BIOMEDICÍNSKÉ CENTRUM

LÉKAŘSKÁ FAKULTA V PLZNI
UNIVERZITA KARLOVA V PRAZE

DETEKCE A LÉČBA ISCHEMICKÉ CHOROBY SRDEČNÍ

1. Edukační sympozium ČTS „Cesta do čekací listiny k transplantaci“

Martin Kačer

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EVROPSKÁ UNIE
EVROPSKÝ FOND PRO REGIONÁLNÍ ROZVOJ
INVESTICE DO VAŠÍ BUDOUCNOSTI
OP Výzkum a vývoj pro inovace

Stratifikace rizika

Revaskularizace

Screeningová metoda

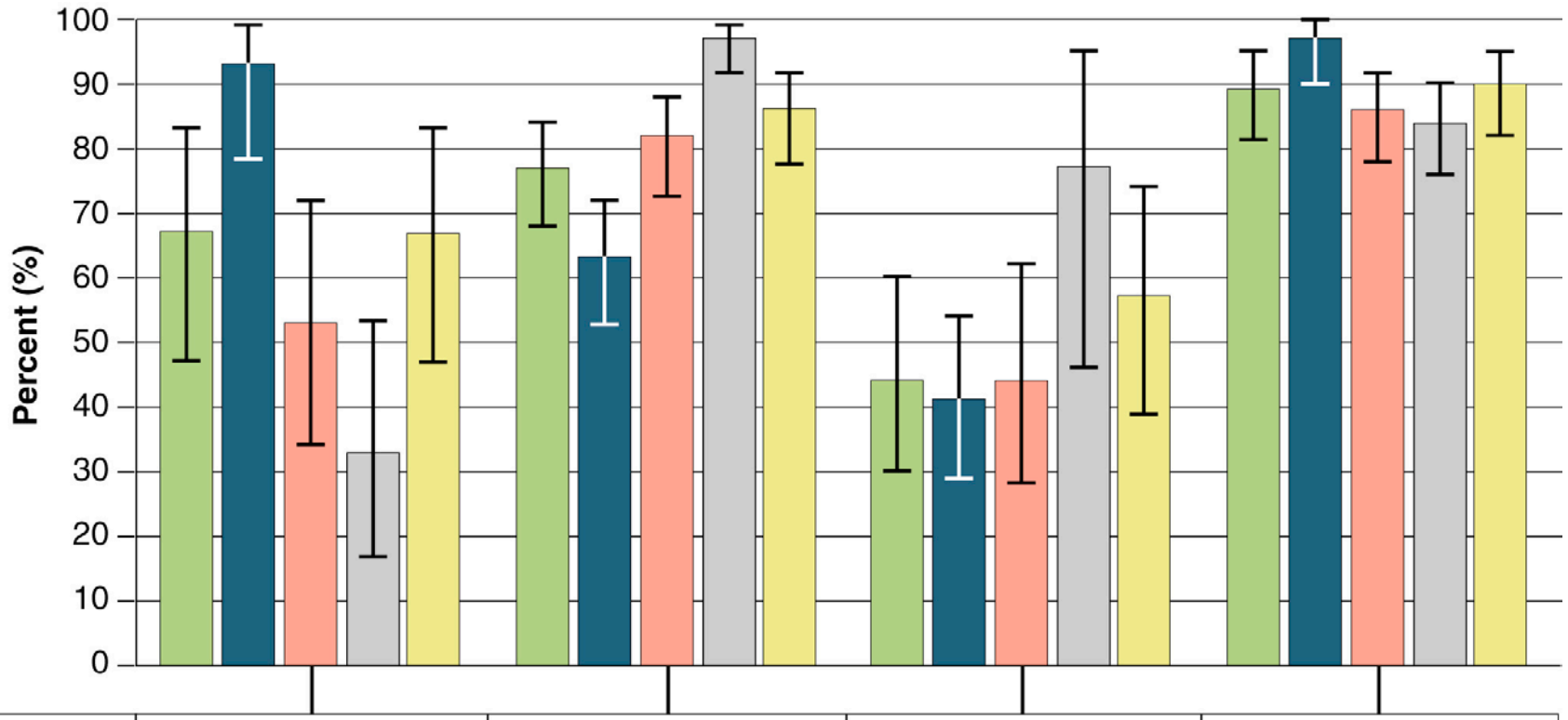
Podpůrná a konzervativní léčba

COOL

Table 5. Accuracy of Noninvasive Testing for Detection of Coronary Artery Stenosis in End-Stage Renal Disease Patients

