## **Supplementary Online Content**

Fanaroff AC, Peterson ED, Kaltenbach LA, et al. Agreement and accuracy of medication persistence identified by patient self-report vs pharmacy fill: a secondary analysis of the cluster randomized ARTEMIS trial. *JAMA Cardiol*. Published online March 4, 2020. doi:10.1001/jamacardio.2020.0125

eTable 1. Baseline Characteristics of the Population With and Without a Prescription Fill in the

Symphony Health Database

eTable 2. Baseline Patient Characteristics

eTable 3. Twelve-Month Kaplan-Meier Event Rates by Patient Reported and Pharmacy Fill

Persistence

eFigure 1. Agreement Between Patient Report and Pharmacy Fill

eFigure 2. Agreement Between Patient Report, Pharmacy Fill, and Voucher Use in Intervention

Arm Patients Who Used the Voucher at Least Once

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

	Pharmacy-linked study population (n = 8.373)	No pharmacy linkage (n = 1.729)
Demographics		
Median Age	62 (54, 70)	62 (54, 70)
Male sex	5,664 (67.7)	1,211 (70.0)
Non-white race	990 (11.8)	201 (11.6)
Medical History		
Prior MI	1,713 (20.5)	347 (20.1)
Diabetes	2,734 (32.7)	551 (31.9)
Hypertension	5,763 (68.8)	1,215 (70.3)
Previously missed medication		
Never	4,228 (50.5)	892 (51.6)
1-3 times per month	3,032 (36.2)	609 (35.2)
Once per week or more	824 (9.8)	164 (9.5)
Index hospitalization		
STEMI	3,847 (46.0)	791 (45.7)
PCI performed	7,467 (89.2)	1,536 (88.8)

**eTable 1.** Baseline Characteristics of the Population With and Without a Prescription Fill in the Symphony Health Database

## eTable 2. Baseline Patient Characteristics

	Measurement Cohorts						
	Overall $(n = 10.102)$	Pharmacy-linked $(n = 8.373)$	Voucher Use (n=3.705)	Phlebotomy (n = 944)			
Demographics	(	(	(				
Median Age	62 (54, 70)	62 (54, 70)	61 (53, 69)	64 (55, 71)			
Male sex	6,875 (68.1)	5,664 (67.7)	2604 (70.3)	646 (68.4)			
Non-white race	1,191 (11.8)	990 (11.8)	325 (8.8)	79 (8.4)			
Medical History							
Prior MI	2,060 (20.4)	1713 (20.5)	663 (17.9)	195 (20.7)			
Prior PCI	2,562 (25.4)	2,123 (25.4)	811 (21.9)	244 (25.9)			
Prior CABG	1,128 (11.2)	925 (11.1)	335 (9.0)	120 (12.7)			
Prior stroke or TIA	680 (6.7)	550 (6.6)	183 (4.9)	45 (4.8)			
Peripheral arterial disease	634 (6.3)	519 (6.2)	167 (4.5)	66 (7.0)			
Prior HF	784 (7.8)	649 (7.8)	200 (5.4)	66 (7.0)			
Diabetes	3,285 (32.5)	2,734 (32.7)	1073 (29.0)	312 (33.1)			
Hypertension	6,978 (69.1)	5,763 (68.8)	2398 (64.7)	671 (71.1)			
Depression	1,166 (11.5)	961 (11.5)	391 (10.6)	116 (12.3)			
Previously missed medication							
Never	5,120 (50.7)	4,228 (50.5)	1955 (52.8)	467 (49.5)			
1-3 times per month	3,641 (36.0)	3,032 (36.2)	1278 (34.5)	358 (37.9)			
Once per week or more	988 (9.8)	824 (9.8)	310 (8.4)	88 (9.3)			
Index hospitalization							
STEMI	4,638 (45.9)	3,847 (46.0)	1779 (48.0)	457 (48.4)			
Multivessel CAD	4,687 (46.4)	3,868 (46.2)	1718 (46.4)	414 (43.9)			
PCI performed	9,003 (89.1)	7,467 (89.2)	3430 (92.6)	855 (90.6)			
CABG	154 (1.5)	125 (1.5)	40 (1.1)	17 (1.8)			
Median Length of stay	2 (2, 3)	2 (2, 3)	2 (2, 3)	2 (2, 3)			

	Concordantly persistent (n = 4185)		Concordantly non-persistent (n = 1131)		Discordant: Patient report persistent, pharmacy fill non-persistent (n = 2911)		Discordant: Patient report non- persistent, pharmacy fill persistent (n = 146)	
	N	KM rate	N	KM rate	N	KM rate	N	KM rate
	events	(95% CI)	events	(95% CI)	events	(95% CI)	events	(95% CI)
MACE	338	8.2	200	18.3	283	9.7	21	14.6
		(7.4-9.0)		(16.0-20.6)		(8.7-10.8)		(8.8-20.3)
All-cause death	137	3.3	87	7.7	62	2.1	10	6.9
		(2.7-3.8)		(6.1-9.3)		(1.6-2.7)		(2.8-11.0)
Myocardial infarction	230	5.6	128	11.8	216	7.5	13	9.3
		(4.9-6.3)		(9.9-13.8)		(6.5-8.4)		(4.5-14.2)
Stroke	23	0.6	18	1.7	27	0.9	1	0.7
		(0.3-0.8)		(0.9-2.5)		(0.6-1.3)		(0-2.1)



eFigure 1: Agreement Between Patient Report and Pharmacy Fill

In 8,373 patients, persistence could be measured by both self-report and pharmacy fill data. Among these patients, 63.5% were either persistent or non-persistent by both metrics and the remaining 36.5% were discordant.

## eFigure 2. Agreement Between Patient Report, Pharmacy Fill, and Voucher Use in Intervention

Arm Patients Who Used the Voucher at Least Once



Persistence data from voucher use combined with pharmacy fill was used as a nominal gold standard in intervention arm patients who used a copayment assistance voucher at least once. Overall, persistence by voucher use combined with pharmacy fill and voucher use was 68.0%. Panel A shows persistence as measured by self-report compared with combined voucher use and pharmacy fill data; 26.9% of patients self-reporting persistence were non-persistent by both voucher use and pharmacy fill data; 24.1% of patients self-reporting non-persistence as measured by pharmacy fill data. Panel B shows persistence as measured by pharmacy fill data; 20.3% of patients classified as non-persistent by pharmacy fill data were persistent by voucher use data.