

NICO.LAB releases latest version of StrokeViewer including 3 new CE marked algorithms

NICO.LAB's new mobile application empowers physicians every step of the stroke workflow to provide patients with the right treatment, in time.

AMSTERDAM, NETHERLANDS, June 17, 2021 /EINPresswire.com/ -- Amsterdam-based MedTech company NICO.LAB has just released a new version of their clinical-decision support tool following a successful funding round of AUD \$13 million earlier this year. Their new mobile application includes a range of additional validated artificial



intelligence algorithms and new features that can help physicians diagnose stroke patients faster and more accurately.

<u>StrokeViewer</u> is a clinical-decision support tool that combines a variety of AI algorithms and a unique communication platform to help physicians diagnose patients in the emergency setting. Stroke is a time-critical disease where reducing the time to diagnosis by minutes can be the difference between recovery and life-long disability.

The new version of StrokeViewer includes three new CE marked algorithms in addition to the already available LVO detection, location and Hemorrhage detection algorithms. The CE marking of Collateral assessment, Automated Perfusion Analysis and ASPECTS means StrokeViewer can empower physicians at every step of the stroke workflow, enabling them to provide patients with the right treatment in time.

Many studies have emphasized the relevance of collateral blood flow in patients presenting with acute ischemic stroke (AIS). During an AIS, collaterals play a vital role in providing alternative routes of blood flow to the tissue surrounding the blockage, providing oxygen to the tissue and therefore keeping it alive. Therefore NICO.LAB developed StrokeViewer's CE-marked Collateral

assessment algorithm which provides consistent quantitative measurements to help physicians make the right treatment choice, with no room for interobserver variability. By combining an excellent vessel segmentation with an accurate thrombus detection, the relative blood flow on the affected side is assessed and quantified with precision. This solution is proven to be reliable in predicting outcome and treatment efficacy and strongly correlates to the current expert-rated standard(1).

Determining the amount of salvageable tissue that can potentially be saved through reperfusion therapy is an important step in making a treatment decision in the stroke workflow. StrokeViewer's Automated perfusion analysis processes CT perfusion images and MRI scans to detect the size of the infarct core and penumbra in acute ischemic stroke. Quality checks and preprocessing steps are always a vital part of StrokeViewer's solution to ensure consistent and reliable results. Therefore the algorithm takes into account movement of the patient, corrects it and displays this through the DICOM viewer that is certified for diagnostic use.

ASPECTS is a 10-point scale used by physicians to determine how much of the brain has been affected by an ischemic stroke. It is a reliable tool to assess early ischemic changes but is susceptible to large inter observer variability, reducing its benefits and reliability in the clinical workflow. Automating the ASPECTS scoring using StrokeViewer overcomes this meaning consistent and reliable results are maintained between hospitals and their network. StrokeViewer's ASPECTS algorithm has been trained on heterogeneous data, meaning results are a continuous and reliable outcome measure empowering physicians to provide patients with the right treatment, in time.

The broad portfolio of algorithms included in StrokeViewer with our unique communication platform and certified diagnostic viewer empowers physicians to make well-informed treatment decisions with confidence.

At NICO.LAB, we believe connecting human and artificial intelligence will revolutionize emergency care. Founded in 2015, NICO.LAB is a MedTech company that stems from leading clinical research. We develop end-to-end solutions to further empower physicians in emergency care. Powered by unique datasets, our artificial intelligence product StrokeViewer® enhances stroke patient outcomes by reducing time to treatment. With CE, TGA and FDA clearance and following a recent successful investment round, we are destined to enhance patient outcomes all over the world.

Learn more on www.nico-lab.com. Follow us on www.nico-lab.com. Follow us on www.nico-lab.com. Follow us on www.nico-lab.com.

(1) Boers AMM, Sales Barros R, Jansen IGH, Berkhemer OA, Beenen LFM, Menon BK, Dippel DWJ, van der Lugt A, van Zwam WH, Roos YBWEM, van Oostenbrugge RJ, Slump CH, Majoie CBLM, Marquering HA; MR CLEAN investigators. Value of Quantitative Collateral Scoring on CT Angiography in Patients with Acute Ischemic Stroke. AJNR Am J Neuroradiol. 2018 Jun;39(6):1074-

1082. doi: 10.3174/ajnr.A5623. Epub 2018 Apr 19. PMID: 29674417; PMCID: PMC7410629.

Jeroen Pex NICO.LAB jpex@nico-lab.com Visit us on social media: Twitter LinkedIn

This press release can be viewed online at: https://www.einpresswire.com/article/543500071

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information. © 1995-2021 IPD Group, Inc. All Right Reserved.