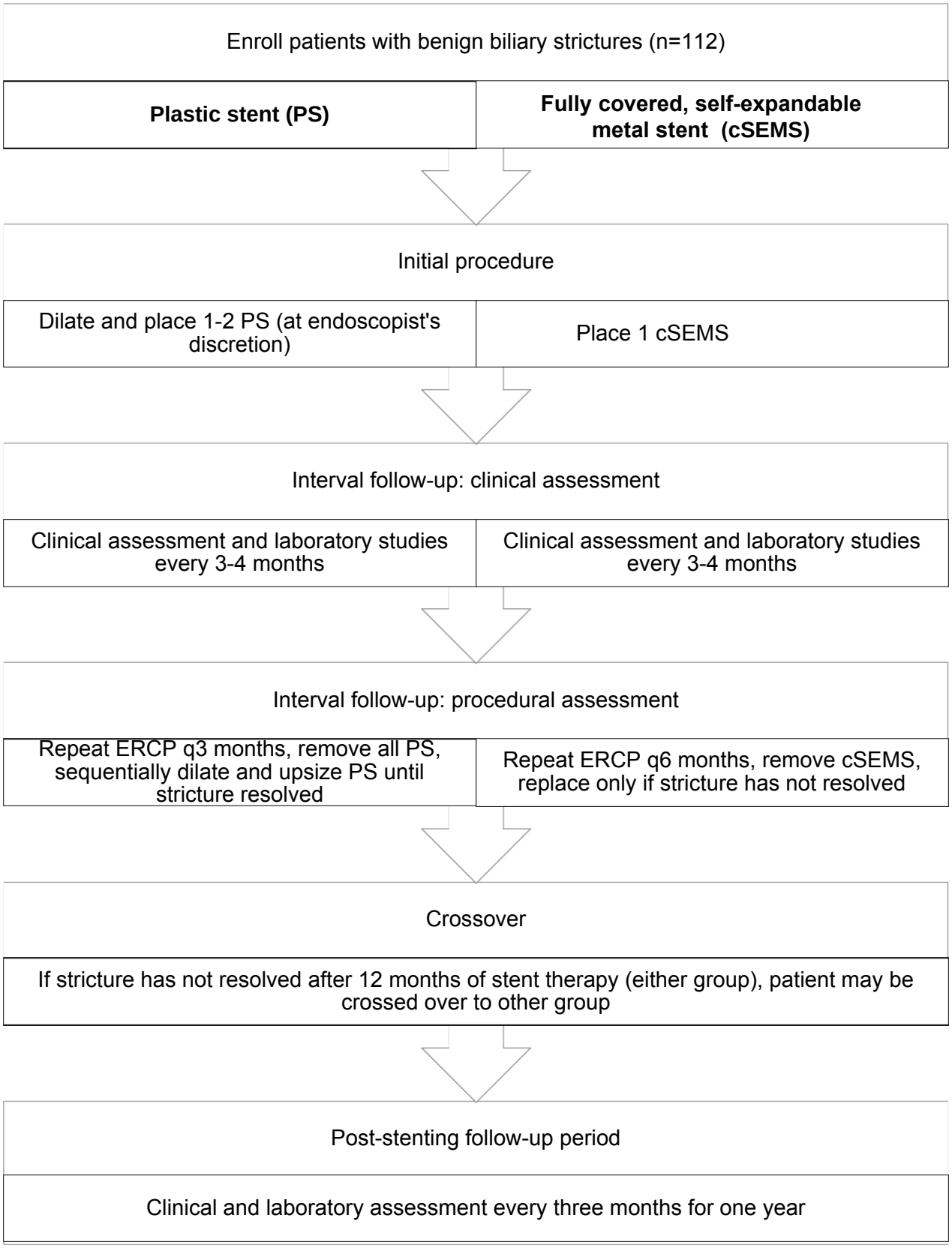
Supplementary Online Content

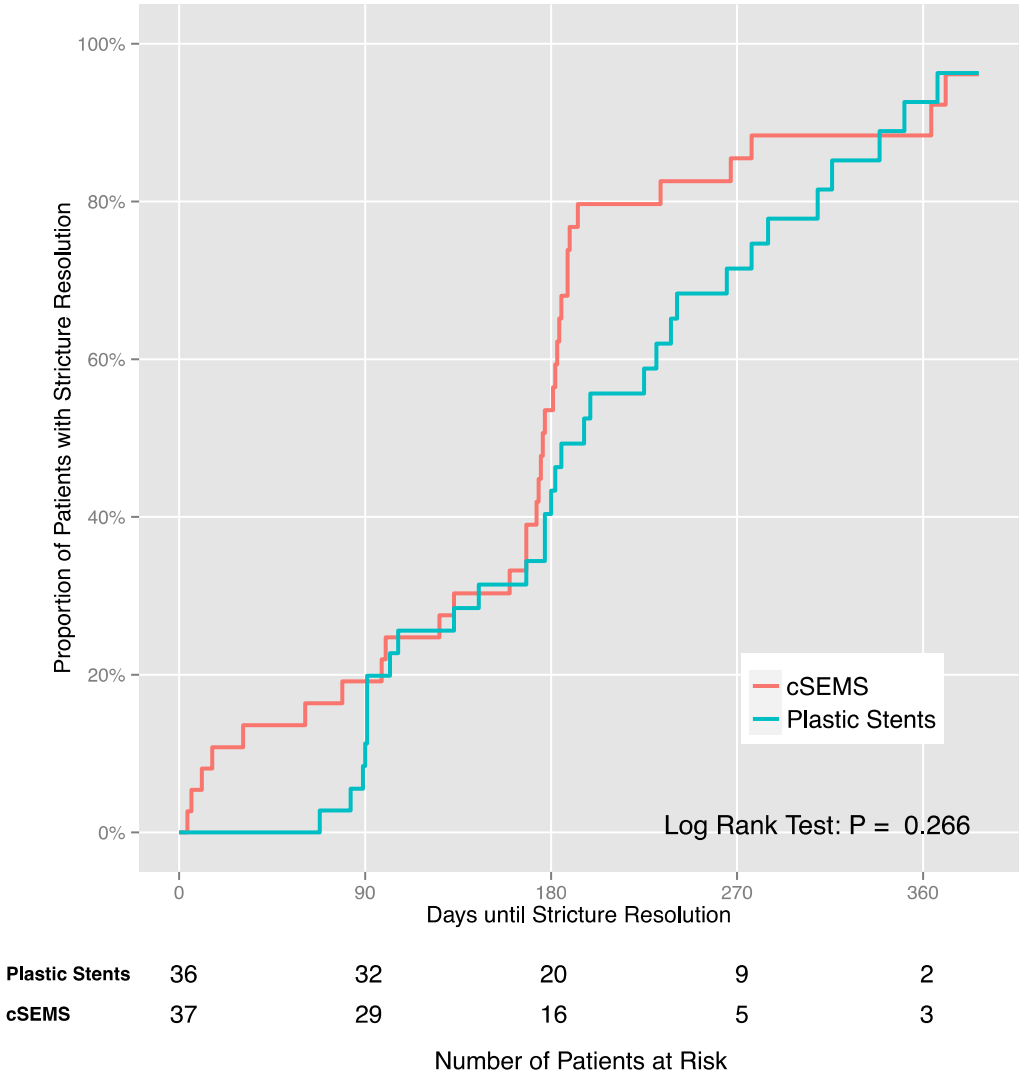
Coté GA, Slivka A, Tarnasky P, et al. Effect of covered metallic stents compared with plastic stents on benign biliary stricture resolution: a randomized clinical trial. *JAMA*. doi:10.1001/jama.2016.2619.

