TOSHIBA

MR Advanced

Vitrea[™] software is a multi-modality advanced visualization system providing comprehensive applications in a variety of IT environments.

The MR Advanced package, powered by Olea Medical, includes Diffusion, Perfusion and streamlined application workflows across many different organs. This package provides access to features which enhance the clinical routine.

Applications

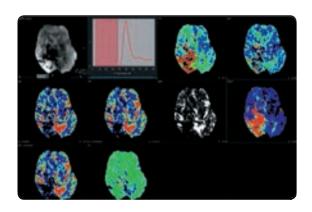
Diffusion Weighted Imaging (DWI)*

The DWI application processes isotropic images from each diffusion gradient factor. It computes parametric maps such as ADC maps and Exponential ADC maps.

DSC Perfusion*

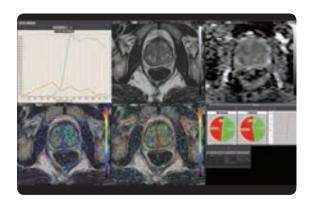
The DSC Perfusion application computes optimized parametric maps (rBV, rBF, TTP, MTT, TMAX, tMIP) from raw perfusion series and provides an algorithm to correct effects of the contrast agent leakage, therefore computing a permeability map. This application supports irregular time sampling and is embedded with the following: automatic or manual arterial input function, automatic background segmentation, four deconvolution methods (sSVD, cSVD, oSVD and Bayesian) and instantaneous motion correction algorithm.





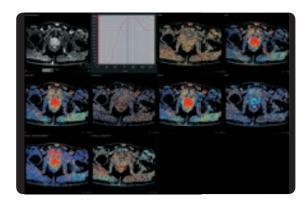
Analysis*

The Analysis application visualizes, segments, measures and evaluates a broad range of datasets from conventional series to perfusion and kinetics series along with DTI and DWI series. It provides user-defined hangings, including specific display per organ and/or pathology, kinetics and curves analysis, ROI, statistics, ratios and histograms, multiple series fusion, semi-automatic volume segmentation, volume rendering and follow-up options.



Kinetics*

The Kinetics application measures the type of contrast enhancement through a kinetic curves analysis and is predictive of malignancy for breast and prostate pathologies.



Mono Follow-up*

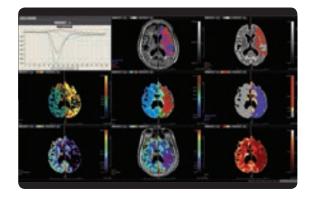
The Mono Follow-up application is embedded with 3D registration between different dates, different modalities or different series within the same study. It provides an optimum interface to efficiently track and assess different time points.

Application Workflows

Stroke*

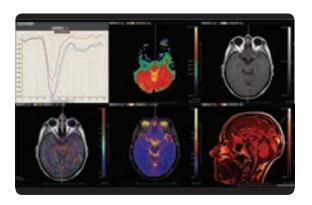
The Stroke application workflows include automatic mismatch computation, providing computation of maps and volumetric estimation of infarct and penumbra.

- MR Acute Care (Stroke)
- MR Stroke DWI



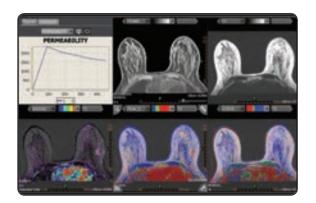
Brain Tumor Streamlined*

The Brain Tumor application workflow offers automated step-by-step processing, including quantitative multi-parametric analysis. This application also includes an optimized leakage correction algorithm to improve the accuracy of dynamic susceptibility-weighted contrast-enhanced perfusion MR imaging.



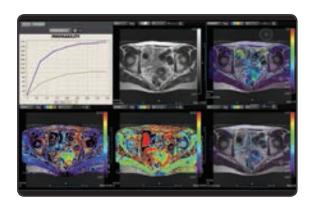
Breast Streamlined*

The Breast Streamlined application workflow is an efficient tool for breast cancer detection, characterization and staging. This workflow computes and displays conventional, diffusion and Kinetics maps (qualitative) and offers complete multi-parametric analysis, including MPR and 3D visualization, volume segmentation, multiple series fusion, kinetics and curve analysis. The Breast applications also include the latest Breast detected report based on BI-RADS** ATLAS; useful to improve communication between radiologists, patients and referring physicians. The standard reporting tool ensures acceptable risk assessment and enhanced follow-up of suspicious findings.



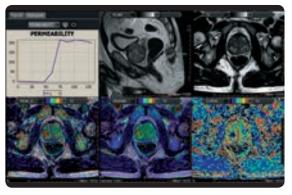
Female Pelvis*

The Female Pelvis application workflow analyzes morphological changes on pelvic female organs (ovaries, uterus, pelvic floor) under pathological conditions. Accurate metrics are a few clicks away: automatic diffusion computation, providing qualitative parameters for quick visual inspection.



Prostate Streamlined*

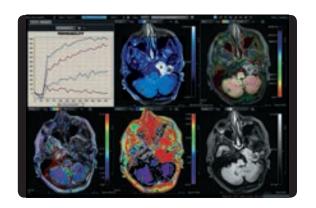
The Prostate Streamlined application workflow offers multi-parametric analysis of all available sequences on the same screen and include access to advanced diffusion and Kinetics and curve analysis. To improve the quality of reading and reporting, the PI-RADS prostate report is included in the advanced prostate application for the detection, characterization and staging of prostate cancer.



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Head and Neck Streamlined*

The Head and Neck Streamlined application workflow provides the automatic diffusion, permeability maps computation, including quantitative data to efficiently assess the patient's response to treatment.



Clinical Application Packages



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