

**CMR-based T1-mapping offers superior diagnostic value compared to longitudinal strain-based assessment of relative apical sparing in cardiac amyloidosis**

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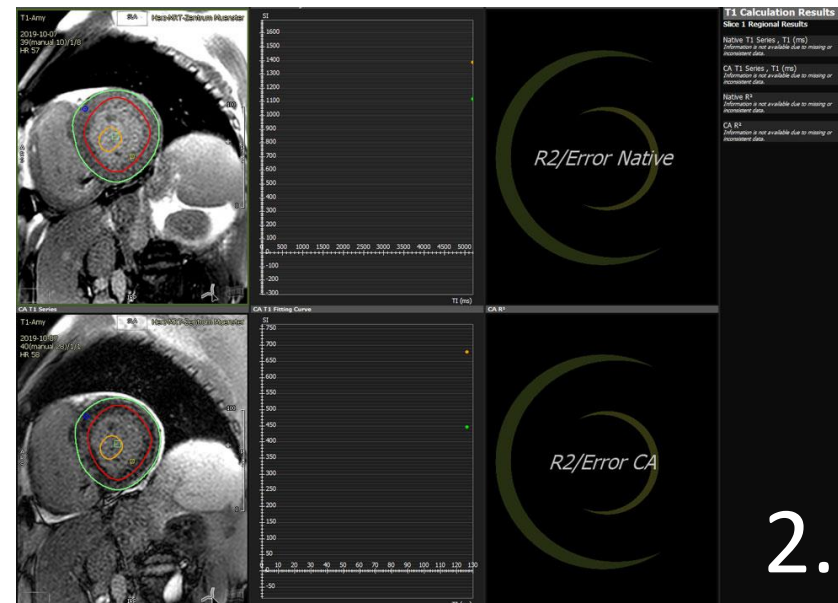
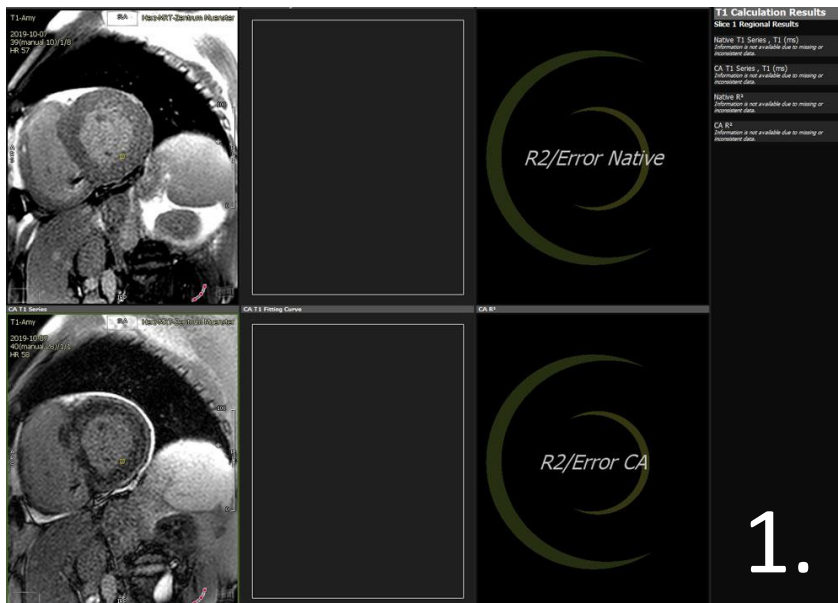
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# T1- / ECV-mapping