This supplementary material has been provided by the authors to give readers additional information about their work.

eFigure 1. Study procedures



eFigure 2. Stricture resolution for OLT patients (n=73)

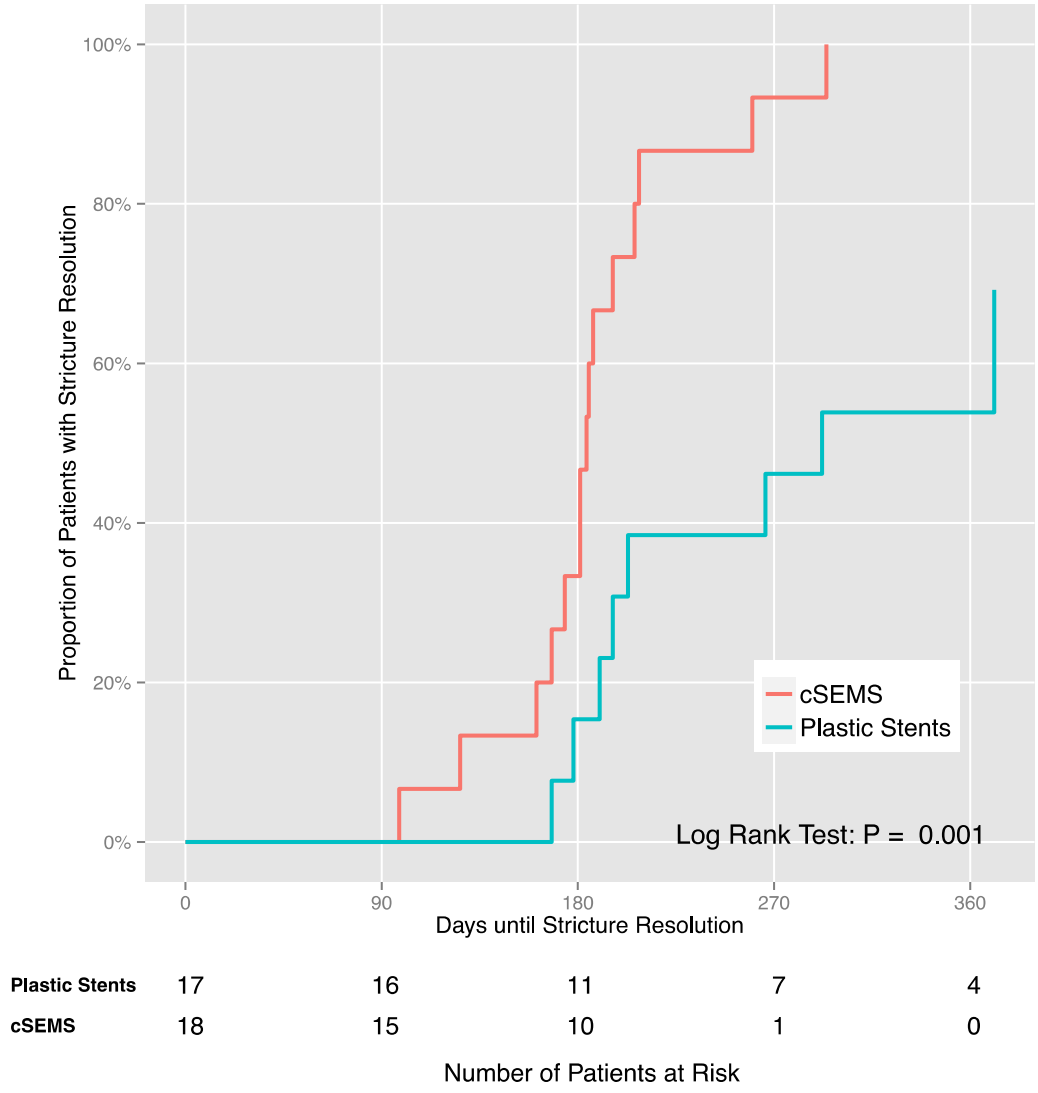


Process outcomes among patients who achieve stricture resolution									
		N	Mean	SD	Median	IQR	Min	Max	P value
Number of ERCPs	cSEMS	33	2.21	0.48	2	0	2	4	<0.0001
	Multiple plastic stents	31	3.13	0.88	3	2	2	5	
Number of days to resolution	cSEMS	33	158.2	89.7	175	88	4	371	0.1583
	Multiple plastic stents	31	193.5	88.7	182	163	68	367	

OLT = orthotopic liver transplant; cSEMS = fully covered, self expandable metallic stent

This Kaplan-Meier curve illustrates the time to stricture resolution for patients with post-liver transplant strictures.

eFigure 3. Stricture resolution for chronic pancreatitis patients (n=35)



Process outcomes among patients who achieve stricture resolution									
		N	Mean	SD	Median	IQR	Min	Max	P value
Number of ERCPs	cSEMS	15	2	0	2	0	2	2	<0.0001
	Multiple plastic stents	8	3.5	0.76	3	1	3	5	
Number of days to resolution	cSEMS	15	187.3	46.7	184	38	98	294	0.1461
	Multiple plastic stents	8	233	70.7	199.5	95	168	371	

This Kaplan-Meier curve illustrates the time to stricture resolution for patients with bile duct strictures secondary to chronic pancreatitis.

eTable 1. Enrollment criteria

Inclusion criteria
• Bismuth Type I benign bile duct stricture (see below)
• Objective signs/symptoms related to the stricture
Exclusion criteria
• Suspected malignant etiology for the stricture