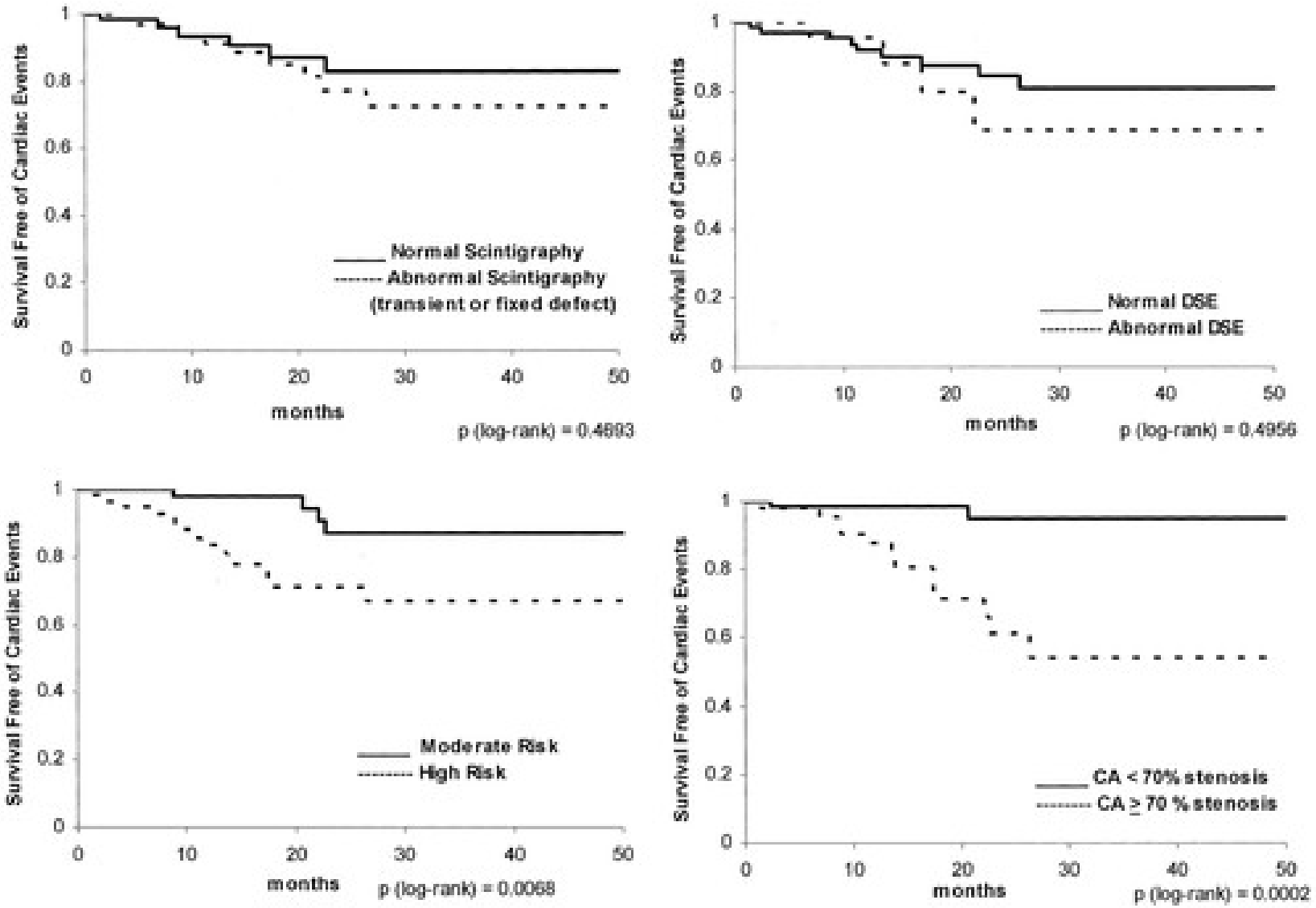
Authors, Year	Study Population	n	Stress Test	Endpoint	Endpoint Prevalence	Sensitivity	Specificity	PPV	NPV
Marwick et al[63]	100% KT candidates Mean age 49±11 y	45	Dipyridamole thallium SPECT	CAS ≥50% CAS ≥70%	0.42	0.37	0.73	0.50	0.61
	56% had diabetic nephropathy				0.31	0.29	0.68	0.29	0.68
Boudreau et al[64]	100% KT candidates 100% had diabetes mellitus	80	Dipyridamole thallium	QCAS ≥70%	0.53	0.86	0.79	0.82	0.83
Vandenberg et al[65]	100% KT candidates Mean age 37±9 y	41	Dipyridamole/adenosine thalium	CAS ≥50% CAS ≥75%	0.46	0.53	0.73	0.63	0.36
	100% had diabetes mellitus				0.39	0.63	0.76	0.63	0.24
		35	Exercise thallium	CAS ≥50%	0.46	0.44	0.63	0.50	0.57
				CAS ≥75%	0.40	0.50	0.67	0.50	0.67
Dahan et al[66]	HD for 6 mo, no overt CAD Mean age 54±11 y	60	Dipyridamole/exercise thallium SPECT	CAS ≥70%	0.22	0.92	0.89	0.71	0.98
