Supplementary Online Content

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eTable 1: ICD-9 and ICD-10 Codes Used to Identify ASCVD

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

eTable 1: ICD-9 and ICD-10 Codes Used to Identify ASCVD

Coronary Artery Disease	Prior myocardial infarction Acute or chronic ischemic heart disease Stable coronary artery disease Ischemic cardiomyopathy Unstable angina	410-414, 429.2, I20-I25
Peripheral Arterial Disease	Claudication, Peripheral Atherosclerosis	440.2, 440.3, 440.4, 440/8, 440.9, I70.2, I70.3, I70.4, I70.5, I70.7
Cerebrovascular Disease	Stroke, TIA, Precerebral Atherosclerosis, Other Cerebrovascular Disease	433, 434, 435, 436, I63, I65, I66, I67
Other Atherosclerotic Disease	Other Atherosclerosis Atheroembolism Abdominal Aortic Aneurysm	440*, 440.1, 441.3, 441.4, 443.9, I70.0, I70.1, I70.8, I70.90, I70.91, I71.3, I71.4

eTable 2: Characteristics of Patients Prescribed PCSK9i in the Overall, Clinical, and Lab Subsample

	Overall Sample N=45,029	Sample w/ clinical characteristics N=17,851	Sample w/ lab characteristics N=5,383
Age			
<45 years	1702 (3.8%)	545 (3.1%)	168 (3.1%)
45-54 years	5239 (11.6%)	1877 (10.5%)	594 (11.0%)
55-64 years	12591 (28.0%)	4736 (26.5%)	1457 (27.1%)
65-74 years	16660 (37.0%)	6905 (38.7%)	2021 (37.5%)
75+ years	8837 (19.6%)	3788 (21.2%)	1143 (21.2%)
Sex (% Female)	23065 (51.2%)	9328 (52.3%)	2749 (51.1%)
Clinical	N/a		
Prior ASCVD	N/a	12186 (68.3%)	3662 (68.0%)
CAD	N/a	10869 (60.9%)	3294 (61.2%)
PAD	N/a	3262 (18.3%)	891 (16.6%)
CVD	N/a	4235 (23.7%)	1196 (22.2%)
Pharmacy			
Retail	35234 (78.2%)	14127 (79.1%)	4266 (79.2%)
Institutional	239 (0.5%)	73 (0.4%)	21 (0.4%)
Mail Order	255 (0.6%)	118 (0.7%)	38 (0.7%)
Specialty	9300 (20.7%)	3533 (19.8%)	1058 (19.7%)
Provider			
Cardiology	21767 (48.3%)	9318 (52.2%)	3225 (59.9%)
General practice	16593 (36.8%)	6029 (33.8%)	1505 (28.0%)
Endocrinology	2234 (5.0%)	884 (5.0%)	211 (3.9%)
Other	4435 (9.8%)	1620 (9.1%)	442 (8.2%)

Payor			
Commercial only	17999 (40.0%)	6547 (36.7%)	2068 (38.4%)
Government only	23652 (52.5%)	9977 (55.9%)	2888 (53.7%)
Commercial + government	2043 (4.5%)	894 (5.0%)	286 (5.3%)
		433 (2.4%)	141 (2.6%)
Statin Use			
High intensity statin	N/a	2071 (11.6%)	653 (12.1%)
Moderate-Low intensity statin	N/a	2053 (11.5%)	589 (10.9%)
No Statin	N/a	13727 (76.9%)	4141 (76.9%)
EZE Use	N/a		
Yes	N/a	1874 (10.5%)	640 (11.9%)
No	N/a	15977 (89.5%)	4743 (88.1%)
Other LLT	N/a		
Yes	N/a	2072 (11.6%)	581 (10.8%)
No	N/a	15779 (88.4%)	4802 (89.2%)
LAB: last LDL			
<70	N/a	N/a	548 (10.2%)
70-99	N/a	N/a	726 (13.5%)
100-129	N/a	N/a	1031 (19.2%)
130-159	N/a	N/a	1246 (23.1%)
160-189	N/a	N/a	941 (17.5%)
>=190	N/a	N/a	891 (16.6%)

eTable 3: Factors associated with approval in multivariable analysis, Overall Sample, Clinical, and Lab Subsample

