

# Cercare Perfusion

Advanced perfusion made simple

# Advanced Technology. Simplicity of use



Cercare Perfusion is a fully automated solution for brain CT and MRI analysis powered by AI. Its technology accounts for capillary function and integrity providing high-quality, crystal-clear perfusion maps for fast and reliable pathology assessment.



## Enhance your workflow

At Cercare Medical we believe that simplicity equals efficiency. That is why we use machine learning algorithm to fully automate postprocessing. From AI-powered arterial input function selection to motion correction, Cercare Perfusion seamlessly provides you with consistent parametric maps that you can trust.



## Read crystal-clear parametric maps

Brain tissue oxygenation depends on more factors than blood flow alone. Capillary integrity and function play a significant role in this process\*. To ensure the high-quality representation of the brain tissue status, our technology accounts for patient specific capillary flow, so you get the images you can rely on.



## Gain insights into tissue oxygenation

Insufficient brain tissue oxygenation underlies many known neurological pathologies. To gain a deeper look into oxygen extraction and metabolism, Cercare Perfusion generates unique parametric maps that can provide you with additional clues on disease status and progression.

**Would you like to see some examples? Request an online demo**

Reach out to us at [cercare-medical.com/contact-sales](https://cercare-medical.com/contact-sales)

# Key features

<b>CT and MRI (DSC and DCE)</b>	Cercare Perfusion generates maps for both CT and MRI perfusion analysis, all within one application.
<b>Regular perfusion maps</b>	Cercare Perfusion generates a range of perfusion maps traditionally used in assessment of a range of neurological disorders such as CBF, CBV, MTT, Delay, MinIP, and TTP.
<b>Unique perfusion maps</b>	Get a possibility to gain deeper insights into brain tissue status using unique perfusion biomarkers. Some of the key ones are CTH, reflecting capillary flow and its heterogeneity together; OEFmax and rCMRO <sub>2</sub> that give you insights into tissue oxygenation and metabolism.
<b>Leakage correction</b>	The solution includes a correction for possible extravasation effects, which is of particular importance in diseases with compromised blood-brain-barrier integrity.
<b>Automatic motion correction</b>	Patients motion is a common reason for image quality degradation. Cercare Perfusion takes care of that.
<b>Automatic image fusion</b>	Cercare Perfusion takes care of automatic series and sequence coregistration so you can get straight to image assessment.
<b>AI-driven AIF selection</b>	Get straight to image interpretation with fully automated postprocessing. We have used machine learning to make the key part of this process, the selection of arterial input function, fully automated. While there is no golden standard for how to do it right, our technology has shown to give consistent results and is comparable to the selection made by experts.**
<b>Multi-vendor compatability</b>	It does not matter which scanner you have. Cercare Perfusion works with what you have got.
<b>Flexible integration</b>	We strive to ensure smooth integration of our solutions into your existing workflows. Using standard DICOM files for its imaging outputs, Cercare Perfusion can be easily integrated with your existing PACS and your viewer.
<b>Keep your protocols</b>	Cercare Perfusion does not require any changes in your existing protocols.

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**CE** Cercare Perfusion is CE marked. Cercare Perfusion consists of Cercare medical Neurosuite and one module - Capillary Function. Cercare Medical Neurosuite and the Capillary Function module are CE-marked according to the European Medical Device Directive 93/42/EEC.

For regulatory status of Cercare Perfusion in other countries and regions, please contact us.

**FDA** Cercare Perfusion (MRI) is FDA cleared for use with MRI images. Cercare Perfusion (MRI) consists of Cercare medical Neurosuite and one module - Capillary Function. **Caution:** US Federal law restricts this device to sale by or on the order of a physician.

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## References

\* Jespersen SN, Østergaard L. The roles of cerebral blood flow, capillary transit time heterogeneity, and oxygen tension in brain oxygenation and metabolism. J Cereb Blood Flow Metab. 2012;32(2):264-277. doi:10.1038/jcbfm.2011.153

\*\* Mouridsen K., et al. Automatic selection of arterial input function using cluster analysis. Magn Reson Med. 2006 Mar;55(3):524-31. doi: 10.1002/mrm.20759.

## About Cercare Medical

**We're bridging the gap between science and clinical practice.**

Founded in 2013, we provide healthcare professionals with reliable yet simple to use neuroimaging solutions. Through a strong focus on bringing clinical research to life with breakthrough technology, our solutions boost confidence in image assessment and treatment decisions.

Our aim is to empower healthcare professionals – to help them practice with speed, insight and confidence, no matter the circumstances.

### Address

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