



Qualifying Medical Conditions for Medical Marijuana Usage Application

Individual Requestor Information

Full Name:	Shea	Kevin	J
	<i>Last</i>	<i>First</i>	<i>M.I.</i>
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	<i>City</i>	<i>State</i>	<i>ZIP Code</i>
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Medical License Number (if applicable):	RP444670	Registry I.D. Number (if applicable):	

Qualifying Condition Request

Name of Medical Condition	Chronic Hepatitis		
Has this condition been approved in any other state?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	16 States and Territories: States: Arizona, Arkansas, Illinois, Maine, Massachusetts, Michigan, Missouri, New Hampshire, New Mexico, North Dakota, Ohio, Rhode Island, Washington Territories: Commonwealth of the Northern Mariana Islands, Puerto Rico, Virgin Islands
If yes, where?	<u>Island, Puerto Rico, Virgin Islands</u>		

References Supporting Qualified Practitioner's Opinion

Full Name:	David Gordon, MD	Certifying MMJ Relationship: <u>Physician</u>
Hospital/Agency:		(888) 916-9937
Address:	798 Hausman Rd. Suite 170 Allentown, PA 18104	Phone:
Full Name:	Charles Harris,	Certifying MMJ Relationship: <u>Physician</u>
Hospital/Agency:		(484) 602-4438
Address:	6724 Kernsville Rd. Orefield, PA 18069	Phone:

Documentation (clinical, medical, or scientific data) Supporting Efficacy of Medical Marijuana as Treatment for Condition

Citation:	Adeyinka Charles Adejumo, Oluwole Muyiwa Adegbala, Kelechi Lauretta Adejumo, and Terence Ndonyi Bukong, "Reduced Incidence and Better Liver Disease Outcomes among Chronic HCV Infected Patients Who Consume Cannabis," Canadian Journal of Gastroenterology and Hepatology, vol. 2018, Article ID 9430953, 9 pages, 2018. https://doi.org/10.1155/2018/9430953.
Summary:	Researchers investigated the effect of cannabis use on chronic liver disease (CLD) from Hepatitis C Virus (HCV) infection. They analyzed hospital discharge records of adults (age ≥ 18 years) with a positive HCV diagnosis. Records were evaluated from 2007 to 2014 of the Nationwide Inpatient Sample (NIS). The study revealed that cannabis users (CUs) had decreased prevalence of liver cirrhosis (aPRR: 0.81[0.72-0.91]), unfavorable discharge disposition (0.87[0.78-0.96]), lower frequencies of higher Baveno4 score and lower total health care cost (\$39,642[36,220-43,387] versus \$45,566[\$42,244-\$49,150]), compared to non-cannabis users (NCUs). Cannabis users had decreased frequencies of ascites and portal hypertension. The frequency of mortality and liver cancer were similar between cannabis users and nonusers.
Citation:	Nordmann S, Vilotitch A, Roux P, Esterle L, Spire B, Marcellin F, Salmon-Ceron D, Dabis F, Chas J, Rey D, Wittkop L, Sogni P, Carrieri P; ANRS CO13 HEPAVIH Study Group. Daily cannabis and reduced risk of steatosis in human immunodeficiency virus and hepatitis C virus-co-infected patients (ANRS CO13-HEPAVIH). J Viral Hepat. 2018 Feb;25(2):171-179. doi: 10.1111/jvh.12797. Epub 2017 Nov 20.
Summary:	Researchers aimed to study whether cannabis use in the HIV and HCV coinfected patient population, was associated with a reduced risk of steatosis, measured by ultrasound examination. A cross-sectional analysis was conducted using data from the first visit where both ultrasound examination data for steatosis (positive or negative diagnosis) and data on cannabis use were available. A logistic regression model was used to evaluate the association between cannabis use and steatosis. Among study sample patients (n = 838), 40.1% had steatosis. 14% reported daily cannabis use, 11.7% regular use and 74.7% no use or occasional use ("never or sometimes"). Daily cannabis use was independently associated with a reduced prevalence of steatosis (adjusted odds ratio [95% CI] = 0.64 [0.42;0.99]; P = .046), after adjusting for body mass index, hazardous alcohol consumption and current or lifetime use of lamivudine/zidovudine. Daily cannabis use may be a protective factor against steatosis in HIV-HCV-co-infected patients.
Citation:	Sylvestre, Diana L; Clements, Barry J; Malibu, Yvonne. Cannabis use improves retention and virologic outcomes in patients treated for hepatitis C. European Journal of Gastroenterology & Hepatology: October 2006 - Volume 18 - Issue 10 - p 1057-1063
Summary:	This study was conducted to define the impact of cannabis use during HCV treatment. The researchers conducted a prospective observational study of standard interferon and ribavirin treatment in 71 recovering substance users, of whom 22 (31%) used cannabis and 49 (69%) did not. A total of 21 out of 71 (30%) had a sustained virologic response: 12 of the 22 cannabis users (54%) and nine of the 49 non-users (18%) (P=0.009), corresponding to a post-treatment virologic relapse rate of 14% in the cannabis users and 61% in the non-users (P=0.009). Overall, 48 (68%) were adherent, 29 (59%) non-users and 19 (86%) cannabis users (P=0.03). Although cannabis users were no more likely than non-users to take at least 80% of the prescribed interferon or ribavirin, they were significantly more likely to remain on HCV treatment for at least 80% of the projected treatment duration, 95 versus 67% (P=0.01). Results suggest that modest cannabis use may offer symptomatic and virologic benefit to some patients undergoing HCV treatment by helping them maintain adherence to the challenging medication regimen.
Citation:	Iris Lavon, Tatiana Sheinin, Sigal Meilin, Efrat Biton, Ayelet Weksler, Gilat Efroni, Avi Bar-Joseph, George Fink and Ayelet Avraham A Novel Synthetic Cannabinoid Derivative Inhibits

