

Eco-Conscious Products for the Planet & People



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## PATENTS & RESEARCH

On this page you will find a list of current Patents & Research for the medicinally active Cannabinoids found in the Cannabis plant.

### PLEASE READ THE FOLLOWING RESEARCH

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SOURCE FOR RESEARCH ARTICLE

([http://books.google.com/books?id=TI1VYZByQGsC&pg=PA80&ots=dpyl3u94f5&dq=Massi%20et%20al.%20J%20Pharmacol%20Exp%20Ther.%202004%20March%3B%20308\(3\)%3A838-45&pg=PA80#v=onepage&q=Massi%20et%20al.%20J%20Pharmacol%20Exp%20Ther.%202004%20March;%20308\(3\):838-45\)&f=false](http://books.google.com/books?id=TI1VYZByQGsC&pg=PA80&ots=dpyl3u94f5&dq=Massi%20et%20al.%20J%20Pharmacol%20Exp%20Ther.%202004%20March%3B%20308(3)%3A838-45&pg=PA80#v=onepage&q=Massi%20et%20al.%20J%20Pharmacol%20Exp%20Ther.%202004%20March;%20308(3):838-45)&f=false))

### RESEARCH PROVING CANNABIS KILLS CANCER

#### CANCER (General)

- <http://www.ncbi.nlm.nih.gov/pubmed/12514108> (<http://www.ncbi.nlm.nih.gov/pubmed/12514108>)
- <http://www.ncbi.nlm.nih.gov/pubmed/15313899> (<http://www.ncbi.nlm.nih.gov/pubmed/15313899%20>)
- <http://www.ncbi.nlm.nih.gov/pubmed/20053780> (<http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F20053780&h=vAQHqrhvf&s=1>)
- <http://www.ncbi.nlm.nih.gov/pubmed/18199524> (<http://www.ncbi.nlm.nih.gov/pubmed/18199524>)
- <http://www.ncbi.nlm.nih.gov/pubmed/19589225> (<http://www.ncbi.nlm.nih.gov/pubmed/19589225>)

- <http://www.ncbi.nlm.nih.gov/pubmed/12182964> (<http://www.ncbi.nlm.nih.gov/pubmed/12182964>)
- <http://www.ncbi.nlm.nih.gov/pubmed/19442435> (<http://www.ncbi.nlm.nih.gov/pubmed/19442435>)
- <http://www.ncbi.nlm.nih.gov/pubmed/12723496> (<http://www.ncbi.nlm.nih.gov/pubmed/12723496>)
- <http://www.ncbi.nlm.nih.gov/pubmed/16250836> (<http://www.ncbi.nlm.nih.gov/pubmed/16250836>)
- <http://www.ncbi.nlm.nih.gov/pubmed/17237277> (<http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F17237277&h=mAQHeQkD9&s=1>)

#### KILLS TUMOR CELLS

- <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1576089> (<http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpmc%2Farticles%2FPMC1576089&h=AQGeyqQE&s=1>)
- <http://www.ncbi.nlm.nih.gov/pubmed/20090845> (<http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F20090845&h=zAQEdZeSp&s=1>)
- <http://www.ncbi.nlm.nih.gov/pubmed/616322> (<http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F616322&h=JAQHBqlv-&s=1>)
- <http://www.ncbi.nlm.nih.gov/pubmed/14640910> (<http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F14640910&h=cAQHWtauM&s=1>)
- <http://www.ncbi.nlm.nih.gov/pubmed/19480992> (<http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F19480992&h=fAQFnioVR&s=1>)
- <http://www.ncbi.nlm.nih.gov/pubmed/15275820> (<http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F15275820&h=dAQEUhBO-&s=1>)
- <http://www.ncbi.nlm.nih.gov/pubmed/15638794> (<http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F15638794&h=wAQGkSP0v&s=1>)
- <http://www.ncbi.nlm.nih.gov/pubmed/16818650> (<http://www.ncbi.nlm.nih.gov/pubmed/16818650>)
- <http://www.ncbi.nlm.nih.gov/pubmed/17952650> (<http://www.ncbi.nlm.nih.gov/pubmed/17952650>)
- <http://www.ncbi.nlm.nih.gov/pubmed/20307616> (<http://www.ncbi.nlm.nih.gov/pubmed/20307616>)
- <http://www.ncbi.nlm.nih.gov/pubmed/16616335> (<http://www.ncbi.nlm.nih.gov/pubmed/16616335>)
- <http://www.ncbi.nlm.nih.gov/pubmed/16624285> (<http://www.ncbi.nlm.nih.gov/pubmed/16624285>)
- <http://www.ncbi.nlm.nih.gov/pubmed/10700234> (<http://www.ncbi.nlm.nih.gov/pubmed/10700234>)
- <http://www.ncbi.nlm.nih.gov/pubmed/17675107> (<http://www.ncbi.nlm.nih.gov/pubmed/17675107>)
- <http://www.ncbi.nlm.nih.gov/pubmed/14617682> (<http://www.ncbi.nlm.nih.gov/pubmed/14617682>)
- <http://www.ncbi.nlm.nih.gov/pubmed/17342320> (<http://www.ncbi.nlm.nih.gov/pubmed/17342320>)
- <http://www.ncbi.nlm.nih.gov/pubmed/16893424> (<http://www.ncbi.nlm.nih.gov/pubmed/16893424>)
- <http://www.ncbi.nlm.nih.gov/pubmed/15026328> (<http://www.ncbi.nlm.nih.gov/pubmed/15026328>)

#### CANCER THERAPY & ANTI-TUMOUR PROPERTIES

- <http://www.ncbi.nlm.nih.gov/pubmed/20925645> (<http://www.ncbi.nlm.nih.gov/pubmed/20925645>)

#### INTESTINAL INFLAMMATION & CANCER

- [www.ncbi.nlm.nih.gov/pubmed/19442536?itool=EntrezSystem2.PEntrez.Pubmed.Pubmed\\_ResultsPanel.Pubmed\\_RVDocSum&ordinalpos=22](http://www.ncbi.nlm.nih.gov/pubmed/19442536?itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVDocSum&ordinalpos=22)  
([http://www.ncbi.nlm.nih.gov/pubmed/19442536?itool=EntrezSystem2.PEntrez.Pubmed.Pubmed\\_ResultsPanel.Pubmed\\_RVDocSum&ordinalpos=22](http://www.ncbi.nlm.nih.gov/pubmed/19442536?itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVDocSum&ordinalpos=22))

#### THC INHIBITS CHOLANGIOCARCINOMA CANCER

- [www.ncbi.nlm.nih.gov/pubmed/19916793?itool=Email.EmailReport.Pubmed\\_ReportSelector.Pubmed\\_RVDocSum&ordinalpos=6](http://www.ncbi.nlm.nih.gov/pubmed/19916793?itool=Email.EmailReport.Pubmed_ReportSelector.Pubmed_RVDocSum&ordinalpos=6) ([http://www.ncbi.nlm.nih.gov/pubmed/19916793?itool=Email.EmailReport.Pubmed\\_ReportSelector.Pubmed\\_RVDocSum&ordinalpos=6](http://www.ncbi.nlm.nih.gov/pubmed/19916793?itool=Email.EmailReport.Pubmed_ReportSelector.Pubmed_RVDocSum&ordinalpos=6))

#### CANNABINOIDS AS A NOVEL THERAPY FOR TREATING MALIGNANT LYMPHOBLASTIC DISEASE

- <http://www.ncbi.nlm.nih.gov/pubmed/21115947> (<http://www.ncbi.nlm.nih.gov/pubmed/21115947>)

#### LEUKEMIA

- <http://www.ncbi.nlm.nih.gov/pubmed/15978942> (<http://www.ncbi.nlm.nih.gov/pubmed/15978942>)
- <http://www.ncbi.nlm.nih.gov/pubmed/16754784> (<http://www.ncbi.nlm.nih.gov/pubmed/16754784>)
- <http://www.ncbi.nlm.nih.gov/pubmed/15454482> (<http://www.ncbi.nlm.nih.gov/pubmed/15454482>)
- <http://www.ncbi.nlm.nih.gov/pubmed/16139274> (<http://www.ncbi.nlm.nih.gov/pubmed/16139274>)
- <http://www.ncbi.nlm.nih.gov/pubmed/14692532> (<http://www.ncbi.nlm.nih.gov/pubmed/14692532>)

#### CANNABINOIDS & THE IMMUNE SYSTEM

- <http://www.ncbi.nlm.nih.gov/pubmed/12052046> ([http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F12052046&h=FAQHgTA\\_7&s=1](http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F12052046&h=FAQHgTA_7&s=1))

#### PROSTATE CANCER

- <http://www.ncbi.nlm.nih.gov/pubmed/12746841?dopt=Abstract> (<http://www.ncbi.nlm.nih.gov/pubmed/12746841?dopt=Abstract>)
- <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3339795?tool=pubmed> (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3339795?tool=pubmed>)
- <http://www.ncbi.nlm.nih.gov/pubmed/22594963> (<http://www.ncbi.nlm.nih.gov/pubmed/22594963>)
- <http://www.ncbi.nlm.nih.gov/pubmed/15753356> (<http://www.ncbi.nlm.nih.gov/pubmed/15753356>)
- <http://www.ncbi.nlm.nih.gov/pubmed/10570948> (<http://www.ncbi.nlm.nih.gov/pubmed/10570948>)
- <http://www.ncbi.nlm.nih.gov/pubmed/19690545> (<http://www.ncbi.nlm.nih.gov/pubmed/19690545>)

Proapoptotic effect of endocannabinoids in prostate cancer cells. Date Published: 01/21/2015

<http://www.nature.com/onc/journal/v27/n3/abs/1210641a.html> (<http://www.nature.com/onc/journal/v27/n3/abs/1210641a.html%20>)

#### BLADDER CANCER

- <http://www.medscape.com/viewarticle/803983> (<http://www.medscape.com/viewarticle/803983>) (Sign-up required to view)

#### COLORECTAL CANCER

- <http://www.ncbi.nlm.nih.gov/pubmed/22231745> (<http://www.ncbi.nlm.nih.gov/pubmed/22231745>)
- <https://www.ncbi.nlm.nih.gov/pubmed/19442536> (<https://www.ncbi.nlm.nih.gov/pubmed/19442536>)
- [http://safeaccess.ca/research/pdf/MD\\_AndersonCancerStudy.pdf](http://safeaccess.ca/research/pdf/MD_AndersonCancerStudy.pdf) ([http://safeaccess.ca/research/pdf/MD\\_AndersonCancerStudy.pdf](http://safeaccess.ca/research/pdf/MD_AndersonCancerStudy.pdf))
- <http://gut.bmj.com/content/54/12/1741.abstract> (<http://gut.bmj.com/content/54/12/1741.abstract>)

#### OVARIAN CANCER

- <http://www.aacrmeetingabstracts.org/cgi/content/abstract/2006/1/1084> (<http://www.aacrmeetingabstracts.org/cgi/content/abstract/2006/1/1084>)

#### BLOOD CANCER

- <http://www.ncbi.nlm.nih.gov/pubmed/12091357> (<http://www.ncbi.nlm.nih.gov/pubmed/12091357>)
- <http://www.ncbi.nlm.nih.gov/pubmed/16908594> (<http://onlinelibrary.wiley.com/doi/10.1002/ijc.23584/abstract>)
- <http://onlinelibrary.wiley.com/doi/10.1002/ijc.23584/abstract> (<http://onlinelibrary.wiley.com/doi/10.1002/ijc.23584/abstract>)
- <http://molpharm.aspetjournals.org/content/70/5/1612.abstract> (<http://molpharm.aspetjournals.org/content/70/5/1612.abstract>)

#### SKIN CANCER

- <http://www.ncbi.nlm.nih.gov/pubmed/12511587> (<http://www.ncbi.nlm.nih.gov/pubmed/12511587>)
- <http://www.ncbi.nlm.nih.gov/pubmed/19608284> (<http://www.ncbi.nlm.nih.gov/pubmed/19608284>)

#### LIVER CANCER

- <http://www.ncbi.nlm.nih.gov/pubmed/21475304> (<http://www.ncbi.nlm.nih.gov/pubmed/19916793>)

#### BILIARY TRACT CANCER

- <http://www.ncbi.nlm.nih.gov/pubmed/19916793> (<http://www.ncbi.nlm.nih.gov/pubmed/19916793>)

#### BRAIN CANCER

- <http://www.nature.com/bjc/journal/v95/n2/abs/6603236a.html> (<http://www.nature.com/bjc/journal/v95/n2/abs/6603236a.html%20>)
- <http://www.ncbi.nlm.nih.gov/pubmed/11479216> (<http://www.ncbi.nlm.nih.gov/pubmed/11479216>)
- <http://www.jneurosci.org/content/21/17/6475.abstract> (<http://www.jneurosci.org/content/21/17/6475.abstract%20>)
- <http://jpet.aspetjournals.org/content/308/3/838.abstract> (<http://jpet.aspetjournals.org/content/308/3/838.abstract%20>)
- <http://mct.aacrjournals.org/content/10/1/90.abstract> (<http://mct.aacrjournals.org/content/10/1/90.abstract%20>)
- <http://www.ncbi.nlm.nih.gov/pubmed/17952650> (<http://www.ncbi.nlm.nih.gov/pubmed/17952650>)
- <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1576089/> (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1576089/%20>)
- <http://www.jci.org/articles/view/37948> (<http://www.jci.org/articles/view/37948>)
- <http://cancerres.aacrjournals.org/content/64/16/5617.full> (<http://cancerres.aacrjournals.org/content/64/16/5617.full>)

#### MOUTH & THROAT CANCER

- <http://www.ncbi.nlm.nih.gov/pubmed/20516751> (<http://www.ncbi.nlm.nih.gov/pubmed/20516751>)

- <http://www.ncbi.nlm.nih.gov/pubmed/20516734> (<http://www.ncbi.nlm.nih.gov/pubmed/20516734>)

