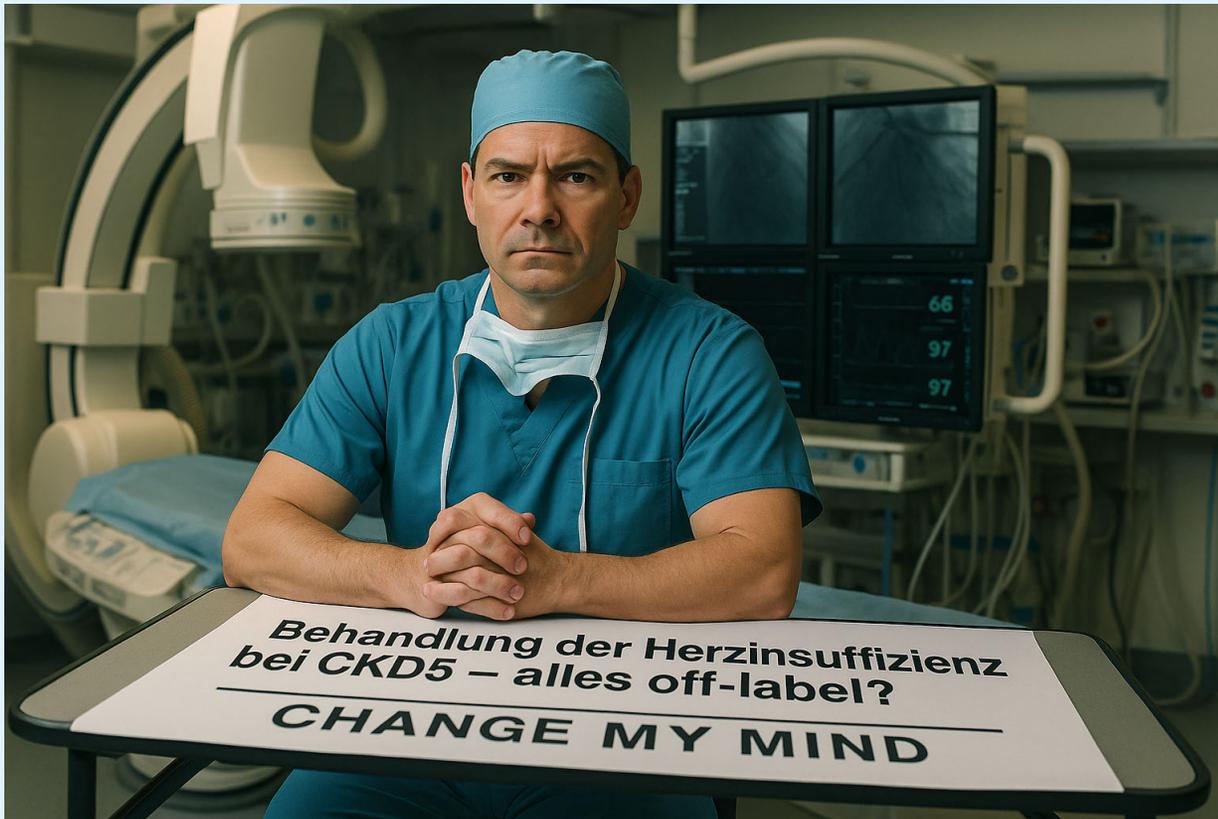


Behandlung der Herzinsuffizienz bei CKD5 - alles off-label?

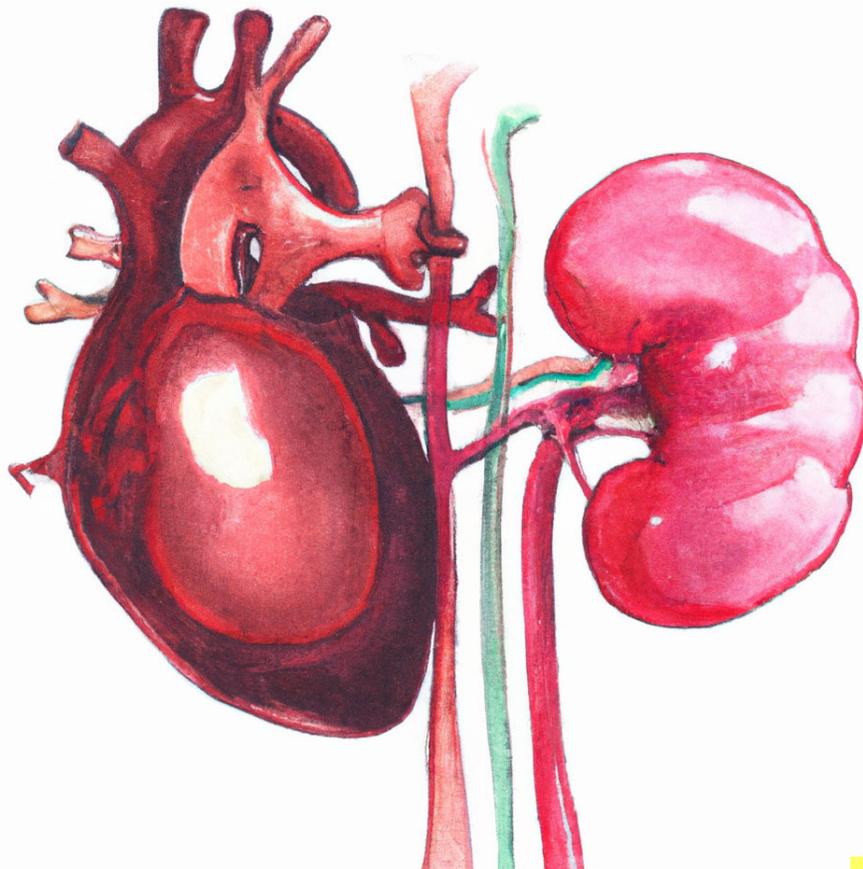


Darlegung potentieller Interessenskonflikte

Der Inhalt des folgenden Vortrages ist Ergebnis des Bemühens um größtmögliche Objektivität und Unabhängigkeit.

Als Referent versichere ich, dass in Bezug auf den Inhalt des folgenden Vortrags **keine Interessenskonflikte** bestehen, die sich aus einem Beschäftigungsverhältnis, einer Beratertätigkeit oder Zuwendungen für Forschungsvorhaben, Vorträge oder andere Tätigkeiten ergeben.

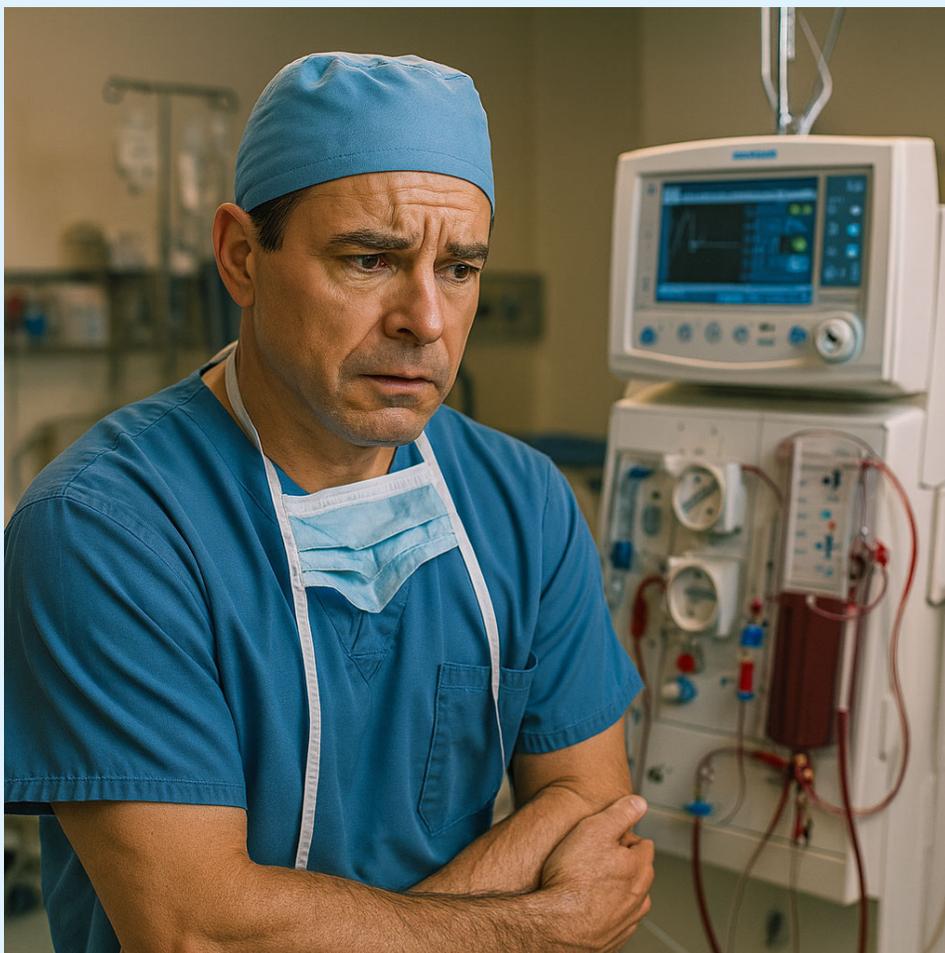
Darlegung potentieller Interessenskonflikte



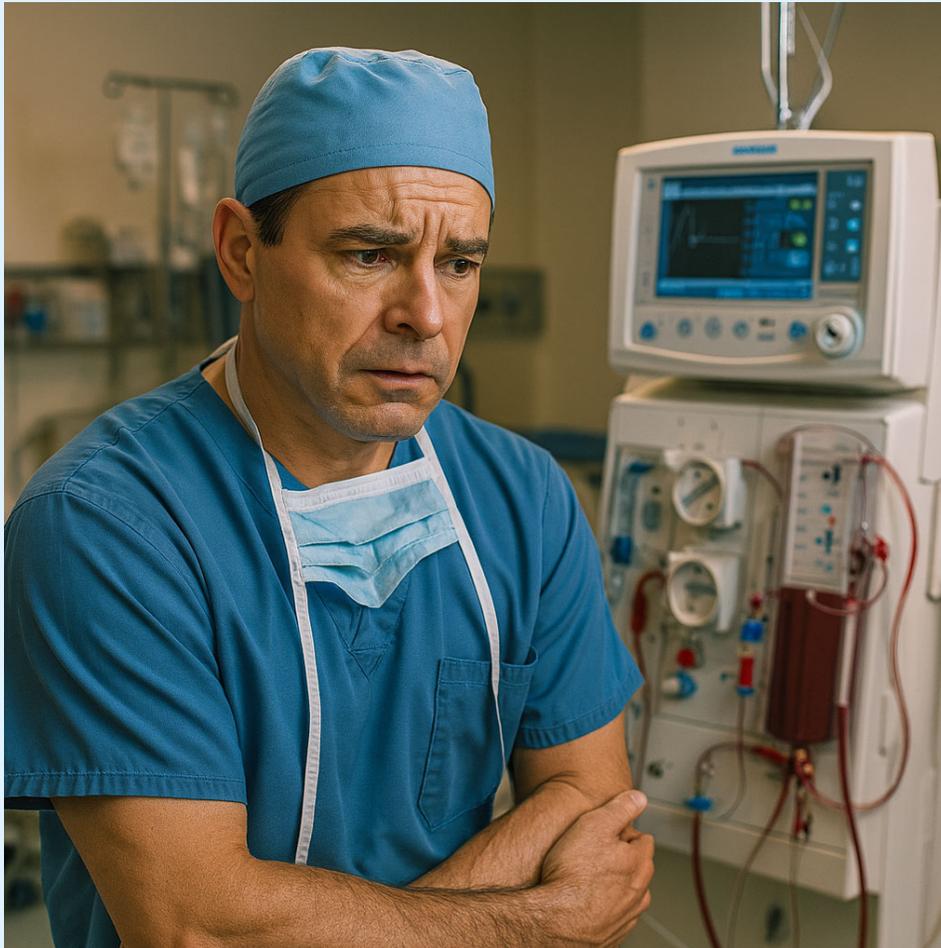
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- Cardiovascular disease is the leading cause of death in end-stage renal disease patients (=50%).
- Approximately 36% of patients with ESRD who require dialysis have HF
- The cardiovascular mortality rate of dialysis patients is 10–20 times higher than that of age-matched individuals in the general population