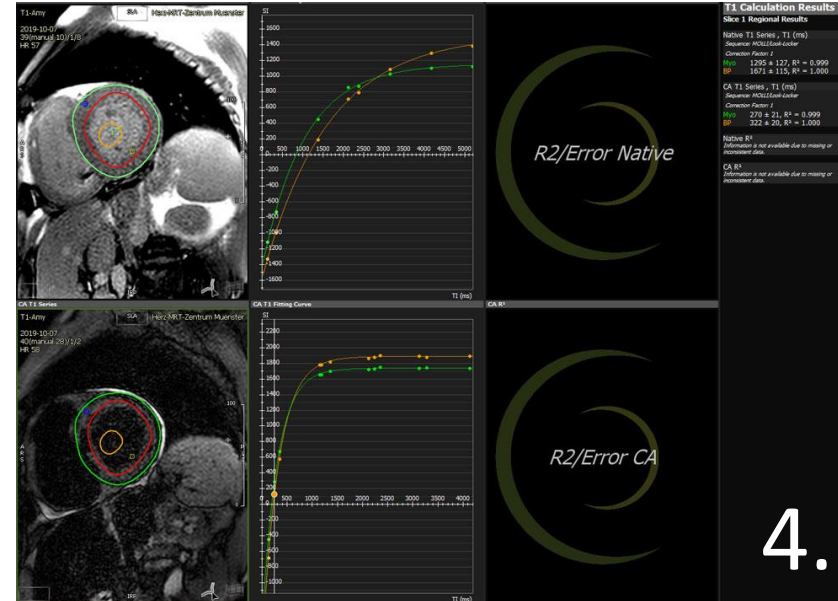
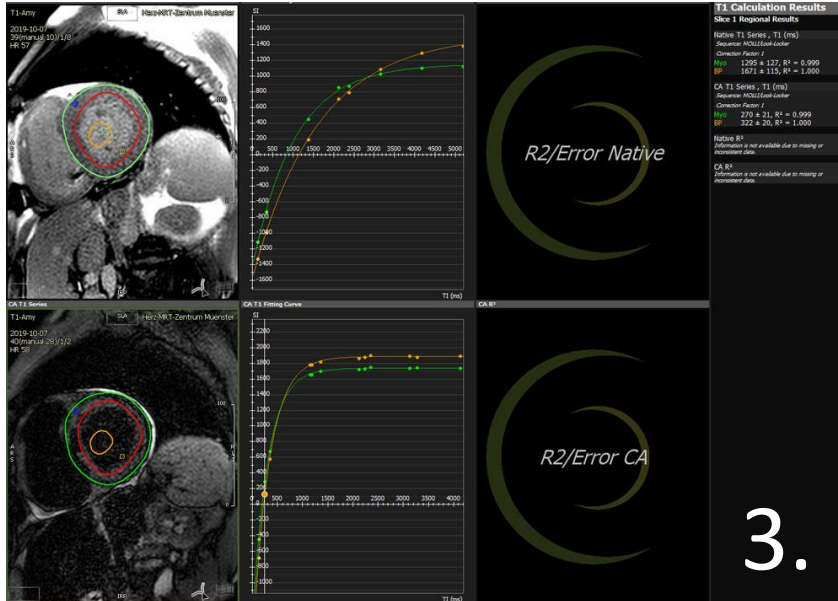
Like almost every other cvi42 circle user, we perform T1-/ECV-mapping according to the following steps. Further information can be found in the cvi42 manual or in the manual of the respective software provider.

1. Load native (T1n) and post-contrast series (T1e) in the respective module.
2. Draw endo- (green) and epicardial (red) contours as well as a blood (orange) contour and a marker for RV-Insertion (blue dot).



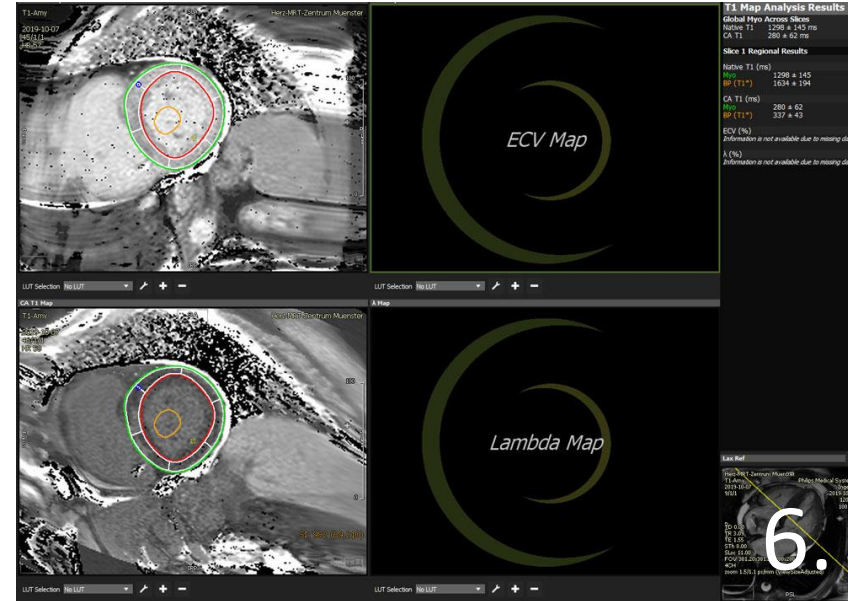
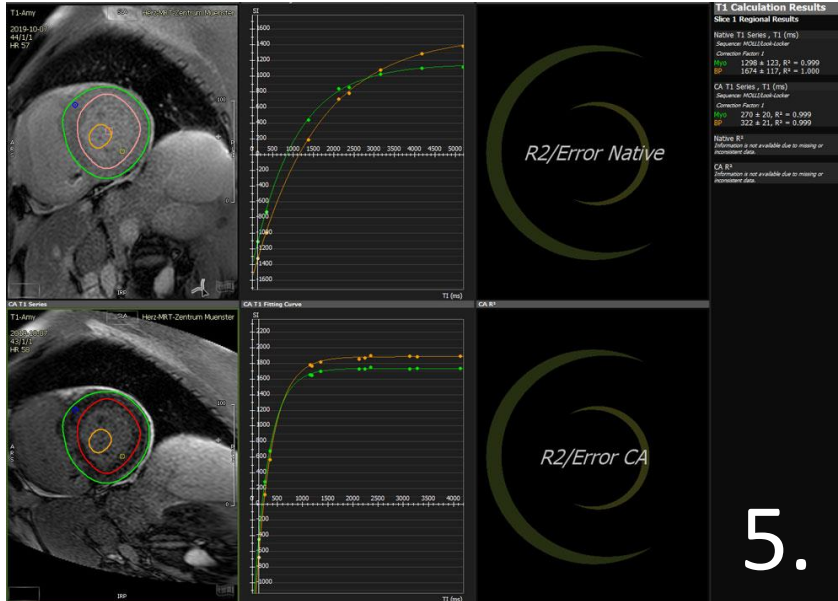
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3. Forward the contours to all single images in T1n and T1e sequences.
4. Check for coarsely mismatched contours/myocardium and correct manually.



