

Supplemental table I.

Diagnosis	Code type	Values
Exposure		
Cannabis use disorder	ICD-9	'30430' '30431' '30432' '30433' '30520' '30521' '30522' '30523'
Cannabis use disorder (excluding cannabis abuse disorder in remission)	ICD-9	30430' '30431' '30432' '30520' '30521' '30522'
Covariates		
Disorders of lipid metabolism	CCS	'53'
Hypertension	CCS	'98' '99'
Diabetes	CCS	'49' '50'
History of coronary artery disease	CCS	'101'
History of cerebrovascular disease	CCS	'113'
Conduction abnormalities	CCS	'105'
	ICD-9	'4270 ' '4271 ' '4272 ' '42760' '42761' '42769' '42781' '42789' '4279 ' '7850 ' '7851'

Chronic Kidney Disease	CCS	'158'
COPD	CCS	'127'
Congestive heart failure	CCS	'108'
Liver disease	CCS	'151' '16' '6'
Alcohol-related disorders	CCS	'660'
Malignancy non-skin cancer	CCS	'11' '12' '13' '14' '15' '16' '17' '18' '19' '20' '21' '24' '25' '26' '27' '28' '29' '30' '31' '32' '33' '34' '35' '36' '41' '43' '44'
Hematologic malignancy	CCS	'37' '38' '39' '40' '41'
Metastatic cancer	CCS	'42'
Rheumatoid arthritis	CCS	'202'
Inflammatory bowel disease	CCS	'144'
Schizophrenia	CCS	'659'
Personality disorders	CCS	'658'
Mood disorders	CCS	'657'
Substance use disorder (excluding cannabis / stimulant/ amphetamines)	ICD-9	'2920 ' '29211' '29212' '2922 ' '29281' '29282'

		'29283' '29284' '29285' '29289' '2929 ' '30400' '30401' '30402' '30403' '30410' '30411' '30412' '30413' '30450' '30451' '30452' '30453' '30460' '30461' '30462' '30463' '30470' '30471' '30472' '30473' '30480' '30481' '30482' '30483' '30490' '30491' '30492' '30493' '30530' '30531' '30532' '30533' '30540' '30541' '30542' '30543' '30550' '30551' '30552' '30553' '30580' '30581' '30582' '30583' '30590' '30591' '30592' '30593' '64830' '64831' '64832' '64833' '64834' '96500' '96501' '96502' '96509' 'V6542'
Amphetamine or cocaine use disorder	ICD-9	'30420' '30421' '30422' '30423' '30440' '30441' '30442' '30443' '30560' '30561' '30562' '30563' '30570' '30571' '30572' '30573'
Smoking	ICD-9	'V1582' '3051 '

Chronic pain syndromes	ICD-9	'3380 ' '33821' '33822' '33828' '33829' '3384 '
Obesity	ICD-9	'27800' '27801' '27802' '27803'
Atrial fibrillation	ICD-9	'42731' '42732'
Outcomes		
Acute limb ischemia ^T	ICD-9*	'4440 ' 44401' 44409' '44422' '44481'
<i>Critical limb ischemia definitions</i>		
Critical limb ischemia	ICD-9	'44022' '44023' '44024'
OR		
Code for tissue loss	ICD-9	'7854 ' '70710' '70712' '70713' '70714' '70715' '70719' '73006' '73007' '73016' '73017' '6826 ' '6827 ' '68110'
AND lower extremity atherosclerosis	ICD-9*	'44020' '44021' '44029' '4400 ' '44030' '44031' '44032' '4404' '4408 ' '4409 ' '24970' '24971' '25070' '25071' '25072' '25073' '44381' '4431 '
Critical limb ischemia restricted definition	ICD-9*	'44022' '44023' '44024'
OR		

Code for tissue loss	ICD-9	'7854 ' '70710' '70712' '70713' '70714' '70715' '70719' '73006' '73007' '73016' '73017' '6826 ' '6827 ' '68110'
AND lower extremity atherosclerosis	ICD-9*	'44020' '44021' '44029' '4400 ' '44030' '44031' '44032' '4404' '4408 ' '4409 ' '24970' '24971' '25070' '25071' '25072' '25073' '44381' '4431 '
Critical limb ischemia urgent cases ^T	ICD-9	'44022' '44023' '44024'
OR		
Code for tissue loss	ICD-9	'7854 ' '70710' '70712' '70713' '70714' '70715' '70719' '73006' '73007' '73016' '73017' '6826 ' '6827 ' '68110'
AND lower extremity atherosclerosis	ICD-9*	'44020' '44021' '44029' '4400 ' '44030' '44031' '44032' '4404' '4408 ' '4409 ' '24970' '24971' '25070' '25071' '25072' '25073' '44381' '4431 '