Gonzales-Bedat M. Clin Nephrol 2015
Bhatti NK J Am Heart Assoc. 2016;5(8)

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Studie	Jahr	Intervention / Vergleich	Population	n (Patienten)
PARADIGM-HF	2014	Sacubitril/Valsartan vs. Enalapril	HFrEF	8 442
GALACTIC-HF	2021	Omecamtiv Mecarbil vs. Placebo	HFrEF	8 256
CHARM-Overall	2003	Candesartan vs. Placebo	HFrEF + HFpEF	7 601
DIG-Trial	1997	Digoxin vs. Placebo	HFrEF	6 800
SHIFT	2010	Ivabradin vs. Placebo	HFrEF, Sinusrhythm	6 558
RELAX-AHF-2	2017	Serelaxin vs. Placebo	Akute HF	6 545
DELIVER	2022	Dapagliflozin vs. Placebo	HFmrEF / ↓ EF	6 263

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Marvel Studios

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Studie	Jahr	Intervention / Vergleich	Population	n (Patienten)	Dialysepatienten eingeschlossen	Nierenfunktions-Grenze (Einschlusskriterium)
PARADIGM-HF	2014	Sacubitril/Valsartan vs. Enalapril	HFrEF	8 442	✗ Nein	eGFR < 30 ml/min ausgeschlossen
GALACTIC-HF	2021	Omecamtiv Mecarbil vs. Placebo	HFrEF	8 256	✗ Nein	eGFR < 20 ml/min ausgeschlossen
CHARM-Overall	2003	Candesartan vs. Placebo	HFrEF + HFpEF	7 601	✗ Nein	Kreatinin > 3 mg/dl (~eGFR < 30) ausgeschlossen
DIG-Trial	1997	Digoxin vs. Placebo	HFrEF	6 800	✗ Nein	Dialyse ausgeschlossen; Kreatinin > 3 mg/dl ausgeschlossen
SHIFT	2010	Ivabradin vs. Placebo	HFrEF, Sinusrhythmus	6 558	✗ Nein	eGFR < 30 ml/min ausgeschlossen
RELAX-AHF-2	2017	Serelaxin vs. Placebo	Akute HF	6 545	✗ Nein	eGFR < 30 ml/min ausgeschlossen
DELIVER	2022	Dapagliflozin vs. Placebo	HFmrEF / ↓ HF	6 263	✗ Nein	eGFR < 25 ml/min ausgeschlossen



ESC

European Society
of Cardiology

European Heart Journal (2021) **42**, 3599–3726
doi:10.1093/eurheartj/ehab368

ESC GUIDELINES

2021 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure

Developed by the Task Force for the diagnosis and treatment of acute and chronic heart failure of the European Society of Cardiology (ESC)

With the special contribution of the Heart Failure Association (HFA) of the ESC

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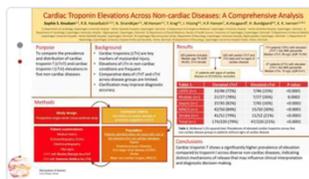
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1 results.

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ESC PREMIUM ACCESS

CONGRESS PRESENTATION



Cardiac troponin elevations across non-cardiac diseases: a comprehensive analysis

31 August 2025 from ESC Congress 2025

Biomarkers in acute coronary syndromes (5)

Dr. S.S Knudsen

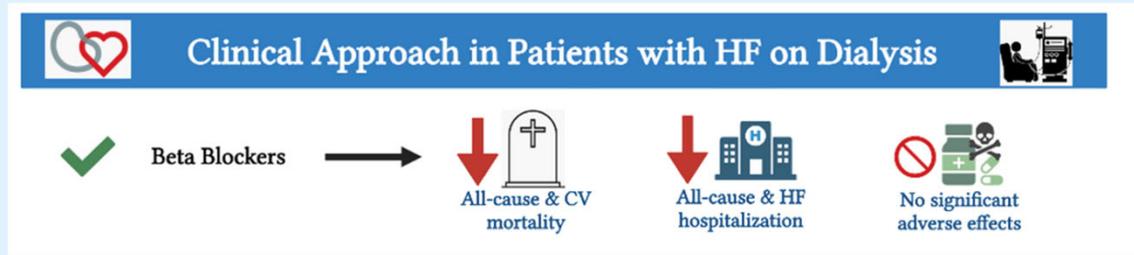
Abstract: observed in patients with CKD5, rhabdomyolysis, and sepsis.

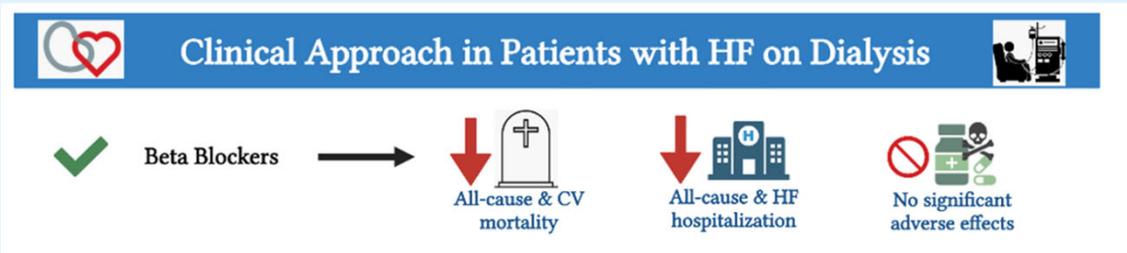
Abstract

Slides/e-Poster

Video

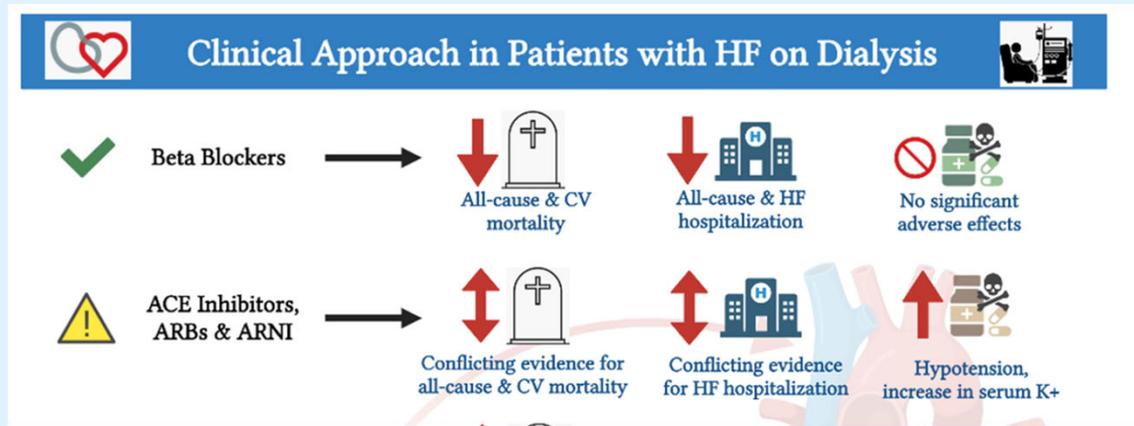


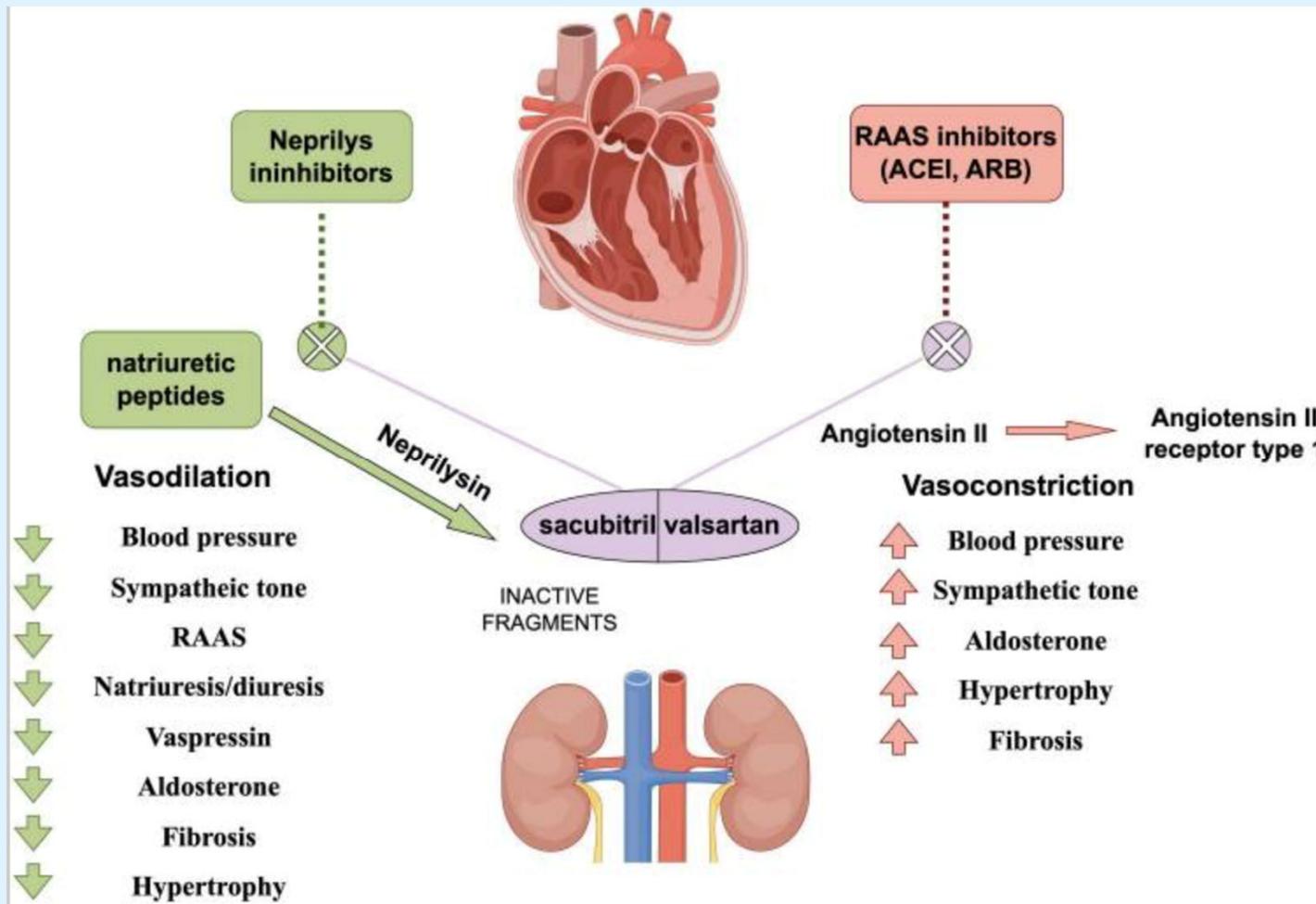




According to police, Daniel Barton, MD, a nephrologist, was booked into the Mahoning County Jail April 22 on an assault charge and is now free on bond.

A cardiologist at the hospital told police the argument began when he texted Dr. Barton to ask why he stopped administering a medication he had prescribed to the patient. When following up in person, the cardiologist said Dr. Barton accused him of going behind his back to continue giving the patient the medication.





