

# Significant association between medically prescribed cannabis for dysuria and an elevated risk of developing substance use disorders!

Cohort 1		Cohort 2	
Dysuria		Cannabis and Dysuria Globally	
Patients Before Matching		Patients Before Matching	
3,825,317		86,321	
Patients After Matching		Patients After Matching	
86,089		86,089	

Comparison of the possible and significantly different etiologies of dysuria after propensity-matching cohorts

Diagnoses	ICD-10-CM Code	Description	Cohort 1	% of Cohort 1	Cohort 2	% of Cohort 2	P-Value	Std Diff.
	N39.0	Urinary tract infection	13,839	16.08%	30,016	34.87%	< 0.0001	0.4417
	N76.0	Acute vaginitis	7,241	8.41%	16,391	19.04%	< 0.0001	0.3126
	N30	Cystitis	5,141	5.97%	14,239	16.54%	< 0.0001	0.3392
	N20	Calculus of kidney/ureter	3,768	4.38%	8,009	9.30%	< 0.0001	0.1961
	N76.1	Subacute & chronic vaginitis	3,541	4.11%	7,087	8.23%	< 0.0001	0.1718
	N76.2	Acute vulvitis	3,450	4.01%	6,971	8.10%	< 0.0001	0.1722
	N76.3	Subacute & chronic vulvitis	3,386	3.93%	6,744	7.83%	< 0.0001	0.1663
	N34	Urethritis	2,940	3.42%	2,940	3.42%	1	< 0.0001
	N40	Benign prostatic hyperplasia	2,891	3.36%	4,473	5.20%	< 0.0001	0.0909
Medications	Code	Description	Cohort 1	% of Cohort 1	Cohort 2	% of Cohort 2	P-Value	Std Diff.
	CN300	Sedatives/hypnotics	23,176	26.92%	50,629	58.81%	< 0.0001	0.6807
	RxNorm 8782	Propofol	11,442	13.29%	29,075	33.77%	< 0.0001	0.4976
	RxNorm 6130	Ketamine	2,212	2.57%	8,595	9.98%	< 0.0001	0.3093

Cohort1= Propensity- score matched patients with dysuria globally (ICD-10-CM Code: R30.0), Cohort2= Propensity- score matched patients with dysuria globally who use medical cannabis (ICD-10-CM Codes: R30.0 AND F12.9)

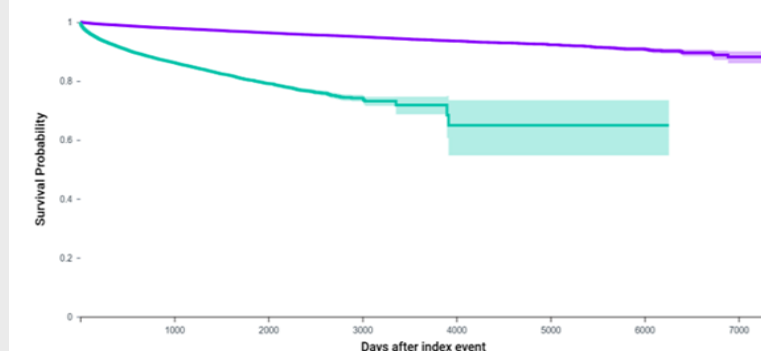
- A retrospective cohort analysis was conducted using a large claims database (TriNetX) to identify adult patients diagnosed with dysuria between 2003 and 2024.
- Patients were stratified into two cohorts: those receiving **any therapy for dysuria (general dysuria cohort, GD)** and those specifically using **MC for dysuria (MC cohort)**.
- Propensity score matching (PSM) was performed in a 1:1 ratio to adjust for age, gender, and race. Risk ratios (RR), odds ratios (OR), and Kaplan-Meier survival analysis were used to assess the incidence of cannabis abuse/dependence, opioid abuse/dependence, and cocaine abuse/dependence among the two cohorts.

## 20- year Kaplan-Meier Analysis for Cannabis Abuse/ Dependence, Opioid Abuse/dependence, OR Cocaine Abuse/Dependence

(Excluding Patients with Outcome Prior to Dysuria and Cannabis Medical Use as Index Event)

Cohort	Patients in Cohort	Patients with Outcome	Survival Probability at End of Time Window	$\chi^2$	df	p
1 Dysuria	82,773	2,322	88.178%	6,789.166	1	< 0.0001
2 Cannabis and Dysuria Globally	49,861	5,798	64.97%			

Kaplan-Meier Survival Curve



- **86,089 patients were included in the analysis**, with a mean age of  $37.3 \pm 16.4$  years, of whom 63.7% were female.
- In the MC cohort, 5,798 of 49,861 patients (11.63%) developed SUD, compared to 2,322 of 82,773 patients (2.81%) in the GD cohort.
- The calculated RR was 0.241 (95% CI: 0.23 to 0.253), and the OR was 0.219 (95% CI: 0.209 to 0.23), indicating a more than **76% increased risk of SUD in patients using MC**.
- Kaplan-Meier analysis over a 20-year follow-up demonstrated that 64.97% of patients in the MC cohort remained free from SUD compared to 88.18% in the GD cohort ( $p < 0.001$ ), further supporting the increased risk associated with MC use.

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