Acute mesenteric ischemia	ICD-9	'5570 '
<i>Chronic mesenteric ischemia definitions</i>		
Chronic mesenteric ischemia	ICD-9	'5571 '
Chronic mesenteric ischemia restricted definition	ICD-9*	'5571 '
Chronic mesenteric ischemia urgent cases ^T	ICD-9	'5571 '
Peripheral arterial disease	ICD-9	'44022' '44023' '44024' '44020' '44021' '44029' '4400 ' '44030' '44031' '44032' '4404' '4408 ' '4409 ' '24970' '24971' '25070' '25071' '25072' '25073' '44381' '4431 '
Acute MI	ICD-9	
Aneurysm of artery supplying the lower extremity		'4423' '4422' '44289' '4429'
Trauma/External Cause of Injury	CCS	'2601' '2602' '2603' '2604' '2605' '2606' '2607' '2608' '2609' '2610' '2611' '2612' '2613' '2614' '2615' '2618' '2619' '2620'
Procedures		
'Foot amputation	ICD-9	'8413' '8414' '8411' '8412'
Below or through knee amputation	ICD-9	'8415' '8416'

Above knee amputation	ICD-9	'8417'
Total amputation	ICD-9	'8413' '8414' '8411' '8412' '8415' '8416' '8417' '8410 '
Open revascularization	ICD-9	'3929' '3818' '3838' '3848' '3868' '3814' '3816' '3834' '3836' '3844' '3846' '3925' '3926' '3864' '3866' '3808' '3806' '3804' '3956' '3957' '3958' '3800'
Endovascular revascularization	ICD-9	'3950' '3990' '0055' '1756' '3979'

Values used to identify exposures, outcomes and covariates. Either the diagnostic codes were queried by ICD-9 code, the clinical classification software codes, defined by AHRQ.

*Code had to be the primary diagnosis

^THad to appear in combination with an identifier for urgent admission

	CAD and CVA Excluded from model				CUD definition excluded those with CUD in remission			
	Cannabis Use Disorder (%)	No Cannabis Use Disorder (%)	Adjusted Odds Ratio (95% CI)	P-Value	Cannabis Use Disorder	No Cannabis Use Disorder (%)	Adjusted Odds Ratio (95% CI)	P-Value

	(n=824 861)	(n=1 610 500)	(Cannabis Use Disorder vs. No Cannabis Use Disorder		(%) (n= 795 990)	(n= 1 515 389)	(Cannabis Use Disorder vs. No Cannabis Use Disorder	
Acute limb Ischemia	292 (0.04)	450 (0.03)	1.29 (1.11-1.49)	0.0008	279 (0.04)	423 (0.03)	1.28 (1.10-1.49)	0.0014
Critical limb Ischemia	1 109 (0.14)	2 748 (0.17)	0.87 (0.81-0.93)	<0.0001	1 109 (0.14)	2 518 (0.17)	0.87 (0.81-0.93)	<0.0001
Critical limb ischemia restricted diagnosis	788 (0.10)	1 931 (0.12)	0.82 (0.76-0.89)	<0.0001	738 (0.09)	1 759 (0.12)	0.83 (0.76-0.90)	<0.0001
Critical limb ischemia urgent cases	908 (0.11)	1 906 (0.12)	0.95 (0.88-1.03)	0.1958	846 (0.11)	1 753 (0.12)	0.94 (0.87-1.02)	0.1559
Acute Mesenteric Ischemia	147 (0.02)	324 (.02)	0.90 (0.74-1.10)	0.2944	145 (0.02)	303 (0.02)	0.92 (0.76-1.13)	0.4248
Chronic Mesenteric Ischemia	283 (0.03)	377 (0.02)	1.51 (1.30-1.76)	<0.0001	274 (0.03)	350 (0.02)	1.53 (1.31-1.80)	<0.0001
Chronic Mesenteric Ischemia : Restricted	81 (.01)	130 (0.01)	1.24 (0.94-1.64)	0.1266	78 (0.01)	115 (0.01)	1.31 (0.98-1.75)	0.0652
Chronic mesenteric ischemia urgent cases	258 (0.03)	331 (.02)	1.57 (1.33-1.85)	<0.0001	249 (0.03)	305 (0.02)	1.60 (1.35-1.89)	<0.0001

Supplemental Table II. Sensitivity analysis performed in a propensity matched cohort by excluding 1) history of coronary artery disease or stroke from the model or 2) cannabis use disorder (CUD) defined as only active CUD, not CUD in remission.