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Autor (Jahr)	Design	Population	n	Follow-up	Hauptergebnisse	Nebenwirkungen
Feng (2022)	Retrospektiv	Hämodialyse, HFfEF/HFmEF	11	3–18 Mon	↑ LVEF	k.A.
Chang (2023)	Multizentrisch retrospektiv	HFfEF, eGFR < 30	510	1 Jahr	↓ Mortalität, langsamere eGFR-Abnahme	k.A.
Lee (2024)	Retrospektiv	HFfEF + CKD	1 276	1 Jahr	↓ Mortalität	k.A.
Liu (2023)	Single-center	ESRD + HF	116	1 Jahr	↓ HF-Hospitalisationen, stabile Kreatininwerte	k.A.
Lin (2024)	Retrospektiv	Dialyse, HFfEF/HFpEF	178	3 Jahre	↑ LVEF, ↓ Mortalität	k.A.
Lee (2020)	Single-center	Dialyse, HFfEF	23	132 Tage	↓ hs-TnT, ↑ LVEF	4 × Hypotonie
Hsiao (2022)	Multizentrisch retrospektiv	HFfEF, eGFR ≤ 30	1 039	1 Jahr	↓ HFH bei Dialyse, ähnliche Mortalität vs ACEI/ARB	↑ Hyperkaliämie (NS)
Wang (2021)	Retrospektiv	HD, HFfEF	110	12 Mon	↓ NT-proBNP, ↑ LVEF	k.A.
Wen (2022)	Single-center	HD, HF	54	6 Mon	↑ LVEF, ↓ HFH & Angina	↑ Hyperkaliämie (p = 0.029)
Yang (2024)	Single-center	HD, HFfEF	89	1 Jahr	Kein Unterschied zu ACEI/ARB	k.A.
Armaly (2024)	Single-center	HD, HFfEF	12	6 Mon	↑ LVEF	1 × Schwindel
Le (2024)	Multizentrisch	HD, HFfEF	2 868	0.9 J (IQR 0.4–1.7)	↓ Gesamt-Mortalität & Hospitalisation	k.A.
Guo (2022)	Retrospektiv	HD, HFpEF	247	3–12 Mon	↓ BP & NT-proBNP, ↑ LVEF	k.A.
Huang (2024)	Prospektiv	HD, HFmEF/HFpEF	155	1 Jahr	↑ LVH, Diastol-Funktion, ADQI-Klasse	k.A.
Mima (2024)	Retrospektiv	HD, HFpEF	9	21 Mon	↓ BP & HF-Symptome	keine AE
Bian (2024)	Retrospektiv	PD, HFpEF	64	1 Jahr	↓ NT-proBNP, ↑ LVEF	Hyperkaliämie 25.8 % vs 39.4 %
Sheng (2023)	RCT	PD, HFpEF	160	6 Mon	↑ Kardiale Funktion & HF-Score	k.A.
Fu (2021)	Retrospektiv	PD, HFpEF	21	3–12 Mon	↓ NT-proBNP & HF-Symptome	k.A.

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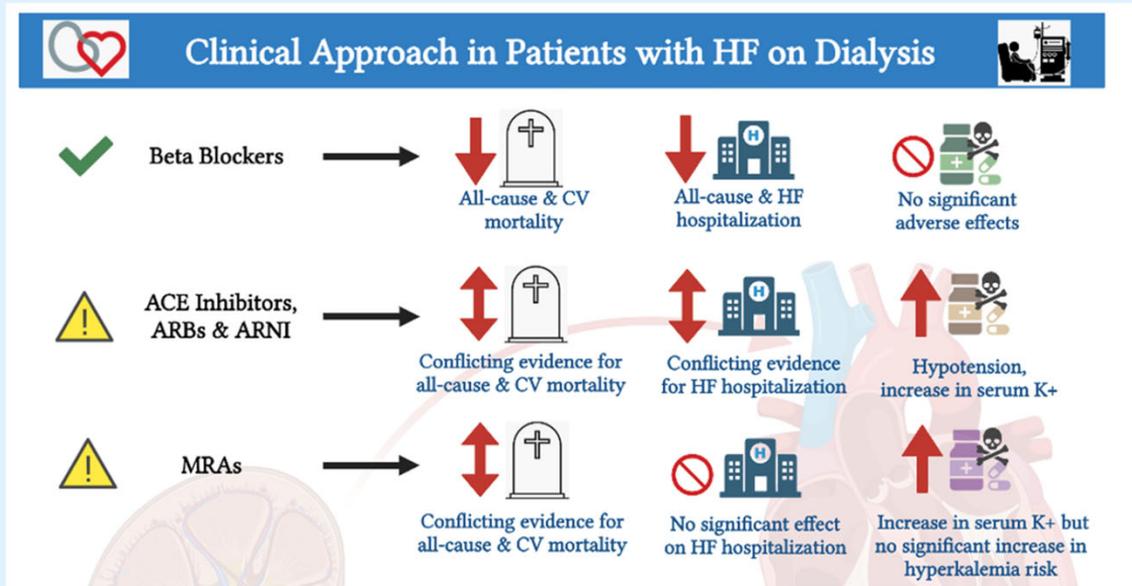
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► Verbesserung von LVEF in fast allen Studien

► Reduktion von Mortalität und HF-Hospitalisationen in großen Kohorten

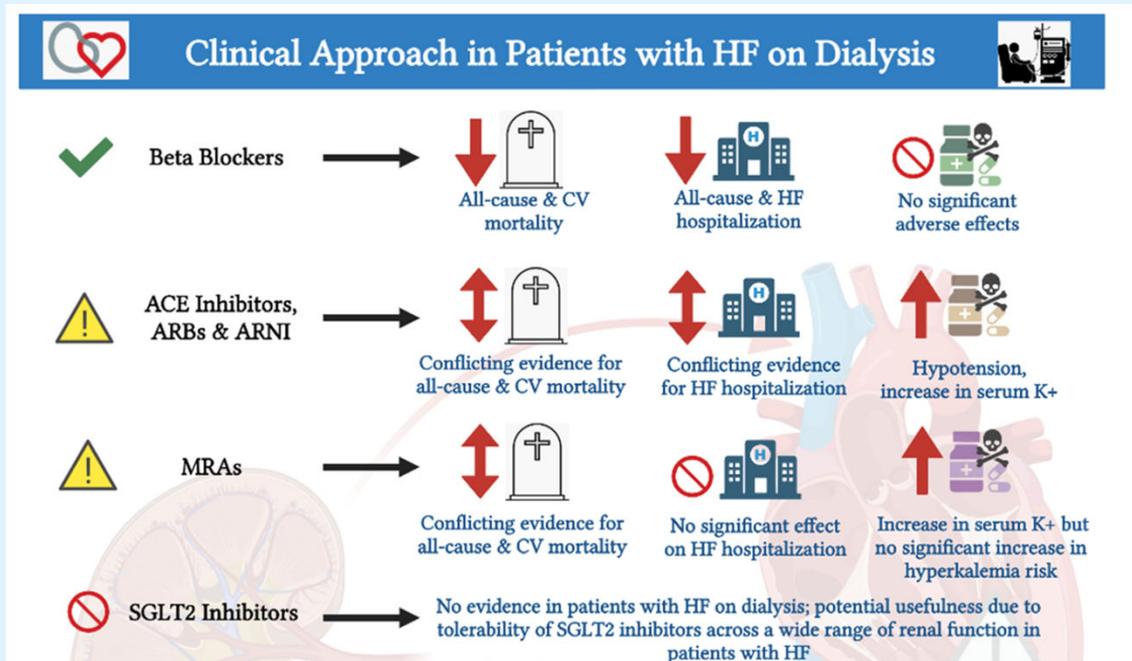
► Geringe Rate an symptomatischer Hypotonie und Hyperkaliämie

► Daten zu 6.932 Patient:innen



Safety and efficacy of steroidal mineralocorticoid receptor antagonists in patients with kidney failure requiring dialysis: a systematic review and meta-analysis of randomised controlled trials

[Année Pyne, MD](#) ^{a,b,c} · [Patrick Rossignol, MD PhD](#) ^{d,e,f,g,h} · [Cameron Giles, MD](#) ^a · [Mats Junek, MD MSc](#) ^{a,b} · [Patrick B Mark, MBChB PhD](#) ⁱ · [Martin Gallagher, MD PhD](#) ^j · et al. [Show more](#)



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Empagliflozin in ESKD - A Feasibility Study

ClinicalTrials.gov ID ⓘ NCT05687058

Sponsor ⓘ University of Mississippi Medical Center

Information provided by ⓘ University of Mississippi Medical Center (Responsible Party)

Date Posted ⓘ 2025-06-25

Recruiting ⓘ

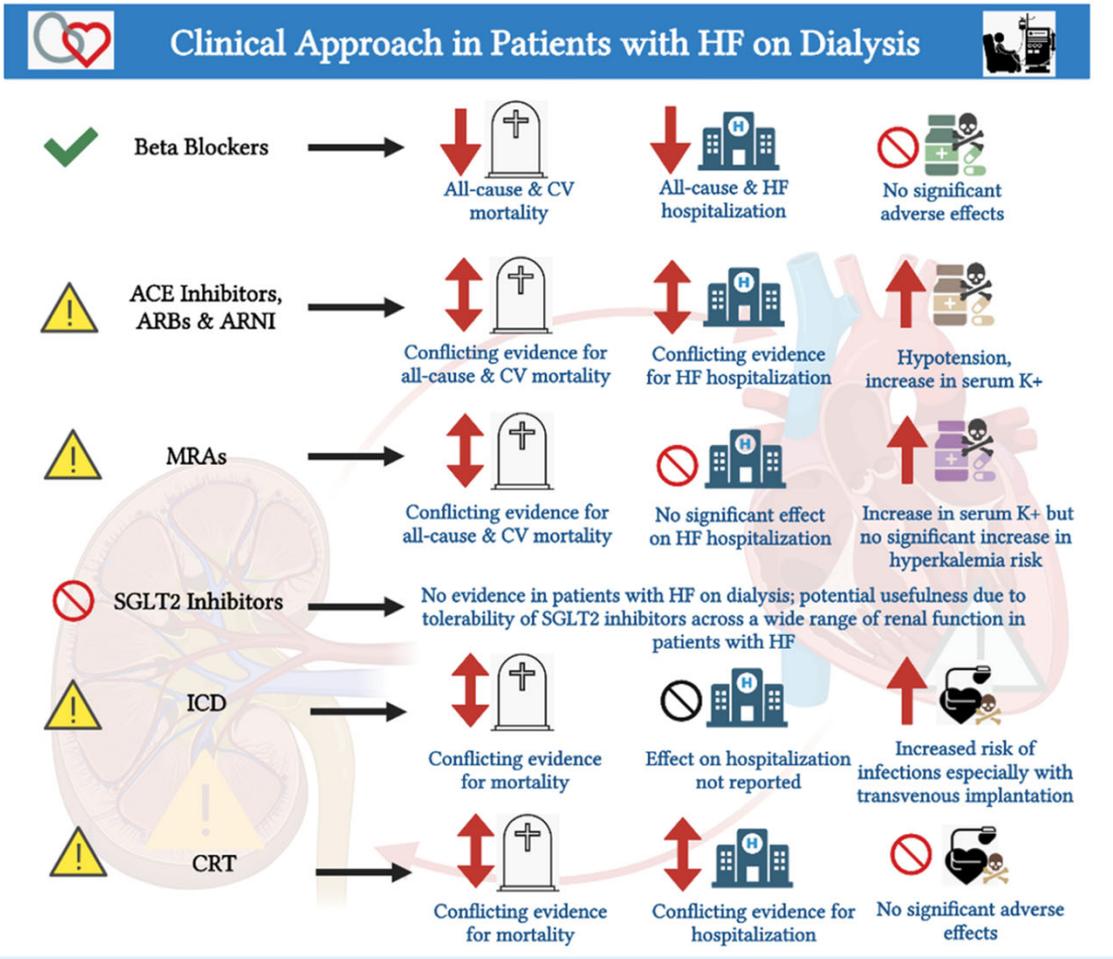
Empagliflozin on Residual Kidney Function in Incident Peritoneal Dialysis Patients (EMPIRIC-PD)

