Olea Sphere 3.0
State-of-the-Art
Post-Processing & 3D Visualization Solution
MULTIMODALITY - MULTIPARAMETRIC - ACCURATE - FAST - QUANTITATIVE - QUALITATIVE - VENDOR NEUTRAL
OLEA SPHERE®
STROKE APPLICATIONS

Recognized expert in perfusion imaging, Olea Medical® gathered a large advisory panel's expectations on stroke to further improve Olea Sphere® MR & CT acute care stroke applications.

Whatever the degree of emergency, these applications now provide radiologists with direct access to stroke report in no time.

INSTANT VOLUMETRIC ESTIMATION OF INFARCT, PENUMBRA AND MISMATCH RATIO

One click output

Core, penumbra and mismatch display

EXPERT OPTIONS IN THE CT & MR APPLICATIONS

- Automatic midline detection
- Optimized artefact removal
- Management of 3D islands
Olea Medical® now provides dynamic temporal information of blood flow that can be exported in the final report.
By halving the contrast-dose for brain perfusion, Olea Medical® changes the game in post-processing with significant benefits both for patients and healthcare providers:*

- Flexible imaging acquisition protocol
- Qualitative & quantitative results comparable with full-dose protocol ones
- Reduction of contrast agent-related risk for patients
- Reduction of overall health care costs

Half-dose (HD) = intravenous injection of 0.05 mmol/kg of Gadolinium
Full-dose (FD) = intravenous injection of 0.1 mmol/kg of Gadolinium

*Source:
Bayesian Estimation of Cerebral Perfusion Using Reduced-Contrast-Dose Dynamic Susceptibility Contrast Perfusion at 3T. AJNR Am J Neuroradiol. 2015 Apr;36(4):710-8
Olea Pulse provides instant report delivery by e-mail. This action comes with unique features for online post-processing monitoring.

**OLEA PULSE** is designed to enhance:

- **REPRODUCIBILITY**
- **PRODUCTIVITY**
- **FLEXIBILITY**

- **STANDARDIZED OPERATOR-INDEPENDENT RESULTS & REPORTING**
- **ENHANCED PATIENT FLOW**
- **24/7 INSTANT ACCESS**
REPORTING AROUND THE CLOCK

“It is completely automatic, it is 7 on 7 and 24 hours a day; so we are a lot faster. So the advantage is that, in our large group, radiologists do not have to wake up, do not have to come to the hospital anymore, so it is completely automatic and we can see it offline, we can see it at home and make the report from home. And that is something that is not possible with the other vendors.”

Patrick Seynaeve, MD, AZ Groeninge Hospital, Kortrijk, Belgium

CUTTING EDGE PERFUSION ANALYSIS

“The current version of OLEA Sphere (3.0 SP 3) encompasses several additive modules for in-depth contrast-enhanced and non-contrast perfusion analysis that may provide complementary information about the pathologically altered vasculature in the most relevant disorders of the human brain. Beyond tissue at risk estimation in acute stroke and separation of the ischemic penumbra from benign oligemia, regional perfusion analysis is frequently employed in patients with vasospasms after subarachnoidal hemorrhage in order to identify critically ill-perfused tissue with cortical TTP asymmetries exceeding 2 sec.

It may further aid to the differential diagnosis of other causes of regional hyperperfusion (e.g. non-convulsive status epilepticus or infections) and hypoperfusion (e.g. postictal conditions or spreading depression in migraine).”

Prof. Roland Wiest, MD, PhD, University Hospital, Berne, Switzerland

SPEED

“For stroke, it doesn’t make sense for software to take another 10 minutes for post-processing; with Olea, it is basically 1 minute.”

K. Nael, MD, Icahn School of Medicine at Mount Sinai, New York, USA


Pizzolato M, Boutelier T, Fick R, Deriche R. ELUCIDATING DISPERSION EFFECTS IN PERFUSION MRI BY MEANS OF DISPERSION-COMPLIANT BASES. 2016 Apr; https://hal.inria.fr/hal-01309243.


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Discover a wide range of advanced applications within Olea Sphere®

« The best way to predict the future is to create it. »
Abraham Lincoln