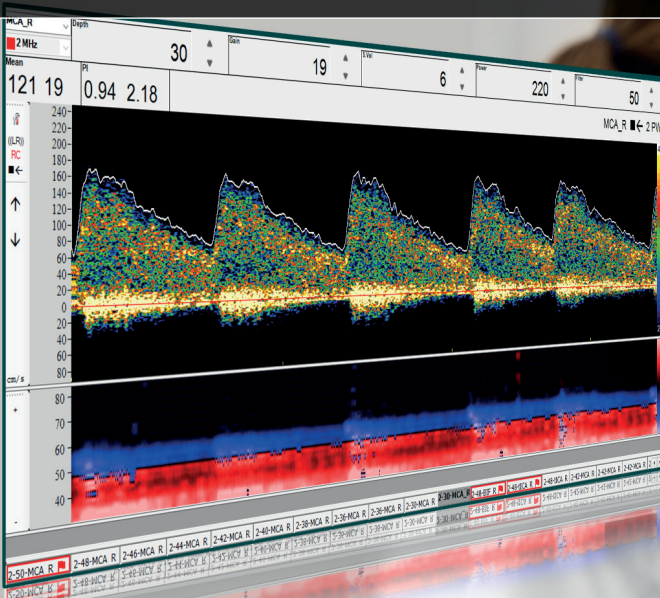


Reliable, efficient, and user-friendly.



DWL TCD – The gold standard screening tool for diagnostics and treatment of Sickle Cell Disease (SCD)

- **Gold standard TCD**
TCD is the gold standard for assessing cerebral blood flow velocities and predicting the risk of stroke.
- **The use of TCD for Sickle Cell Disease**
With TCD, healthcare professionals can detect steno-occlusive lesions in large cerebral arteries and microangiopathic lesions, which can cause ischemic stroke and silent infarcts in children with SCD.
- **DWL for Sickle Cell Disease**
The SCD specific software functions ensure reliable and accurate findings not only for diagnostics, but also for prognosis and for guiding therapy and treatment.
- **DWL specific Sickle Cell Disease examination program**
The SCD specific examination program automatically displays the vessel sections with the highest blood flow velocities and determines the relevant findings quickly and easily.
- **DWL specific Sickle Cell Disease report**
The SCD specific report highlights the highest mean velocity segment for fast identification of critical conditions and quick and accurate diagnosis.



Sickle Cell Disease

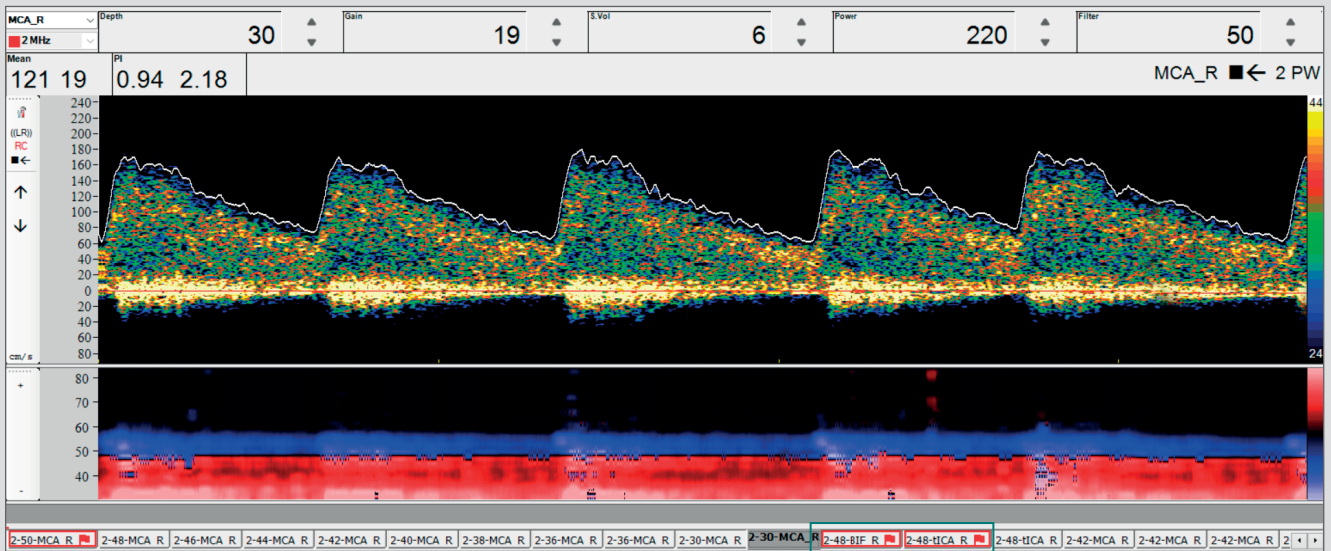
Sickle Cell Disease (SCD) is one of the world's most prevalent genetic diseases and the result of sickle-shaped deformations of the erythrocytes due to a genetic defect. People and especially children with Sickle Cell Disease frequently show steno-occlusive lesions in large cerebral arteries and microangiopathic lesions, causing ischemic stroke and silent infarcts that impact their neurocognitive development and quality of life. The disease is mainly found in areas with widespread cases of malaria and occurs from a gene mutation in the children of infected people. Through migration, sickle cell anemia is spreading globally and has become a global public health issue.