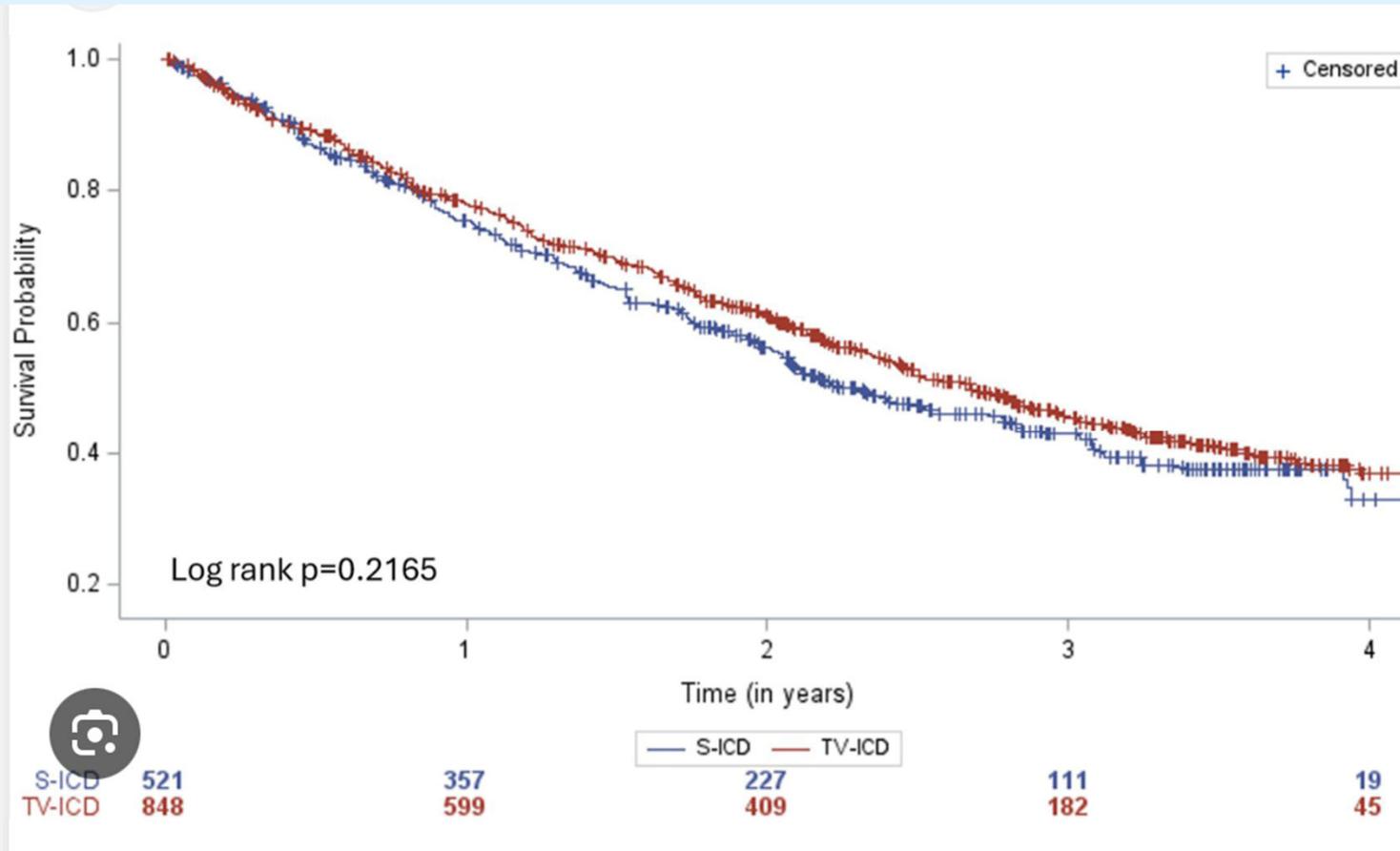
ClinicalTrials.gov ID ⓘ NCT06483074

Sponsor ⓘ Chinese University of Hong Kong

Information provided by ⓘ Cheuk-Chun SZETO, Chinese University of Hong Kong (Responsible Party)

Last Update Posted ⓘ 2025-08-06





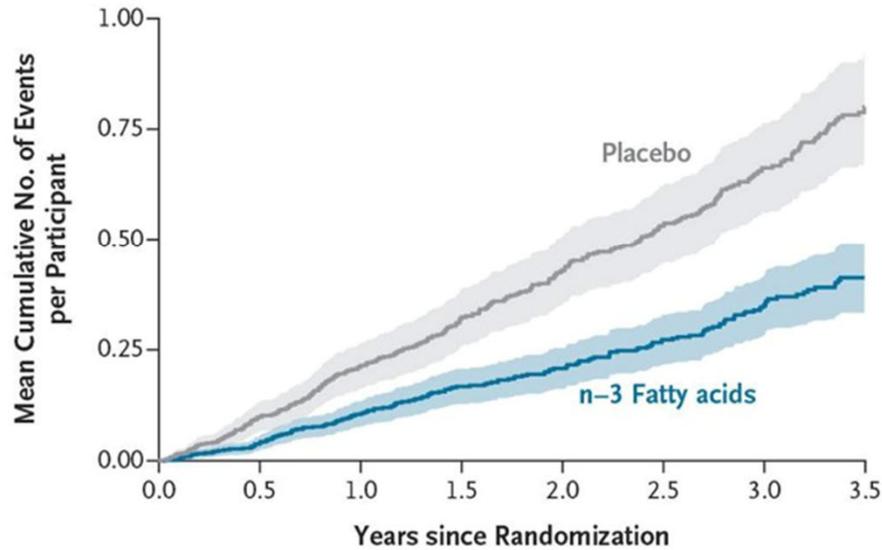
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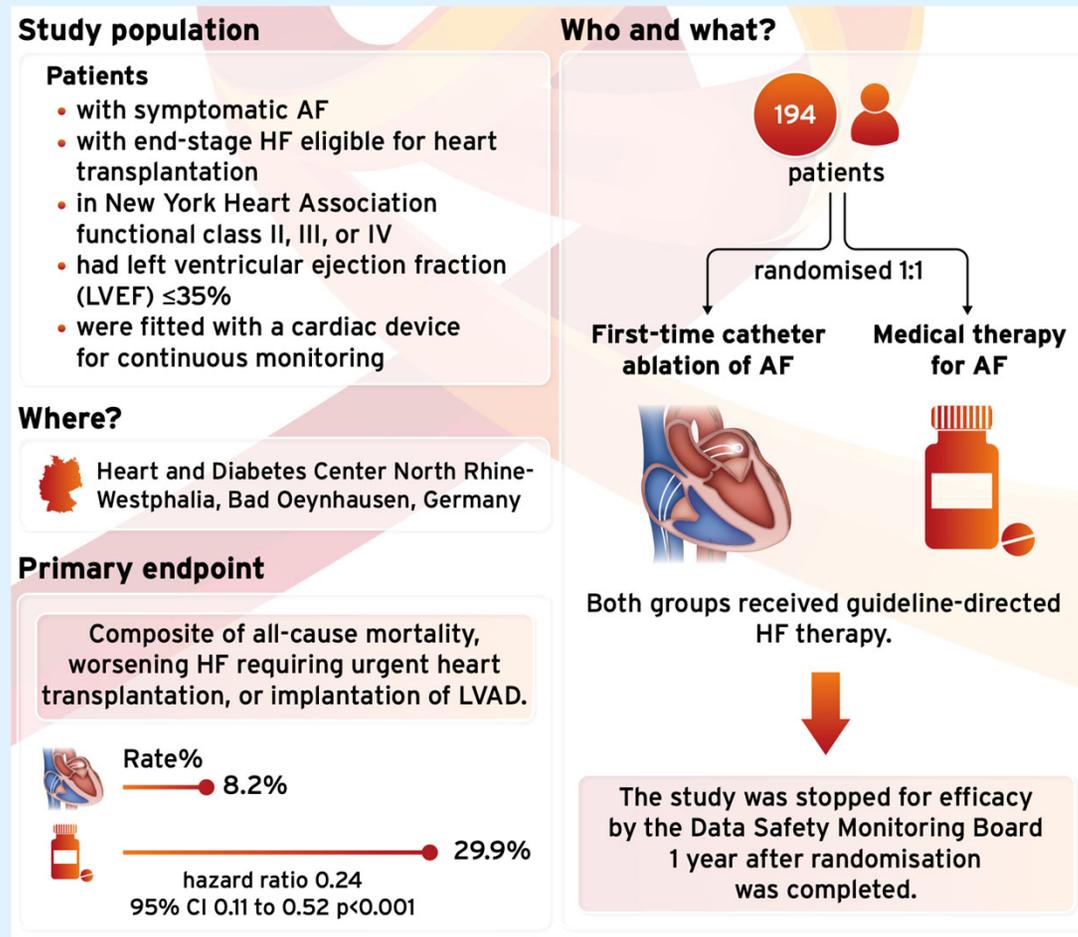


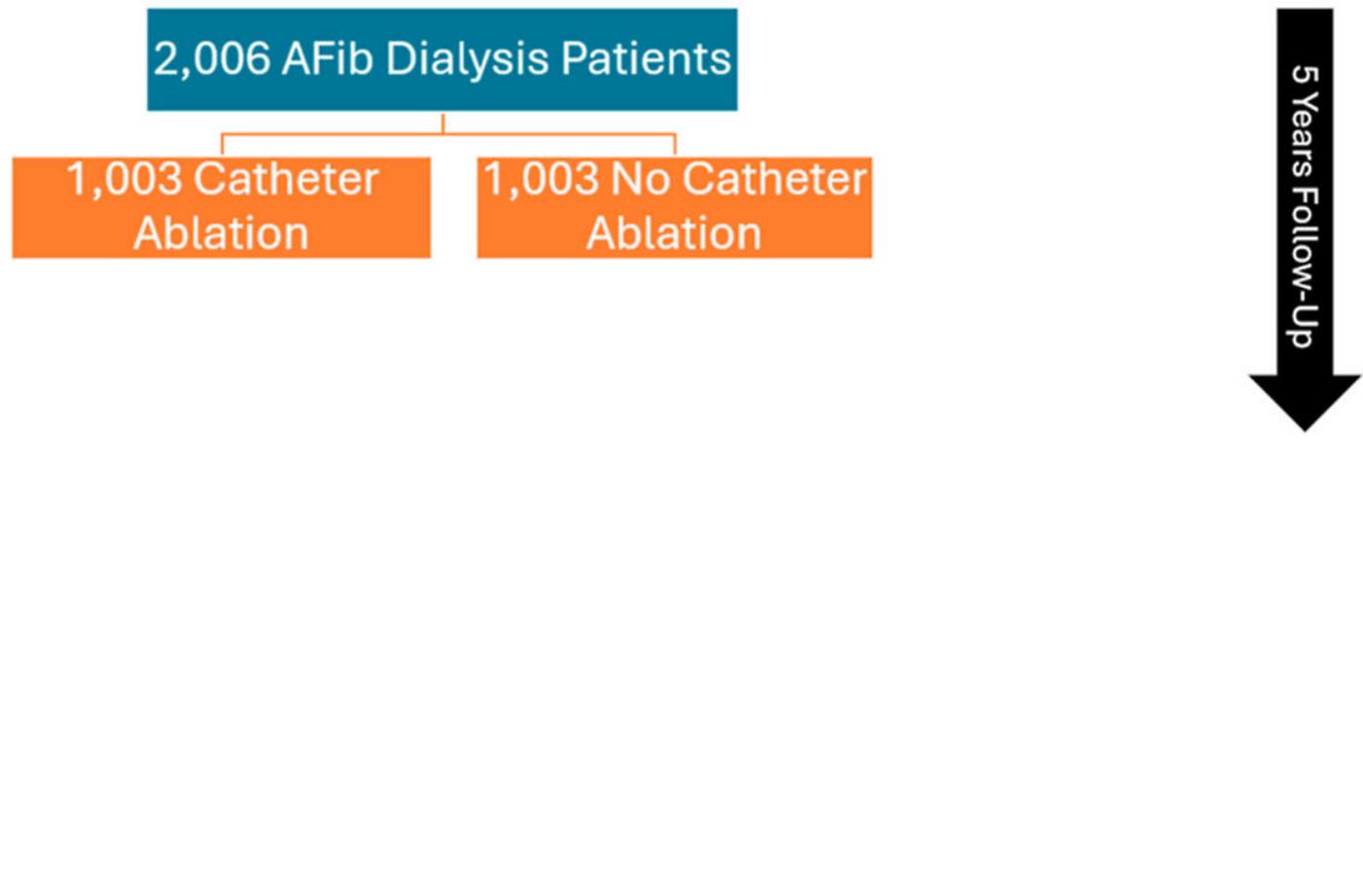
Fish-Oil Supplementation and Cardiovascular Events in Patients Receiving Hemodialysis