**BREAST CANCER**

- <http://www.ncbi.nlm.nih.gov/pubmed/20859676> (<http://www.ncbi.nlm.nih.gov/pubmed/20859676>)
- <http://www.ncbi.nlm.nih.gov/pubmed/18025276> (<http://www.ncbi.nlm.nih.gov/pubmed/18025276>)
- <http://www.ncbi.nlm.nih.gov/pubmed/21915267> (<http://jpet.aspetjournals.org/content/early/2006/05/25/jpet.106.105247.full.pdf+html>)
- <http://jpet.aspetjournals.org/content/early/2006/05/25/jpet.106.105247.full.pdf+html> (<http://jpet.aspetjournals.org/content/early/2006/05/25/jpet.106.105247.full.pdf+html>)
- <http://www.molecular-cancer.com/content/9/1/196> (<http://www.molecular-cancer.com/content/9/1/196%20>)
- <http://www.ncbi.nlm.nih.gov/pubmed/22776349> (<http://www.ncbi.nlm.nih.gov/pubmed/22776349>)
- <http://www.pnas.org/content/95/14/8375.full.pdf+html> (<http://www.pnas.org/content/95/14/8375.full.pdf+html%20>)
- <http://cancerres.aacrjournals.org/content/66/13/6615.abstract> (<http://cancerres.aacrjournals.org/content/66/13/6615.abstract>)
- <http://endo.endojournals.org/content/141/1/118.abstract#fn-1> (<http://endo.endojournals.org/content/141/1/118.abstract#fn-1>)

**LUNG CANCER**

- <http://www.ncbi.nlm.nih.gov/pubmed/22198381> (<http://www.ncbi.nlm.nih.gov/pubmed/22198381>)
- <http://www.ncbi.nlm.nih.gov/pubmed/21097714> (<http://www.ncbi.nlm.nih.gov/pubmed/21097714>)

**UTERINE, TESTICULAR, & PANCREATIC CANCER**

- <http://www.cancer.gov/cancertopics/pdq/cam/cannabis/healthprofessional/page4> (<http://www.cancer.gov/cancertopics/pdq/cam/cannabis/healthprofessional/page4>)
- <http://cancerres.aacrjournals.org/content/66/13/6748.abstract> (<http://cancerres.aacrjournals.org/content/66/13/6748.abstract%20>)

**CANNABINOIDS AND PARTIALLY/FULLY INDUCED CELL DEATH IN CANCER**

- <http://www.ncbi.nlm.nih.gov/pubmed/12130702> (<http://www.ncbi.nlm.nih.gov/pubmed/12130702>)
- <http://www.ncbi.nlm.nih.gov/pubmed/19457575> (<http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F19457575&h=NAQFFyk8W&s=1>)
- <http://www.ncbi.nlm.nih.gov/pubmed/18615640> (<http://www.ncbi.nlm.nih.gov/pubmed/18615640>)
- <http://www.ncbi.nlm.nih.gov/pubmed/17931597> (<http://www.ncbi.nlm.nih.gov/pubmed/17931597>)
- <http://www.ncbi.nlm.nih.gov/pubmed/18438336> ([http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F18438336&h=FAQHgTA\\_7&s=1](http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F18438336&h=FAQHgTA_7&s=1))
- <http://www.ncbi.nlm.nih.gov/pubmed/19916793> (<http://www.ncbi.nlm.nih.gov/pubmed/19916793>)
- <http://www.ncbi.nlm.nih.gov/pubmed/18387516> (<http://www.ncbi.nlm.nih.gov/pubmed/18387516>)
- <http://www.ncbi.nlm.nih.gov/pubmed/15453094> (<http://www.ncbi.nlm.nih.gov/pubmed/15453094>)
- <http://www.ncbi.nlm.nih.gov/pubmed/19229996> (<http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F19229996&h=JAQHBqlv-&s=1>)
- <http://www.ncbi.nlm.nih.gov/pubmed/9771884> (<http://www.ncbi.nlm.nih.gov/pubmed/9771884>)
- <http://www.ncbi.nlm.nih.gov/pubmed/18339876> (<http://www.ncbi.nlm.nih.gov/pubmed/18339876>)
- <http://www.ncbi.nlm.nih.gov/pubmed/12133838> (<http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F12133838&h=jAQG8BSmQ&s=1>)
- <http://www.ncbi.nlm.nih.gov/pubmed/16596790> (<http://www.ncbi.nlm.nih.gov/pubmed/16596790>)
- <http://www.ncbi.nlm.nih.gov/pubmed/11269508> (<http://www.ncbi.nlm.nih.gov/pubmed/11269508>)
- <http://www.ncbi.nlm.nih.gov/pubmed/15958274> (<http://www.ncbi.nlm.nih.gov/pubmed/15958274>)
- <http://www.ncbi.nlm.nih.gov/pubmed/19425170> (<http://www.ncbi.nlm.nih.gov/pubmed/19425170>)
- <http://www.ncbi.nlm.nih.gov/pubmed/17202146> (<http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F17202146&h=wAQGkSP0v&s=1>)
- <http://www.ncbi.nlm.nih.gov/pubmed/11903061> (<http://www.ncbi.nlm.nih.gov/pubmed/11903061>)
- <http://www.ncbi.nlm.nih.gov/pubmed/15451022> (<http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F15451022&h=2AQF4yFI-&s=1>)
- <http://www.ncbi.nlm.nih.gov/pubmed/20336665> (<http://www.ncbi.nlm.nih.gov/pubmed/20336665>)
- <http://www.ncbi.nlm.nih.gov/pubmed/19394652> (<http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F19394652&h=WAQG2knvX&s=1>)
- <http://www.ncbi.nlm.nih.gov/pubmed/11106791> (<http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F11106791&h=dAQEUhBO-&s=1>)
- <http://www.ncbi.nlm.nih.gov/pubmed/19189659> (<http://www.ncbi.nlm.nih.gov/pubmed/19189659>)
- <http://www.ncbi.nlm.nih.gov/pubmed/16500647> (<http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F16500647&h=LAQHWTppV&s=1>)
- <http://www.ncbi.nlm.nih.gov/pubmed/19539619> (<http://www.ncbi.nlm.nih.gov/pubmed/19539619>)
- <http://www.ncbi.nlm.nih.gov/pubmed/19059457> (<http://www.ncbi.nlm.nih.gov/pubmed/19059457>)
- <http://www.ncbi.nlm.nih.gov/pubmed/16909207> (<http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F16909207&h=pAQEU1Eqm&s=1>)
- <http://www.ncbi.nlm.nih.gov/pubmed/18088200> (<http://www.ncbi.nlm.nih.gov/pubmed/18088200>)
- <http://www.ncbi.nlm.nih.gov/pubmed/10913156> (<http://www.ncbi.nlm.nih.gov/pubmed/10913156>)
- <http://www.ncbi.nlm.nih.gov/pubmed/18354058> (<http://www.ncbi.nlm.nih.gov/pubmed/18354058>)
- <http://www.ncbi.nlm.nih.gov/pubmed/19189054> (<http://www.ncbi.nlm.nih.gov/pubmed/19189054>)
- <http://www.ncbi.nlm.nih.gov/pubmed/17934890> (<http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F17934890&h=eAQEXU5Kj&s=1>)
- <http://www.ncbi.nlm.nih.gov/pubmed/16571653> (<http://www.ncbi.nlm.nih.gov/pubmed/16571653>)
- <http://www.ncbi.nlm.nih.gov/pubmed/19889794> (<http://www.ncbi.nlm.nih.gov/pubmed/19889794>)
- <http://www.ncbi.nlm.nih.gov/pubmed/15361550> (<http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F15361550&h=NAQFFyk8W&s=1>)





The Patents are proof of the true medicinal value that this plant holds.

These Patents show us how plants like Cannabis are having medicinal compounds extracted and Patented strictly **FOR PROFIT!**

**Over 85+ Cannabinoids** (<http://en.wikipedia.org/wiki/Cannabinoid>) are found occurring naturally in the Cannabis Plant (<http://www.hort.purdue.edu/newcrop/ncnu02/pdf/small.pdf>).

**These Cannabinoids fit into our Endocannabinoid System** ([http://en.wikipedia.org/wiki/Endocannabinoid\\_system](http://en.wikipedia.org/wiki/Endocannabinoid_system)) receptors like a key!

**EVERY HUMAN BEING** has Cannabinoid Receptor sites located around their body,

including the Heart, Brain, Liver, Immune System Cells, Bladder, Intestines, and Lungs.

**The densest G protein-coupled receptor in the Human Brain is the Cannabinoid Receptor** ([http://en.wikipedia.org/wiki/Cannabinoid\\_receptor](http://en.wikipedia.org/wiki/Cannabinoid_receptor)).

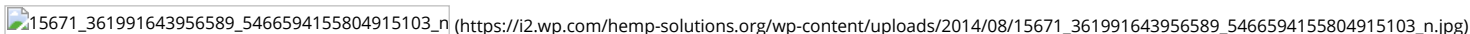
"Cannabinoids are a specific class of psychoactive compounds present in Indian cannabis (*Cannabis sativa*), including about sixty different molecules, the most representative being cannabinol, cannabidiol and several isomers of tetrahydrocannabinol. Knowledge of the therapeutic activity of cannabis dates back to the ancient dynasties of China, where, 5,000 years ago, cannabis was used for the treatment of asthma, migraine and some gynaecological disorders. These uses later became so established that, around 1850, cannabis extracts were included in the US Pharmacopoeia and remained there until 1947."

Source: [https://www.google.com/patents/US5948777?](https://www.google.com/patents/US5948777?dq=patent+cannabinoid&hl=en&sa=X&ei=9XH4KeBdD9yQSrioCoDw&ved=0CEUQ6AEwBjgU)

[dq=patent+cannabinoid&hl=en&sa=X&ei=9XH4KeBdD9yQSrioCoDw&ved=0CEUQ6AEwBjgU](https://www.google.com/patents/US5948777?dq=patent+cannabinoid&hl=en&sa=X&ei=9XH4KeBdD9yQSrioCoDw&ved=0CEUQ6AEwBjgU)

## LEARN ABOUT YOUR ENDOCANNABINOID SYSTEM

Your Endocannabinoid System Explained



## PATENTS FOR CANNABINOIDS

### FOUND IN CANNABIS

#### #1 - "Cannabinoids as Antioxidants and Neuroprotectants"

DESCRIPTION: "Cannabinoids have been found to have antioxidant properties, unrelated to NMDA receptor antagonism. This new found property makes cannabinoids **useful in the**

Several non-psychoactive cannabinoids have been found to have antioxidant properties, and act to inhibit receptor engagement. This new research properly makes cannabinoids useful in the **treatment and prophylaxis of wide variety of oxidation associated diseases, such as ischemic, age-related, inflammatory and autoimmune diseases.** The cannabinoids are found to have particular application as **neuroprotectants**, for example 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.** Nonpsychoactive cannabinoids, such as cannabidiol, are particularly advantageous to use because they avoid toxicity that is encountered with psychoactive cannabinoids at high doses useful in the method of the present invention."

PUBLICATION NUMBER: **US 6630507 B1**

FILED BY: The United States Of America As Represented By The Department Of Health And Human Services (<http://www.google.com/search?tbo=p&tbn=pts&hl=en&q=inassignee:%22The+United+States+Of+America+As+Represented+By+The+Department+Of+Health+And+Human+Services%22>)

LINK: <http://www.google.com/patents/US6630507> (<http://www.google.com/patents/US6630507>)

#### #2 - "Phytocannabinoids in the treatment of cancer"

DESCRIPTION: "This invention relates to the use of phytocannabinoids, **either in an isolated form or in the form of a botanical drug substance (BDS) in the treatment of cancer.** Preferably the cancer to be treated is cancer of the prostate, cancer of the breast or cancer of the colon."

"Botanical Drug Substance (BDS)" is Cannabis

PUBLICATION NUMBER: **US 20130059018 A1**

FILED BY: Otsuka Pharmaceutical Co., Limited (<http://www.google.com/search?tbo=p&tbn=pts&hl=en&q=inassignee:%22Otsuka+Pharmaceutical+Co.,+Limited%22>), Gw Pharma Limited (<http://www.google.com/search?tbo=p&tbn=pts&hl=en&q=inassignee:%22Gw+Pharma+Limited%22>)

LINK: <http://www.google.com/patents/US20130059018> (<http://www.google.com/patents/US20130059018>)

#### #3 - "Treating or preventing diabetes with Cannabidiol (CBD)"

DESCRIPTION: "Use of a cannabidiol for the manufacture of a medicament identified **for the treatment or prevention of diabetes and/or insulinitis.**"

Cannabidiol (CBD) can easily be extracted from high CBD strains of Cannabis such as Hemp varieties grown for Fiber and Food. See Patent #6 - "Cannabinoid Extraction Method (<https://www.google.com/patents/US6403126?dq=patent+cannabinoid&hl=en&sa=X&ei=M1DyU6KwDYHcOuy6gLgF&ved=0CCUQ6AEwAQ>)" for details on extraction of CBD from Cannabis.

PUBLICATION NUMBER: **US 8071641 B2**

FILED BY: Yissum Research Development Company Of The Hebrew University Of Jerusalem (<https://www.google.com/search?tbo=p&tbn=pts&hl=en&q=inassignee:%22Yissum+Research+Development+Company+Of+The+Hebrew+University+Of+Jerusalem%22>), Hadsit Hadasit Medical Research Services and Development Ltd. (<https://www.google.com/search?tbo=p&tbn=pts&hl=en&q=inassignee:%22Hadsit+Hadasit+Medical+Research+Services+and+Development+Ltd.%22>)

LINK: [https://www.google.com/patents/US8071641?dq=patent+8071641&hl=en&sa=X&ei=GhvsU\\_fQIY6KyASyZDICQ&ved=0CB4Q6AEwAA](https://www.google.com/patents/US8071641?dq=patent+8071641&hl=en&sa=X&ei=GhvsU_fQIY6KyASyZDICQ&ved=0CB4Q6AEwAA) ([https://www.google.com/patents/US8071641?dq=patent+8071641&hl=en&sa=X&ei=GhvsU\\_fQIY6KyASyZDICQ&ved=0CB4Q6AEwAA](https://www.google.com/patents/US8071641?dq=patent+8071641&hl=en&sa=X&ei=GhvsU_fQIY6KyASyZDICQ&ved=0CB4Q6AEwAA))

#### #4 - "Use of Cannabidiol (CBD) in the treatment of autoimmune hepatitis"

DESCRIPTION: "**Methods of treating autoimmune hepatitis are provided.** The methods include injecting **cannabidiol** into the subject, where the cannabidiol is synthetic cannabidiol or **natural cannabidiol** isolated from other natural cannabinoids."

