

# OncoQuant

## Robust tools for routine oncology diagnosis, treatment follow-up, reporting and clinical trial management

Oncology follow-up exams make up most of routine studies. Due to the expanding breadth of data associated with today's multi-modality, multiple time-point oncology studies, reviewing these exams can be time-consuming and labor-intensive.

AW Family's OncoQuant™ application is designed to help organize and display your oncology data to facilitate your quick review. Both your routine comparisons and advanced clinical evaluations may benefit from the OncoQuant workflow to navigate through findings and interact with results.



## Overview

OncoQuant medical diagnostic software streamlines oncology readings so you can spend less time retrieving studies and preparing exams, and more time reading and reviewing. A true cross-modality oncology reading platform, OncoQuant helps you correlate and compare CT, MR, PET/CT and 3D X-ray data. It automates workflow to facilitate comparisons over time and makes reviewing follow-up exams efficient.

The oncology review protocol and follow-up wizard simplify your assessment, characterization, and measurement of findings on the basis of morphologic criteria.

OncoQuant is available on VolumeShare 7, a multi-modality advanced visualization workflow solution that helps to enhance diagnostic precision and productivity.



## Highlights

- Automatic multi-modality image registration at loading for two or more exams<sup>1</sup>
- Adaptable workflow supports standard criteria such as RECIST 1.0, 1.1,2 and WHO<sup>3</sup>
- Dedicated automatic review protocols help to identify and load like series
- Right-click menu workflow measurements at baseline and follow-up
- Intuitive, interactive summary table
- Single-click quick report displays up to four dates including baseline, nadir, prior and current exams

## Features

- ✓ Automatic registration/synchronization<sup>1</sup>
- ✓ Saves and reloads images and measurements of prior oncology exams
- ✓ Intelligent review, comparison, and follow-up with dedicated protocols
- ✓ Exports DICOM and non-DICOM images of findings, measurements
- ✓ Multi-modality cases management with no upper limit on the number of exams
- ✓ Quick report of the entire review including up to four major dates (baseline, nadir, prior, and current)
- ✓ Advanced visualization tools:
  - AutoContour tool provides consistent contouring
  - Lung VCAR algorithm for lung nodules in CT<sup>4</sup>
  - Capture any finding as a structure of interest using the standard arrow tool
- ✓ Statistical results export in CSV format for data analysis
- ✓ Summary table:
  - Baseline and follow-up management
  - Drag and drop follow-up wizard
  - Target type selection
  - Customizable morphological criterion for routine and research

## Feature details

OncoQuant's versatility and flexibility help streamline your reading and reporting workflow. For both routine analysis and research-oriented purposes, OncoQuant quantifies and correlates data from disparate modalities to give you a comprehensive picture of any abnormality.

### Automatic registration/synchronization<sup>1</sup>

Automatic registration/synchronization allows multiple exams to be registered simultaneously and the registered results to be saved. This registration technique streamlines follow-up workflow and, by matching and displaying common anatomical locations from different studies, facilitates correlation among multiple modalities.

### Dedicated protocols for intelligent review, comparison and follow-up

The Oncology Review Protocol makes review of Oncology images in busy clinical settings efficient. For follow up exams, OncoQuant automatically registers images<sup>1</sup>, and then initiates an automatic like-series selection based on the content of the latest prior Save State series.

All loaded exam series are displayed in a dedicated Oncology Review layout, which maximizes available monitor space and displays like-series side by side. This protocol helps streamline workflow by suggesting target types to lesions/ abnormalities based on the rules of a standard you selected, e.g., RECIST 1.0, RECIST 1.1, and WHO classifications<sup>2,3</sup>. If you select the RECIST 1.1 criteria, OncoQuant suggests a target lesion when it is greater than 10mm in the baseline study.

For research, you can define your own customized criteria to evaluate findings and track response to therapy, or you can add additional standards like Cheson, CHOI, etc. During review, the Summary table collects findings and measurements for efficient reporting.

When reviewing exams with standard Volume Viewer protocols, such as VV General Review, OncoQuant gives you the flexibility to perform routine functions, such as optimally organizing an image display for exam comparison, or specialized tools, such as using oncology morphologic criteria.