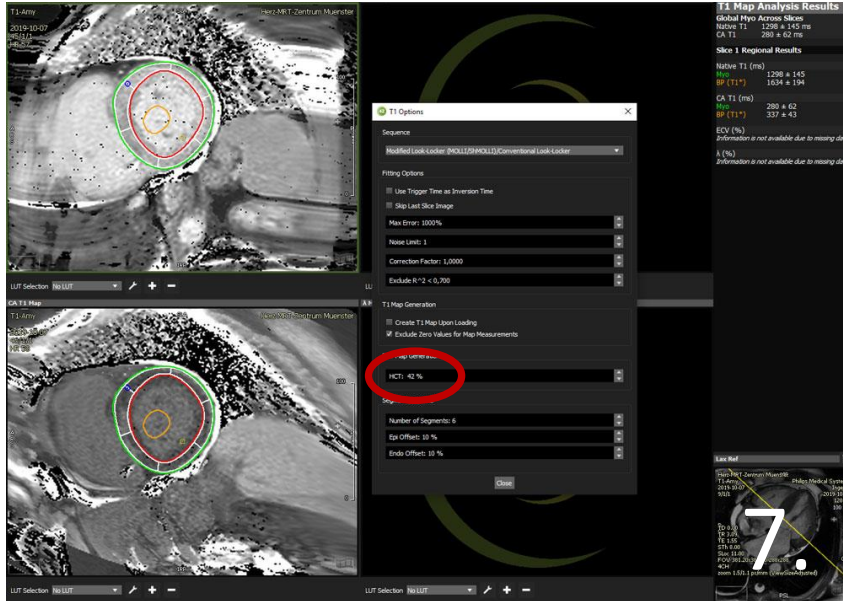
# T1- / ECV-mapping

5. Register T1n- and T1e-images.
6. Generate T1n- and T1e-maps – copy contours.



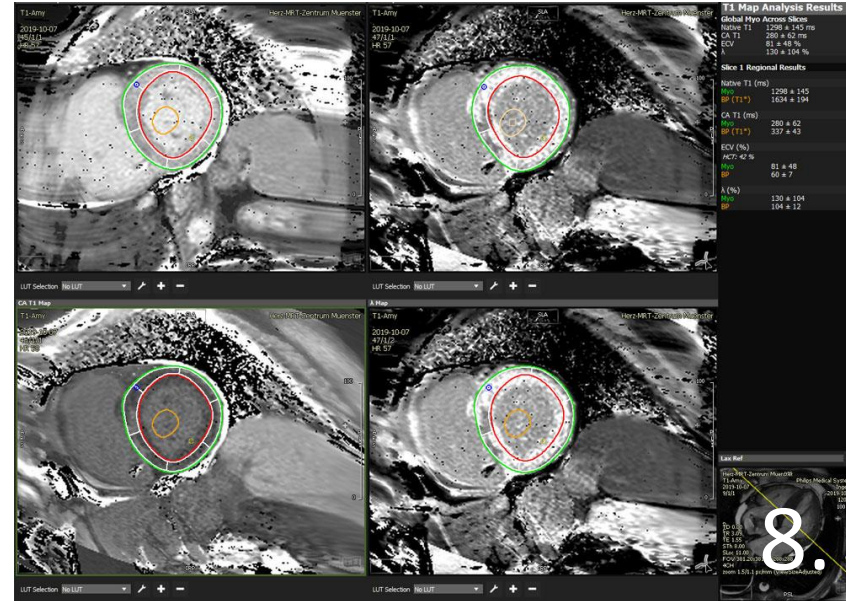
# T1- / ECV-mapping

7. Enter recent hematocrit.
8. Calculate ECV-maps.



T1n-map

ECV map



T1e-map

Global:  
T1n: 1298 ms  
T1e: 280 ms  
ECV: 81 %