TCD recommended as screening tool

Transcranial Doppler sonography (TCD) is the gold standard to assess blood flow velocities in the vessels of the Circle of Willis in SCD patients and predict the risk of stroke. TCD is highly recommended as a routine screening tool not only for Sickle Cell Disease diagnostics, but also for prognosis and for guiding therapy and treatment: exchange transfusions, hydroxyurea, allogeneic hematopoietic stem cell transplant, recently approved drugs and new therapeutic options (gene therapy, gene editing).

DWL specific Sickle Cell Disease examination program

Sickle Cell Disease leads to occlusions of smaller and larger arteries with recurrent circulatory disorders, recognized by increased blood flow velocities. During an examination with the DWL specific routine program, the user is given the opportunity to automatically display the vessel sections with the highest blood flow velocities and therefore determine the relevant findings quickly and easily. The data obtained in this way can be made available in a specific SCD report for faster diagnosis.

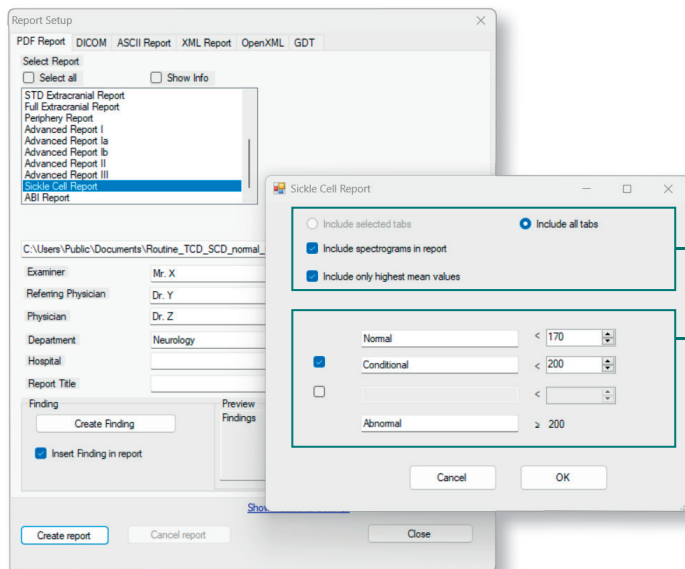


DWL specific SCD examination program includes:

- Customizable auto label list
- Auto examination program – standard or customizable
- Saving options of single spectra or extended recordings
- Automatic identification of the segment with the highest mean velocity for each vessel and side
- Marking of the recording (single spectra/extended recording) by a flag symbol



Highlighted highest mean values



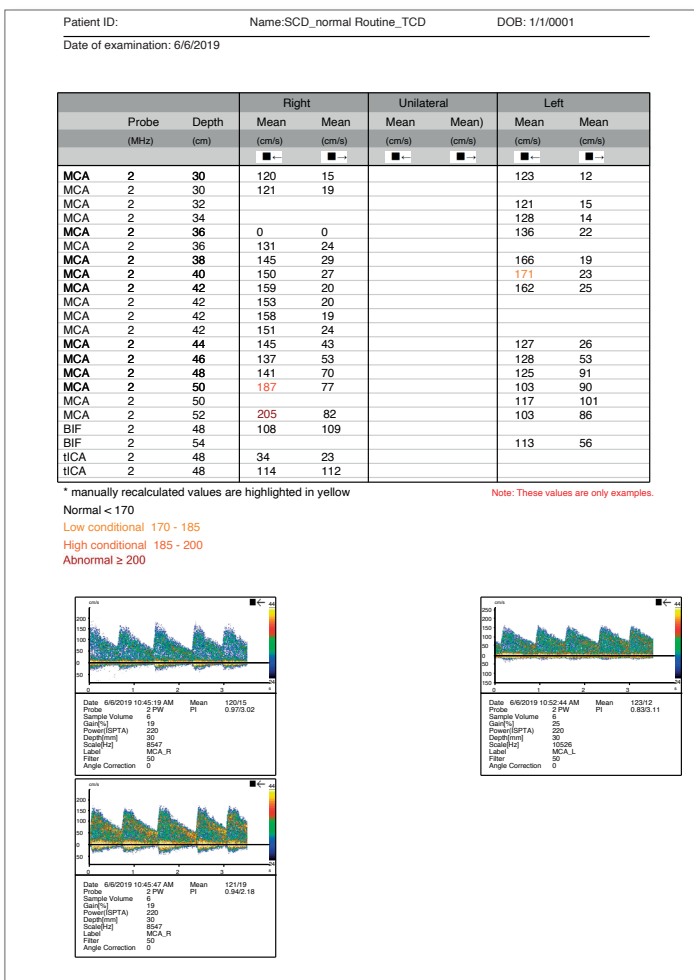
Report options

Customizable target values for up to 4 different conditions

Standard Target Values

Normal	< 170 cm/s	Unmarked (black)
Conditional	170 to 200 cm/s	Orange
Abnormal	> 200 cm/s	Red

*Adams, et al.



DWL specific SCD report includes:

- Customizable SCD report in PDF format
- Customizable target values for up to 4 different conditions (e.g., normal/low conditional/ high conditional/abnormal)
- Highlighted target values for fast identification of critical conditions
- Automatic color marking of the target values
- Options to include only highest mean values or selected recordings for simple assessment of critical conditions
- Option to include spectrograms
- Export options via DICOM and HL7



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Sickle Cell Disease

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