PUBLICATION NUMBER: **US 8242178 B2**

FILED BY: University Of South Carolina (<https://www.google.com/search?tbo=p&tbn=pts&hl=en&q=inassignee:%22University+Of+South+Carolina%22>)

LINK: <https://www.google.com/patents/US8242178?dq=patent+8242178&hl=en&sa=X&ei=pBvsU72AlsWUyASc1oGQDg&ved=0CB4Q6AEwAA> (<https://www.google.com/patents/US8242178?dq=patent+8242178&hl=en&sa=X&ei=pBvsU72AlsWUyASc1oGQDg&ved=0CB4Q6AEwAA>)

#### #5 - "Cannabinoids used for treating Prostate Cancer"

DESCRIPTION: "Compositions and methods are described for the treatment of prostatitis, benign prostatic hypertrophy, and prostate cancer. The compositions contain either aqueous extracts or dried mixtures of selenium- and zinc-enriched **cannabis plant material**, shiitake mushrooms, and maitake mushrooms. **The compositions are effective in treating prostate disorders by alleviating pain and voiding symptoms, decreasing inflammation and prostate size, reducing cellular proliferation in prostate tissue, and/or reducing PSA levels to within the normal range of 0-4.**"

PUBLICATION NUMBER: **7597910 B2**

FILED BY: Sigm Medical Research Institute (<http://www.google.com/search?tbo=p&tbn=pts&hl=en&q=inassignee:%22Sigm+Medical+Research+Institute%22>)

LINK: <http://www.google.com/patents/US7597910> (<http://www.google.com/patents/US7597910>)

#### #6 - "7-hydroxy cannabidiol (7-oh-cbd) for use in the treatment of non-alcoholic fatty liver disease (nafld)"

DESCRIPTION: The liver plays a key role in regulating total body energy homeostasis and its ability to do so is greatly affected by the occurrence of pathological conditions such as hepatosteatosis or non-alcoholic fatty liver disease (NAFLD), which contributes to hepatic insulin resistance and potentially end-stage liver disease-related mortality. Triglyceride accumulation in hepatocytes of steatotic livers results from the incorporation of plasma free fatty acids as well as de novo fat synthesis.

[0011] Lowering TG levels in the blood **can help reduce the risk of suffering from heart disease, diabetes and other metabolic disorders.**

[0012] It has been shown previously that **tetrahydrocannabivarin (THCV)** is able to decrease triglyceride levels in HHL-5 cells treated with oleic acid. This is an in vitro model for fatty liver

disease which showed that THCV was able to reduce triglyceride (TG) levels in a time dependent manner (Wargent et al., 2013).

[0013] It has also been suggested that **cannabidiol (CBD)** may be useful in reducing TG levels in blood (WO 2009/093018).

PUBLICATION NUMBER: **WO 2015198077 A1**

FILED BY: Gw Pharma Limited (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Gw+Pharma+Limited%22>)

LINK: <https://www.google.com/patents/WO2015198077A1?cl=en&dq=cannabidiol&hl=en&sa=X&ved=0ahUKewiuzKuaslrMAhUkuYMKHSgLA64Q6AEIHTAA>  
(<https://www.google.com/patents/WO2015198077A1?cl=en&dq=cannabidiol&hl=en&sa=X&ved=0ahUKewiuzKuaslrMAhUkuYMKHSgLA64Q6AEIHTAA>)

#### #7 - "Use of cannabinoids in the treatment of epilepsy"

DESCRIPTION: The present disclosure relates to the use of cannabidiol (CBD) for the reduction of total convulsive seizure frequency in the treatment of "treatment-resistant epilepsy" (TRE). In particular, the disclosure relates to the use of CBD of treating TRE when the TRE is Dravet syndrome; myoclonic absence seizures or febrile infection related epilepsy syndrome (FIRES). The disclosure further relates to the use of CBD in combination with one or more anti-epileptic drugs (AEDs).

PUBLICATION NUMBER: **WO 2015193667 A1**

FILED BY: Gw Pharma Limited

LINK: <https://www.google.com/patents/WO2015193667A1?cl=en&dq=cannabinoids&hl=en&sa=X&ved=0ahUKewjqiOyIplrMAhUFvYMKHbS0A00Q6AEIKzAC>  
(<https://www.google.com/patents/WO2015193667A1?cl=en&dq=cannabinoids&hl=en&sa=X&ved=0ahUKewjqiOyIplrMAhUFvYMKHbS0A00Q6AEIKzAC>)

#### #8 - "Cannabinoid extraction method"

DESCRIPTION: A method of extracting cannabinoids, cannflavins, and/or essential oils from hemp and/or of producing a whole hemp extract lacking  $\Delta^9$ -THC is herein described.

PUBLICATION NUMBER: **US 6403126 B1**

FILED BY: Websar Innovations Inc. (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Websar+Innovations+Inc.%22>)

LINK: <https://www.google.com/patents/US6403126?dq=patent+cannabinoid&hl=en&sa=X&ei=M1DyU6KwDYHcOuy6gLgF&ved=0CCUQ6AEwAQ>  
(<https://www.google.com/patents/US6403126?dq=patent+cannabinoid&hl=en&sa=X&ei=M1DyU6KwDYHcOuy6gLgF&ved=0CCUQ6AEwAQ>)

#### #9- "Anti-tumoural effects of cannabinoid combinations"

DESCRIPTION: "The invention relates to the use of a **combination of cannabinoids, particularly tetrahydrocannabinol (THC) and cannabidiol (CBD)**, in the manufacture of a medicament for use in the treatment of cancer. In particular **the cancer to be treated is a brain tumor, more particularly a glioma, more particularly still a glioblastoma multiforme (GBM)**"

PUBLICATION NUMBER: **US 8632825 B2**

FILED BY: Gw Pharma Limited (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Gw+Pharma+Limited%22>), Otsuka Pharmaceutical Co., Limited (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Otsuka+Pharmaceutical+Co.,+Limited%22>)

LINK: <https://www.google.com/patents/US8632825?dq=patent+cannabinoid&hl=en&sa=X&ei=M1DyU6KwDYHcOuy6gLgF&ved=0CDMQ6AEwAw>  
(<https://www.google.com/patents/US8632825?dq=patent+cannabinoid&hl=en&sa=X&ei=M1DyU6KwDYHcOuy6gLgF&ved=0CDMQ6AEwAw>)

#### #10 - "Cannabinoid drugs"

DESCRIPTION: "The invention relates to the use of **cannabinoid compounds (derivatives of tetrahydrocannabinol)** for decreasing cell proliferation in a mammal."

PUBLICATION NUMBER: **US 6448288 B1**

FILED BY: University Of Massachusetts (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22University+Of+Massachusetts%22>)

LINK: <https://www.google.com/patents/US6448288?dq=patent+cannabinoid&hl=en&sa=X&ei=M1DyU6KwDYHcOuy6gLgF&ved=0CDoQ6AEwBA>  
(<https://www.google.com/patents/US6448288?dq=patent+cannabinoid&hl=en&sa=X&ei=M1DyU6KwDYHcOuy6gLgF&ved=0CDoQ6AEwBA>)

#### #11 - "Cannabinoid receptor antagonists"

DESCRIPTION: "This invention discloses methods of using certain aryl-benzo[b]thiophene and benzo[b]furan compounds to block or inhibit cannabinoid receptors in mammals. It also discloses novel compounds which are antagonists of the cannabinoid receptors and also discloses pharmaceutical formulations which contain the compounds as an active ingredient."

"Among the many beneficial pharmacological properties attributed to marijuana are: analgesia, lowering blood and intra-ocular pressure, and anti-emetic activity in both mammals and man."

PUBLICATION NUMBER: **US 5596106 A**

FILED BY: Eli Lilly And Company (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Eli+Lilly+And+Company%22>)

LINK: <https://www.google.com/patents/US5596106?dq=patent+cannabinoid&hl=en&sa=X&ei=M1DyU6KwDYHcOuy6gLgF&ved=0CEEQ6AEwBQ>  
(<https://www.google.com/patents/US5596106?dq=patent+cannabinoid&hl=en&sa=X&ei=M1DyU6KwDYHcOuy6gLgF&ved=0CEEQ6AEwBQ>)

#### #12 - "Agonists specific for the peripheral Cannabinoid receptor"

DESCRIPTION: "Among the many beneficial pharmacological properties attributed to marijuana are: analgesia, lowering blood and intra-ocular pressure, and anti-emetic activity in both

mammals and man.”

PUBLICATION NUMBER: **US 6903137 B2**

FILED BY: Yissum Research Development Co. Of The Hebrew University Of Jerusalem (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Yissum+Research+Development+Co.+Of+The+Hebrew+University+Of+Jerusalem%22>)

LINK: <https://www.google.com/patents/US6903137?dq=patent+cannabinoid&hl=en&sa=X&ei=M1DyU6KwDYHcOuy6gLgF&ved=0CEgQ6AEwBg>  
(<https://www.google.com/patents/US6903137?dq=patent+cannabinoid&hl=en&sa=X&ei=M1DyU6KwDYHcOuy6gLgF&ved=0CEgQ6AEwBg>)

**#13 – “Cannabinoid-containing plant extracts as neuroprotective agents”**

PUBLICATION NUMBER: **EP 1976506 A1**

FILED BY: GW Pharma Limited (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22GW+Pharma+Limited%22>)

LINK: <https://www.google.com/patents/EP1976506A1?cl=en&dq=patent+cannabinoid&hl=en&sa=X&ei=M1DyU6KwDYHcOuy6gLgF&ved=0CE8Q6AEwBw>  
(<https://www.google.com/patents/EP1976506A1?cl=en&dq=patent+cannabinoid&hl=en&sa=X&ei=M1DyU6KwDYHcOuy6gLgF&ved=0CE8Q6AEwBw>)

**#14 – “Administration of (natural or synthetic) cannabinoids to (human or non-human) mammals having cerebral tumors, and cannabinoids are chosen from Delta 9-tetrahydrocannabinol, Delta 8-tetrahydrocannabinol, cannabiniol and cannabidiol”**

PUBLICATION NUMBER: **US 20040039048 A1**

FILED BY: Manuel Guzman Pastor (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Manuel+Guzman+Pastor%22>), Cristina Sanchez Garcia (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Cristina+Sanchez+Garcia%22>), Ismael Galve Roperh (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Ismael+Galve+Roperh%22>)

LINK: <https://www.google.com/patents/US20040039048?dq=patent+cannabinoid&hl=en&sa=X&ei=M1DyU6KwDYHcOuy6gLgF&ved=0CFYQ6AEwCA>  
(<https://www.google.com/patents/US20040039048?dq=patent+cannabinoid&hl=en&sa=X&ei=M1DyU6KwDYHcOuy6gLgF&ved=0CFYQ6AEwCA>)

**#15 – “Comprising regulating the expression or activity of cannabinoid receptors in bone cells”**

PUBLICATION NUMBER: **US 7749953 B2**

FILED BY: Yissum Research Development Company Of The Hebrew University Of Jerusalem (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Yissum+Research+Development+Company+Of+The+Hebrew+University+Of+Jerusalem%22>)

LINK: [https://www.google.com/patents/US7749953?dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU\\_myGo6VyATtnoKAAg&ved=0CBsQ6AEwADgK](https://www.google.com/patents/US7749953?dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU_myGo6VyATtnoKAAg&ved=0CBsQ6AEwADgK)  
([https://www.google.com/patents/US7749953?dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU\\_myGo6VyATtnoKAAg&ved=0CBsQ6AEwADgK](https://www.google.com/patents/US7749953?dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU_myGo6VyATtnoKAAg&ved=0CBsQ6AEwADgK))

**#16 – “Medical use for acidic cannabinoids”**

PUBLICATION NUMBER: **WO 2012144892 A1**

FILED BY: Fyttagoras B.V. (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Fyttagoras+B.V.%22>)

LINK: [https://www.google.com/patents/WO2012144892A1?cl=en&dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU\\_myGo6VyATtnoKAAg&ved=0CCIQ6AEwATgK](https://www.google.com/patents/WO2012144892A1?cl=en&dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU_myGo6VyATtnoKAAg&ved=0CCIQ6AEwATgK)  
([https://www.google.com/patents/WO2012144892A1?cl=en&dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU\\_myGo6VyATtnoKAAg&ved=0CCIQ6AEwATgK](https://www.google.com/patents/WO2012144892A1?cl=en&dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU_myGo6VyATtnoKAAg&ved=0CCIQ6AEwATgK))

**#17 – “Method of relieving analgesia and reducing inflammation using a cannabinoid delivery topical liniment”**

PUBLICATION NUMBER: **US 6949582 B1**

FILED BY: Wallace Walter H (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Wallace+Walter+H%22>)

LINK: [https://www.google.com/patents/US6949582?dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU\\_myGo6VyATtnoKAAg&ved=0CCkQ6AEwAjgK](https://www.google.com/patents/US6949582?dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU_myGo6VyATtnoKAAg&ved=0CCkQ6AEwAjgK)  
([https://www.google.com/patents/US6949582?dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU\\_myGo6VyATtnoKAAg&ved=0CCkQ6AEwAjgK](https://www.google.com/patents/US6949582?dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU_myGo6VyATtnoKAAg&ved=0CCkQ6AEwAjgK))

**#18 – “Novel cannabinoid receptor ligands, pharmaceutical compositions containing them, and process for their preparation”**

PUBLICATION NUMBER: **WO 2006129178 A1**

FILED BY: Glenmark Pharmaceuticals Sa (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Glenmark+Pharmaceuticals+Sa%22>), Meyyappan Muthuppalaniappan (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Meyyappan+Muthuppalaniappan%22>), Gopalan Balasubramanian (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Gopalan+Balasubramanian%22>), Srinivas Gullapalli (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Srinivas+Gullapalli%22>), Neelima Khairatkar Joshi (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Neelima+Khairatkar+Joshi%22>), Shridhar Narayanan (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Shridhar+Narayanan%22>)

LINK: [https://www.google.com/patents/WO2006129178A1?cl=en&dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU\\_myGo6VyATtnoKAAg&ved=0CDAQ6AEwAzgK](https://www.google.com/patents/WO2006129178A1?cl=en&dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU_myGo6VyATtnoKAAg&ved=0CDAQ6AEwAzgK)  
([https://www.google.com/patents/WO2006129178A1?cl=en&dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU\\_myGo6VyATtnoKAAg&ved=0CDAQ6AEwAzgK](https://www.google.com/patents/WO2006129178A1?cl=en&dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU_myGo6VyATtnoKAAg&ved=0CDAQ6AEwAzgK))

