitor.

The use of a monochrome monitor might decrease the quality of the text and the graphics that are displayed. This may influence the correct interpretation of these results.

3.7 Use of a high resolution monitor

A screen resolution higher than 130 ppi may lead to scaling issues. Some entries in the graphical user interface, for example, in the configuration dialogs or the interactive findings dialog, may overlap or be hidden.

Make sure that the screen resolution is set to less than 130 ppi.

4 Known issues

This section describes the CT restrictions that are known for *syngo.via* VB40.

4.1 General information on *syngo*.CT applications

4.1.1 Required Online Help contents are not displayed

Opening the Online Help by pressing the **F1** key or clicking a **More** link may result in an error.

Use the search function in the Online Help viewer to display the required content.

4.1.2 The shortcut key to show or hide full image text does not work in all *syngo.via* CT applications

When you load a data set in the **MM Reading** workflow step, select a segment and use the **Show full image text** or **Hide full image text** shortcut key, it does not work.

Replace any segment and press the shortcut key.

4.1.3 Windowing cannot be adjusted for CT presets

In some *syngo*.CT applications, you cannot adjust the windowing presets or assign your own shortcut keys.

You need to manually adjust the windowing in the segments.

You need to use the default shortcut keys.

4 Known issues

4.1.4 Logging information is missing when using FastTransfer

If a FastTransfer *syngo.via* node is used to send data from the Siemens Healthineers CT scanner to *syngo.via*, the Audit Trail does not contain information regarding the respective DICOM transfer data logs.

Do not use a FastTransfer *syngo.via* node to send data to *syngo.via*:

- Make sure, the **syngo FastTransfer Nodes** option is disabled for the DICOM network node in the **Siemens Healthcare Service Software** of the CT scanner.
- Contact your local Siemens Healthineers service technician for assistance.
- Manually transfer the files from the **Patient Browser** to the defined *syngo.via* DICOM node.

4.1.5 Client installation on *syngo* MMWP

If you intend to evaluate patient data within a *syngo.via* application, make sure that the system has enough free RAM space (> 2 GB) before starting the client. Close other patients and other *syngo* **MMWP** applications, if necessary.

4.1.6 Blurred image text

Image text may be blurred and not readable, especially at clients where a Windows 7 operating system has been installed.

Improvement:

- Disable **Smooth Edges for fonts** in the **Windows Desktop Display Properties**.

4.1.7 Vessel labels are not displayed while printing with “Save as result series”

When you send the CPR images to printing by clicking the **Print visible image** icon and try to save the series of images in the **Save as result series** dialog, snapshots of the newly created image series do not contain vessel labels.

In the **Save as result series** dialog, add vessel labels accordingly.

4.1.8 An exception occurs during a printing job

When you print more than 1 film in the Chinese language, an exception occurs.

You must print each film individually.

4.1.9 No mouse interactions if the Ctrl key is pressed before editing

If you press the **Ctrl** key before dragging the mouse to edit the centerline, mouse interactions are ignored.

You must press and hold a control point on the centerline with the mouse before pressing the **Ctrl** key.

4.2 *syngo*.CT CaScoring

4.2.1 Calcium scoring report template

The calcium scoring report template does not provide support for an automatic classification of the total score according to the reference norms as known from *syngo*.via VA11.

With the current version, only the total score is reported, but no automatic classification is provided.

4 Known issues

Proceed as follows to include the classification in the report:

- Compare the scoring result with the reference norms in the report.
- In the report composer, enter the classification manually as free text, based on the classification table which is still maintained in the report.

4.3 *syngo*.CT Dual Energy

4.3.1 Exception occurs when opening an assigned study with the CT Dual Energy workflow

After system update or upgrade, when you open a study to which the CT Dual Energy workflow has already been assigned, an exception may occur.

Close the workflow and reassign it.

4.3.2 Unsupported voltage combinations are displayed when configuring an application class

When you configure an application class on the **Application Classes** tab of the **CT Dual Energy Configuration**, the **Dual Energy Spectra** list may display voltage combinations that are not supported for the selected application class.