	23% had diabetes mellitus								
Herzog et al[67]	100% KT candidates	50	DSE	QCAS ≥50%	0.54	0.52	0.74	0.70	0.57
	Mean age 51±11 y			QCAS ≥70%	0.24	0.75	0.71	0.45	0.90
	78% had diabetic nephropathy			CAS ≥75%	0.32	0.75	0.76	0.60	0.87
Worthley et al[68]	100% KT candidates Mean age 50±9 y	40	Exercise/pacing tetrofosmin nuclide imaging	CAS >70%	0.38	0.87	0.88	0.81	0.92
	78% had diabetes mellitus								
de Lima et al[56]	100% KT candidates	89	DSE	CAS ≥70%	0.38	0.44	0.87	0.53	0.60
		102	Dipyridamole SPECT	CAS ≥70%	0.23	0.35	0.76	0.72	0.68
Sharma et al[55]	100% KT candidates Mean age 52±12 y	125	DSE	CAS >70%	0.29	0.89	0.94	0.86	0.95
	39% had diabetes mellitus								
	55% were on dialysis								
Ferreira et al[69]	100% KT candidates Mean age 52±9 y 27% had diabetic nephropathy	148	Dobutamine/atropine echocardiography	CAS >50% CAS >70%		0.53 0.71	0.87 0.85		