**#19 – “Bicyclic cb2 cannabinoid receptor ligands”**

PUBLICATION NUMBER: **EP 1469842 A2**



FILED BY: Pharmos Corporation (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Pharmos+Corporation%22>)

LINK: [https://www.google.com/patents/EP1469842A2?cl=en&dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU\\_myGo6VyATtnoKAAg&ved=0CDcQ6AEwBDgK](https://www.google.com/patents/EP1469842A2?cl=en&dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU_myGo6VyATtnoKAAg&ved=0CDcQ6AEwBDgK)  
([https://www.google.com/patents/EP1469842A2?cl=en&dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU\\_myGo6VyATtnoKAAg&ved=0CDcQ6AEwBDgK](https://www.google.com/patents/EP1469842A2?cl=en&dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU_myGo6VyATtnoKAAg&ved=0CDcQ6AEwBDgK))

#### #20 – “Peripheral cannabinoid receptor (CB2) selective ligands”

PUBLICATION NUMBER: **US 6995187 B1**

FILED BY: University Of Connecticut (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22University+Of+Connecticut%22>)

LINK: [https://www.google.com/patents/US6995187?dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU\\_myGo6VyATtnoKAAg&ved=0CD4Q6AEwBTgK](https://www.google.com/patents/US6995187?dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU_myGo6VyATtnoKAAg&ved=0CD4Q6AEwBTgK)  
([https://www.google.com/patents/US6995187?dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU\\_myGo6VyATtnoKAAg&ved=0CD4Q6AEwBTgK](https://www.google.com/patents/US6995187?dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU_myGo6VyATtnoKAAg&ved=0CD4Q6AEwBTgK))

#### #21 – “Chewing gum compositions comprising cannabinoids”

PUBLICATION NUMBER: **US 20110097283 A1**

FILED BY: Mareda Holding Bv (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Mareda+Holding+Bv%22>)

LINK: [https://www.google.com/patents/US20110097283?dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU\\_myGo6VyATtnoKAAg&ved=0CEUQ6AEwBjgK](https://www.google.com/patents/US20110097283?dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU_myGo6VyATtnoKAAg&ved=0CEUQ6AEwBjgK)  
([https://www.google.com/patents/US20110097283?dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU\\_myGo6VyATtnoKAAg&ved=0CEUQ6AEwBjgK](https://www.google.com/patents/US20110097283?dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU_myGo6VyATtnoKAAg&ved=0CEUQ6AEwBjgK))

#### #22 – “Cannabinoid liquid formulations for mucosal administration”

PUBLICATION NUMBER: **EP 2314284 A2**

FILED BY: GW Pharma Limited (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22GW+Pharma+Limited%22>)

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([https://www.google.com/patents/EP2314284A2?cl=en&dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU\\_myGo6VyATtnoKAAg&ved=0CFMQ6AEwCDgK](https://www.google.com/patents/EP2314284A2?cl=en&dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU_myGo6VyATtnoKAAg&ved=0CFMQ6AEwCDgK))

#### #23 – “Isolation of herbal and cannabinoid medicinal extracts”

PUBLICATION NUMBER: **US 20030017216 A1**

FILED BY: Schmidt Robert Gustav (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Schmidt+Robert+Gustav%22>), Coco Charles Edward (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Coco+Charles+Edward%22>)

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([https://www.google.com/patents/US20030017216?dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU\\_myGo6VyATtnoKAAg&ved=0CFoQ6AEwCTgK](https://www.google.com/patents/US20030017216?dq=patent+cannabinoid&hl=en&sa=X&ei=Z1TyU_myGo6VyATtnoKAAg&ved=0CFoQ6AEwCTgK))

#### #24 – “Cannabinoid formulations”

PUBLICATION NUMBER: **WO 2013009928 A1**

FILED BY: Organic Medical Research (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Organic+Medical+Research%22>)

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(<https://www.google.com/patents/WO2013009928A1?cl=en&dq=patent+cannabinoid&hl=en&sa=X&ei=9XHjU4KeBdD9yQSrioCoDw&ved=0CBsQ6AEwADgU>)

#### #25 – “Cannabinoid patch and method for cannabis transdermal delivery”

PUBLICATION NUMBER: **CA 2356020 C**

FILED BY: Lawrence L. Brooke (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Lawrence+L.+Brooke%22>), Cal C. Herrmann (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Cal+C.+Herrmann%22>), Su Il Yum (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Su+Il+Yum%22>), Patchtek, Inc. (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Patchtek,+Inc.%22>)

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#### #26 – “Medicinal acidic cannabinoids”

PUBLICATION NUMBER: **EP 1559423 A1**

FILED BY: Nederlandse Organisatie Voor Toegepast-Natuurwetenschappelijk Onderzoek Tno (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Nederlandse+Organisatie+Voor+Toegepast-Natuurwetenschappelijk+Onderzoek+Tno%22>)

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(<https://www.google.com/patents/EP1559423A1?cl=en&dq=patent+cannabinoid&hl=en&sa=X&ei=9XHjU4KeBdD9yQSrioCoDw&ved=0CCkQ6AEwAjgU>)

#### #27 – “Cannabinoid compositions and methods of use thereof”

PUBLICATION NUMBER: **WO 2006024958 A2**

FILED BY: Novimmune Sa (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Novimmune+Sa%22>), Bernard Mach (<https://www.google.com/search?>)

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<https://www.google.com/patents/WO2006024958A2?cl=en&dq=patent+cannabinoid&hl=en&sa=X&ei=9XH4U4KeBdD9yQsRioCoDw&ved=0CDcQ6AEwBDgU>

#### #28 - "Cannabinoid crystalline derivatives and process of cannabinoid purification"

PUBLICATION NUMBER: **EP 1560819 B1**

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<https://www.google.com/patents/EP1560819B1?cl=en&dq=patent+cannabinoid&hl=en&sa=X&ei=9XH4U4KeBdD9yQsRioCoDw&ved=0CD4Q6AEwBTgU>

#### #29 - "Cannabinoid receptor agonists"

PUBLICATION NUMBER: **US 5948777 A**

FILED BY: Smithkline Beecham Corporation (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Smithkline+Beecham+Corporation%22>)

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<https://www.google.com/patents/US5948777?dq=patent+cannabinoid&hl=en&sa=X&ei=9XH4U4KeBdD9yQsRioCoDw&ved=0CEUQ6AEwBjgU>

#### #30 - "Transmucosal delivery of cannabinoids"

PUBLICATION NUMBER: **EP 1539069 A1**

FILED BY: University of Mississippi (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22University+of+Mississippi%22>)

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<https://www.google.com/patents/EP1539069A1?cl=en&dq=patent+cannabinoid&hl=en&sa=X&ei=9XH4U4KeBdD9yQsRioCoDw&ved=0CFoQ6AEwCTgU>

#### #31 - "Cannabinoid patch and method for cannabis transdermal delivery"

PUBLICATION NUMBER: **US 6328992 B1**

FILED BY: Lawrence L. Brooke (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Lawrence+L.+Brooke%22>), Cal C. Herrmann (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Cal+C.+Herrmann%22>), Su Il Yum (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Su+Il+Yum%22>)

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<https://www.google.com/patents/US6328992?dq=patent+cannabinoid&hl=en&sa=X&ei=JnryU9-nCcu3yATYloGQBQ&ved=0CDAQ6AEwAzge>

#### #32 - "Cannabinoid receptor modulators, their processes of preparation, and use of cannabinoid receptor modulators in treating respiratory and non-respiratory diseases"

PUBLICATION NUMBER: **WO 2001058869 A2**

FILED BY: Chen Bang Chi (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Chen+Bang+Chi%22>), Ping Chen (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Ping+Chen%22>), John Hynes Jr (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22John+Hynes+Jr%22>), Peter Kiener (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Peter+Kiener%22>), Katerina Leftheris (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Katerina+Leftheris%22>), Malinda Longphre (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Malinda+Longphre%22>), Derek J Norris (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Derek+J+Norris%22>), Chennagiri R Pandit (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Chennagiri+R+Pandit%22>), Steven Spergel (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Steven+Spergel%22>), Squibb Bristol Myers Co (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Squibb+Bristol+Myers+Co%22>), John Tokarski (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22John+Tokarski%22>), Stephen Wroblecki (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Stephen+Wroblecki%22>), Hong Wu (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Hong+Wu%22>), Rulin Zhao (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Rulin+Zhao%22>)

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<https://www.google.com/patents/WO2001058869A2?cl=en&dq=patent+cannabinoid&hl=en&sa=X&ei=JnryU9-nCcu3yATYloGQBQ&ved=0CEUQ6AEwBjge>

#### #35 - "Anti-tumoural effects of cannabinoid combinations"

PUBLICATION NUMBER: **EP 2318000 A1**

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<https://www.google.com/patents/EP2318000A1?cl=en&dq=patent+cannabinoid&hl=en&sa=X&ei=JnryU9-nCcu3yATYloGQBQ&ved=0CEwQ6AEwBzge>

#### #36 - "Use of cannabinoids as anti-inflammatory agents"

PUBLICATION NUMBER: **US 6410588 B1**

FILED BY: The Mathilda And Terence Kennedy Institute Of Rheumatology (<https://www.google.com/search?>

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(<https://www.google.com/patents/US6410588?dq=patent+cannabinoid&hl=en&sa=X&ei=JnryU9-nCcu3yATYloGQBQ&ved=0CFMQ6AEwCDge>)

#### #37 – “Medicinal products created from cannabis using cannabinoid profiles as indicators of efficacy”

PUBLICATION NUMBER: **CA 2322549 A1**

FILED BY: A. Paul Hornby (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22A.+Paul+Hornby%22>), Martin D. Sutherland (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Martin+D.+Sutherland%22>), Pavel U. Dimotoff (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Pavel+U.+Dimotoff%22>)

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(<https://www.google.com/patents/CA2322549A1?cl=en&dq=patent+cannabinoid&hl=en&sa=X&ei=JnryU9-nCcu3yATYloGQBQ&ved=0CFoQ6AEwCTge>)

#### #38 – “New use for cannabinoid (CBD)”

PUBLICATION NUMBER: **WO 2007138322 A1**

FILED BY: Gw Pharma Ltd (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Gw+Pharma+Ltd%22>), Geoffrey Guy (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Geoffrey+Guy%22>), Roger Pertwee (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Roger+Pertwee%22>), Adele Thomas (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Adele+Thomas%22>)

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(<https://www.google.com/patents/WO2007138322A1?cl=en&dq=patent+cannabinoid&hl=en&sa=X&ei=e33yU6aYJof4yQS3xILYDw&ved=0CD4Q6AEwBTgo>)

#### #40 – “Liquid cannabinoid formulations”

PUBLICATION NUMBER: **US 8222292 B2**

FILED BY: Insys Therapeutics, Inc. (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Insys+Therapeutics,+Inc.%22>)

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(<https://www.google.com/patents/US8222292?dq=patent+cannabinoid&hl=en&sa=X&ei=e33yU6aYJof4yQS3xILYDw&ved=0CEUQ6AEwBjgo>)

#### #41 – “Cannabinoid derivatives, methods of making, and use thereof”

PUBLICATION NUMBER: **US 7169942 B2**

FILED BY: University Of Tennessee Research Foundation (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22University+Of+Tennessee+Research+Foundation%22>)

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(<https://www.google.com/patents/US7169942?dq=patent+cannabinoid&hl=en&sa=X&ei=e33yU6aYJof4yQS3xILYDw&ved=0CFMQ6AEwCDgo>)

#### #42 – “Prodrugs of cannabidiol, compositions comprising prodrugs of cannabidiol and methods of using the same”

DESCRIPTION: “Described herein are cannabidiol prodrugs, methods of making cannabidiol prodrugs, formulations comprising cannabidiol prodrugs and methods of using cannabidiols. One embodiment described herein relates to the transdermal or topical administration of a cannabidiol prodrug for treating and preventing diseases and/or disorders.”

“The clinical usefulness of the cannabinoids, including cannabidiol (“CBD”), to provideanalgesia and neuroprotection, reduce inflammation, help alleviate nausea and emesis, as well as treat epilepsy, anxiety disorders, and glaucoma, has been well-recognized. In addition, it is also well-known that cannabidiol lacks the psychoactive effects seen in many of the other cannabinoids, including  $\Delta^9$ -tetrahydrocannabinol, which is currently available in an oral dosage, sold under the trade name Marinol®.”

PUBLICATION NUMBER: **US 8293786 B2**

FILED BY: Alltranz Inc. (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Alltranz+Inc.%22>)

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(<https://www.google.com/patents/US8293786?dq=cannabidiol&hl=en&sa=X&ei=uaTzU8rRCcayyASfIYCYCA&ved=0CCUQ6AEwAQ>)

#### #43 – “Use of the phytocannabinoid cannabidiol (cbd) in combination with a standard anti-epileptic drug (saed) in the treatment of epilepsy”

DESCRIPTION: “The invention relates to the use of cannabidiol (CBD), at a dose of greater than 300mg/day, in combination with a standard anti-epileptic drug (SAED) which acts via sodium or calcium channels, for use in the treatment of epilepsy. The SAED is preferably one which • modifies low-threshold or transient neuronal calcium currents, or • reduces high-frequency neuronal firing and sodium-dependent action potentials and enhances GABA effects. Preferred SAEDs are ethosuximide and valproate.”

PUBLICATION NUMBER: **WO 2012093255 A1**

FILED BY: Gw Pharma Limited (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Gw+Pharma+Limited%22>), Otsuka Pharmaceutical Co. Limited (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Otsuka+Pharmaceutical+Co.+Limited%22>)

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(<https://www.google.com/patents/WO2012093255A1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=uaTzU8rRCcayyASfIYCYCA&ved=0CDQ6AEwBA>)

(<https://www.google.com/patents/WO2017093235A1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=uaTzU8rRCcayyASfIYCYCA&ved=0CUEQ6AEwBQ>)

#### #44 – “Method of preparing cannabidiol (CBD) from plant material”

DESCRIPTION: “The invention relates to methods of **preparing cannabidiol in substantially pure form starting from plant material**. Also described are substantially **pure preparations of cannabidiol having a chromatographic purity of 95% or greater.**”

PUBLICATION NUMBER: **EP 1542952 A1**

FILED BY: GW Pharma Limited (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22GW+Pharma+Limited%22>)

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(<https://www.google.com/patents/EP1542952A1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=uaTzU8rRCcayyASfIYCYCA&ved=0CEEQ6AEwBQ>)

#### #45 – “Converting cannabidiol to Delta 8 or Delta 9-tetrahydrocannabinol by mixing the diol with a catalyst and solvent and allowing the mixture to separate, removing the organic phase; and eluting the tetrahydrocannabinol from the organic phase”

DESCRIPTION: “Methods of converting cannabidiol to  $\Delta^8$ -tetrahydrocannabinol or  $\Delta^9$ -tetrahydrocannabinol are described. The described methods produce higher yields and higher purity compared to prior art methods.”