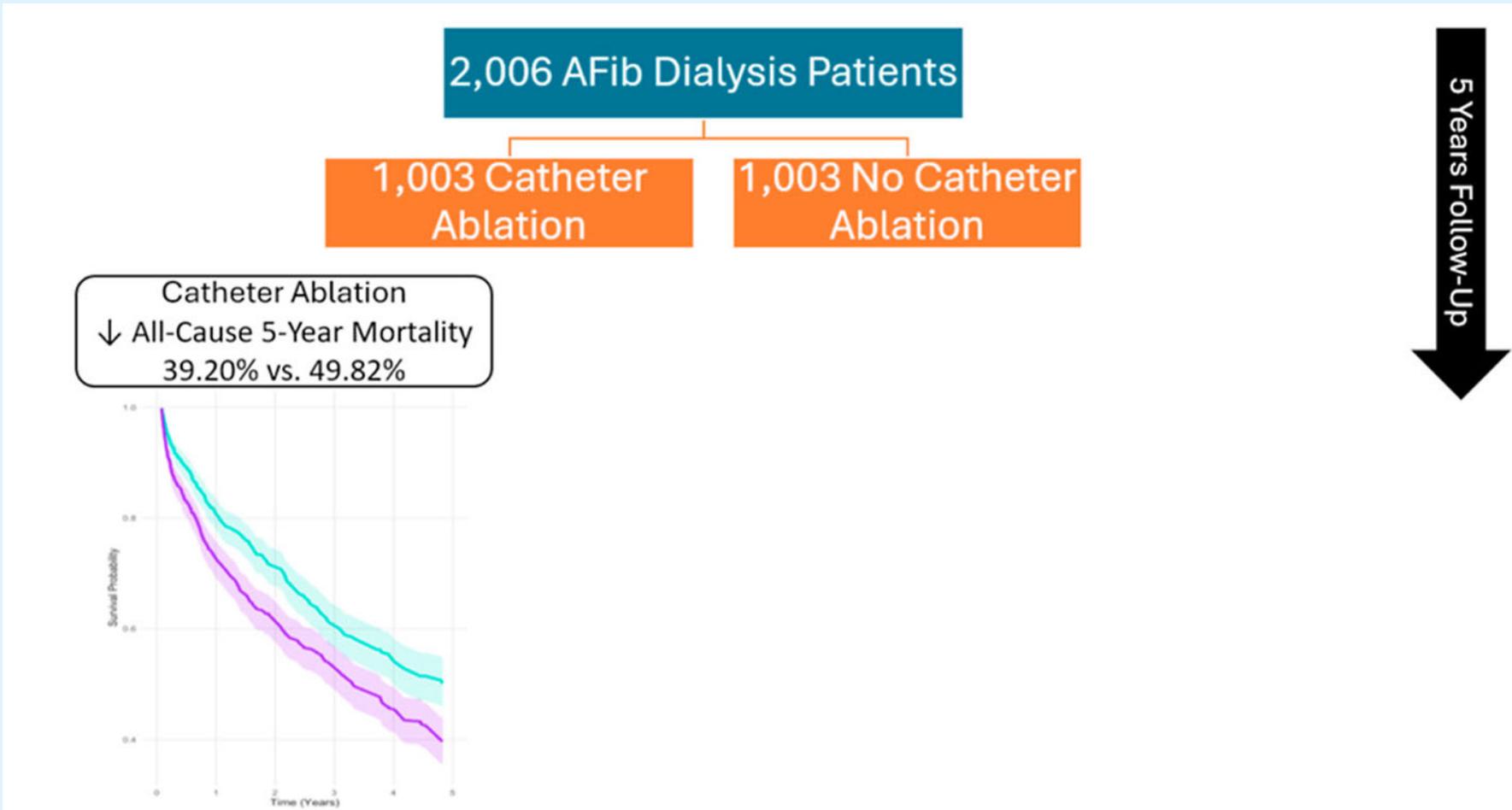


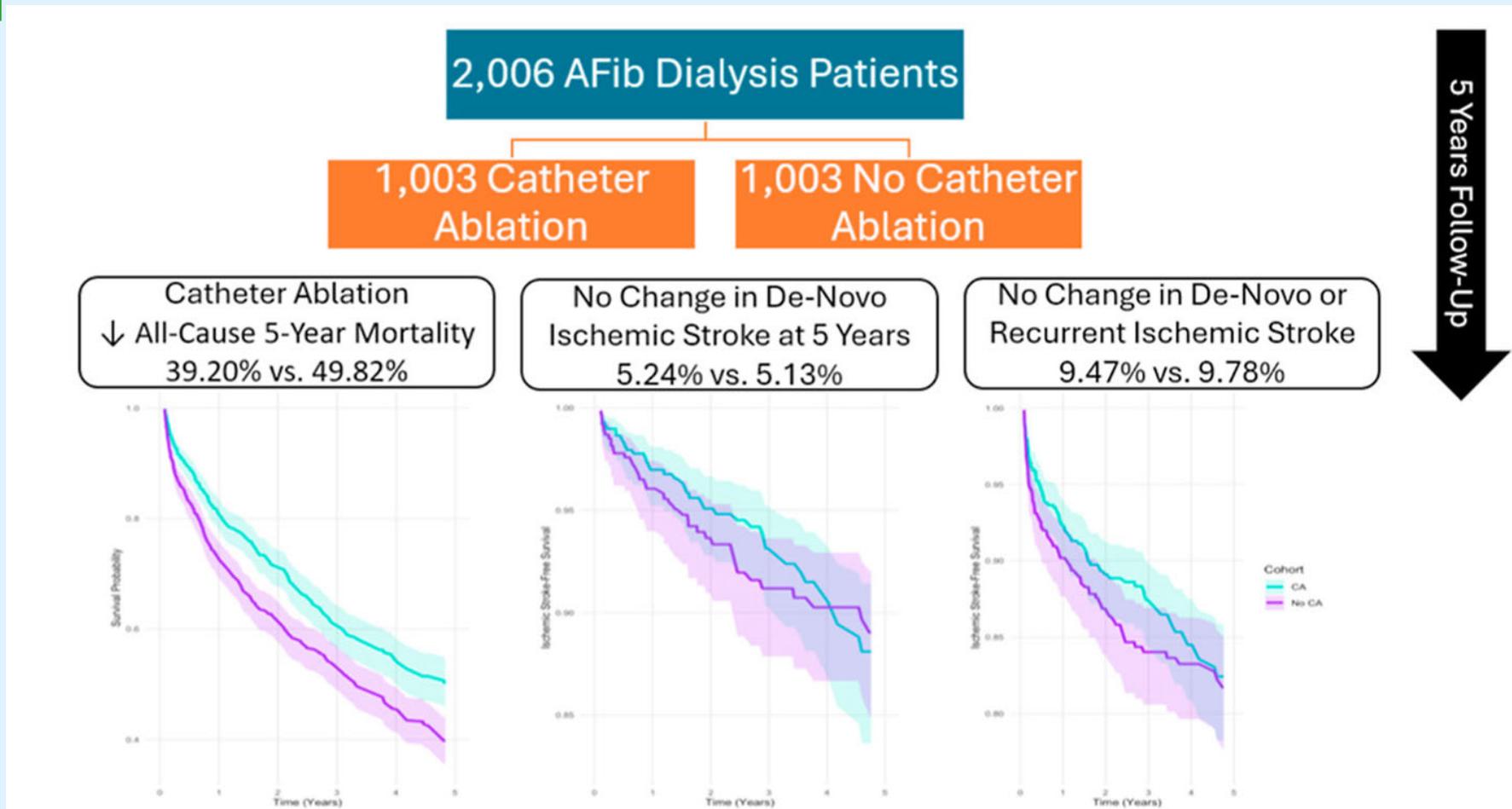
No. at Risk

Placebo	618	543	482	398	365	325	284	124
n-3 Fatty acids	610	544	492	422	369	319	279	128



