

The CONSERVE Trial: **C**oronary Computed Tomographic **A**ngiography for **S**elective Cardiac Catheterization **R**elation to Cardio**V**ascular Outcomes and **E**conomics

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On behalf of The CONSERVE Investigators

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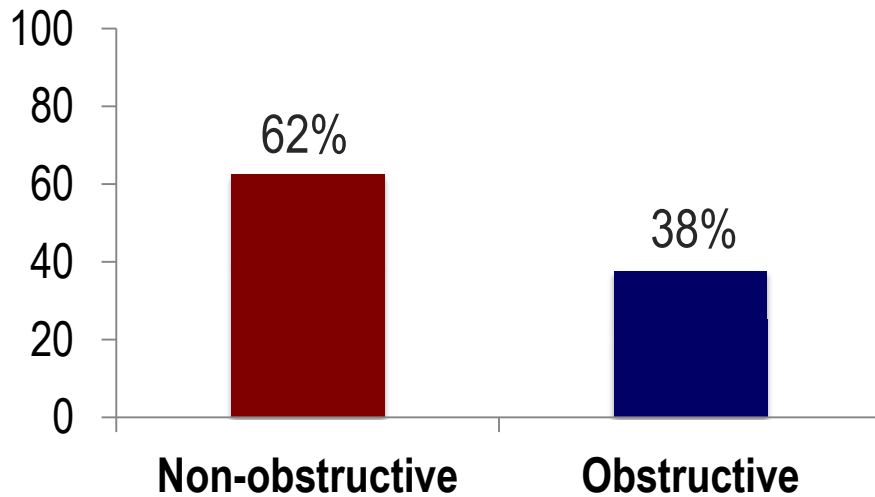
Declaration of Interest

- I have nothing to declare



Background

Nearly, 2/3 of patients undergoing invasive coronary angiography (ICA) have no actionable CAD.



Source: Patel et al. NEJM 2010;362:886-95.

Coronary CT angiography (CCTA) is a non-invasive test with high performance to exclude CAD.

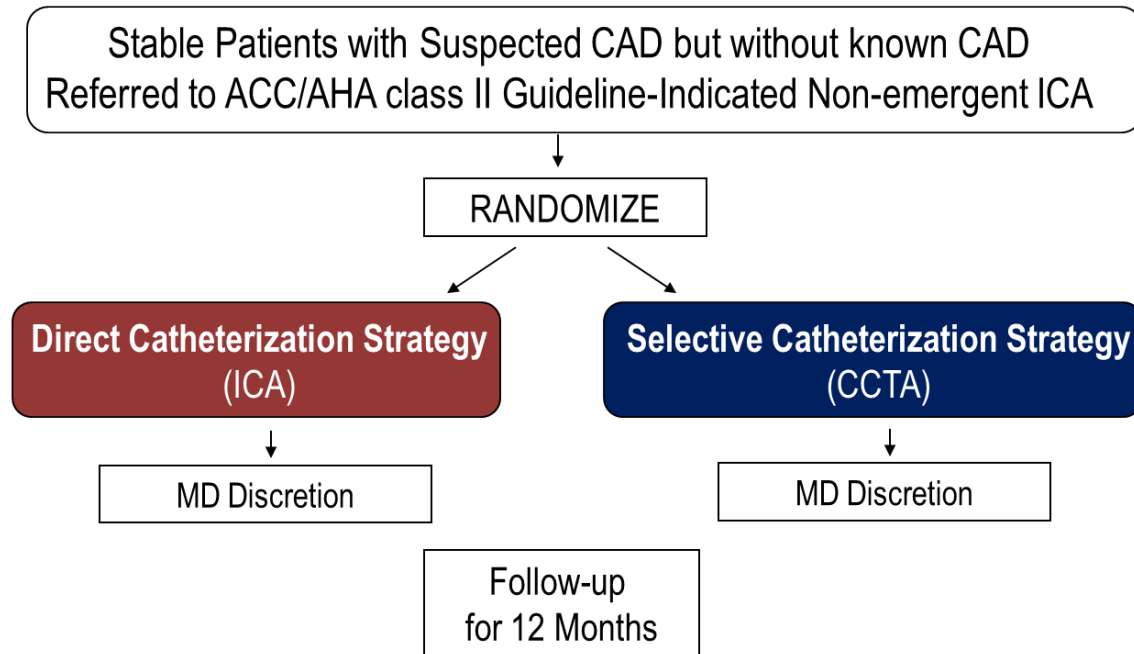


**For patients referred for ICA,
whether selective ICA informed by CCTA is effective is unknown.**

Purpose and key points about methods

To determine the clinical and economic outcomes of “selective catheterization,” as informed by CCTA, versus “direct catheterization” for stable patients referred for ICA.

Study Design



Primary Endpoint (Clinical)

MACE Rates

4.6%
(33/719)



Direct
ICA

4.6%
(36/784)



Selective
ICA

Hazards Ratio for MACE
(p=0.99)

	Overall (n=1,503)	Direct ICA (n=719)	Selective ICA (n=784)	P value
MACE	69 (4.6%)	33 (4.6%)	36 (4.6%)	1.00
Non-fatal MI	4 (0.3%)	2 (0.3%)	2 (0.3%)	1.00
Unstable angina	17 (1.1%)	8 (1.1%)	9 (1.1%)	1.00
Urgent / emergent revascularization	0 (0.0%)	0 (0.0%)	0 (0.0%)	-
CV hospitalization	64 (4.3%)	31 (4.3%)	33 (4.2%)	1.00
CV Death	3 (0.2%)	1 (0.1%)	2 (0.3%)	1.00
Stroke	4 (0.3%)	2 (0.3%)	2 (0.3%)	1.00

Secondary Endpoint (Economic)

Per-Patient Resource Utilization and Costs

Per-Patient	Direct ICA	Selective ICA	P value
ICA (Index + Downstream)	1.02	0.22	<0.001
	- 78% reduction		
Revascularization	0.17	0.10	<0.001
	-41% reduction		
Non-invasive testing (Index + Downstream)	0.15	1.17	<0.001
Non-invasive testing (Downstream)	0.15	0.17	0.27
CV hospitalizations	0.04	0.04	0.95
Outpatient visits	3.04	2.82	0.018
Cardiovascular Costs* (USD)	6,740	3,338	<0.001
	-50% reduction		

*Costs include all components of resource utilization during the trial period

Conclusions

- **Compared to Direct ICA, Selective ICA demonstrated:**
 - No differences in MACE
 - Lower rates of ICA and revascularization
 - Lower cardiovascular costs
- **For ACC / AHA guideline-indicated ICA, Selective ICA informed by CCTA was associated with no differences in outcomes while reducing ICA by nearly 80%**