• Prior endotherapy within one year of presentation except in the following two scenarios: o Early (< 30 days) stent placement following liver transplant o In patients with chronic pancreatitis, single plastic stent placed during presenting ERCP while evaluating for malignancy
• Bismuth Type II-IV stricture
• Proximal common hepatic duct diameter < 6 mm
• Intact gallbladder o Except in cases where a stent can be deployed > 1cm below the cystic duct insertion
• Age < 18 years, pregnancy, incarceration, inability to provide informed consent
• Karnofsky performance status ≤ 40
• Inability to pass a guidewire proximal to the stricture
• Stricture > 8cm in length
• Life expectancy < 1 year
• Concomitant nonanastomotic biliary strictures (e.g., biliary cast syndrome)

A Bismuth type I bile duct stricture was defined as a common bile duct or common hepatic duct stricture whose proximal margin was ≥ 2 cm from the hepatic confluence.

eTable 2. Other adverse events

Adverse event (AE)	PS (n=55)						cSEMS (n=57)					
	Total events	Patients with event	Severe events	Patients with severe event	Related AE	Patients with related AE	Total events	Patients with event	Severe events	Patients with severe event	Related AE	Patients with related AE
Cardiopulmonary	1	1	0	0	0	0	1	1	0	0	0	0
Anorexia	0	0	0	0	0	0	3	2	2	1	0	0
Cirrhosis or End Stage Liver Disease	1	1	1	1	0	0	1	1	1	1	0	0
Nausea	0	0	0	0	0	0	1	1	0	0	1	1
Neck Swelling	1	1	0	0	0	0	0	0	0	0	0	0
Pleural Effusion	1	1	1	1	0	0	0	0	0	0	0	0
Portal Vein Thrombosis	0	0	0	0	0	0	1	1	1	1	0	0
Pruritus	0	0	0	0	0	0	1	1	0	0	0	0
Pseudoaneurysm	0	0	0	0	0	0	1	1	1	1	0	0
Stroke	1	1	1	1	0	0	0	0	0	0	0	0
Development of unrelated cancer	1	1	1	1	0	0	0	0	0	0	0	0
Urosepsis	1	1	1	1	0	0	0	0	0	0	0	0