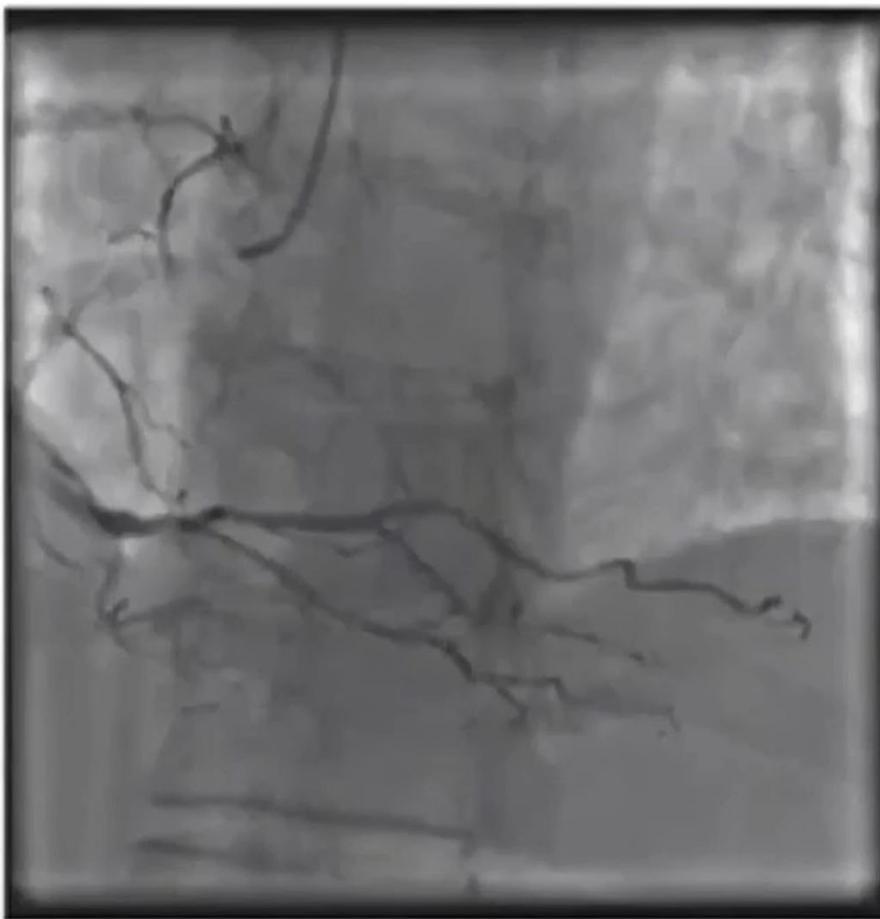






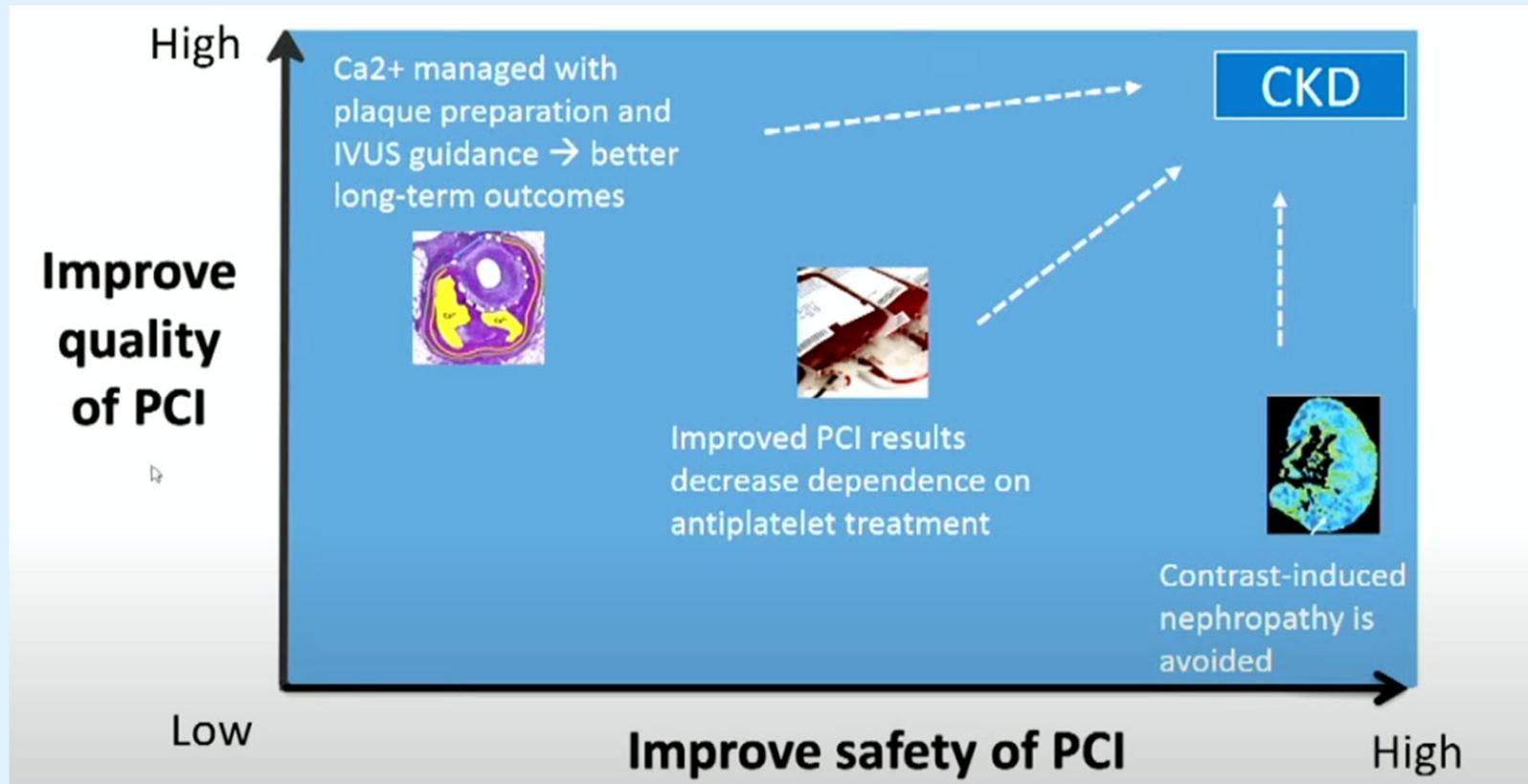
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12/2017 – DM, HT, HL, CKD V

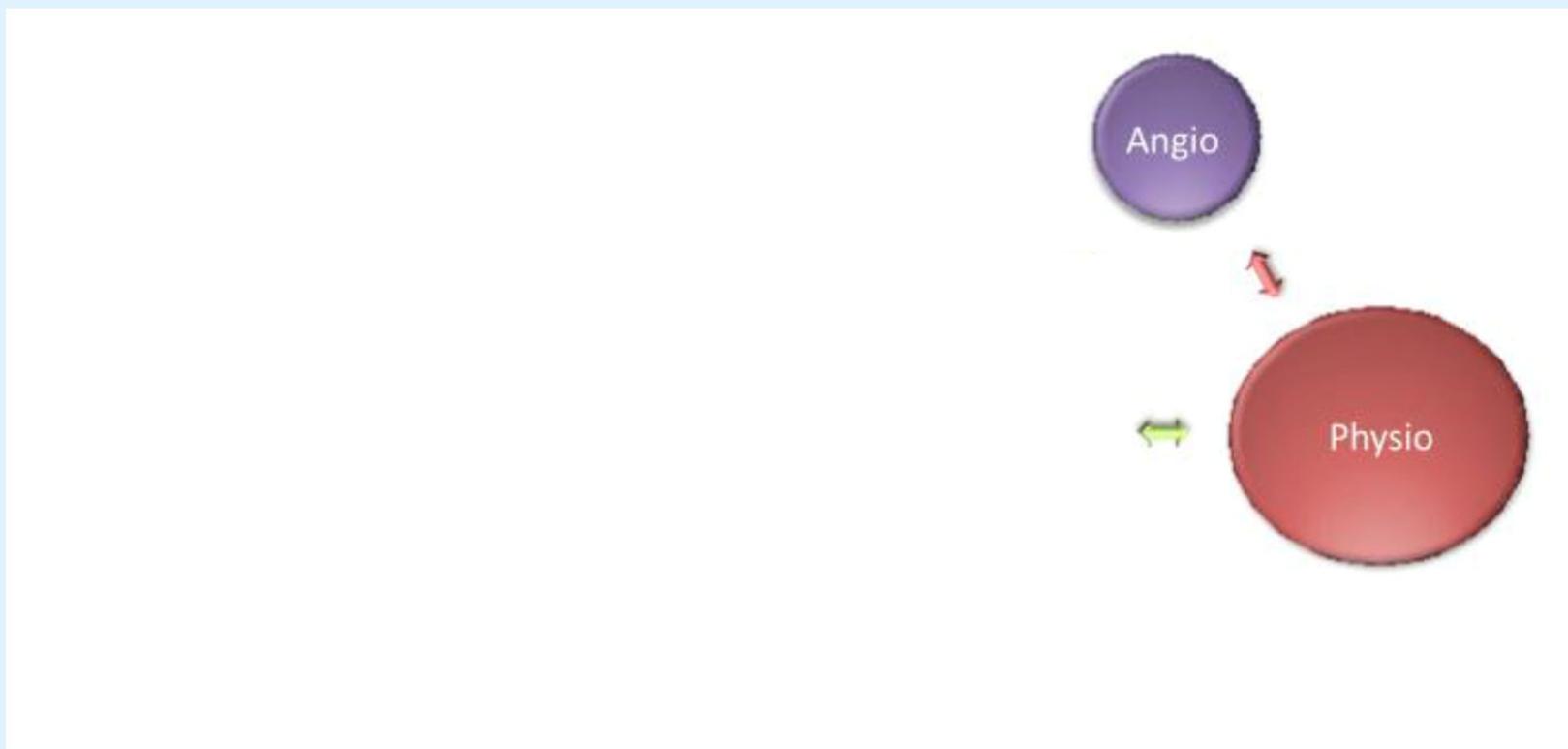


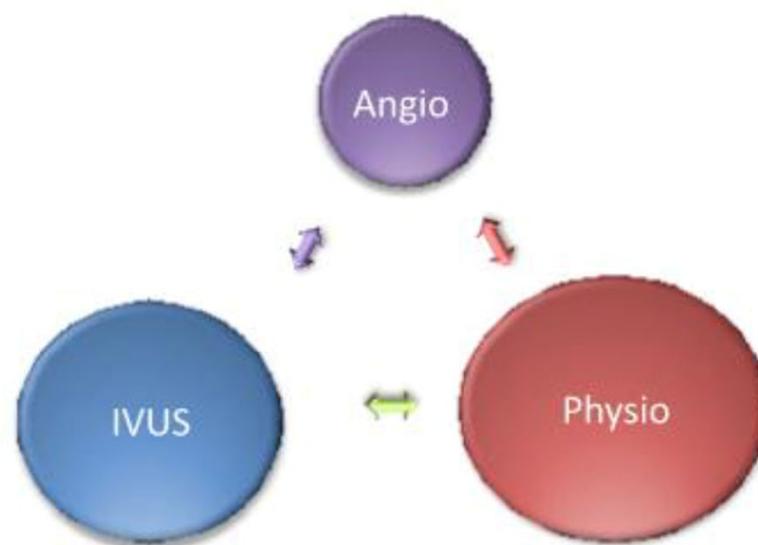
10/2018 - DM, HT, HL, ESRD dialysis





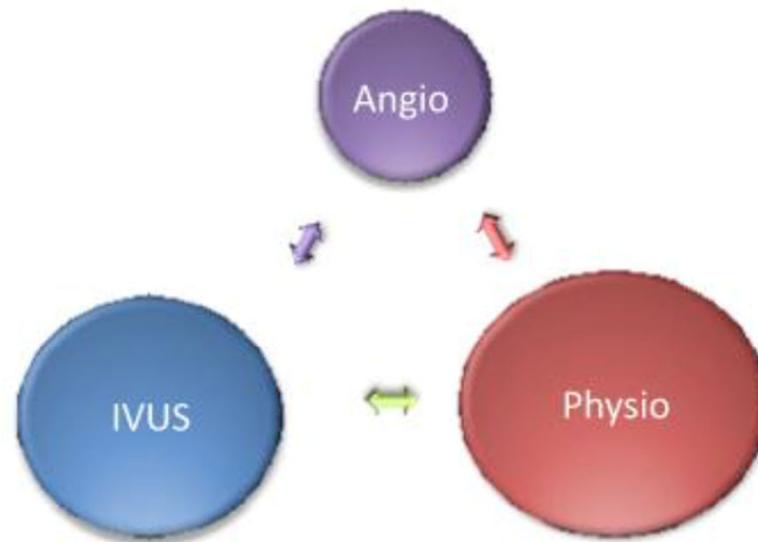




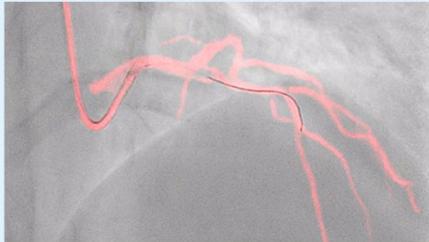


Co-registration displays
allow easy navigation
between 3 modalities:

- ✓ Angiography
- ✓ IVUS images
- ✓ Physiological values



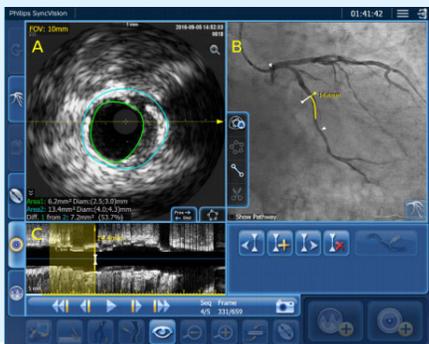




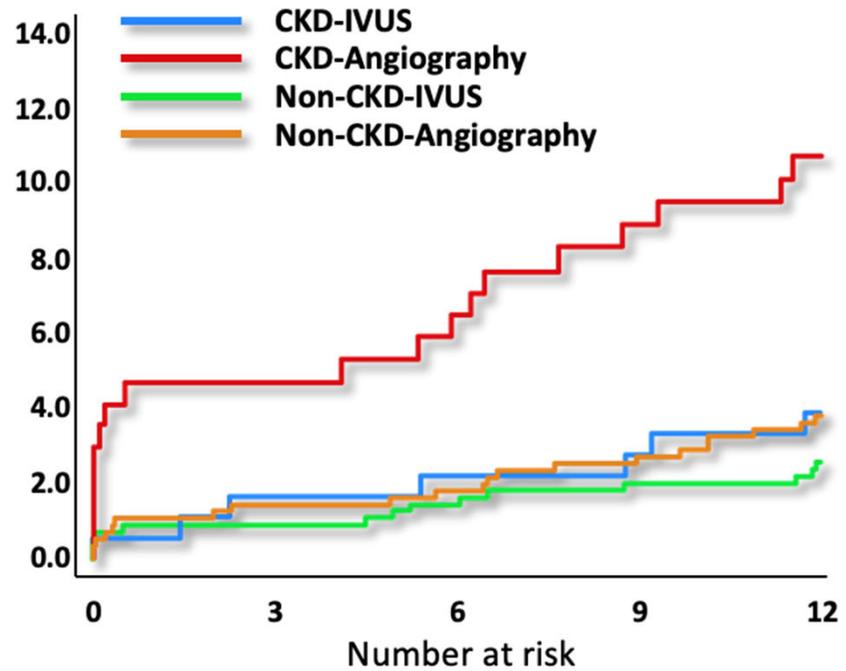
Dynamic Coronary Roadmap



Device Detection

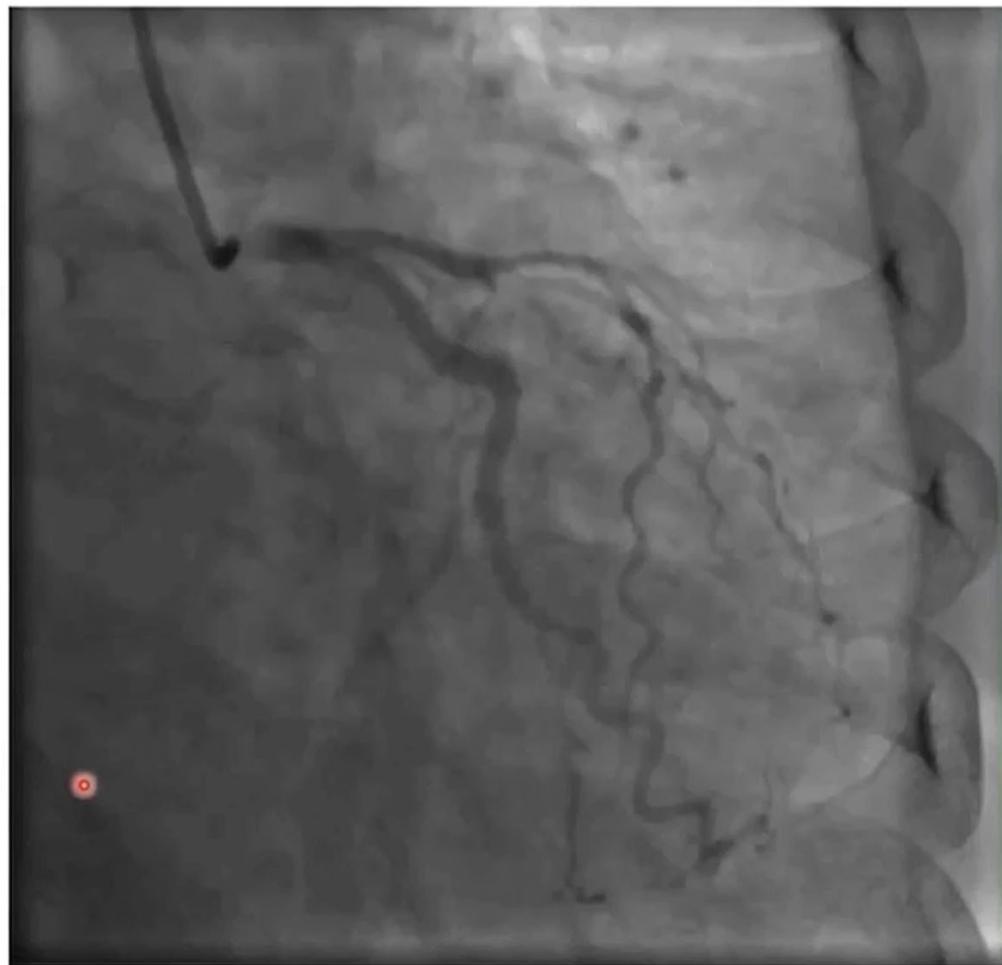
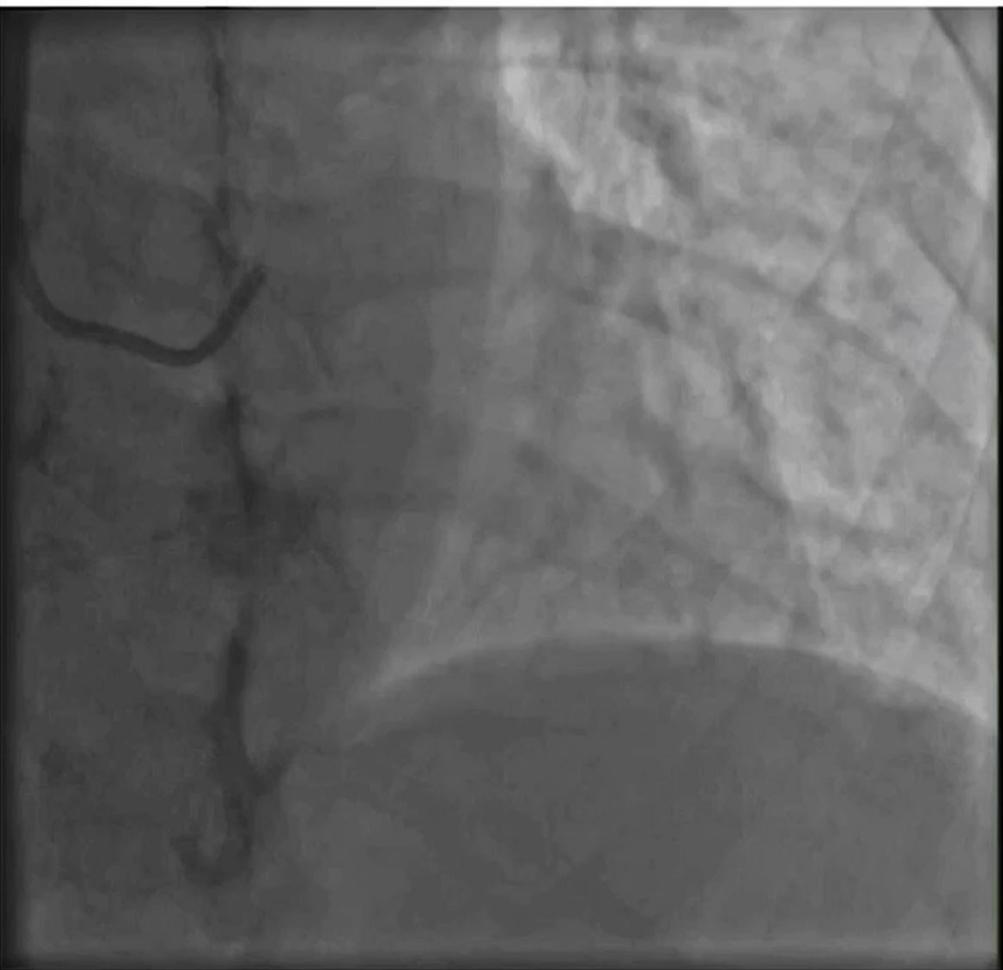


Co-Registration

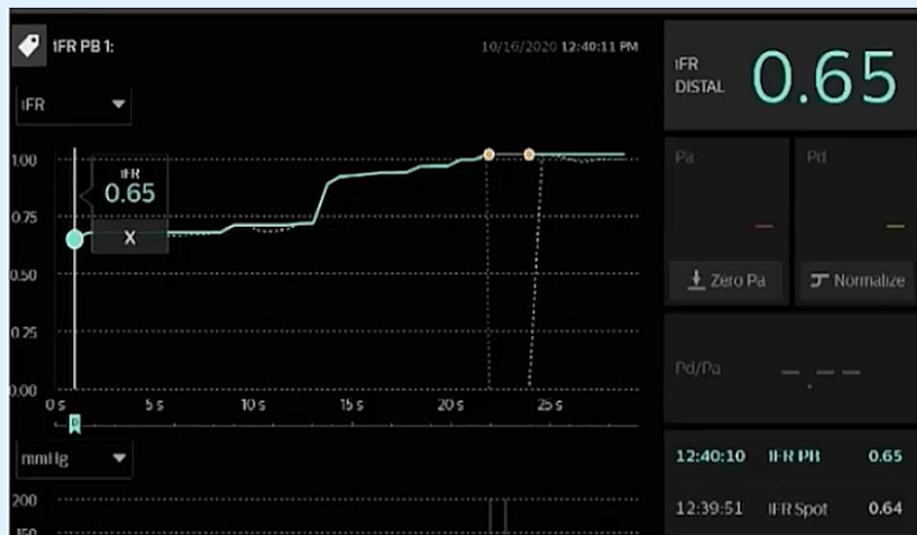


	0	3	6	9	12
CKD-IVUS	180	177	176	174	170
CKD-Angiography	169	161	157	150	147
Non-CKD-IVUS	543	537	533	529	525
Non-CKD-Angiography	551	541	537	531	525

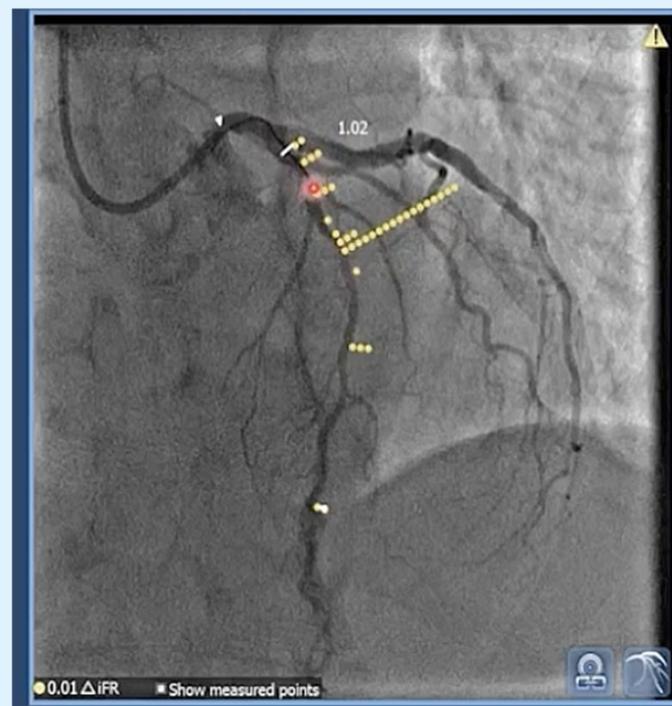
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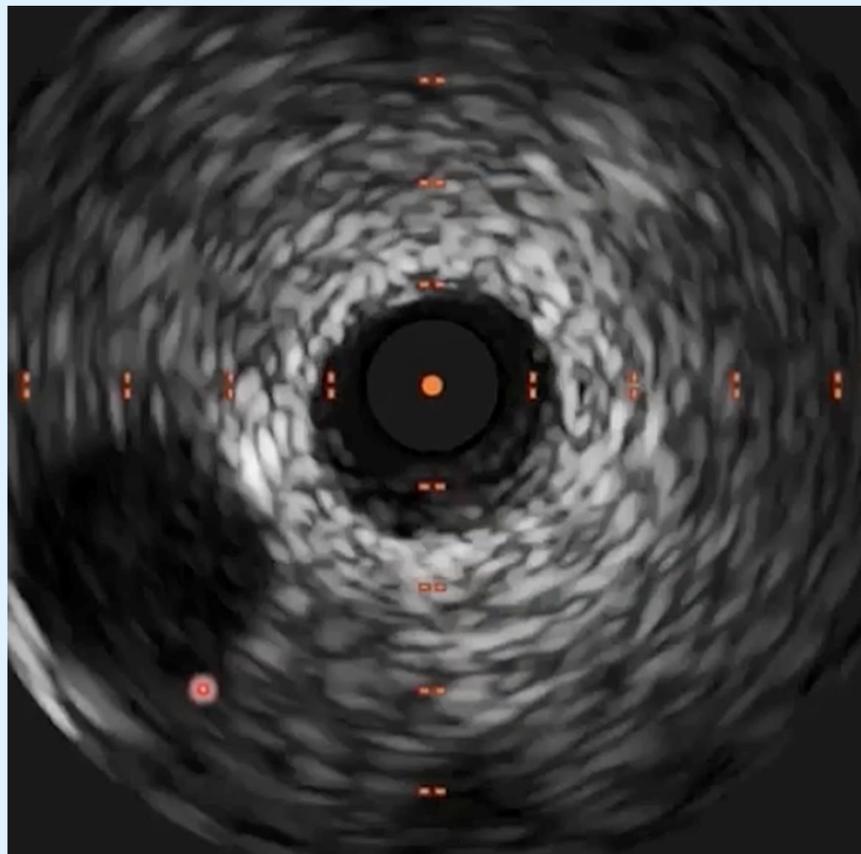


