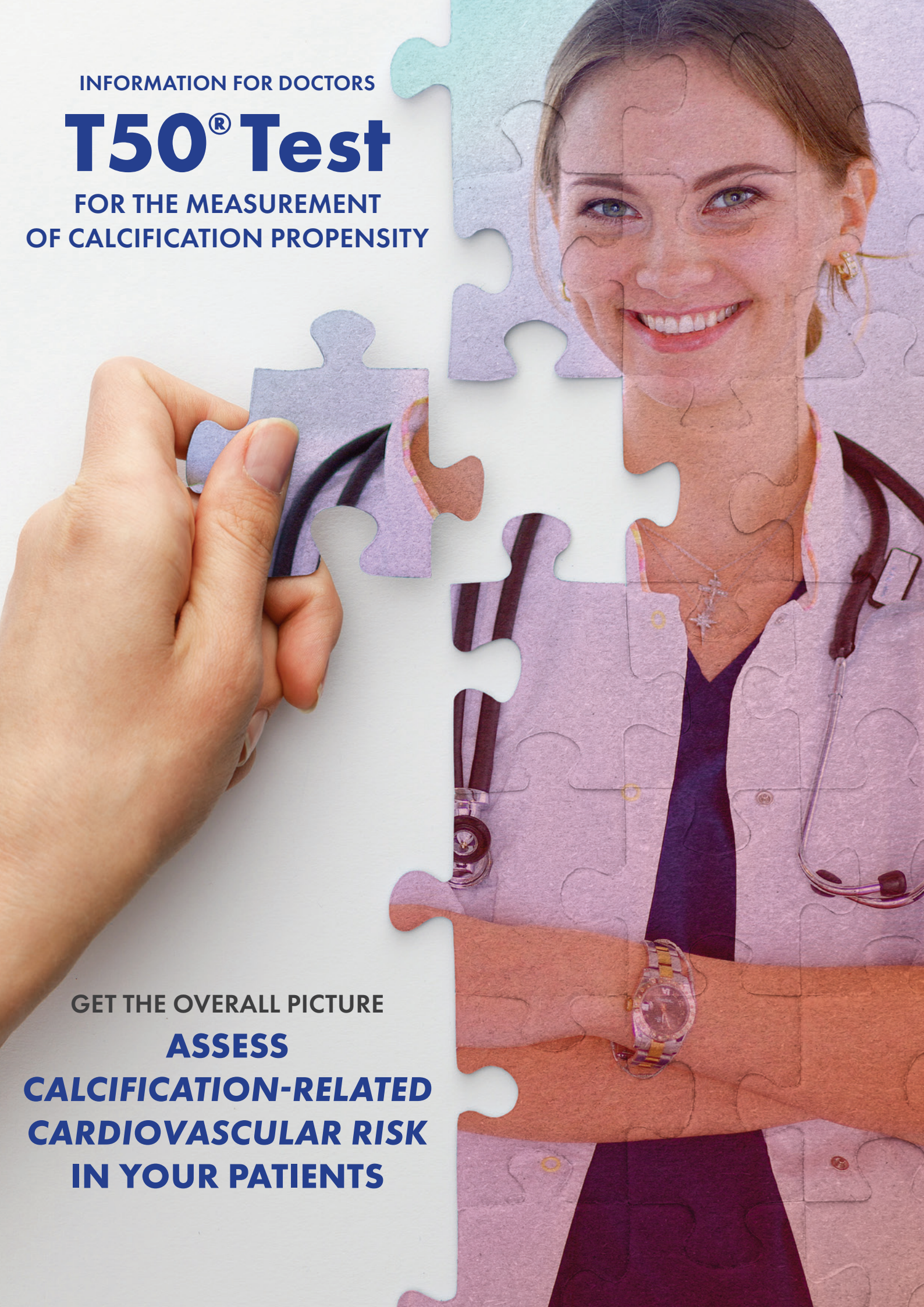


INFORMATION FOR DOCTORS

T50[®] Test

FOR THE MEASUREMENT
OF CALCIFICATION PROPENSITY



GET THE OVERALL PICTURE

ASSESS

**CALCIFICATION-RELATED
CARDIOVASCULAR RISK
IN YOUR PATIENTS**

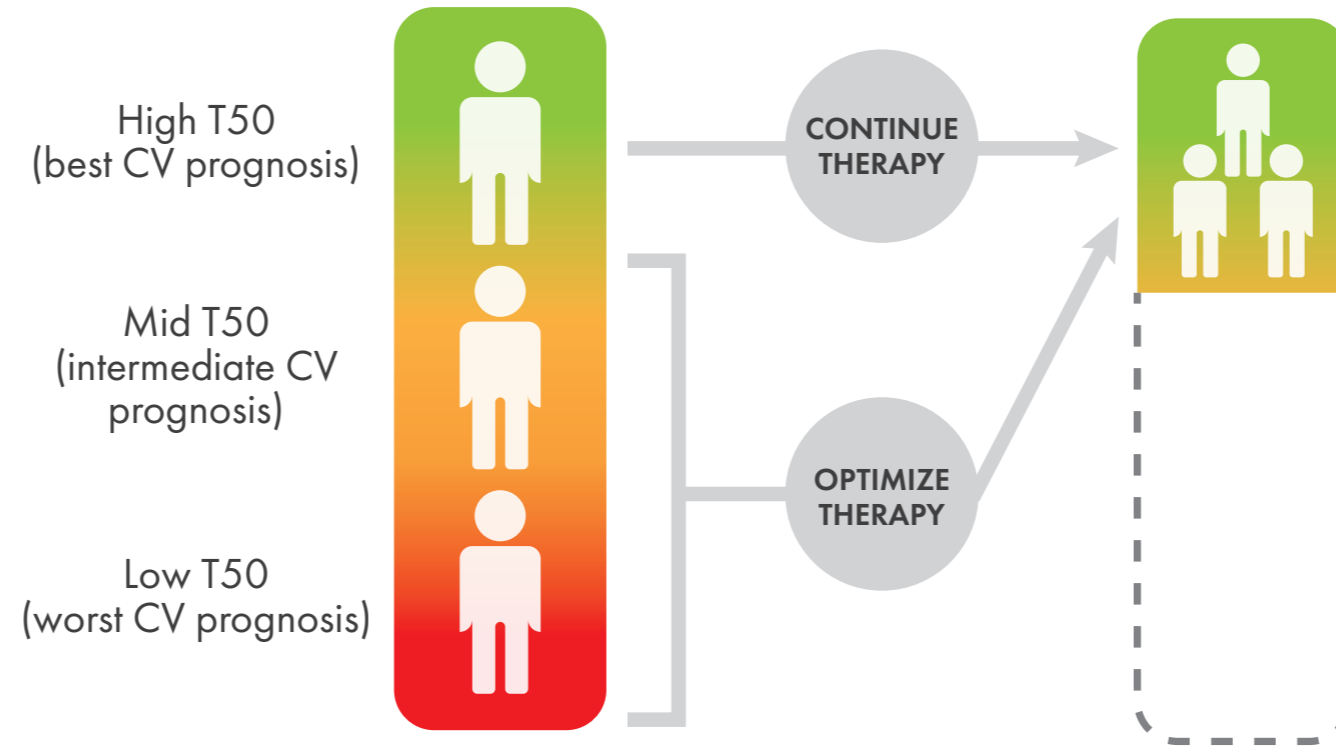
CALCIFICATION IN DIALYSIS PATIENTS

Dialysis patients suffer from accelerated vascular calcification, causing heart attacks, peripheral artery disease, strokes and death. Only parts of the blood's calcification system, e.g. calcium and phosphate, can be measured today. This results in incomplete and fragmented therapy guidance.

T50® Test FOR THE MEASUREMENT OF CALCIFICATION PROPENSITY

T50 is the first and only blood test, providing a global functional assessment of the humoral calcification system. Specifically, T50 measures the formation velocity of type 2 calciprotein particles (CPP2), which are considered responsible for the long feared phosphate toxicity. Therefore, future therapies should be aimed at improving T50 rather than simply lowering phosphate levels.¹ The T50 result is expressed in minutes (min).

ASSESS AND IMPROVE CALCIFICATION-RELATED CARDIOVASCULAR RISK



HOW TO OPTIMIZE T50 IN YOUR DIALYSIS PATIENTS

	General population	CKD 2-5	Dialysis	Kidney transplant
Proposed clinical use of T50	Obtain prognostic information, e.g. among those with diabetes ⁸ or peripheral artery disease ¹⁹	Identify and monitor individuals at highest calcification-related CV risk, guide therapies when approaching CKD5	Assess calcification-related CV risk, guide therapy and monitor treatment success	Identify and monitor individuals at highest calcification-related CV risk, guide therapies when approaching CKD5
CV RISK REDUCTION* PER 100 MINUTES HIGHER T50 VALUE				