PUBLICATION NUMBER: **US 7399872 B2**

FILED BY: Webster G R Barrie (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Webster+G+R+Barrie%22>), Sarna Leonard P (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Sarna+Leonard+P%22>), Raphael Mechoulam (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Raphael+Mechoulam%22>)

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#### #46 – “Novel cannabidiol derivatives and their use as anti-inflammatory agents”

DESCRIPTION: “NOVEL CANNABIDIOL DERIVATIVES AND THEIR USE AS ANTI-INFLAMMATORY AGENTS”

PUBLICATION NUMBER: **WO 2008107879 A1**

FILED BY: Yissum Res Dev Co (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Yissum+Res+Dev+Co%22>), Raphael Mechoulam (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Raphael+Mechoulam%22>), Natalya Kogan (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Natalya+Kogan%22>), Ruth Gallily (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Ruth+Gallily%22>), Aviva Breuer (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Aviva+Breuer%22>)

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(<https://www.google.com/patents/WO2008107879A1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=uaTzU8rRCcayyASfIYCYCA&ved=0CFYQ6AEwCA>)

#### #47 – “Use of cannabidiol for the inhibition of brain tumour cell migration”

DESCRIPTION: “The invention relates to the use of a cannabis plant extract or a cannabinoid as a pharmaceutically active agent in the inhibition of tumour cell migration.”

PUBLICATION NUMBER: **EP 1802274 B1**

FILED BY: GW Pharma Limited (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22GW+Pharma+Limited%22>)

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(<https://www.google.com/patents/EP1802274B1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=uaTzU8rRCcayyASfIYCYCA&ved=0CF0Q6AEwCQ>)

#### #48 – “Supercritical co2 extraction of tetrahydrocannabinol and cannabidiol from cannabis plant material”

DESCRIPTION: “The invention relates to a method for producing an extract from cannabis plant matter, containing tetrahydrocannabinol, cannabidiol and optionally the carboxylic acids thereof. According to said method, the dried plant matter is ground and subjected to a CO2 extraction and the primary extract obtained is separated. The inventive method permits .DELTA.8 or .DELTA.9 tetrahydrocannabinol to be selectively obtained both from industrial hemp and from drug-producing hemp, optionally after dissolving the primary extract in ethanol, separating undesirable waxes and removing the solvent under reduced pressure. ”

PUBLICATION NUMBER: **CA 2424356 A1**

FILED BY: Delta-9-Pharma GmbH (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Delta-9-Pharma+GmbH%22>), Adam Muller (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Adam+Muller%22>)

LINK: [https://www.google.com/patents/CA2424356A1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=q6\\_zU9umCZOxYASjYGAQAQ&ved=0CCIQ6AEwATgK](https://www.google.com/patents/CA2424356A1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=q6_zU9umCZOxYASjYGAQAQ&ved=0CCIQ6AEwATgK)  
([https://www.google.com/patents/CA2424356A1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=q6\\_zU9umCZOxYASjYGAQAQ&ved=0CCIQ6AEwATgK](https://www.google.com/patents/CA2424356A1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=q6_zU9umCZOxYASjYGAQAQ&ved=0CCIQ6AEwATgK))

#### #49 – “Use of cannabidiol prodrgs in topical and transdermal administration with microneedles”

DESCRIPTION: “Described herein are microneedle drug delivery systems comprising a pharmaceutical compositions comprising pharmaceutically active agents (e.g., **cannabidiolandprodrgs of cannabidiol**) and microneedle arrays suitable for local and systemic delivery of the active agent to a mammal. Also described herein are methods of using a

**cannabinoid prodrugs of cannabidiol**, and microneedle arrays suitable for local and systemic delivery of the active agent to a mammal. Also described herein are methods of using a microneedle transdermal or topical drug delivery systems comprising pharmaceutical compositions, comprising **cannabidiol and prodrugs of cannabidiol**, and microneedle arrays in **the treatment disease, including pancreatitis and pancreatic cancer.**"

PUBLICATION NUMBER: **EP 2473475 A1**

FILED BY: AllTranz Inc. (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22AllTranz+Inc.%22>)

LINK: [https://www.google.com/patents/EP2473475A1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=q6\\_zU9umCZOxYASJpYGAAQ&ved=0CCkQ6AEwAjgK](https://www.google.com/patents/EP2473475A1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=q6_zU9umCZOxYASJpYGAAQ&ved=0CCkQ6AEwAjgK)  
([https://www.google.com/patents/EP2473475A1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=q6\\_zU9umCZOxYASJpYGAAQ&ved=0CCkQ6AEwAjgK](https://www.google.com/patents/EP2473475A1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=q6_zU9umCZOxYASJpYGAAQ&ved=0CCkQ6AEwAjgK))

#### #50 – “Pharmaceutical compositions comprising cannabidiol derivatives”

DESCRIPTION: “The present invention relates to cannabidiol derivatives and to pharmaceutical compositions comprising **cannabidiol derivatives being antiinflammatory agents having analgesic, antianxiety, anticonvulsive, neuroprotective, antipsychotic and anticancer activity**. The present invention also relates to a process for the preparation of cannabidiol derivatives. It also relates to the use of cannabidiol derivatives and of pharmaceutical compositions comprising same in the preparation of a medicament, in a method of the treatment of human beings with cannabidiol derivatives or with a pharmaceutical preparations comprising same.”

PUBLICATION NUMBER: **WO 2001095899 A2**

FILED BY: Breuer Aviva (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Breuer+Aviva%22>), Fride Ester (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Frider+Ester%22>), Gallily Ruth (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Gallily+Ruth%22>), Hanus Lumir (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Hanus+Lumir%22>), Mechoulam Raphael (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Mechoulam+Raphael%22>), Tchilibon Susana (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Tchilibon+Susana%22>), Yissum Res Dev Co (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Yissum+Res+Dev+Co%22>)

LINK: [https://www.google.com/patents/WO2001095899A2?cl=en&dq=cannabidiol&hl=en&sa=X&ei=q6\\_zU9umCZOxYASJpYGAAQ&ved=0CEwQ6AEwBzgK](https://www.google.com/patents/WO2001095899A2?cl=en&dq=cannabidiol&hl=en&sa=X&ei=q6_zU9umCZOxYASJpYGAAQ&ved=0CEwQ6AEwBzgK)  
([https://www.google.com/patents/WO2001095899A2?cl=en&dq=cannabidiol&hl=en&sa=X&ei=q6\\_zU9umCZOxYASJpYGAAQ&ved=0CEwQ6AEwBzgK](https://www.google.com/patents/WO2001095899A2?cl=en&dq=cannabidiol&hl=en&sa=X&ei=q6_zU9umCZOxYASJpYGAAQ&ved=0CEwQ6AEwBzgK))

#### #51 – “Therapeutic uses of cannabidiol compounds”

DESCRIPTION: “This invention relates to the use of cannabidiol compounds in therapy.”

“Use of a cannabidiol (CBD) compound for the preparation of a pharmaceutical composition for treatment of at least one fundamental parameter affecting a vascular system selected from (a) the cardiovascular system; (b) the peripheral vascular system; or (c) a combination of (a) and (b), the fundamental parameter being selected from at least one of (i) dimension of heart scars; (ii) blood/plasma levels; (iii) atherosclerosis.”

PUBLICATION NUMBER: **EP 2007376 B1**

FILED BY: Hadasit Medical Research Services And Development Ltd. (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Hadasit+Medical+Research+Services+And+Development+Ltd.%22>), Yissum Research Development Company of the Hebrew University of Jerusalem (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Yissum+Research+Development+Company+of+the+Hebrew+University+of+Jerusalem%22>)

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#### #52 – “Method for producing an extract from cannabis plant matter, containing a tetrahydrocannabinol and a cannabidiol and cannabis extracts”

DESCRIPTION: “The invention relates to a method for producing an extract from cannabis plant matter, containing tetrahydrocannabinol, cannabidiol and optionally the carboxylic acids thereof. According to said method, the dried plant matter is ground and subjected to a CO<sub>2</sub> extraction and the primary extract obtained is separated. The invention method permits Δ<sup>8</sup> or Δ<sup>9</sup> tetrahydrocannabinol to be selectively obtained both from industrial hemp and from drug-producing hemp, optionally after dissolving the primary extract in ethanol, separating undesirable waxes and removing the solvent under reduced pressure. ”

PUBLICATION NUMBER: **US 20040049059 A1**

FILED BY: Adam Mueller (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Adam+Mueller%22>)

LINK: [https://www.google.com/patents/US20040049059?dq=cannabidiol&hl=en&sa=X&ei=78XzU\\_eUFOroigK-ID4Ag&ved=0CBsQ6AEwADgU](https://www.google.com/patents/US20040049059?dq=cannabidiol&hl=en&sa=X&ei=78XzU_eUFOroigK-ID4Ag&ved=0CBsQ6AEwADgU)  
([https://www.google.com/patents/US20040049059?dq=cannabidiol&hl=en&sa=X&ei=78XzU\\_eUFOroigK-ID4Ag&ved=0CBsQ6AEwADgU](https://www.google.com/patents/US20040049059?dq=cannabidiol&hl=en&sa=X&ei=78XzU_eUFOroigK-ID4Ag&ved=0CBsQ6AEwADgU))

#### #53 – “Anti-nausea and anti-vomiting activity of cannabidiol compounds”

DESCRIPTION: “The present invention relates the use of certain **cannabidiol derivatives and of their dimethyl heptyl homologs (CBD-DMH) in the treatment of nausea, in particular chemotherapy-induced nausea, and of anti vomiting activity**. The present invention relates also to the use of said cannabidiol derivatives being part of a pharmaceutical composition.”

PUBLICATION NUMBER: **US 8119697 B2**

FILED BY: Yissum Research Development Company Of The Hebrew University Of Jerusalem (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Yissum+Research+Development+Company+Of+The+Hebrew+University+Of+Jerusalem%22>)

LINK: [https://www.google.com/patents/US8119697?dq=cannabidiol&hl=en&sa=X&ei=78XzU\\_eUFOroigK-ID4Ag&ved=0CCIQ6AEwATgU](https://www.google.com/patents/US8119697?dq=cannabidiol&hl=en&sa=X&ei=78XzU_eUFOroigK-ID4Ag&ved=0CCIQ6AEwATgU) ([https://www.google.com/patents/US8119697?dq=cannabidiol&hl=en&sa=X&ei=78XzU\\_eUFOroigK-ID4Ag&ved=0CCIQ6AEwATgU](https://www.google.com/patents/US8119697?dq=cannabidiol&hl=en&sa=X&ei=78XzU_eUFOroigK-ID4Ag&ved=0CCIQ6AEwATgU))

#### #54 – “Pharmaceutical compositions containing (+) cannabidiol and derivatives thereof and some such novel derivatives”

DESCRIPTION: "Cannabinoid derivatives are known for their functions in the central as well as peripheral nervous system. The present invention describes some novel (+)-cannabidiol (CBD) derivatives, and their selective activity in the peripheral and not in the central nervous system. Thus, it is an object of the invention to provide the use of (+)-**CBD derivatives as analgesics, anti-inflammatory and anti-diarrheal agents.**"

PUBLICATION NUMBER: **WO 2005023741 A3**

FILED BY: Ariel Ltd (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Ariel+Ltd%22>), Fride Ester (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Fride+Ester%22>), Mechoulam Raphael (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Mechoulam+Raphael%22>), Yissum Res Dev Co (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Yissum+Res+Dev+Co%22>)

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([https://www.google.com/patents/WO2005023741A3?cl=en&dq=cannabidiol&hl=en&sa=X&ei=78XzU\\_eUFOroigK-ID4Ag&ved=0CCKQ6AEwAjgU](https://www.google.com/patents/WO2005023741A3?cl=en&dq=cannabidiol&hl=en&sa=X&ei=78XzU_eUFOroigK-ID4Ag&ved=0CCKQ6AEwAjgU))

#### #55 - "Use of cannabidiol in the treatment of chemotherapy-induced nausea and vomiting"

DESCRIPTION: "Cannabidiol for use in the treatment of chemotherapy-induced nausea."

PUBLICATION NUMBER: **EP 1476145 B1**

FILED BY: Yissum Research Development Company Of The Hebrew University Of Jerusalem (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Yissum+Research+Development+Company+Of+The+Hebrew+University+Of+Jerusalem%22>)

LINK: [https://www.google.com/patents/EP1476145B1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=gf\\_zU4qEM8SXyASyvoGgBQ&ved=0CEwQ6AEwBzgU](https://www.google.com/patents/EP1476145B1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=gf_zU4qEM8SXyASyvoGgBQ&ved=0CEwQ6AEwBzgU)  
([https://www.google.com/patents/EP1476145B1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=gf\\_zU4qEM8SXyASyvoGgBQ&ved=0CEwQ6AEwBzgU](https://www.google.com/patents/EP1476145B1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=gf_zU4qEM8SXyASyvoGgBQ&ved=0CEwQ6AEwBzgU))

#### #56 - "New pharmaceutical formulation comprising cannabidiol and tetrahydrocannabinol"

DESCRIPTION: "Treating or preventing diabetes with cannabidiol (CBD)"

PUBLICATION NUMBER: **EP 2173332 A1**

FILED BY: GW Pharma Limited (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22GW+Pharma+Limited%22>)

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([https://www.google.com/patents/EP2173332A1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=EQD0U4fDDs\\_5yQS1-4Eo&ved=0CCIQ6AEwATge](https://www.google.com/patents/EP2173332A1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=EQD0U4fDDs_5yQS1-4Eo&ved=0CCIQ6AEwATge))

#### #57- "Use of Cannabidiol in the Treatment of Hepatitis"

DESCRIPTION: "Cannabinoids are known to interact with CB1 and CB2 receptors expressed in the nervous and immune systems mediating a wide range of effects, including anti-inflammatory properties. However, cannabinoids that bind CB1 are also psychoactive thereby limiting their clinical use. Cannabidiol (CBD) is the most abundant nonpsychotropic plant cannabinoid but has not been studied as extensively as  $\Delta^9$ -tetrahydrocannabinol (THC). The present disclosure reports the immunosuppressive properties of CBD and demonstrates that CBD induces apoptosis in thymocytes and splenocytes and inhibits the proliferative responsiveness of T and B cells. This indicates that CB2 selective agonists, devoid of psychotropic effect, may serve as novel anti-inflammatory/immunosuppressive agents."