Převzato z Circulation. 2012;126:617-663.



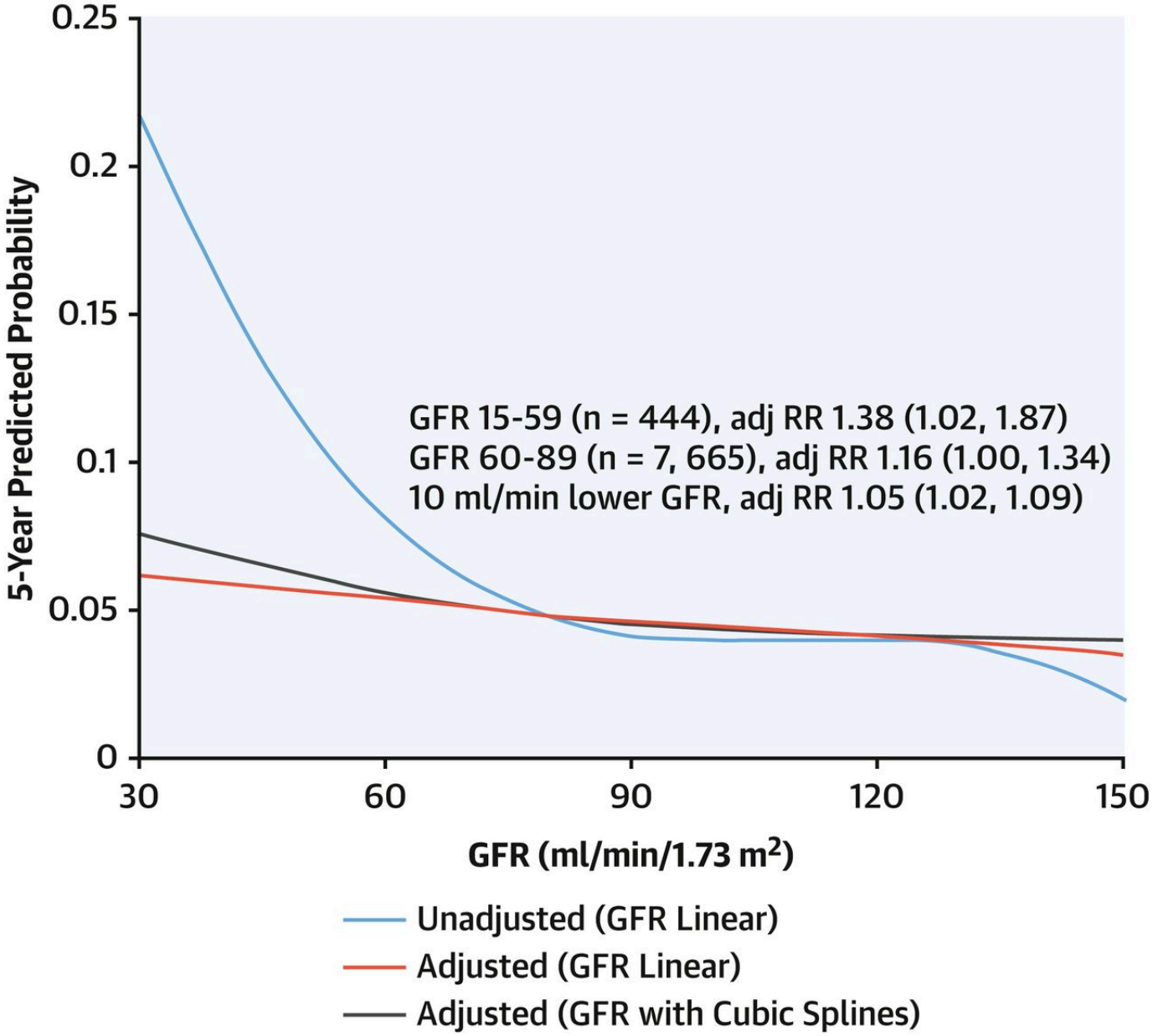
	Sensitivity	Specificity	PPV	NPV
CACS	67	77	44	89
Coronary CTA	93	63	41	97
SPECT	53	82	44	86
CACS/SPECT	33	97	77	84
Coronary CTA/SPECT	67	86	57	90

Převzato z JACC: Cardiovascular Imaging. 2015;5:8:553-62.



Jose Jayme G. De Lima. Hypertension. Coronary Angiography Is the Best Predictor of Events in Renal Transplant Candidates Compared With Noninvasive Testing, Volume: 42, Issue: 3, Pages: 263-268, DOI: (10.1161/01.HYP.0000087889.60760.87)

