

Validation of new oszillometric PAOD parameters: Puls Wave Index (PWI), Tissue Optical Perfusion Pressure (TOPP) and oszillometric ABI vs cw-Doppler-ABI

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Disclosure

Speaker name:

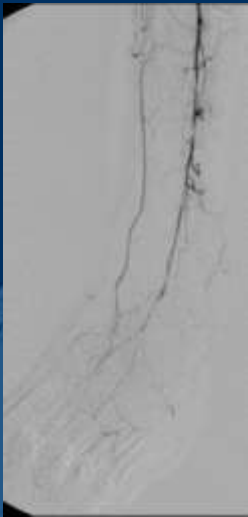
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I have the following potential conflicts of interest to report:

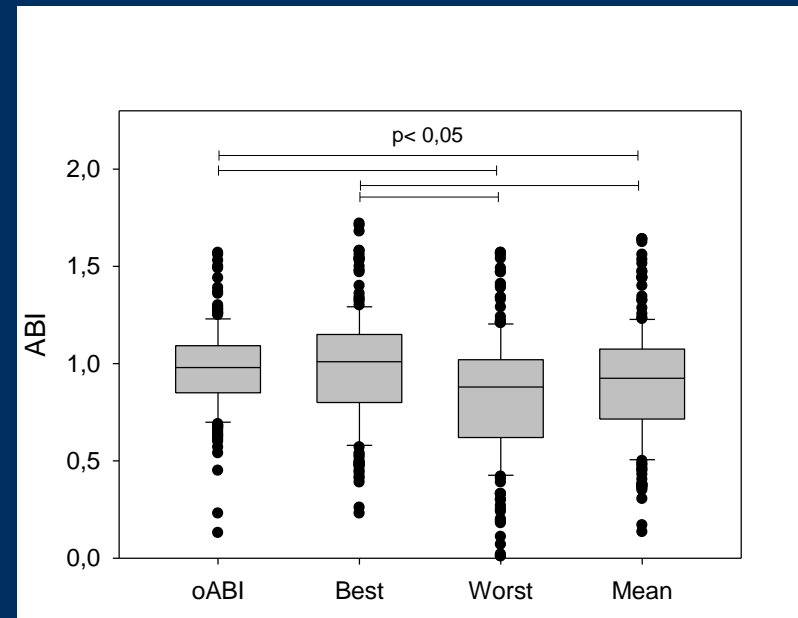
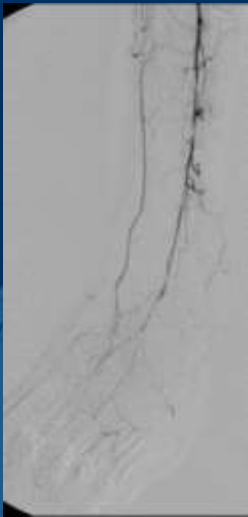
- Consulting
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)