PUBLICATION NUMBER: **US 20120302646 A1**

FILED BY: University Of South Carolina (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22University+Of+South+Carolina%22>)

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([https://www.google.com/patents/US20120302646?dq=cannabidiol&hl=en&sa=X&ei=EQD0U4fDDs\\_5yQS1-4Eo&ved=0CDAQ6AEwAzge](https://www.google.com/patents/US20120302646?dq=cannabidiol&hl=en&sa=X&ei=EQD0U4fDDs_5yQS1-4Eo&ved=0CDAQ6AEwAzge))

#### #58 - "Process for the production of dronabinol"

DESCRIPTION: "A method for the production of dronabinol is disclosed, whereby: a) **cannabidiol is isolated from fibrous hemp as cannabidiol acid**, b) the cannabidiol, optionally obtained by decarboxylation, is cyclised in the presence of Lewis acids in a non-polar solvent to give dronabinol, c) the above is isolated by a chromatographic method and d) the residue obtained from the eluant after distilling off the solvent is purified by vacuum distillation. The dronabinol can be used for dispensing purposes in a syringe filled therewith and as inhalation solution for thermal nebulisation with hot air."

PUBLICATION NUMBER: **CA 2472561 A1**

FILED BY: Christian Steup (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Christian+Steup%22>)

LINK: <https://www.google.com/patents/CA2472561A1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=bQH0U9Prjsr-yQScqoH4DA&ved=0CCIQ6AEwATgo>  
(<https://www.google.com/patents/CA2472561A1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=bQH0U9Prjsr-yQScqoH4DA&ved=0CCIQ6AEwATgo>)

#### #59 - "Use of tetrahydrocannabinol and/or cannabidiol for the treatment of inflammatory bowel disease"

DESCRIPTION: "The present invention relates to the use of a **combination of the cannabinoids tetrahydrocannabinol (THC) and cannabidiol (CBD) in the treatment of an inflammatory bowel disease**, wherein the ratio of THC to CBD (w/w) is 2:1 to 1:2, and wherein the CBD is in a unit dose form suitable for delivering a daily dose of CBD in the dose range of from between 5 to 200mg.

PUBLICATION NUMBER: **EP 2182940 B1**

FILED BY: GW Pharma Limited (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22GW+Pharma+Limited%22>)

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(<https://www.google.com/patents/EP2182940B1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=bQH0U9PrJsr-yQScqoH4DA&ved=0CDAQ6AEwAzgo>)

#### #60 – “Synergistic therapies of cannabidiol with hypothermia for neuroprotection”

DESCRIPTION: “The present invention relates to the combination of the phytocannabinoid cannabidiol with therapeutic hypothermia for use in the treatment of neuroprotection or astroprotection.”

PUBLICATION NUMBER: **WO 2013182862 A1**

FILED BY: Gw Pharma Limited (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Gw+Pharma+Limited%22>)

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(<https://www.google.com/patents/WO2013182862A1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=bQH0U9PrJsr-yQScqoH4DA&ved=0CD4Q6AEwBTgo>)

#### #61 – “Therapeutic uses of Cannabigerol (CBG)”

DESCRIPTION: “The present invention relates to the use of the cannabinoid cannabigerol (CBG) in the manufacture of medicaments for use in the treatment of diseases and conditions benefiting from concurrent agonism of the CB1 and the CB2 cannabinoid receptors. **Such diseases or conditions to be treated are taken from the group: pain, neurodegenerative disease, ischemic disease, brain injury or damage, acquired brain injury, age related inflammatory or autoimmune disease, cachexia, nausea and vomiting, glaucoma, movement disorders, rheumatoid arthritis, asthma, allergy, psoriasis, Crohn's disease, systemic lupus erythematosus, diabetes, cancer, osteoporosis, renal ischemia and nephritis.**”

PUBLICATION NUMBER: **EP 2175848 A1**

FILED BY: Gw Pharma Limited (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Gw+Pharma+Limited%22>)

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(<https://www.google.com/patents/EP2175848A1?cl=en&dq=cannabigerol&hl=en&sa=X&ei=BAT0U9XXKNixyAT40IL4AQ&ved=0CB4Q6AEwAA>)

#### #62 – “Cannabinoids for use in the treatment of neuropathic pain”

DESCRIPTION: “The present invention relates to cannabinoids for use in the treatment of neuropathic pain. Preferably the cannabinoids are one or more phytocannabinoids of: cannabigerol (CBG), cannabichromene (CBC), cannabidivarin (CBDV) or tetrahydrocannabivarin (THCV). More preferably the phytocannabinoids are isolated and / or purified from cannabis plant extracts.”

PUBLICATION NUMBER: **EP 2709604 A1**

FILED BY: GW Pharma Limited (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22GW+Pharma+Limited%22>), Otsuka Pharmaceutical Co., Ltd. (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Otsuka+Pharmaceutical+Co.,+Ltd.%22>)

LINK: <https://www.google.com/patents/EP2709604A1?cl=en&dq=cannabigerol&hl=en&sa=X&ei=BAT0U9XXKNixyAT40IL4AQ&ved=0CFYQ6AEwCA>  
(<https://www.google.com/patents/EP2709604A1?cl=en&dq=cannabigerol&hl=en&sa=X&ei=BAT0U9XXKNixyAT40IL4AQ&ved=0CFYQ6AEwCA>)

#### #63 – “Cannabis sativa plants rich in cannabichromene (CBC) and its acid, extracts thereof and methods of obtaining extracts therefrom”

DESCRIPTION: “The present invention relates to plants producing, as their major cannabinoid cannabichromenic acid (CBCA) or its neutral (decarboxylated) form cannabichromene (CBC), hereafter jointly referred to as CBC(A). It additionally relates to: • A botanical material obtainable from said plants; • A botanical raw material (BRM), • An extract including a botanical drug substance (BDS) and a purified BDS; • A formulation comprising the BRM, BDS, purified BDS or other extract; • The use of the BRM, BDS, purified BDS or other extract in the manufacture of a medicament; • A method of deriving plants yielding a high proportion of the cannabinoid CBC (A) at the expense of other cannabinoids; • A method of cultivating plants such that they yield a high proportion of the cannabinoid CBC(A) at the expense of other cannabinoids; and • A method of extracting CBC(A) from said plants.”

PUBLICATION NUMBER: **US 20110098348 A1**

FILED BY: Gw Pharma Limited (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Gw+Pharma+Limited%22>)

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(<https://www.google.com/patents/US20110098348?dq=cannabichromene&hl=en&sa=X&ei=NrYDVLHMDILNggTh8IKwDg&ved=0CB8Q6AEwAA>)

#### #64 – “Pharmaceutical compositions comprising cannabichromene type compounds”

DESCRIPTION: “The invention relates to the use of cannabichromene type compounds and derivatives thereof in the **treatment of mood disorders.**”

PUBLICATION NUMBER: **US 8470874 B2**

FILED BY: Gw Pharma Limited (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Gw+Pharma+Limited%22>)

LINK: <https://www.google.com/patents/US8470874?dq=cannabichromene&hl=en&sa=X&ei=NrYDVLHMDILNggTh8IKwDg&ved=0CCYQ6AEwAQ>  
(<https://www.google.com/patents/US8470874?dq=cannabichromene&hl=en&sa=X&ei=NrYDVLHMDILNggTh8IKwDg&ved=0CCYQ6AEwAQ>)

#### #65 – “Cannabichromene derivative is exposed to the virus, a host cell, or an infected cell under conditions sufficient to inhibit the replication or proliferation of the virus, especially HIV.”

DESCRIPTION: “The invention provides a method, compounds, and compositions for inhibiting the replication or proliferation of a virus. In accordance with the invention, at least one cannabichromene derivative is exposed to the virus, a host cell, or an infected cell under conditions **sufficient to inhibit the replication or proliferation of the virus.**”

PUBLICATION NUMBER: **US 6541510 B2**

FILED BY: Immugen Pharmaceuticals, Inc. (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Immugen+Pharmaceuticals,+Inc.%22>)

LINK: <https://www.google.com/patents/US6541510?dq=cannabichromene&hl=en&sa=X&ei=NrYDVLHMDILNggTh8IKwDg&ved=0CDQQ6AEwAw>  
<https://www.google.com/patents/US6541510?dq=cannabichromene&hl=en&sa=X&ei=NrYDVLHMDILNggTh8IKwDg&ved=0CDQQ6AEwAw>

**#66 - "Phytocannabinoids for use in the treatment of intestinal inflammatory diseases"**

DESCRIPTION: "The present invention relates to one or more of the phytocannabinoids tetrahydrocannabivarin (THCV); cannabigerol (CBG); cannabichromene (CBC); and cannabidivarin (CBDV) **for use in the treatment of intestinal inflammatory diseases. Preferably the intestinal inflammatory disease is either ulcerative colitis or Crohn's disease.**"

PUBLICATION NUMBER: **WO 2013076487 A1**

FILED BY: Gw Pharma Limited (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Gw+Pharma+Limited%22>)

LINK: <https://www.google.com/patents/WO2013076487A1?cl=en&dq=cannabichromene&hl=en&sa=X&ei=NrYDVLHMDILNggTh8IKwDg&ved=0CEQQ6AEwBQ>  
<https://www.google.com/patents/WO2013076487A1?cl=en&dq=cannabichromene&hl=en&sa=X&ei=NrYDVLHMDILNggTh8IKwDg&ved=0CEQQ6AEwBQ>

**#67 - "Tetrahydrocannabivarin (thcv) for use in the protection of pancreatic islet cells"**

DESCRIPTION: "The present invention relates to the phytocannabinoid tetrahydrocannabivarin (THCV) **for use in the protection of pancreatic islet cells.** Preferably the pancreatic islet cells to be protected are beta cells. More preferably the protection of the pancreatic islet cells maintains insulin production at levels which are able to substantially control or improve control of blood glucose levels in a patient."

PUBLICATION NUMBER: **WO 2013076471 A1**

FILED BY: Gw Pharma Limited (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Gw+Pharma+Limited%22>)

LINK: <https://www.google.com/patents/WO2013076471A1?cl=en&dq=tetrahydrocannabivarin&hl=en&sa=X&ei=wbkDVJirB9DjggTZn4CwCg&ved=0CB8Q6AEwAA>  
<https://www.google.com/patents/WO2013076471A1?cl=en&dq=tetrahydrocannabivarin&hl=en&sa=X&ei=wbkDVJirB9DjggTZn4CwCg&ved=0CB8Q6AEwAA>

**#68 - "THCV and THC extracts derived from plant material"**

DESCRIPTION: "The invention relates to THCV and THC containing extracts derived from plant material. A botanical drug substance preferably comprises at least 70% THCV and the isolated THCV is preferably 95% THCV. Most preferably it is in a crystalline form."

PUBLICATION NUMBER: **EP 2161262 A1**

FILED BY: Gw Pharma Limited (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Gw+Pharma+Limited%22>)

LINK: <https://www.google.com/patents/EP2161262A1?cl=en&dq=tetrahydrocannabivarin&hl=en&sa=X&ei=wbkDVJirB9DjggTZn4CwCg&ved=0CF4Q6AEwCQ>  
<https://www.google.com/patents/EP2161262A1?cl=en&dq=tetrahydrocannabivarin&hl=en&sa=X&ei=wbkDVJirB9DjggTZn4CwCg&ved=0CF4Q6AEwCQ>

**#69 - Cannabis plant named 'Avidekel'**

DESCRIPTION: "The disclosure relates to a new and distinct cultivar of *Cannabis Sativa* plant named 'Avidekel', characterized by a high amount of Cannabidiol (CBD) (16.3%) and a very low amount of Tetrahydrocannabinol (THC, 0.8%)."

PUBLICATION NUMBER: **US20140259228 A1**

FILED BY: Ytzchak Cohen (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Ytzchak+Cohen%22>)

LINK: <https://www.google.com/patents/US20140259228?dq=cannabidiol&hl=en&sa=X&ei=gwUyVPyCHJecygTmhICQBQ&ved=0CCsQ6AEwAg>  
<https://www.google.com/patents/US20140259228?dq=cannabidiol&hl=en&sa=X&ei=gwUyVPyCHJecygTmhICQBQ&ved=0CCsQ6AEwAg>

**#70 - Cannabis plant named 'Erez'**

DESCRIPTION: "The disclosure relates to a new and distinct cultivar of *Cannabis Sativa* plant named 'Erez', characterized by a high amount of Cannabidiol (CBD) (>16%) and a higher amount of Tetrahydrocannabinol (THC, ~23%)."

PUBLICATION NUMBER: **US20140245494 A1**

FILED BY: Ytzchak Cohen (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Ytzchak+Cohen%22>)

LINK: <https://www.google.com/patents/US20140245494?dq=cannabidiol&hl=en&sa=X&ei=gwUyVPyCHJecygTmhICQBQ&ved=0CDIQ6AEwAw>  
<https://www.google.com/patents/US20140245494?dq=cannabidiol&hl=en&sa=X&ei=gwUyVPyCHJecygTmhICQBQ&ved=0CDIQ6AEwAw>

**#71 - Cannabis plant named 'Midnight'**

DESCRIPTION: "The disclosure relates to a new and distinct *Cannabis Sativa* L. plant named 'Midnight', having an almost equal ratio of Cannabidiol (CBD) concentration to Tetrahydrocannabinol (THC) concentration, (e.g., substantially close to 1), as illustrated and described herein."