CKD progression	---	21-48% ²	n.a.	72% ⁴
CV disease	---	21% ²	15%⁶	32% ⁵
CV mortality	29% ⁸	20% ²	11%⁶	53% ⁴
All-cause mortality	17% ⁸	22-48% ^{2,3}	11-45%^{6,7}	53% ⁴

*For detailed information, please refer to the original publications. T50 is linearly related to risk.^{7,9}

DETERMINANT	T50 EFFECT SIZE ESTIMATE
Phosphate	+10 min / -0.1 mM ¹⁰
Magnesium	+14 min / +0.1 mM ^{11,12}
Secondary Hyperparathyroidism	+43 min ¹³
Use of Citrate	+36 min ^{14,15,16}
Start of HD/PD	+63 min ¹⁷
Dialysis session	+54 min ¹⁸

T50

- detects patients at risk of calcification-related CV events
- guides therapy
- monitors treatment success

1: Vervloet, Toxins 2019; 2: Bundy et al., CJASN 2019; 3: Smith et al., JASN 2014; 4: Keyzer et al., JASN 2015; 5: Bostom et al., AJN 2018; 6: Pasch et al., CJASN 2016; 7: Sanchez et al., ERA-EDTA 2020; 8: Eelderink et al., ATVB 2020; 9: Dahle et al., AJT 2016; 10: Thiel et al., Clin Kidney J 2020; 11: Bressendorff et al., Kidney Int Rep 2016; 12: Bressendorff et al., CJASN 2018; 13: Shoji et al., CJASN, 2021; 14: Quinones et al., J Nephrol, 2019; 15: Ter Meulen et al., Plos One 2019; 16: Lorenz et al., NDT 2018; 17: Ponte et al., NDT 2020; 18: Dekker et al., Plos One 2016; 19: Bojic et al., Thromb Haemost 2021; CV: cardiovascular; CKD: chronic kidney disease; HD: hemodialysis; PD: peritoneal dialysis

In Switzerland, the T50[®] Test is offered by:

- **Zentrum für Labormedizin, Inselspital Bern** •
- **Labor Dr. Risch** •
- **Synlab** •

The T50[®] Test is currently available for self-payers only.

calciscon
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**SWISS
MADE**

The T50 Calcification Propensity test is a CE marked IVD product.
It is available through selected accredited medical laboratories.