

### Clinical Research Concerning Cannabis

“The length of this review, necessitated by the steady growth in the number of indications for the potential therapeutic use of cannabinoid-related medications, is a clear sign of the emerging importance of this field. This is further underlined by the quantity of articles in the public database dealing with the biology of cannabinoids, which numbered ~200 to 300/year throughout the 1970s to reach an astonishing 5900 in 2004.” *Pharmacological Reviews*, 2006. **Editors Note:** A June 2010 search of Pubmed.gov from the National Library of Medicine now finds over 12,000 citations for biomedical literature concerning the terms “cannabis” or “cannabinoid.” <http://pharmrev.aspetjournals.org/content/58/3/389.full.pdf> and <http://www.pubmed.gov>

#### From *Drug War Facts*, citations include:

**(cancer)** “... a cannabinoid-based therapeutic strategy for neural diseases devoid of undesired psychotropic side effects could find in CBD [cannabidiol] a valuable compound in cancer therapies along with the perspective of evaluating a synergistic effect with other cannabinoid molecules and/or with other chemotherapeutic agents as well as with radiotherapy.” *Journal of Pharmacology and Experimental Therapeutics*, 2004. <http://jpet.aspetjournals.org/content/308/3/838.full.pdf>

**(breast cancer)** “... for a highly malignant human breast carcinoma cell line, we have shown here that cannabidiol and a cannabidiol-rich extract counteract cell growth both in vivo and in vitro as well as tumor metastasis in vivo.” *Journal of Pharmacology and Experimental Therapeutics*, 2006. <http://jpet.aspetjournals.org/content/318/3/1375.full.pdf>

**(diabetic retinopathy)** “... CBD as an antioxidant to block oxidative stress and as an inhibitor of adenosine reuptake to enhance a self-defense mechanism against retinal inflammation represents a novel therapeutic approach to the treatment of ophthalmic complications associated with diabetes.” *World Journal of Diabetes*, 2010. <http://www.wjgnet.com/1948-9358/pdf/v1/i1/12.pdf>

**(gastrointestinal disorders)** “Cannabis derivatives and other newly developed cannabinoids may represent promising tools for the treatment of different GI disorders because they can act at multiple sites, covering a wide spectrum of symptoms.” *Journal of Molecular Medicine*, 2005. <http://www.springerlink.com/content/pj24p7323lp31105/fulltext.pdf>

**(HIV)** “This study provides evidence that short-term use of cannabinoids, either oral or smoked, does not substantially elevate viral load in individuals with HIV infection who are receiving stable antiretroviral regimens containing nelfinavir or indinavir.” *Annals of Internal Medicine*, 2003. <http://www.annals.org/content/139/4/258.full.pdf+html>

**(HIV and hepatitis C)** “Short-term use of smoked cannabis did not affect viral load in 15 HIV-positive patients and also is associated with adherence to therapy and reduced viral loads in 16 patients with hepatitis C infections.” American Medical Association, Council on Science and Public Health, 2009. [http://americansforsafeaccess.org/downloads/AMA\\_Report.pdf](http://americansforsafeaccess.org/downloads/AMA_Report.pdf)

**(migraine headaches)** “Cannabis’ unique ability to modulate various serotonergic receptor subtypes, inhibit glutamatergic-mediated toxicities, simultaneously provide antiinflammatory activity and provide acute symptomatic and chronic preventive relief make it unique among available treatments for this disorder.” *Journal of Cannabis Therapeutics*, 2000. [http://www.drugpolicy.org/docUploads/hemp\\_for\\_headache.pdf](http://www.drugpolicy.org/docUploads/hemp_for_headache.pdf)

**(morning sickness)** “In the context of pregnancy, cannabis was rated as extremely effective or effective by 92% of the respondents who had used it as a therapy for nausea and vomiting (morning sickness).” *Contemporary Therapies in Clinical Practice*, 2009. [http://safeaccess.ca/research/cannabis\\_nausea2006.pdf](http://safeaccess.ca/research/cannabis_nausea2006.pdf)

**(multiple sclerosis)** “Neuroinflammation, found in autoimmune diseases such as MS, has been shown to be reduced by cannabinoids through the regulation of cytokine levels in microglial cells. The therapeutic potential of cannabinoids in MS is therefore comprehensive ...” *BMC Neurology*, 2009. <http://www.biomedcentral.com/content/pdf/1471-2377-9-59.pdf>

**(neuroprotectant)** “... cannabinoids are found to have particular application as neuroprotectants ... in limiting neurological damage following ischemic insults, such as stroke and trauma, or in the treatment of neurodegenerative diseases, such as Alzheimer’s disease, Parkinson’s disease and HIV dementia.” Hampson, et. al., U.S. Patent Office, 2003. <http://mapinc.org/url/DOpPxJxR>

**(pain)** “...this study provides further insight into the applicability of cannabinoid botanicals in the management of a broad range of refractory chronic pain conditions in adults, from myofascial pain and discogenic back pain to neuropathic pain and central pain syndromes.” *Journal of Opioid Management*, 2009. [http://students.washington.edu/sunila/JOM\\_5-5-05.pdf](http://students.washington.edu/sunila/JOM_5-5-05.pdf)

**(substance abuse treatment)** “... cannabis use did not compromise substance abuse treatment amongst the medical marijuana using group ... medical marijuana users seemed to fare equal to or better than non-medical marijuana users in every important outcome category.” *Harm Reduction Journal*, 2010. <http://www.harmreductionjournal.com/content/pdf/1477-7517-7-3.pdf>

These Facts and more can be found in the “Medical Marijuana” Chapter of *Drug War Facts* at <http://www.drugwarfacts.org>. *Drug War Facts* is a project of Common Sense for Drug Policy <http://www.csdp.org>, with web hosting provided by Drug Policy Central <http://www.drugpolicycentral.com>.