Převzato z N Engl J Med 2004; 351:2795-2804



Převzato z J Am Coll Cardiol 2019;74:1823-1838

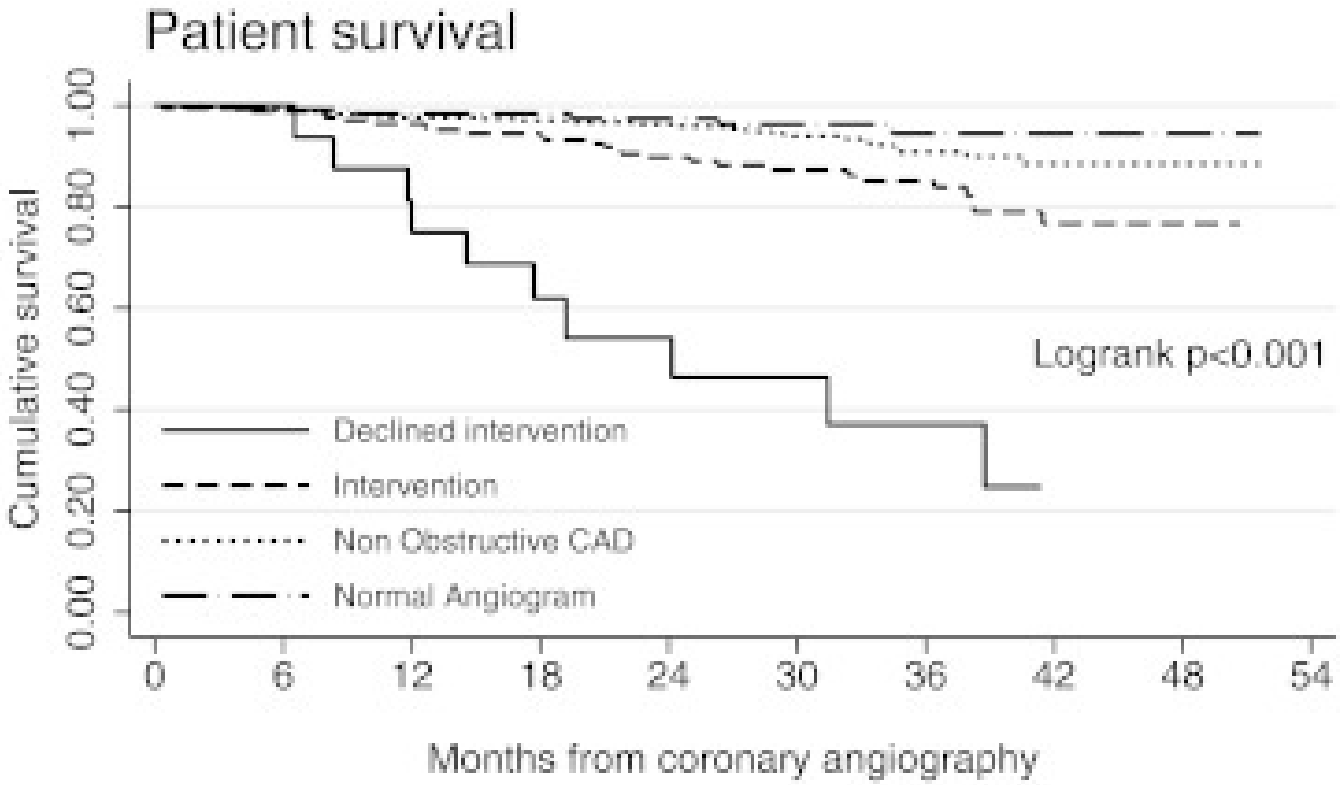
Table 2. Adjusted Hazard Ratio for Death from Any Cause, Cardiovascular Events, and Hospitalization among 1,120,295 Ambulatory Adults, According to the Estimated GFR.*

Estimated GFR	Death from Any Cause	Any Cardiovascular Event	Any Hospitalization
	adjusted hazard ratio (95 percent confidence interval)		
≥60 ml/min/1.73 m²†	1.00	1.00	1.00
45–59 ml/min/1.73 m²	1.2 (1.1–1.2)	1.4 (1.4–1.5)	1.1 (1.1–1.1)
30–44 ml/min/1.73 m²	1.8 (1.7–1.9)	2.0 (1.9–2.1)	1.5 (1.5–1.5)
15–29 ml/min/1.73 m²	3.2 (3.1–3.4)	2.8 (2.6–2.9)	2.1 (2.0–2.2)
<15 ml/min/1.73 m²	5.9 (5.4–6.5)	3.4 (3.1–3.8)	3.1 (3.0–3.3)

* The analyses were adjusted for age, sex, income, education, use or nonuse of dialysis, and the presence or absence of prior coronary heart disease, prior chronic heart failure, prior ischemic stroke or transient ischemic attack, prior peripheral arterial disease, diabetes mellitus, hypertension, dyslipidemia, cancer, a serum albumin level of 3.5 g per deciliter or less, dementia, cirrhosis or chronic liver disease, chronic lung disease, documented proteinuria, and prior hospitalizations.