	Inflammatory Liver Damage via Negative Cytokine Regulation Molecular Pharmacology December 2003, 64 (6) 1334-1341; DOI: https://doi.org/10.1124/mol.64.6.1334	
Summary:	<p>In this study, they investigated the mechanism of action of a novel synthetic cannabinoid to determine the therapeutic potential of cannabinoids. Treatment with PRS-211,092 significantly decreased Concanavalin A-induced liver injury in mice that was accompanied by: 1) promotion of early gene expression of interleukin (IL)-6 and IL-10 that play a protective role in this model; 2) induction of early gene expression of the suppressors of cytokine signaling (SOCS-1 and 3), followed by 3) inhibition of several pro-inflammatory mediators, including IL-2, monocyte chemoattractant protein-1 (MCP-1), IL-1β, interferon-γ, and tumor necrosis factor α. These results allowed the researchers to propose a mechanism by which PRS-211,092 stimulates the expression of IL-6, IL-10 and the SOCS proteins that, in turn, negatively regulates the expression of pro-inflammatory cytokines. Negative regulation by PRS-211,092 was further demonstrated in cultured T cells, where it inhibited IL-2 production and nuclear factor of activated T cells activity. These findings suggest that this cannabinoid derivative is an immunomodulator that could be developed as a potential drug for hepatitis as well as for other short- or long-term inflammatory diseases.</p>	

Documentation Supporting Qualified Physicians Opinion: Benefits of Medical Marijuana Use Outweigh Health Risks for Condition	
Summary:	<p>Patients diagnosed with chronic hepatitis C frequently report using cannabis to ease both symptoms of the disease such as pain and decreased appetite as well as the nausea associated with antiviral therapy. As chronic HCV infection progresses, marijuana has been shown to help alleviate complications, especially portal hypertension and liver cancer without worsening liver cirrhosis, complications of cirrhosis, mortality, liver cancer, and unfavorable discharge disposition. Marijuana may also help to prevent progression of steatosis or at least not contribute to worsening steatosis. While marijuana alone cannot treat chronic hepatitis C, it can be used in a complementary way along with physician-prescribed medications to provide a higher likelihood of treatment success for chronic hepatitis C patients.</p>

Disclaimer and Signature

I certify that my answers are true and complete to the best of my knowledge.

Individual
Requestor
Signature:

Kevin Shea

Date: 10/27/21

Patients diagnosed with chronic hepatitis C frequently report using cannabis to ease both symptoms of the disease such as pain and decreased appetite as well as the nausea associated with antiviral therapy. As HCV progresses, marijuana has been shown to help alleviate complications, especially portal hypertension and liver cancer without worsening liver cirrhosis, complications of cirrhosis, mortality, liver cancer, and unfavorable discharge disposition. Marijuana may also help to prevent progression of steatosis or at least not contribute to worsening steatosis. While marijuana alone cannot treat chronic hepatitis C, it can be used in a complementary way along with physician-prescribed medications to provide a higher likelihood of treatment success for chronic hepatitis C patients.