PUBLICATION NUMBER: **US20140245495 A1**

FILED BY: Ytzchak Cohen (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Ytzchak+Cohen%22>)

LINK: <https://www.google.com/patents/US20140245495?dq=cannabidiol&hl=en&sa=X&ei=ewLjvPvCHlervgTmhICQBQ&ved=0CDkO6AEwBA>



<https://www.google.com/patents/US20140245495?dq=cannabidiol&hl=en&sa=X&ei=gwUyVPyCHJecyTmhlCQBQ&ved=0CDkQ6AEwBA>  
(<https://www.google.com/patents/US20140245495?dq=cannabidiol&hl=en&sa=X&ei=gwUyVPyCHJecyTmhlCQBQ&ved=0CDkQ6AEwBA>)

#### #72 – “Methods and compositions for treating cancer”

DESCRIPTION: “This disclosure provides compositions and method useful for treating cell proliferative disorders including cancer. The disclosure provides cannabidiol derivatives and compositions thereof either alone or in combination with THC or a derivative thereof.”

PUBLICATION NUMBER: **US 20140065243 A1**

FILED BY: Sean D. McAllister (<https://www.google.com/search?tbo=p&tbn=pts&hl=en&q=ininventor:%22Sean+D.+McAllister%22>), Pierre-Yves Desprez (<https://www.google.com/search?tbo=p&tbn=pts&hl=en&q=ininventor:%22Pierre-Yves+Desprez%22>)

LINK: <https://www.google.com/patents/US20140065243?dq=cannabidiol&hl=en&sa=X&ei=9QgyVMYPF8OtyAS9z4LIBA&ved=0CFgQ6AEwCDgK>  
(<https://www.google.com/patents/US20140065243?dq=cannabidiol&hl=en&sa=X&ei=9QgyVMYPF8OtyAS9z4LIBA&ved=0CFgQ6AEwCDgK>)

#### #73 – “Use for cannabinoids”

DESCRIPTION: “The present invention relates to the use of CBD alone or in combination with another cannabinoid, in the manufacture of a pharmaceutical or nutraceutical formulation for use in controlling cholesterol levels in a subject. It also relates to the use of THCV alone or in combination with another cannabinoid, in the manufacture of a pharmaceutical or nutraceutical formulation for use in increasing energy expenditure in a subject. Furthermore the CBD alone or in combination with another cannabinoid or the THCV alone or in combination with another cannabinoid are used as part of a regime to **manage or treat type I or II diabetes, obesity, dyslipidaemia, related metabolic disorders and cardiovascular disease.**”

PUBLICATION NUMBER: **US 20130245110 A1**

FILED BY: Gw Pharma Limited (<https://www.google.com/search?tbo=p&tbn=pts&hl=en&q=inassignee:%22Gw+Pharma+Limited%22>)

LINK: <https://www.google.com/patents/US20130245110?dq=cannabidiol&hl=en&sa=X&ei=4AsyVLerJ460yASr-IHgBw&ved=0CE0Q6AEwBzgo>  
(<https://www.google.com/patents/US20130245110?dq=cannabidiol&hl=en&sa=X&ei=4AsyVLerJ460yASr-IHgBw&ved=0CE0Q6AEwBzgo>)

#### #74 – “Cannabinoid derivatives”

DESCRIPTION: “The disclosure relates to cannabinoid derivative compounds, pharmaceutical compositions made thereof, and methods for treating various diseases and disorders including cancer.”

PUBLICATION NUMBER: **US20140245495 A1**

FILED BY: Sutter West Bay Hospitals (<https://www.google.com/search?tbo=p&tbn=pts&hl=en&q=inassignee:%22Sutter+West+Bay+Hospitals%22>)

LINK: <https://www.google.com/patents/US20130209483?dq=cannabidiol&hl=en&sa=X&ei=vw0yVNjAH4eyQSBgLLICA&ved=0CBwQ6AEwADgy>  
(<https://www.google.com/patents/US20130209483?dq=cannabidiol&hl=en&sa=X&ei=vw0yVNjAH4eyQSBgLLICA&ved=0CBwQ6AEwADgy>)

#### #75 – “Phytocannabinoids for use in the treatment of intestinal inflammatory diseases”

DESCRIPTION: “The present invention relates to one or more of the phytocannabinoids tetrahydrocannabivarin (**THCV**); cannabigerol (**CBG**); cannabichromene (**CBC**); and cannabidivarin (**CBDV**) for use in the treatment of intestinal inflammatory diseases. **Preferably the intestinal inflammatory disease is either ulcerative colitis or Crohn's disease.**”

PUBLICATION NUMBER: **WO2013076487 A1**

FILED BY: Gw Pharma Limited (<https://www.google.com/search?tbo=p&tbn=pts&hl=en&q=inassignee:%22Gw+Pharma+Limited%22>)

LINK: <https://www.google.com/patents/WO2013076487A1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=vw0yVNjAH4eyQSBgLLICA&ved=0CCMQ6AEwATgy>  
(<https://www.google.com/patents/WO2013076487A1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=vw0yVNjAH4eyQSBgLLICA&ved=0CCMQ6AEwATgy>)

#### #76 – “Phytocannabinoids for use in the treatment of breast cancer”

DESCRIPTION: “The present invention relates to phytocannabinoids for use in the treatment of a breast cancer. In a first embodiment the invention relates to an oral presentation of tetrahydrocannabinol (**THC**) for use in the treatment of aggressive breast cancer, characterised by overexpression of the Her2 gene. In a second embodiment the invention relates to the phytocannabinoid cannabidiol (**CBD**) for use in the treatment of aggressive breast cancer, characterised by overexpression of the Her2 gene. In a third embodiment the invention relates to the combination of the phytocannabinoids tetrahydrocannabinol (**THC**) and cannabidiol (**CBD**) for use in the treatment of breast cancer or to treat, prevent or to reduce the risk of a cancer metastasising.”

PUBLICATION NUMBER: **WO 2013057487 A1**

FILED BY: Gw Pharma Limited (<https://www.google.com/search?tbo=p&tbn=pts&hl=en&q=inassignee:%22Gw+Pharma+Limited%22>), Otsuka Pharmaceutical Co., Limited (<https://www.google.com/search?tbo=p&tbn=pts&hl=en&q=inassignee:%22Otsuka+Pharmaceutical+Co.,+Limited%22>)

LINK: <https://www.google.com/patents/WO2013057487A1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=vw0yVNjAH4eyQSBgLLICA&ved=0CEgQ6AEwBjgy>  
(<https://www.google.com/patents/WO2013057487A1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=vw0yVNjAH4eyQSBgLLICA&ved=0CEgQ6AEwBjgy>)

#### #77 – “Plant extract from low-THC cannabis for the treatment of disease”

DESCRIPTION: “The present invention relates to a plant extract from a low-tetrahydrocannabinol (THC) variety of *Cannabis sativa* subsp. *sativa* for the treatment of disease. The invention further relates to the production of the extract and pharmaceutical compositions comprising said extract and the uses thereof.”

PUBLICATION NUMBER: **US 20130012575 A1**

FILED BY: Heinz Letzel (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Heinz+Letzel%22>), Regina Klaeger (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Regina+Klaeger%22>), Rudolph Klaeger (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Rudolph+Klaeger%22>), Thomas Ebell (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Thomas+Ebell%22>)

LINK: <https://www.google.com/patents/US20130012575?dq=cannabidiol&hl=en&sa=X&ei=gBAyVKXZAYsbyQSi5oDgAQ&ved=0CEoQ6AEwBjg8>  
(<https://www.google.com/patents/US20130012575?dq=cannabidiol&hl=en&sa=X&ei=gBAyVKXZAYsbyQSi5oDgAQ&ved=0CEoQ6AEwBjg8>)

#### #78- "Use of Cannabidiol in the Treatment of Hepatitis"

DESCRIPTION: "Cannabinoids are known to interact with CB1 and CB2 receptors expressed in the nervous and immune systems mediating a wide range of effects, including anti-inflammatory properties. However, cannabinoids that bind CB1 are also psychoactive thereby limiting their clinical use. Cannabidiol (CBD) is the most abundant nonpsychotropic plant cannabinoid but has not been studied as extensively as  $\Delta^9$ -tetrahydrocannabinol (THC). The present disclosure reports the immunosuppressive properties of CBD and demonstrates that CBD induces apoptosis in thymocytes and splenocytes and inhibits the proliferative responsiveness of T and B cells. This indicates that CB2 selective agonists, devoid of psychotropic effect, may serve as novel anti-inflammatory/immunosuppressive agents."

PUBLICATION NUMBER: **US 20120302646 A1**

FILED BY: University Of South Carolina (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22University+Of+South+Carolina%22>)

LINK: <https://www.google.com/patents/US20120302646?dq=cannabidiol&hl=en&sa=X&ei=qREyVMGdGcezyATzv4HgDA&ved=0CEgQ6AEwBjhG>  
(<https://www.google.com/patents/US20120302646?dq=cannabidiol&hl=en&sa=X&ei=qREyVMGdGcezyATzv4HgDA&ved=0CEgQ6AEwBjhG>)

#### #80- "Cannabinoids for use in the treatment of neurodegenerative diseases or disorders"

DESCRIPTION: "The present invention relates to cannabinoids for use in the prevention or treatment of neurodegenerative diseases or disorders. Preferably the cannabinoids are cannabichromene (CBC) cannabidivarin (CBDV) and/or cannabidivarin acid (CBDVA). **More preferably the neurodegenerative disease or disorder to be prevented or treated is Alzheimer's disease.**"

PUBLICATION NUMBER: **US 20120289589 A1**

FILED BY: Gw Pharmaceuticals Limited (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Gw+Pharmaceuticals+Limited%22>)

LINK: <https://www.google.com/patents/US20120289589?dq=cannabidiol&hl=en&sa=X&ei=XhMyVMaKEY-2yASej4GoCg&ved=0CDgQ6AEwBDhQ>  
(<https://www.google.com/patents/US20120289589?dq=cannabidiol&hl=en&sa=X&ei=XhMyVMaKEY-2yASej4GoCg&ved=0CDgQ6AEwBDhQ>)

#### #81- "Inhibition of tumour cell migration"

DESCRIPTION: "The invention relates to **the use of a cannabis plant extract or a cannabinoid** as a pharmaceutically active agent in the inhibition of tumour cell migration."

PUBLICATION NUMBER: **US 20120225136 A1**

FILED BY: Gw Pharma Limited (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Gw+Pharma+Limited%22>)

LINK: <https://www.google.com/patents/US20120225136?dq=cannabidiol&hl=en&sa=X&ei=oBQyVlidK46RyASF04FA&ved=0CF8Q6AEwCTha>  
(<https://www.google.com/patents/US20120225136?dq=cannabidiol&hl=en&sa=X&ei=oBQyVlidK46RyASF04FA&ved=0CF8Q6AEwCTha>)

#### #82- "Method For Treatment Of HIV And Diseases Of Immune Dysregulation"

DESCRIPTION: "A method of treatment of and/or preventing transmission of human immunodeficiency virus (HIV) by administering to a subject in need thereof a composition comprising a cannabinoid derivative."

PUBLICATION NUMBER: **US 20120122917 A1**

FILED BY: Craig Rick Travis (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Craig+Rick+Travis%22>)

LINK: <https://www.google.com/patents/US20120122917?dq=cannabidiol&hl=en&sa=X&ei=TBuYVjztOs6lyATU3lCwDA&ved=0CFQ6AEwCDhk>  
(<https://www.google.com/patents/US20120122917?dq=cannabidiol&hl=en&sa=X&ei=TBuYVjztOs6lyATU3lCwDA&ved=0CFQ6AEwCDhk>)

#### #83- "Use of the phytocannabinoid cannabidiol (cbd) in combination with a standard anti-epileptic drug (saed) in the treatment of epilepsy"

DESCRIPTION: "The invention relates to **the use of cannabidiol (CBD), at a dose of greater than 300mg/day**, in combination with a standard anti-epileptic drug (SAED) which acts via sodium or calcium channels, for use in the treatment of epilepsy. The SAED is preferably one which • modifies low-threshold or transient neuronal calcium currents, or • reduces high-frequency neuronal firing and sodium-dependent action potentials and enhances GABA effects. Preferred SAEDs are ethosuximide and valproate."

PUBLICATION NUMBER: **WO 2012093255 A1**

FILED BY: Gw Pharma Limited (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Gw+Pharma+Limited%22>), Otsuka Pharmaceutical Co. Limited (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Otsuka+Pharmaceutical+Co.+Limited%22>)

LINK: <https://www.google.com/patents/WO2012093255A1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=gxYyVKG2G5WsyASCuoIQ&ved=0CBwQ6AEwADhu>  
(<https://www.google.com/patents/WO2012093255A1?cl=en&dq=cannabidiol&hl=en&sa=X&ei=gxYyVKG2G5WsyASCuoIQ&ved=0CBwQ6AEwADhu>)

**#84- "Compositions comprising cannabinoids for treatment of nausea, vomiting, emesis, motion sickness or like conditions"**

DESCRIPTION: "Cannabinoids, in particular CBD and CBDA and their acid derivatives are provided for use as an active pharmaceutical substance in the treatment of nausea, vomiting, emesis, motion sickness. In particular extracts of *cannabis* plants are presented which are rich in these substances and suitable for pharmaceutical use."

PUBLICATION NUMBER: **US 20120059062 A1**

FILED BY: Gw Pharma Limited (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Gw+Pharma+Limited%22>)

LINK: <https://www.google.com/patents/US20120059062?dq=cannabidiol&hl=en&sa=X&ei=eRcyVNHXJiiYyAT5rYDQAQ&ved=0CFsQ6AEwCTh4>  
(<https://www.google.com/patents/US20120059062?dq=cannabidiol&hl=en&sa=X&ei=eRcyVNHXJiiYyAT5rYDQAQ&ved=0CFsQ6AEwCTh4>)

**#85- "Breeding, production, processing and use of specialty cannabis"**

DESCRIPTION: "The invention provides compositions and methods for the breeding, production, processing and use of specialty cannabis."

PUBLICATION NUMBER: **WO 2014145490 A2**

FILED BY: Biotech Institute, Llc (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Biotech+Institute,+Llc%22>)

LINK: <https://www.google.com/patents/WO2014145490A2?cl=en&dq=cannabigerol&hl=en&sa=X&ei=HUszVKjfPOTksAT8zoCACw&ved=0CCQQ6AEwAQ>  
(<https://www.google.com/patents/WO2014145490A2?cl=en&dq=cannabigerol&hl=en&sa=X&ei=HUszVKjfPOTksAT8zoCACw&ved=0CCQQ6AEwAQ>)

**#86- "Administering plant extracts including tetrahydrocannabinolic acid and tetrahydrocannabinol, as analgesics and/or anti-inflammatory agents"**

DESCRIPTION: "The invention relates to an acidic cannabinoid for medical use and to a cannabis extract comprising an acidic cannabinoid. The extract may comprise one or more compounds selected from the group consisting of cannabidiolic acid (CBD-A), cannabidiol (CBD), cannabigerolic acid (CBGA), cannabigerol (CBG), cannabinolic acid (CBN-A) and cannabino. The invention further relates to a method for preparing a preparation comprising extracting an acidic cannabinoid from cannabis."