Only configure voltage combinations and application classes that are supported by your Siemens Healthineers CT scanner.

4.3.3 Data sets not changing to Ready state

In the **CT Dual Energy** workflow, when you load a **SOM7** data set, the data set sometimes does not change to the **Ready** state.

Cancel the workflow and remap the data set.

4.3.4 Display of the isolated lung

In the segments displaying fused MPR and fused MIP thin images, lung isolation is visualized with a blue contour line.

4.3.5 Reassigning data

You have completed a reading in *syngo*.CT Dual Energy and closed the data by clicking the **Complete work item** icon.

- To reassign this data to another or the same workflow, wait until the save symbol in the status bar of the Patient Navigation is not displayed anymore.

4.3.6 Changing the monitor setup

A change of the monitor setup automatically results in a layout change of the displayed data.

If you suspend a data evaluation and change the monitor setup, the layout information of the previous monitor setup, for example, normalized regions of interest (ROI) or assigned color look up tables (LUT), is not applied to the new layout.

4.3.7 Patient data contains several valid scans/reconstructions

If there is more than one valid Dual Energy reconstruction in the same study, **CT Dual Energy** preprocessing will process all reconstructions. The work item is shown as **Ready to read** as soon as the first valid reconstruction is fully processed. If *syngo*.CT Dual Energy is opened before the other reconstructions are processed, you cannot load these reconstructions by dragging them from the **Series** panel. These reconstructions are only displayed in a floating window.

We recommend to open the patient some time after the work item has been marked as ready.

4.3.8 Reconstruction parameters for single source Dual Energy scans

On CT scanners, single source Dual Energy scans can be reconstructed with the following options:

- HD FoV
- Extended FoV
- Extended CT scale

syngo.CT Dual Energy does not accept images that have been reconstructed using the above options. These options are only required for viewing the images, not for analyzing the images.

If you need to analyze images in *syngo*.CT Dual Energy, reconstruct the scans as follows:

- One reconstruction for viewing images with extended CT scale or extended FoV, for example, to get an improved view of the metal.
- One standard reconstruction for Dual Energy CT, for example, to get an improved view of the soft tissue between metal implants.

4.3.9 Incorrect data set is displayed when enlarging a segment

When enlarging a segment by pressing the **ALT** key and double-clicking, the incorrect data set may be displayed in the segment of the second monitor.

Enlarge each segment individually by double-clicking only.

4.3.10 Segments remain empty when opening the CT Dual Energy workflow

In rare cases, when opening the **CT Dual Energy** workflow, the segments remain empty after the application class calculations have finished.

Close the workflow and reassign it.

4.3.11 Measurement values are not updated when the Dual Energy ROI is repositioned

After changing the Dual Energy configuration and reassigning the workflow, the values of a previously drawn Dual Energy ROI are not recalculated when you reposition the Dual Energy ROI.

Delete the Dual Energy ROI and redraw it.

4.4 Rapid Results Technology

4.4.1 Creation of Ranges Preset

The user-defined **Number of Images** value is not fixed and reflects an organ-dependent value while creating range presets.

Click the **Lock Number of Images** icon to maintain the number of images before creating range presets.

4 Known issues

G

general safety 8, 8

S

safety advice 8, 8

Safety information 7



This page has been intentionally left blank.



Manufacturer's note:

This device bears a CE mark in accordance with the provisions of Council Directive 93/42/EEC of June 14th 1993, concerning medical devices.

The CE marking applies only to Medical Devices which have been put on the market according to the above-mentioned EC Directive.

Unauthorized changes to this product are not covered by the CE mark and the related Declaration of Conformity.

Caution: Federal law restricts this device to sale by or on the order of a physician, dentist, or veterinarian (21 CFR 801.109(b) (1)).

The original language of this document is English.

Siemens Healthineers

Headquarters

Siemens Healthcare GmbH

Henkestr. 127

91052 Erlangen

Germany

Phone: +49 9131 84-0

siemens-healthineers.com

Legal Manufacturer

Siemens Healthcare GmbH

Henkestr. 127

91052 Erlangen

Germany