- I do not have any potential conflict of interest

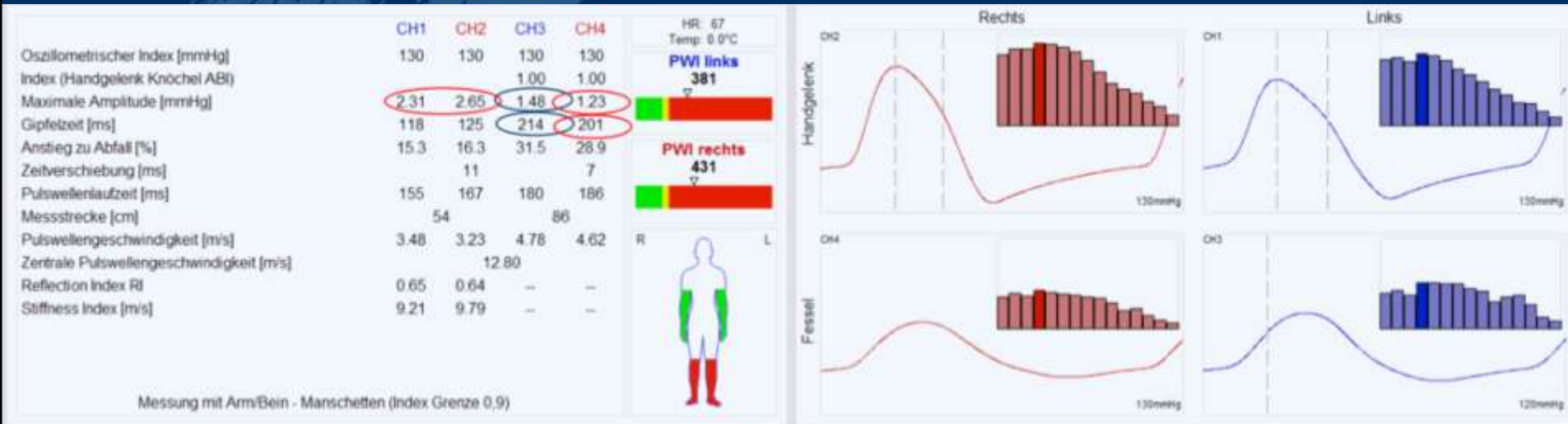
ABI-TOPP-PWI-measurement



ABI-TOPP-PWI-measurement



ABI-TOPP-PWI-measurement



Higher amplitude UE

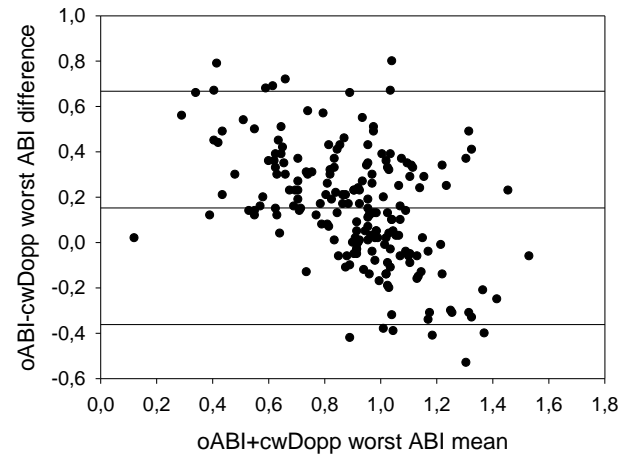
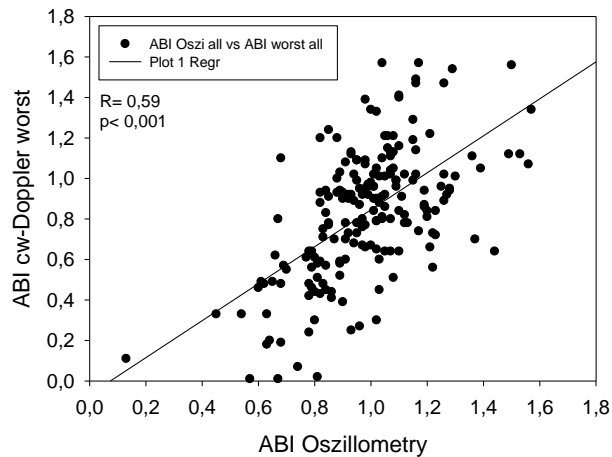
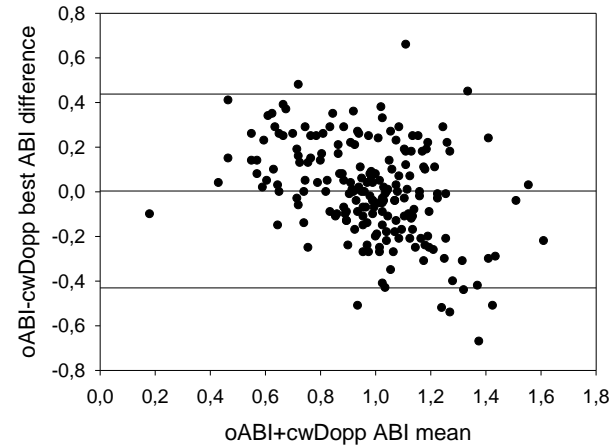
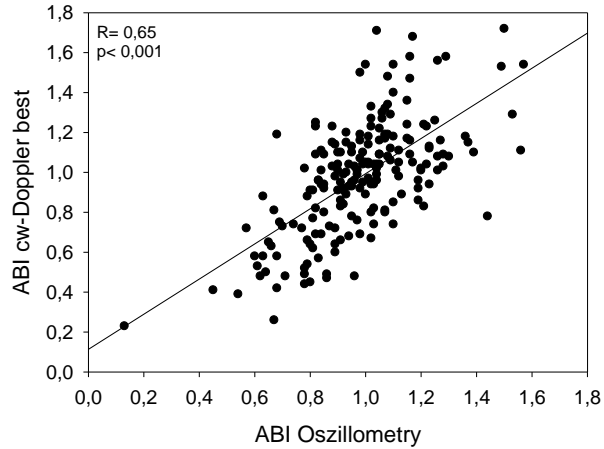
X Time to peak = PWI