## Advanced Visualization tools

### Multi-modality contouring:

Auto contour gives you consistent tools for multi-modality review and comparison: the same contouring tool with the same workflow supports CT, MR and PET images

- For CT and MR images, the contouring tool will suggest contour boundaries of structures and let you edit and validate the result
- For PET images, the contouring tool has been adapted for standard SUV calculations
- If Lung VCAR\* is available, then the algorithm for CT lung nodules is accessible when you need to evaluate, segment, and label lung nodules from any Volume Viewer protocol

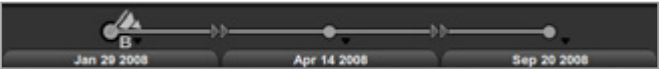
### Lung nodules

Lung VCAR\* combined with OncoQuant provides a Digital Contrast Agent (DCA) overlay feature that highlights, with adjustable sensitivity, suspicious areas in all reformat planes from the Volume Viewer protocols.

### Summary table






The Summary Table collects measurements and organizes them according to finding and exam date. OncoQuant brings several flexible features to the Summary Table.

The intuitive interactive Summary Table is an effective data manager, and allows you to quickly navigating through findings. You have access to the following options:

- **Baseline and follow up management:**  
The graphic date line shows the date of the baseline (reference) exam and the NADIR<sup>2</sup>. The sliding indicator provides an easy way to track measurements and evaluate trends.
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- **Drag and drop measurements:**  
Measurements can be dragged and dropped in order to:
    - Link one measurement to a similar measurement in another finding
    - Unlink a linked measurement in a new finding
  - **Follow up wizard:**  
The follow-up wizard facilitates measurement workflow by selecting the same tools utilized in the prior reviews. The wizard also rapidly navigates to the prior findings locations. This allows you to quickly perform follow up measurements. It also facilitates the assessment, characterizations and measurements of morphological changes over time.

- **Target type selection:**

With Oncology Review, target type is set automatically when the lesion anatomy is identified, based on selected morphological criterion:

-  Target Lesion (must be measurable at baseline)
-  Non-Target Measurable Lesion
-  Non-Target Non-Measurable Lesion
-  Standard Finding (incidental findings)
-  New Lesion

You can manually change the automatic designation. When using other protocols, the target type must be manually set.

- **Research tools:**

The summary table supports a research-driven workflow with tools that conform to standards such as RECIST (1.0, 1.1) and WHO, and it offers you the capability to easily customize morphologic data and set specific rules for 1D, 2D and 3D criterion types.

Morphological evaluation outputs (sum and count) are displayed in the bottom of the summary table for each date. The example below shows RECIST 1.1 criteria at three time points for one target and one non-target lesion.

## Saving and exporting

OncoQuant provides you with tools that facilitate the saving and reloading of images and measurements:

- Automatic screen capture flagging for new findings
- Capture and storage of a session's current state, saving measurements, morphologic criteria, and corresponding exams, and existing Save State functionality
- The ability to easily load states from the patient list or merge them in an active session during follow up workflows

- Export of measurement statistics in CSV format to USB or to local/ remote hard drive. You can then import them into other SW for further analysis
- Export of the measurement images and an image of the summary table via the Filmer for presentations, teaching files, etc.

In addition, findings can be captured in the Filmer for printing, saving for upload to a PACS system, or for export as PNGs for presentations, for example. A user-friendly output presents a patient header and rules for display so images are not too small to view. The example below shows two target lesions from three dates and the RECIST Summary displayed on a single page.

## System requirements

- Recommended monitor resolution is up to dual 2MP (1600 x 1200) or a single 3MP (1536 x 2048)
- Refer to AW Applications platform compatibility document

## Prerequisite software

- Integrated registration is required for automatic registration and synchronization
- Lung VCAR is required for lung nodule segmentation and digital contrast agent (DCA)

## Indications for use

OncoQuant is a medical diagnostic software that allows the processing, review, analysis and communication of 3D reconstructed images and their relationship to originally acquired images from CT, MR, X-ray, Angiography and PET scanning devices. The combination of acquired images, reconstructed images, annotations and measurements performed by the clinician are intended to provide the referring physician with clinically relevant information for diagnosis, surgery and treatment planning, and follow-up over time.



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### Regulatory compliance:

This product complies with Regulation (EU) 2017/45 of the European Parliament and the Council of medical device (MDR).

### Rx Only

This product and its feature may not be available in some other countries or regions. Please contact your sales associate.

### References

1. Integrated Registration\* license required.
2. RECIST is a guideline to perform clinical trials. Rules and guidelines can be found on the official website <http://www.eortc.org/investigatorsarea/recist>.
3. See WHO criteria in the publication: Measures of Response: RECIST, WHO, and New Alternatives, J Clin Oncol 24:3245-3251.
4. Lung VCAR option required.

\*Separate medical devices, requiring additional licenses

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