	Unadjusted Analysis				Adjusted Analysis	
	Cannabis Use Disorder (%) (n=826 795)	No Cannabis Use Disorder (%) (n=45 471 062)	Crude Odds Ratio (95% CI) (Cannabis Use Disorder vs. No Cannabis Use Disorder)	P-Value	Adjusted Odds Ratio (95% CI) (Cannabis Use Disorder vs. No Cannabis Use Disorder)	P-Value
Acute limb Ischemia	292 (0.04)	18 554 (0.04)	0.87 (0.77-0.97)	0.014	1.33 (1.18-1.51)	<0.001
Critical limb Ischemia	1 193 (0.14)	207 198 (0.46)	0.32 (0.30-0.33)	<0.0001	0.85 (0.80-0.91)	<0.0001
Critical limb ischemia restricted diagnosis	788 (0.10)	139 931 (0.31)	0.31 (0.29-0.33)	<0.0001	0.83 (0.77-0.90)	<0.0001
Critical limb ischemia urgent cases	908 (0.11)	132 319 (0.29)	0.377 (0.35-0.40)	<0.0001	0.92 (0.86-0.99)	0.0237
Acute Mesenteric Ischemia	147 (0.02)	23 109 (0.05)	0.35	<0.0001	0.96 (0.81-1.13)	0.6073

			(0.30-0.41)			
Chronic Mesenteric Ischemia	283 (0.03)	19 177 (0.04)	0.81 (0.77-0.91)	<0.0001	1.59 (1.40-1.81)	<0.0001
Chronic Mesenteric Ischemia : Restricted	81 (0.01)	6 735 (0.01)	0.66 (0.53-0.83)	0.83	1.45 (1.14-1.85)	0.0027
Chronic mesenteric ischemia urgent cases	258 (0.03)	15 642 (0.03)	0.91 (0.80-1.03)	0.12	1.75 (1.44-1.90)	<0.0001

Supplemental Table III. Sensitivity analysis performed by repeating the analysis in the entire unmatched cohort while correcting for all confounders used in the propensity matched analysis with logistic regression procedures and weights to account for survey design.

Abbreviations: 95%CI, 95% confidence interval.

Critical Limb Ischemia	Patients without Cannabis use Disorder (n=2622)	Patients with Cannabis use Disorder (n=1145)		
	Number of Patients Undergoing Procedure (%)	Number of Patients Undergoing Procedure (%)	Adjusted Odds Ratio(95%CI) (Cannabis Use Disorder vs. No Cannabis Use Disorder)	P-Value
Endovascular Intervention	598 (21.9%)	229 (19.2%)	0.87 (0.73-1.03)	0.1047

Open Intervention	673 (24.7%)	297 (24.9%)	1.04 (0.89-1.22)	0.6355
Total Amputation	988 (36.2%)	425 (35.6%)	0.97 (0.84-1.12)	0.6583
Above Knee Amputation	148 (5.4%)	59 (5.0%)	0.92 (0.67-1.25)	0.5942
Below Knee Amputation	332 (12.7%)	120 (10.1%)	0.80 (0.64-1.00)	0.0464
Foot Amputation	571 (20.9%)	271 (22.7%)	1.10 (0.93-1.29)	0.2709
	Total Inpatient Cost (\$) (SD)	Total Inpatient Cost (\$) (SD)	Cost Ratio (95% CI) (Cannabis Use Disorder vs. No Cannabis Use Disorder)	P-Value
Total Inpatient cost*	21 266 (20 011)	21 117 (24 798)	0.99 (0.93-1.04)	0.6352
	Total Inpatient Length of Stay (days) (SD)	Total Inpatient Length of Stay (days) (SD)	LOS Ratio (95% CI) (Cannabis Use Disorder vs. No Cannabis Use Disorder)	P-Value
Length of Stay	8.78 (8.61)	8.55 (9.72)	0.96 (0.91-1.01)	0.1307

Table IV. Comparison of rates of interventions performed, cost and length of stay in those with a diagnosis of chronic critical limb ischemia, using the unrestricted definition, in the matched cohort. Odds ratios are adjusted for stimulant use disorder which remained unbalanced in the matched cohort.

*Cost estimated from total charges using conversion ratios provided by the Health Care Cost and utilization project. Cost data was missing for 153 patients.

Abbreviations: 95%CI, 95% confidence interval.