Amplitude LE

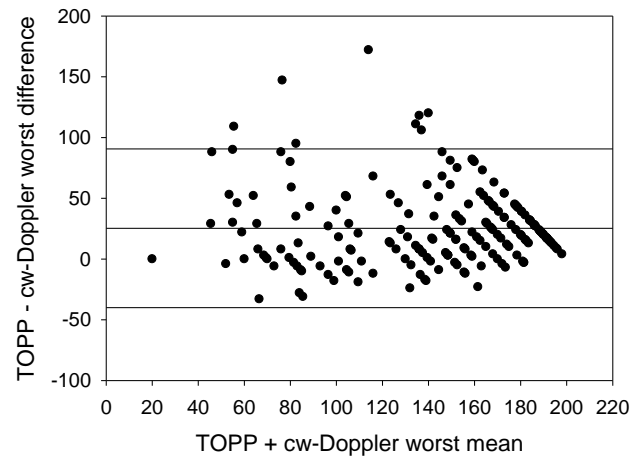
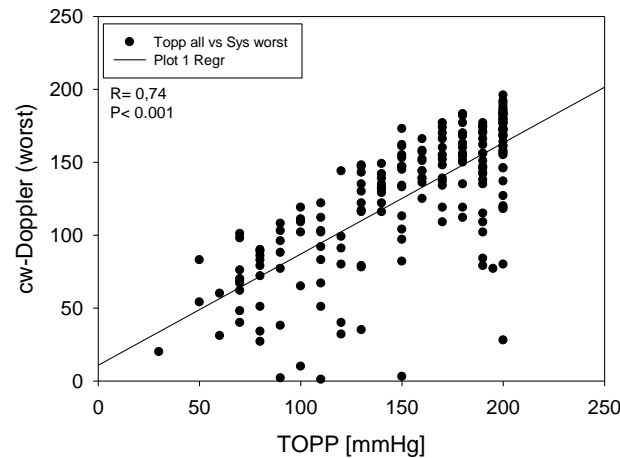
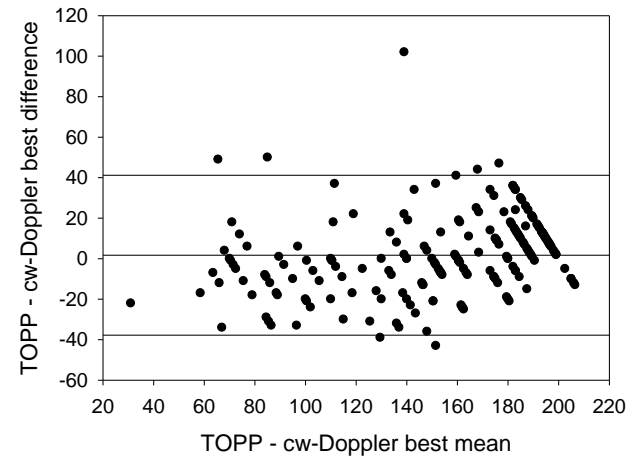
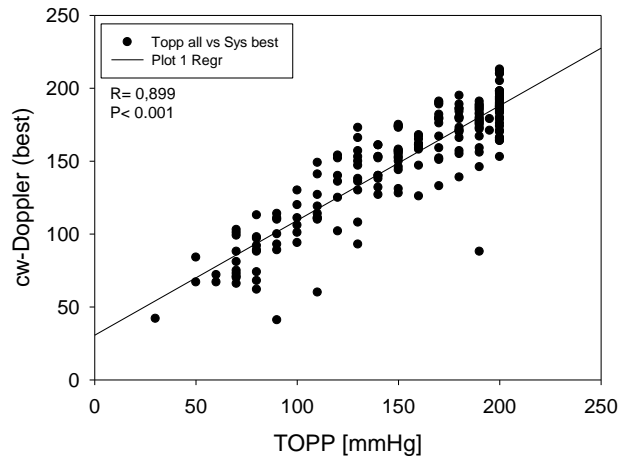
$$\text{Left } \frac{2,65}{1,48} \times 214 = 381$$

