cvi42®

v.6.2.1 (4569)

Release Notes

circle
CARDIOVASCULAR
IMAGING

What's New in Version 6.2.1

4D Flow
- Large study loading improvements for faster study opening times
- Clinical workflow automation
  - Auto-loading & auto-contouring
  - AI-based segmentation of aorta, pulmonary artery, and heart chambers
- AI-based detection of peak-velocity planes in the aorta and PA for automated Qp/Qs measurement

Web Viewer
- MR SAX function results are pre-populated in the report as part of server-side pre-processing
- Display of 2D Flow, Tissue, and LGE contours for a pre-existing workspace that has been analyzed with cvi42 for report verification in the browser

CORE CT
- CMPR tab re-design for improved usability
  - two orthogonal CMPR views
  - 3D vessel tree view with vessel cross-section reference marker
  - Vessel length measurement in straightened and curved MPR
  - Improved vessel centerline tracking, requiring fewer manual edits
- MPR
  - Edits to vessel centerlines now update the 3D vessel tree view
- NEW Viewer Module
  - View 2D images, secondary captures, and reformatted series in CORE CT

CT Strain
- Automated re-slicing of multi-phase volumetric CT studies to create short-axis and long-axis series for strain analysis
- Automated contouring of reformatted series
- New strain algorithm designed for cardiac CT studies

Aortic Valve
- Automated measurements (Ostia heights, ST Junction, Sinus of Valsalva, Aortic Annulus) for a streamlined planning workflow

Report
- Improved interoperability options for exporting results to other systems
  - DICOM SR support
  - XML output for CORE CT results

Platform
- Expanded support for Canon and United Imaging images

WATCHMAN TruPlan
- TruPlan client for LAAC planning is now compatible with cvi42 server to simplify enterprise deployment

Note: This version of cvi42 includes calculation improvements that may lead to changes in results and measurements. Due to the modification of the qRound function to adhere to mathematical standards, all modules might exhibit differences in measurements and results. Testing has shown that most clinical results are within 5% of those from the previous version when using the default settings. If a workspace version with the old mathematical operations is loaded (workspace generated from v6.2.0 or below), a warning message will appear in cvi42 and CORE CT.

Resolved Issues

The following list contains resolved usability related issues, in addition to all other internal issues resolved during the product development process.

Number	Summary
CV-28985	MPR Viewer measurements change when Adjust View to Zoom Size setting is changed
CV-28854	cvi42|Strain: cvi42 may crash when running Strain analysis with specific contours
CV-29016	cvi42|Report: Final report and final addendum have identical DICOM content date and DICOM content time
CV-28684	cvi42|2D Flow: Applying Static Tissue Background Correction does not update the 'Net Negative Volume'
CV-28654	Function SAX: Studies with no phase sync have inconsistent polarmap and SAX results between LAX phases
CV-28495	Manually composed 4D flow series may not work due to strict magnitude series classification
CV-28884	cvi42|Report: Trans-Septal header is shown even when empty
CV-28793	Series in MPR frames are rotated images 180 degrees in Coronary, Vascular, and Femoral modules

Known Issues

Number	Summary
CV-61	Changing the windows display scaling while cvi42 is running results in an erratic user interface

	Workaround: After changing the system Windows Display Scaling, the cvi42 client should be restarted to correctly apply the changes.
CV-146	Function SAX: Reference lines in the reference viewer are not displayed after switching the viewer from other modules with multiple screens *Workaround: Displaying the cine on SAX or LAX will bring the reference lines back.*
CV-1467	Flow 2D: Contour detection with threshold mode is erroneously enabled when flow colour overlay is active *Workaround: Turn off flow colour overlay when defining the vessel contour to better see vessel borders*
CV-1897	cvi42|Mitral Valve: After defining a contour on the same image plane of the annulus contour, the contour measurement will be reported in both regular measurements and with the annulus-related measurements *Workaround: User can delete the capture created*
CV-2200	cvi42|Mitral Valve: Measurement captures are not saved in the measurements panel when a MAC annulus is defined on the same image *Workaround: No workaround*
CV-2536	cvi42|Quantitative Perfusion: Refresh lag on Rest and Stress viewers in module when multiple users are reading the same study simultaneously *Workaround: Avoid multiple users opening the same study in Quantitative Perfusion module at the same time*
CV-3076	Function SAX module: Copying and pasting SAX reference points from one image to another is forwarding them to all the images. *Workaround: No workaround. Place a new reference point instead of pasting it*
CV-3479	Flow 2D module: ROI label below the images frames in the Comparison tab do not update if the user loads a new series with same contour type and no label. On-screen report and graph update the contour label and respective values as expected *Workaround: Give a label to the ROI contour of the new series*
CV-4727	cvi42|4D Flow: Rotate View and Preset Views don't work in 4K resolution. *Workaround: Reduce the display resolution of the system*
CV-4852	Function SAX module: Semi-automatic RV contour detection in the current phase does not work if one of the slices of that phase already has one or more RV contour(s) *Workaround: Use Ai detection or delete existing RV contour(s) in the selected phase*
CV-6966	cvi42|Report: Importing Findings/Summary Text in Structured Findings also imports Summary Text *Workaround: Delete the unnecessary Summary Text from the Structured Findings section in the Admin pages*
CV-6969	cvi42 client fails to start with multiple monitors on some laptop systems. *Workaround: Start cvi42 client on the second monitor, then move it to the main monitor*