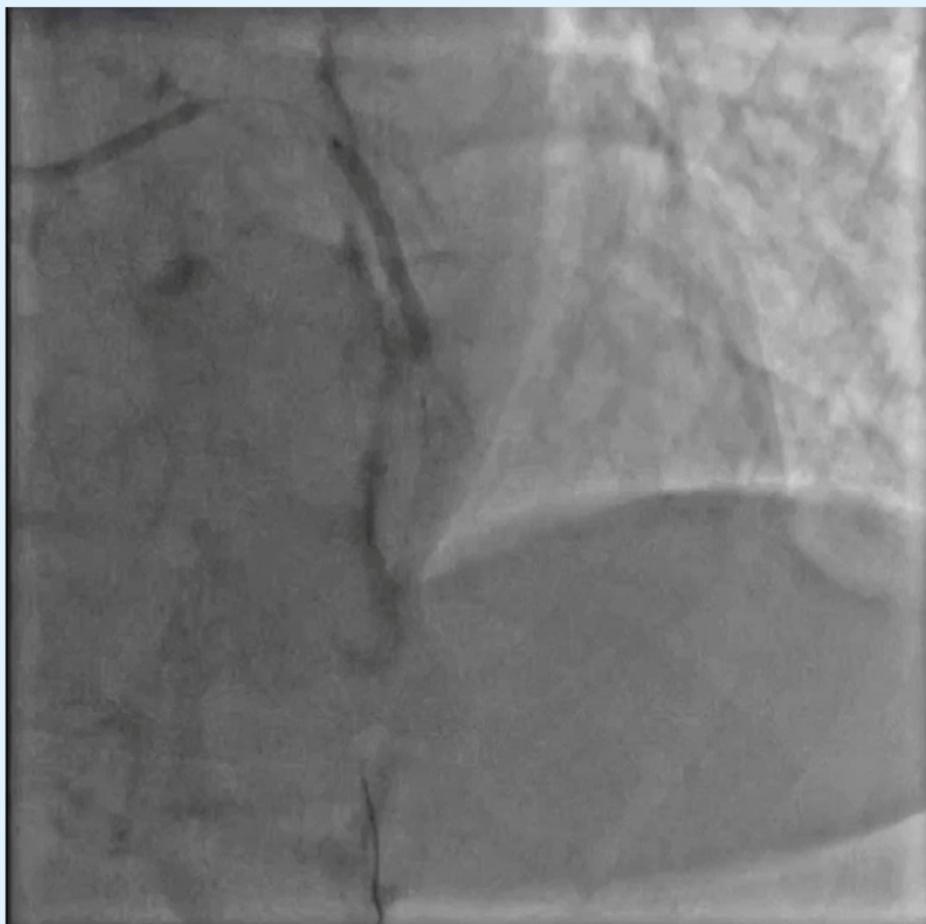
iFR Pullback

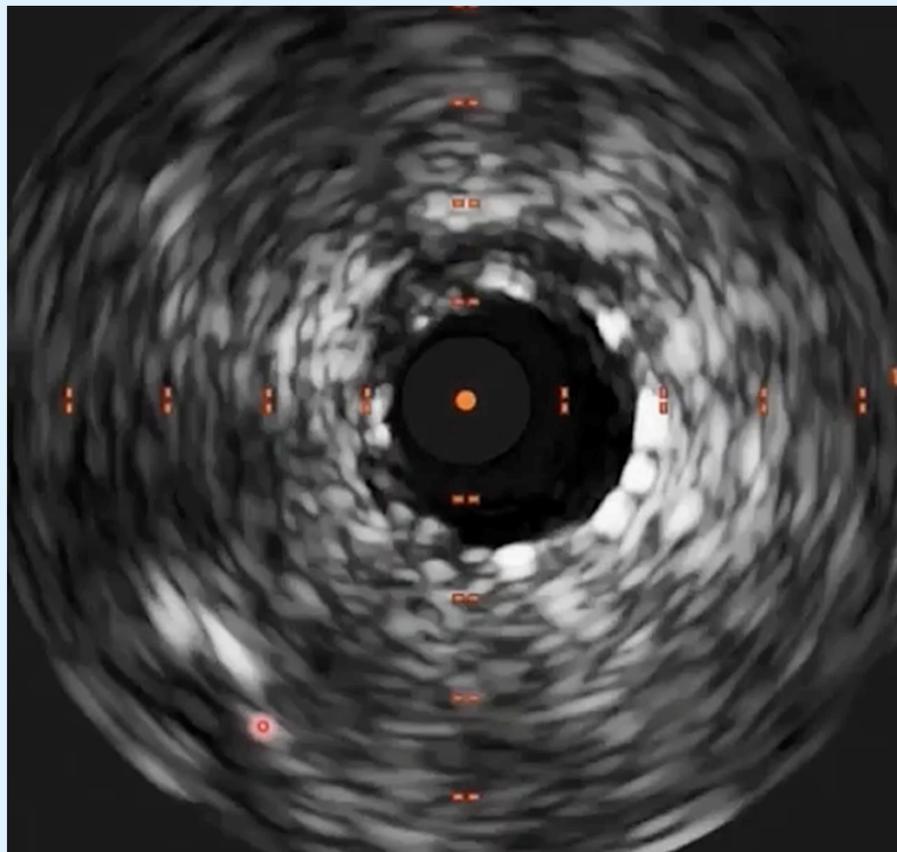


iFR Coregistration

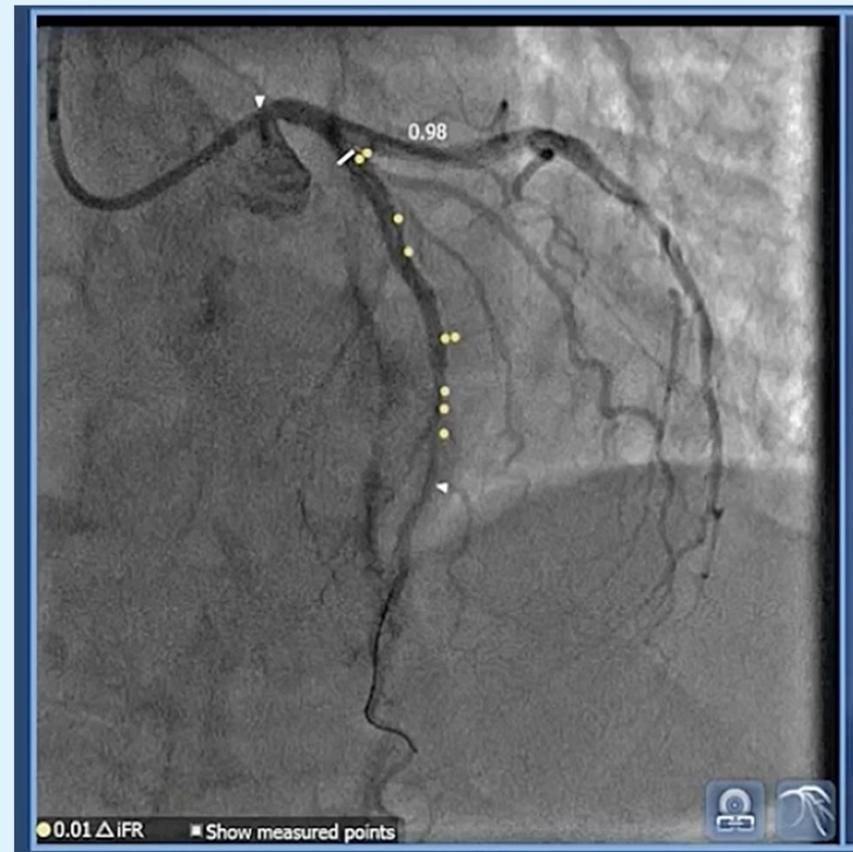
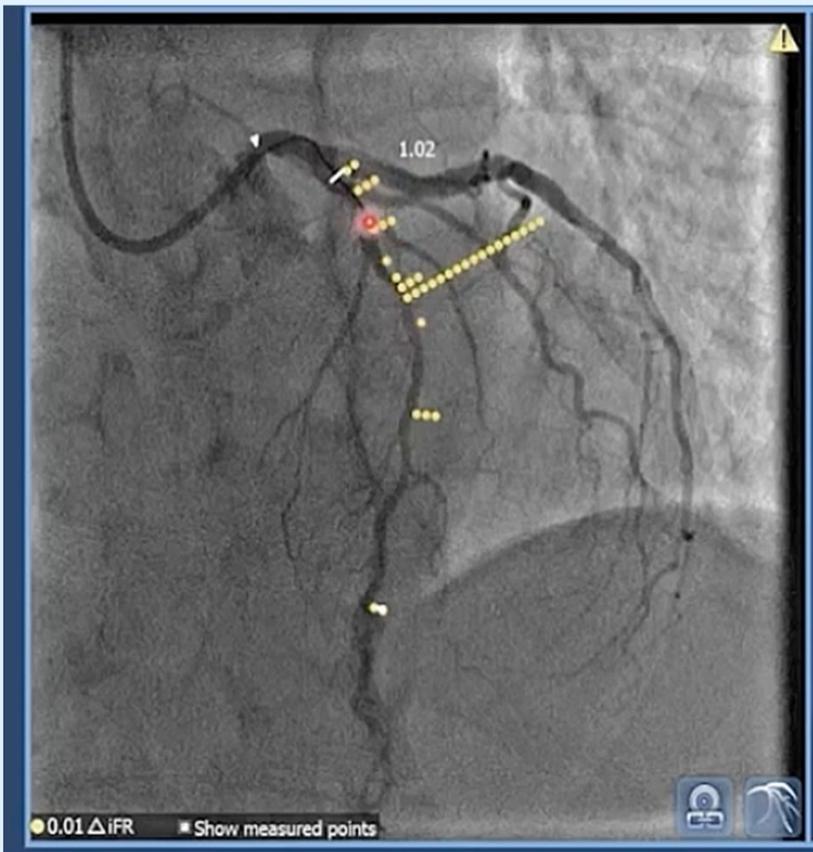








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Herzlichen Dank für Ihre Aufmerksamkeit



St. Joseph Krankenhaus
Berlin Tempelhof



Klinik für **Kardiologie**

Chefarzt Dr. Sebastian Jäger