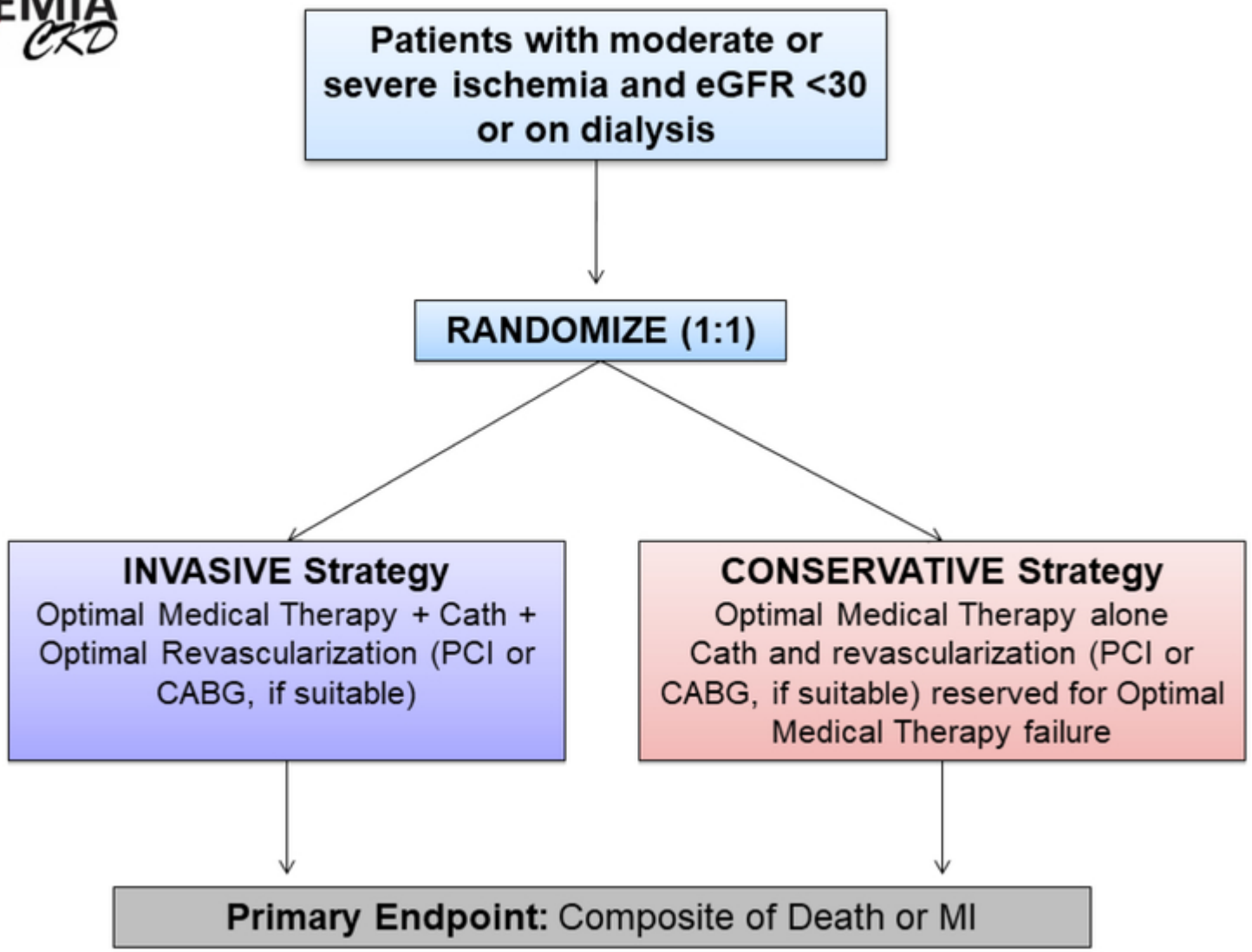
† This group served as the reference group.

Převzato z N Engl J Med 2004; 351:1296-1305



Number at risk										
Declined intervention	16	16	12	9	7	5	3	0	0	0
Intervention	168	166	156	143	127	89	67	30	6	0
Non Obstructive CAD	348	344	311	283	243	187	116	54	11	0
Normal Angiogram	125	124	114	105	96	65	47	32	7	0

Převzato z Clin J Am Soc Nephrol. 2011 Aug; 6(8): 1912–1919.



Převzato z Am Heart J. 2018 Nov; 205: 42–52.

Farmakoterapie
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Stratifikace rizika

Revaskularizace

Screeningová metoda

Podpůrná a konzervativní léčba

Nephrology Professional

Urine Good Hands