CV-6970	cvi42 does not appear optimized on some high-resolution displays. *Workaround: Adjust the system display resolution or adjust the Display Scaling as needed*
CV-9429	cvi42|Report: Too many images causes extreme lag *Workaround: Delete report and send again*
CV-9665	Multiview cine playback slowdowns on Mac OS machines with AMD graphic cards *Workaround: Manually turn off image interpolation before playing multiview cine*
CV-10851	Module Femoral: Study specific femoral rendering issue *Workaround: Upgrade hardware/drive to meet the minimum system specification*
CV-10957	Certain workflow may result in patient data to not be automatically synced between cvi42 and r42 *Workaround: Updating the values via entering the Patient Data Module or manual editing in report42*
CV-11598	Flow 2D module: Auto Segmentation Flow sometimes results in poor contours *Workaround: Deselect and select the contour again, then press "Segment Flow Contour" to adjust the contour to the correct anatomy*
CV-13057	Tissue SI: LAX reference lines appear incorrectly sometimes in second LAX viewer *Workaround: Load a SAX series into the T2 frame or navigate to a different phase/slice*
CV-14462	cvi42 | Strain: Exporting STL file doesn't work in Mac OS *Workaround: No workaround.*
CV-14490	cvi42|4D Flow: Contour detection is not triggered after re-activating "auto-contouring" options *Workaround: Activate one of the double-oblique cursors to trigger the contour detection or adjust the flow plane position*
CV-16643	cvi42|4D Flow: Mac Only - Region Growing cannot always be activated with cmd+g in Segmentation Page *Workaround: Use the context menu: Clipping - 3D Region Grow Clip to activate region growing.*
CV-17009	Enable Indication functions in CVI cause protocol save button to be greyed out *Workaround: None*
CV-23551	Platform discrepancy in plaque analysis results *Workaround: None*
CV-24827	Tissue T1/T2: Number of skipped phases prioritizes classification-identified value over saved Protocol and workspace setting *Workaround: The setting can be manually changed by the user.*
CV-25654	cvi42|Quantitative Perfusion: Inconsistencies when using Gadovist and/or Pre-bolus *Workaround: No workaround.*
CV-26139	Mitral Valve: Clicking on neo-LVOT measurement loaded from a workspace will give incorrect viewport orientation *Workaround: None*

CV-26436	Installers might take longer to present the user with the UAC dialogue *Workaround: No workaround.*
CV-26457	cvi42|Strain: Non-default sub-pixel matrix size might cause polar map discrepancies across platforms *Workaround: None*
CV-26627	MRA MIP radial reconstructions may not combine properly to allow smooth visualization *Workaround: The user can manually re-compose slices that have been interleaved incorrectly.*
CV-26945	cvi42|4D Flow: Specific Philips studies do not sort correctly *Workaround: Users can create a manual series with the Series Composer tool, to organize/sort the appropriate series together, and continue with 4D Flow analysis.*
CV-28049	cvi42|4D Flow: Study may unload after saving the Secondary Capture image in specific studies *Workaround: Only work around at the moment is to close and reopen the study.*
CV-28061	Logging in to admin port on enterprise server is allowed with an expired license *Workaround: No workaround.*
CV-28867	For a remote DICOM node setup, "Restricted to Role" only works for Q/R and not for Send *Workaround: No workaround.*
CV-28998	Study list: Column widths in the study list are not saved between sessions *Workaround: No workaround.*
CV-29061	SAX module: Contour detection fails on studies acquired with PhotometricInterpretation in colour *Workaround: User can manually draw contours, or acquire images in a supported format.*
CV-29062	Web Configurator and Web Client do not support special characters in passwords *Workaround: No workaround.*

External Libraries – Copyright and Licensing Requirements

Open-source libraries can be found on the Circle website. It can also be found as Open_Source_Notices.pdf in the install directory of cvi42.

Support

For further information on installing/exchanging the dynamic libraries please contact Circle Cardiovascular Imaging support.

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