

Table 4. Baseline Factors as Predictors of Treatment Outcomes

Baseline Factor	Treatment	Strength of Evidence	Studies (Participants), <i>n</i>		Conclusions
			Randomized Trials	Other Comparative Studies Cohort Studies	
Diagnostic tests	Revascularization	Weak	1 (106)	2 (354)	Captopril testing and renography (scintigraphy) did not predict outcomes after angioplasty (1 study); disagreement about whether elevated resistance index predicted outcomes after angioplasty (2 studies)
	Medical treatment	Weak		1 (45)	Nonspiral flow on magnetic resonance angiography predicted progression of kidney function worsening

Bilateral disease (versus unilateral disease)	Revascularization versus medical treatment	Weak	1 (55)	1 (106)	Greater blood pressure improvement and possibly better kidney function after angioplasty compared with medical treatment, in contrast to patients with unilateral disease
	Revascularization	Weak		7 (1999)	Disagreement about whether patients with bilateral disease had reduced a mortality rate or better kidney and blood pressure outcomes
	Medical treatment	Weak		2 (116)	No difference in kidney outcomes, but higher mortality rate with bilateral disease
Baseline kidney function	Revascularization vs. medical treatment	Weak		1 (52)	Among patients with elevated serum creatinine concentrations, surgical revascularization resulted in lower a mortality rate than did medical treatment alone

	Revascularization	Acceptable		2 (269)	12 (2246)	Poorer kidney function predicted a higher mortality rate, poorer clinical outcomes (including cardiovascular events), and poorer blood pressure control after angioplasty; studies disagreed about whether baseline kidney function predicted improvements in kidney function after angioplasty
	Medical treatment	Weak		1 (52)	1 (26)	Poorer kidney function predicted higher mortality and dialysis rates but not changes in blood pressure
Baseline percent stenosis	Revascularization	Weak	1 (55)	2 (185)	2 (471)	Disagreement about whether percent stenosis predicted blood pressure or kidney outcomes after angioplasty
	Medical treatment	Weak	1 (55)	1 (52)	1 (362)	Reduced survival, but no effect on blood pressure or kidney function

Baseline cardiovascular disease	Revascularization	Acceptable		2 (269)	5 (1454)	Patients with cardiovascular disease had increased mortality rates and worse kidney function after angioplasty
	Medical treatment	Weak		2 (269)	1 (362)	Disagreement about whether cardiovascular disease predicts death
Demographic characteristics	Revascularization	Weak	1 (55)	3 (348)	2 (561)	Disagreement about whether outcomes differed by sex or age of patients
	Medical treatment	Weak	1 (55)	3 (348)	1 (362)	Disagreement about whether outcomes differed by sex or age of patients
Stent placement	Revascularization	Weak			2 (269)	No difference in blood pressure and kidney outcomes between patients who had stents placed and those who did not