$$\text{Right } \frac{2,65}{1,23} \times 201 = 431$$

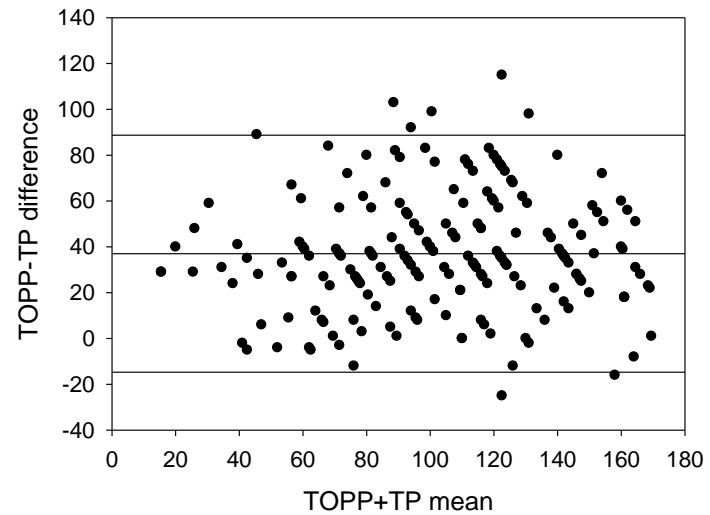
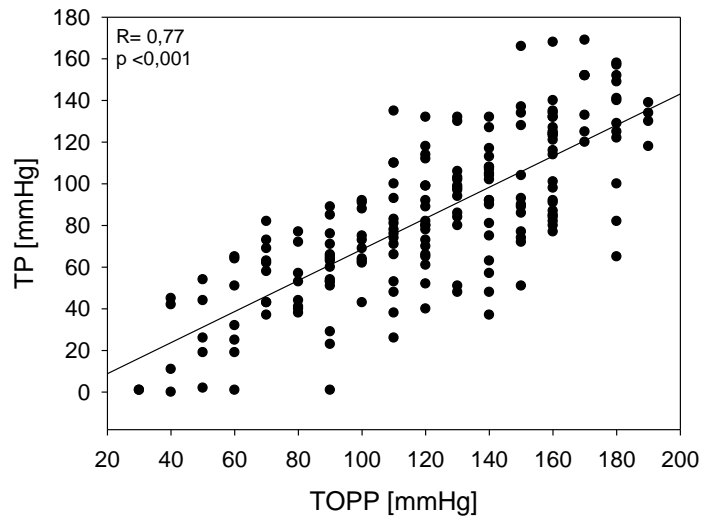
cw-Dopper-ABI vs Oszillometric-ABI



cwDopp-systolic pressure vs TOPP

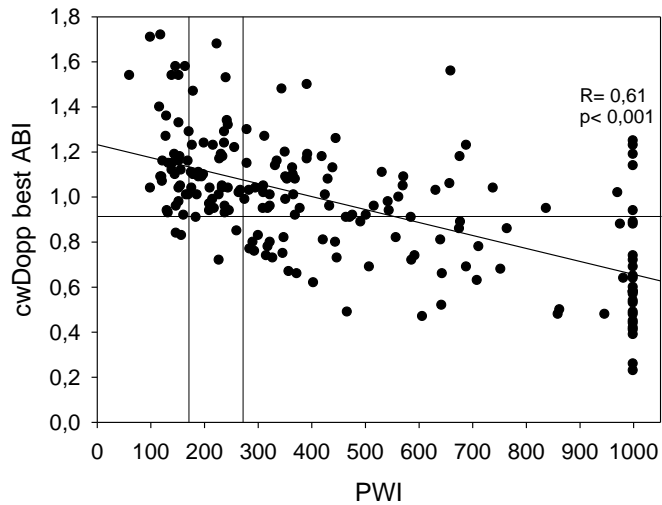


TOPP vs TP

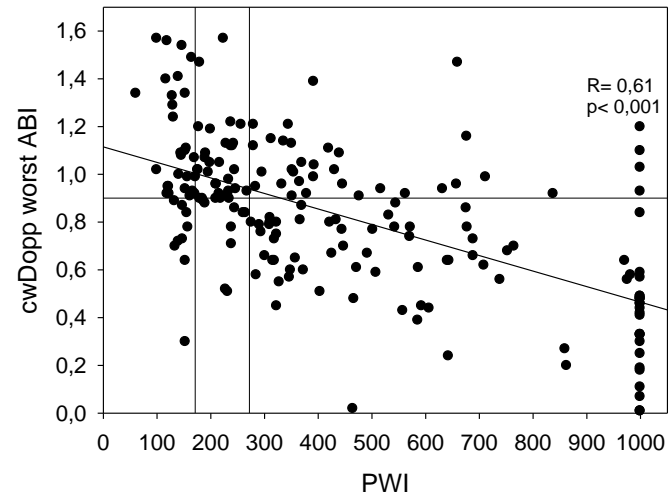


PWI vs cw-Doppler-ABI

PWI Oszillometry vs cw-Doppler (best)



PWI Oszillometry vs cw-Doppler (worst)



Conclusion

- Good correlation of oszi-ABI vs cw-Dopp-ABI,
- Missing „patients at risk“,
- Very good correlation of TOPP vs cw-Doppler systolic pressure,
- Good correlation of PWI vs cw-Doppler-ABI,
- Increased risk of atherosclerosis in patients with normal ABI and increased PWI,
- One-stop-shop method

Next steps

- Meaning of TOPP and PWI in PAOD at rest vs after stress
(133 pts, poster presentation tomorrow).
- Immediate control of improved perfusion after peripheral intervention and on follow-up!

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