PUBLICATION NUMBER: **US 7807711 B2**

FILED BY: Nederlandse Organisatie Voor Toegepast-Natuurwetenschappelijk Onderzoek Tno (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Nederlandse+Organisatie+Voor+Toegepast-Natuurwetenschappelijk+Onderzoek+Tno%22>)

LINK: <https://www.google.com/patents/US7807711?dq=cannabigerol&hl=en&sa=X&ei=Y04zVKG8M8Gf8QGk5oG4Cg&ved=0CBwQ6AEwADiYAg>  
(<https://www.google.com/patents/US7807711?dq=cannabigerol&hl=en&sa=X&ei=Y04zVKG8M8Gf8QGk5oG4Cg&ved=0CBwQ6AEwADiYAg>)

**#87- "Medicinal acidic cannabinoids" → Please watch the video "The Power of Raw Cannabis (<https://www.youtube.com/watch?v=qgEP9FdlzT8>)"**

DESCRIPTION: "The invention relates to an acidic cannabinoid for medical use and to a cannabis extract comprising an acidic cannabinoid. The extract may comprise one or more compounds selected from the group consisting of cannabidiolic acid (CBD-A), cannabidiol (CBD), cannabigerolic acid (CBGA), cannabigerol (CBG), cannabinolic acid (CBN-A) and cannabino. The invention further relates to a method for preparing a preparation comprising extracting an acidic cannabinoid from cannabis."

PUBLICATION NUMBER: **US 20070032544 A1**

FILED BY: Nederlandse Organisatie Voor Toegepastnatuurwetenschappelijk Onderzoek Tno (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Nederlandse+Organisatie+Voor+Toegepastnatuurwetenschappelijk+Onderzoek+Tno%22>)

LINK: <https://www.google.com/patents/US20070032544?dq=cannabigerol&hl=en&sa=X&ei=Y04zVKG8M8Gf8QGk5oG4Cg&ved=0CCMQ6AEwATiYAg>  
(<https://www.google.com/patents/US20070032544?dq=cannabigerol&hl=en&sa=X&ei=Y04zVKG8M8Gf8QGk5oG4Cg&ved=0CCMQ6AEwATiYAg>)

**#88- "Antiviral methods and compounds" (CBC - Cannabichromene)**

DESCRIPTION: "The invention provides a method, compounds, and compositions for inhibiting the replication or proliferation of a virus. In accordance with the invention, at least one cannabichromene derivative is exposed to the virus, a host cell, or an infected cell under conditions sufficient to inhibit the replication or proliferation of the virus."

PUBLICATION NUMBER: **US 20030171372 A1**

FILED BY: Immugen Pharmaceuticals, Inc. (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Immugen+Pharmaceuticals,+Inc.%22>)

LINK: <https://www.google.com/patents/US20030171372?dq=cannabigerol&hl=en&sa=X&ei=EVAzVOLrOoef8AGI9oGADQ&ved=0CEYQ6AEwBjYAg>  
(<https://www.google.com/patents/US20030171372?dq=cannabigerol&hl=en&sa=X&ei=EVAzVOLrOoef8AGI9oGADQ&ved=0CEYQ6AEwBjYAg>)

**#89- "THCV and THCV extracts derived from plant material"**

DESCRIPTION: "The invention relates to THCV and THCV containing extracts derived from plant material. A botanical drug substance preferably comprises at least 70% THCV and the isolated THCV is preferably 95% THCV. Most preferably it is in a crystalline form."

PUBLICATION NUMBER: **EP 2161262 A1**

FILED BY: GW Pharma Limited (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22GW+Pharma+Limited%22>)

LINK: <https://www.google.com/patents/EP2161262A1?cl=en&dq=cannabigerol&hl=en&sa=X&ei=FVlzVLGYOeO1sQTGpLlOw&ved=0CBwQ6AEwADj8Ag>  
(<https://www.google.com/patents/EP2161262A1?cl=en&dq=cannabigerol&hl=en&sa=X&ei=FVlzVLGYOeO1sQTGpLlOw&ved=0CBwQ6AEwADj8Ag>)

## #90- "Metered dose inhaler"

DESCRIPTION: "A medicinal aerosol product comprising a pressurized metered dose inhaler, including a canister (1) equipped with a metering valve and containing a medicinal aerosol solution formulation, and an actuator (2) comprising a nozzle block (14) defining an actuator orifice (6) leading to an expansion chamber, wherein the formulation includes a cannabinoid, a hydrofluorocarbon propellant and an optional amount of an alcohol co-solvent, and the actuator orifice (6) has a diameter of about 0.30mm or less, and/or is laser drilled."

PUBLICATION NUMBER: **WO 2003055549 A1**

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(<https://www.google.com/patents/WO2003055549A1?cl=en&dq=cannabigerol&hl=en&sa=X&ei=EVAzVOLrOoef8AGI9oGADQ&ved=0CE0Q6AEwBzjyAg>)

## #91- "Extraction of pharmaceutically active cannabinoids from plant materials"

DESCRIPTION: "The invention relates to the extraction of pharmaceutically active components from plant materials, and more particularly to the preparation of a botanical drug substance (BDS) for incorporation into a medicament. It also relates to a BDS of given purity, for use in pharmaceutical formulations. In particular it relates to BDS comprising cannabinoids obtained by extraction from cannabis." **Botanical Drug Substance (BDS) = Cannabis**

PUBLICATION NUMBER: **EP 2311475 A2**

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## #92- "Anti-inflammatory and antimicrobial compounds and compositions"

DESCRIPTION: "The use of cannabichromene (CBC) and its homologues and isomers to induce hypothermia, reduce inflammation in mammals, and as antimicrobial agents is disclosed. Preferably, a compound selected from cannabichromene, its homologues and isomers, is administered as a novel composition, in combination with a pharmaceutically acceptable diluent carrier."

PUBLICATION NUMBER: **US 4837228 A**

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## #93- "Botanical drug substances comprising various proportions of THC and CBD"

DESCRIPTION: "The invention provides a botanical drug substance obtainable from botanical raw material from a high THC containing cannabis plant having a THC content, wherein said botanical drug substance is an extract derived from the high THC cannabis plant comprising at least 50% THC w/w of extract, no more than 5% CBD as %w/w of the THC content, and no more than 5% cannabinoids other than THC and CBD as %w/w of the THC content and a botanical drug substance obtainable from botanical raw material from a high CBD containing cannabis plant having a CBD content, wherein said botanical drug substance is an extract derived from the high CBD cannabis plant comprising 50% CBD w/w of extract, no more than 7.5% THC as %w/w of the CBD content, and no more than 5% cannabinoids other than CBD and THC as %w/w of the CBD content. The botanical drug substances of the invention may be used to prepare pharmaceutical formulations."

PUBLICATION NUMBER: **CA 2823474 A1**

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## #94- "Cannabinoids for the treatment of cancers dependent on hedgehog mechanisms"

**"The Hedgehog (Hh) pathway has been implicated in growth and survival of many types of tumors, but with different frequencies depending on the type of tumor. For example, 95% of basal cell carcinomas have mutations in the Hedgehog pathway (Weiss, G.J. and R.L. Korn, Cancer, (2012), doi: 10.1002/cncr.27532 (epub ahead of print))."**

DESCRIPTION: "The present invention relates to a pharmaceutical composition comprising one or more endocannabinoids, cannabinoids and/or modified versions thereof complexed with one or more lipoproteins, wherein said one or more endocannabinoids are selected from N-acyl ethanolamides, N-acyl dopamines, 2-acyl glycerols and 2-glycerol ethers and wherein said one or more cannabinoids are selected from cannabinoids, cannabidiols and tetrahydrocannabinols. Further, the invention relates to the use of said pharmaceutical composition in the

one or more cannabinoids are selected from cannabinoids, cannabidiols and tetrahydrocannabinols; further, the invention relates to the use of said pharmaceutical composition in the treatment of a tumour in a mammal. Also, the invention relates to a method for modulating the activity of the hedgehog signaling pathway in a mammalian cell and the use of one or more endocannabinoids, cannabinoids and modified versions thereof in the differentiation of embryonic stem cells, progenitor cells and/or induced stem cells. "

PUBLICATION NUMBER: **WO 2014057067 A1**

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(<https://www.google.com/patents/WO2014057067A1?cl=en&dq=cannabinoids+brain&hl=en&sa=X&ei=3IYzVJL5E8TJ8AG-soDgAg&ved=0CFUQ6AEwCA>)

#95- **"Peripherally-acting cannabinoid receptor agonists for chronic pain"**

DESCRIPTION: "Peripherally acting cannabinoid agonist compounds, pharmaceutical compositions, and methods of using them are presented."

"Synthetic and naturally occurring cannabinoids are a focus of strong social, legal and medical controversy concerning their therapeutic utility, yet studies show that cannabinoids reduce the symptoms of hyperalgesia and allodynia associated with persistent pain of inflammatory and neuropathic origin in humans and animals. Furthermore, cannabinoids are effective in alleviating chronic pain symptoms after prolonged repeated treatment, unlike opioids, which have only limited effectiveness. A major impediment to the widespread use of cannabinoid analgesics has been their central nervous system (CNS)- mediated psychotropic side effects. In addition, there are various other conditions where selective activation (or blockade) of peripheral cannabinoid receptors could prove to be of clinical benefit. "

PUBLICATION NUMBER: **WO 2014015298 A1**

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#96- **"Methods of regulating cannabinoid receptor activity-related disorders and diseases"**

DESCRIPTION: "This disclosure concerns the discovery of the use of fenoterol analogues for regulating cannabinoid (CB) receptor activity-related disorders and disease, such as dysregulated CB receptors, including treating a disorder or disease, such as a glioblastoma, hepatocellular carcinoma, liver cancer, colon cancer, and/or lung cancer, which is associated with altered cannabinoid receptor activity. In one example, the method includes administering to a subject having or at risk of developing a disorder or disease regulated by CB receptor activity an effective amount of a fenoterol analogue to reduce one or more symptoms associated with the disorder or disease regulated by CB receptor activity."

"[025] FIGS. 6A-6C illustrate the role of cannabinoid receptor activation in the anti-proliferative action of (R,R')-MNF in HepG2 cells." → **Kill cancer by activating your Cannabinoid Receptors!**

PUBLICATION NUMBER: **WO 2013177418 A1**

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(<https://www.google.com/patents/WO2013177418A1?cl=en&dq=cannabinoid+cancer&hl=en&sa=X&ei=IFszVJu5HcXGsQTE9YCQBA&ved=0CFoQ6AEwCDgo>)

#97- **"A composition containing non-psychotropic cannabinoids for the treatment of inflammatory diseases"**

DESCRIPTION: "The invention relates to a composition comprising at least one non-psychotropic cannabinoid and/or at least one phenolic or flavonoid compound and/or Denbinobin and their uses for the prevention and treatment of gastrointestinal inflammatory diseases and for the prevention and treatment of gastrointestinal cancers. It also relates to a phytoextract obtained from the plant *Cannabis sativa*, more particularly from the selected variety CARMA."

PUBLICATION NUMBER: **EP 2044935 A1**

FILED BY: Vivacell Biotechnology Espana S.L. (<https://www.google.com/search?tbo=p&tbm=pts&hl=en&q=inassignee:%22Vivacell+Biotechnology+Espana+S.L.%22>)

LINK: <https://www.google.com/patents/EP2044935A1?cl=en> (<https://www.google.com/patents/EP2044935A1?cl=en>)

#98- **"Use of the phytocannabinoid Cannabidiol (CBDV) in the treatment of epilepsy"**

DESCRIPTION: "This invention relates to the use of the phytocannabinoid cannabidiol (CBDV) and combinations of the phytocannabinoid CBDV with tetrahydrocannabinol (THCV) and cannabidiol (CBD) in the treatment of epilepsy. The invention further relates to the use of the phytocannabinoid CBDV in combination with standard anti-epileptic drugs (SAEDs). Preferably the SAED is one of ethosuximide, valproate or phenobarbital."

PUBLICATION NUMBER: **CA 2794620 A1**

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#### #99- "Treatment of hepatic encephalopathy and liver cirrhosis"

DESCRIPTION: "The compounds D9-tetrahydrocannabinol (THC), cannabidiol (CBD) and capsaicin are useful for prevention, treatment, or both, of hepatic encephalopathy. The compounds capsaicin, 2-arachidonoylglycerol (2-AG), HU-308 and cannabidiol are useful for prevention, treatment, or both, of liver cirrhosis."

PUBLICATION NUMBER: **US 20110251290 A1**

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#### #100- "Endocannabinoids for Enhancing Growth and Development in Infants"

DESCRIPTION: "The present invention relates to a method for promoting infant feeding, growth or development comprising administering to an infant a formula or a pharmaceutical composition comprising an endocannabinoid in an amount sufficient to promote feeding, growth or development. The present invention also relates to an infant formula comprising an enhanced amount of an endocannabinoid. The infant formula of the invention may be in a powder form or in a liquid form. The infant formula or the pharmaceutical composition may further comprise an endocannabinoid-promoting compound."

"The major active molecule in the marijuana (*Cannabis sativa*) plant,  $\Delta^9$ -tetrahydrocannabinol (THC), activates at least two specific receptors denoted CB<sub>1</sub> and CB<sub>2</sub>. Since 1992, several endogenous ligands for these receptors have been isolated from brain and peripheral tissue, entitled the "endocannabinoids" (ECs; see for example (Fride and Gobshtis, 2007)."

"The endocannabinoid-receptor system has many physiological roles including the regulation of memory, management of pain and inflammatory processes, immune regulation as well as feeding and appetite. The first ECs to be isolated and the most extensively studied are "anandamide" (AEA) and 2-arachidonoyl glycerol (2-AG)."

PUBLICATION NUMBER: **US 20110172305 A1**

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dq=Yissum+Research+Development+Company+Of+The+Hebrew+University+Of+Jerusalem+cannabinoids&hl=en&sa=X&ei=qmQzVMylAcaKsQsXhYKIBw&ved=0CCoQ6AEwAjgy)