MR 4D Flow

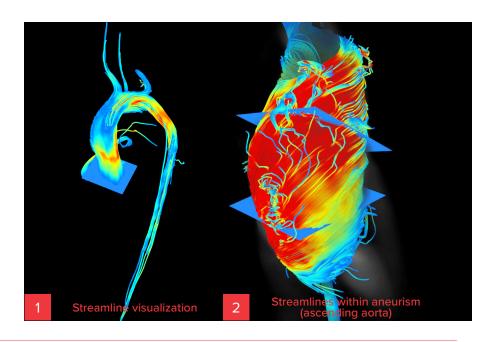
Caas

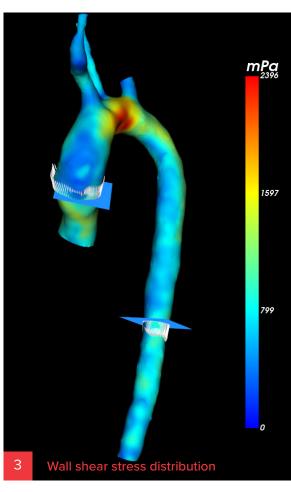
Complete assessment of your MR 4D Flow data

Visualization

CAAS MR 4D Flow enables you to construct a 3D volume of the cardiovascular structure. The software provides multiple options for visualization of blood flow.

Blood flow can be visualized by streamlines, time-resolved 3D pathlines or as color coded vectors.





Wall Shear Stress¹

Measure the wall shear stress (WSS). The distribution of the wall shear stress will be presented in a 3D color coded model.

Compare different planes within a dataset, local values of wall shear stress are represented by pie charts.

¹ Wall Shear Stress and Pressure Difference analysis are for research use only and not meant for clinical decision support

Key product features

- Complete 4D Flow analysis in a few clicks
- Ownership of your data
- No contrast agent needed
- Vendor Neutral
- CE Marked, 510(k) approved



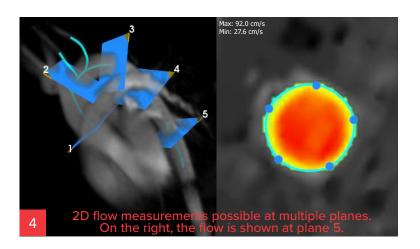
4D Magnetic Resonance Analysis

Caas

2D Flow Parameters

Perform a 2D Flow phase contrast analysis in the 3D volume. Freely move planes throughout the aorta for 2D velocity analyses.

Cardiac output, forward and backward flow, pumped blood volume, regurgitation fraction, and flow displacement are calculated and reported.



1.0 Pressure difference in an Aortic Sterosis

Pressure Difference¹

Calculate pressure difference between a reference and an obstruction plane. The pressure difference between the reference and obstruction plane is depicted by a color coded pressure map. The color coded pressure map will help in visualization of altered intraluminal pressures along the vessel.

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4D Magnetic Resonance Analysis

Caas 4D MR Flow enables time-efficient and intuitive analysis of your 3D phase contrast MR. Within a few clicks Caas MR 4D Flow extracts relevant information from the 3D phase contrast MR images.

Automatic 3D segmentation of the data provides interactive visualization of flow patterns by means of streamlines, time-resolved path lines, and color coded vectors. Compare different planes in the aorta or different datasets by 2D flow and Wall Shear Stress parameters.

Pie Medical Imaging stands for:

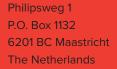
- The gold standard in Quantitative Analysis software
- Extensive validation for both patient care and research
- Accurate and reproducible analysis results
- Fast and intuitive operation
- Expertise in cardiovascular quantitative analysis software

Quality Assurance:

Pie Medical Imaging develops, produces and sells products in accordance with international accepted standards. CAAS MR 4D Flow is CE marked (MDD compliant) and has 510(k) clearance. The workflows Wall Shear Stress Analysis and Pressure Difference are for research use only and not meant for clinical decision support.

Quality Management System complies with:

- ISO 13485
- FDA Good Manufacturing Practices
- Canadian CAN/CSA ISO 13485



t +31 (0)43 328 13 28 e pmi@pie.nl i www.piemedicalimaging.com