	Overall Sample N=45,029	Clinical Subsample N=17,851	Lab Subsample N=5,383
Model Variable	OR (95% CI)	OR (95% CI)	OR (95% CI)
Age (Ref: <45)			
45-54	1.26 (1.11 - 1.43)	1.26 (1.01 - 1.59)	1.31 (0.87 - 1.98)
55-64	1.33 (1.18 - 1.5)	1.39 (1.13 - 1.73)	1.48 (1 - 2.19)
65-74	1.83 (1.62 - 2.06)	1.89 (1.52 - 2.34)	1.90 (1.28 - 2.82)
75+	1.84 (1.62 - 2.08)	1.93 (1.55 - 2.41)	1.79 (1.19 - 2.69)
Female v. Male	0.87 (0.83 - 0.91)	0.91 (0.85 - 0.97)	0.95 (0.84 - 1.08)
Pharmacy			
Specialty vs. Retail	1.76 (1.66 - 1.86)	1.80 (1.64 - 1.98)	1.96 (1.66 - 2.33)
Mail Order	9.28 (6.47-13.3)	1.92 (1.17 - 3.13)	6.43 (2.67 - 15.50)
Institutional	1.35 (1.03-1.77)	6.69 (4.06 - 11.00)	4.98 (1.83 - 13.60)
Specialty (Ref: General)			
Cardiologist	1.49 (1.42 - 1.56)	1.41 (1.32 - 1.52)	1.42 (1.24 - 1.63)
Endocrinologist	1.24 (1.13 - 1.37)	1.23 (1.05 - 1.43)	1.03 (0.75 - 1.42)
Other	1.21 (1.13 - 1.30)	1.27 (1.12 - 1.43)	1.37 (1.08 - 1.73)
Payor (Ref: Commercial)			
Government	2.85 (2.7 - 3.0)	3.1 (2.85 - 3.38)	3.27 (2.79 - 3.83)
Gov + Commercial	2.9 (2.62 - 3.22)	2.79 (2.37 - 3.27)	2.6 (1.95 - 3.46)

PBM (Ref: None of top 10)			
PBM 1	2.09 (1.90 - 2.30)	2.09 (1.78 - 2.45)	2.32 (1.73 - 3.13)
PBM 2	0.99 (0.81 - 1.21)	1.23 (0.91 - 1.66)	1.15 (0.67 - 1.98)
PBM 3	0.74 (0.65 - 0.84)	0.71 (0.58 - 0.86)	0.95 (0.66 - 1.37)
PBM 4	0.81 (0.76 - 0.88)	0.88 (0.78 - 0.99)	0.75 (0.6 - 0.93)
PBM 5	0.82 (0.77 - 0.89)	0.83 (0.74 - 0.93)	0.76 (0.61 - 0.94)
PBM 6	1.26 (1.16 - 1.37)	1.24 (1.09 - 1.41)	1.19 (0.94 - 1.5)
PBM 7	1.26 (1.10 - 1.45)	1.48 (1.19 - 1.83)	1.32 (0.92 - 1.92)
PBM 8	0.82 (0.76 - 0.88)	0.78 (0.7 - 0.88)	0.77 (0.62 - 0.95)
PBM 9	1.10 (1.00 - 1.21)	1.19 (1.02 - 1.39)	1.22 (0.92 - 1.62)
PBM 10	0.44 (0.36 - 0.54)	0.50 (0.37 - 0.67)	0.54 (0.32 - 0.9)
Indication			
Prior ASCVD v. Primary		1.19 (1.11 - 1.28)	1.18 (1.04 - 1.35)
Medication			
High Intensity Statin v. No Statin		1.07 (0.96 - 1.18)	1.03 (0.85 - 1.24)
Low/Moderate Statin v. No Statin		1.02 (0.92 - 1.13)	1.14 (0.94 - 1.38)
Ezetimibe v. No		1.22 (1.1 - 1.36)	1.29 (1.07 - 1.56)
Other LLT vs. No		1.14 (1.03 - 1.26)	1.22 (1.01 - 1.48)
Last LDL-C (Ref: <70 mg/dL)			
70-99			0.93 (0.73 - 1.19)
100-129			0.94 (0.74 - 1.18)
130-159			0.92 (0.73 - 1.15)
160-189			0.89 (0.7 - 1.12)

190+			0.9 (0.71 - 1.15)

eFigure: Duration from Initial Prescription Submission and Time to Approval

Histogram of the amount of time between the pharmacy first attempting to fill the prescription and when the patient is approved for therapy.