

CDA CLINICS RESEARCH DATABASE

| Condition Treated | Cannabinoid/ Terpene | Effect | Dose | Review Study | Rating |
|---|-------------------------------|------------------------------|-------------------------|--|--------|
| Acne | THCV (Tetrahydrocannabivarin) | Anti-acne(major) | NA | Differential effectiveness of selected non-psychoactive phytocannabinoids on human sebocyte functions implicates their introduction in dry/seborrheic skin and acne treatment | 2 |
| Acute Lung Injury | CBD (Cannabidiol) | Antiinflammatory(moderate) | 20mg/kg | Cannabidiol, a non-psychoactive plant-derived cannabinoid, decreases inflammation in a murine model of acute lung injury: Role for the adenosine A2A receptor | 2 |
| Acute Lung Injury | Eucalyptol | Antiinflammatory(major) | 100/200/400mg/kg, | Eucalyptol suppresses matrix metalloproteinase-9 expression through an extracellular signal-regulated kinase-dependent nuclear factor-kappa B pathway to exert anti-inflammatory effects in an acute lung inflammation model | 2 |
| Acute Pancreatitis | CBD (Cannabidiol) | Antiinflammatory(major) | 0.5mg/kg | Anti-inflammatory role of cannabidiol and O-1602 in cerulein-induced acute pancreatitis in mice | 2 |
| Acute Psychosocial Stress | THC (Tetrahydrocannabinol) | Anxiolytic(moderate) | 7.5/12.5mg, | Dose-related effects of delta-9-THC (Tetrahydrocannabinol) on emotional responses to acute psychosocial stress | 4 |
| ADHD | THC (Tetrahydrocannabinol) | Improves behaviour(moderate) | 71ng/mL | Cannabis improves symptoms of ADHD | 3 |
| ADHD | THC (Tetrahydrocannabinol) | Neuroprotectant(moderate) | NA | Oral Δ9-Tetrahydrocannabinol Improved Refractory Gilles de la Tourette Syndrome in an Adolescent by Increasing Intracortical Inhibition: A Case Report | 3 |
| AD-related Neuroinflammation | CBD (Cannabidiol) | Antiinflammatory(major) | 2.5 or 10mg/kg | Cannabidiol in vivo blunts β-amyloid induced neuroinflammation by suppressing IL-1β and iNOS expression | 2 |
| Adult Aedes Aegypti (yellow fever mosquito) | Eucalyptol | Larvicidal(moderate) | NA | 1,8-Cineole (Eucalyptol), a mosquito feeding and ovipositional repellent from volatile oil of Hemizonia fitchii (Asteraceae) | 2 |
| Aedes albopictus | Geraniol | Insect repellent(major) | 0.250µg/cm ³ | Host-Seeking and Blood-Feeding Behavior of Aedes albopictus (Diptera: Culicidae) Exposed to Vapors of Geraniol, Citral, Citronellal, Eugenol, or Anisaldehyde | 2 |
| Airway hypersecretion | Eucalyptol | Antiinflammatory(major) | 200mg | Anti-inflammatory activity of 1,8-cineol (eucalyptol) in bronchial asthma: a double-blind placebo-controlled trial | 4 |
| Algesic | Limonene | Analgesic(moderate) | NA | Involvement of transient receptor potential A1 channel in algesic and analgesic actions of the organic compound limonene | 2 |
| ALS | CBN (Cannabinol) | Neuroprotectant(moderate) | 5mg/kg | Cannabinol delays symptom onset in SOD1(G93A) transgenic mice without affecting survival | 2 |

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| ALS | THC (Tetrahydrocannabinol) | Antispasticity(moderate) | 5mg | Tetrahydrocannabinol (THC (Tetrahydrocannabinol)) for cramps in amyotrophic lateral sclerosis: a randomised, double-blind crossover trial | 4 |
| ALS | THC (Tetrahydrocannabinol) | Neuroprotectant(moderate) | NA | The CB2 cannabinoid agonist AM-1241 prolongs survival in a transgenic mouse model of amyotrophic lateral sclerosis when initiated at symptom onset | 2 |
| Alzheimer's Disease | CBD (Cannabidiol) | Neuroprotectant(moderate) | NA | The marijuana component cannabidiol inhibits β-amyloid-induced tau protein hyperphosphorylation through Wnt/β-catenin pathway rescue in PC12 cells | 2 |
| Alzheimer's Disease | THC (Tetrahydrocannabinol) | Neuroprotectant(major) | NA | The potential therapeutic effects of THC (Tetrahydrocannabinol) on Alzheimer's disease | 2 |
| Alzheimer's Disease | THC (Tetrahydrocannabinol) | Neuroprotectant(major) | NA | Safety and Efficacy of Medical Cannabis Oil for Behavioral and Psychological Symptoms of Dementia: An Open Label, Add-On, Pilot Study. | 2 |
| Alzheimer's Disease | THC (Tetrahydrocannabinol) | Neuroprotectant(major) | NA | Tetrahydrocannabinol for neuropsychiatric symptoms in dementia: A randomized controlled trial. | |
| Anorexia | CBD (Cannabidiol) | Appetite Stimulant(major) | NA | Effects of Dronabinol on Anorexia and disturbed behavior in patients with Alzheimer's Disease | 4 |
| Anorexia | CBD (Cannabidiol) | Appetite Stimulant(major) | NA | Cannabis Use in Epilepsy and Anorexia- Two "N-of-One" Trials. (P6.039) | 4 |
| Anorexia | THC (Tetrahydrocannabinol) | Appetite Stimulant(moderate) | NA | A double-blind trial of delta 9-tetrahydrocannabinol in primary anorexia nervosa | 4 |
| Anorexia | THC (Tetrahydrocannabinol) | Appetite Stimulant(moderate) | NA | A phase II study of delta-9-tetrahydrocannabinol for appetite stimulation in cancer-associated anorexia. | 4 |
| Anxiety | CBD (Cannabidiol) | Anxiolytic(major) | 600mg | Cannabidiol Reduces the Anxiety Induced by Simulated Public Speaking in Treatment-Naïve Social Phobia Patients | 4 |
| Anxiety | CBD (Cannabidiol) | Anxiolytic(major) | NA | Inverted U-Shaped Dose-Response Curve of the Anxiolytic Effect of Cannabidiol during Public Speaking in Real Life. | 4 |
| Anxiety | CBD (Cannabidiol) | Anxiolytic(major) | NA | Effectiveness of Cannabidiol Oil for Pediatric Anxiety and Insomnia as Part of Posttraumatic Stress Disorder: A Case Report | |
| Anxiety | CBD (Cannabidiol) | Anxiolytic(major) | NA | Cannabidiol enhances consolidation of explicit fear extinction in humans. | |
| Anxiety | Limonene | Anxiolytic(major) | 25/50/75 mg/kg, | Evaluation of acute toxicity of a natural compound (+)-limonene epoxide and its anxiolytic-like action | 2 |
| Anxiety | D-Limonene | Neuroprotective(moderate) | 15.21% of mixture | Neuropharmacological activities of phytoncide released from <i>Cryptomeria japonica</i> | 1 |
| Anxiety | Linalool | Anxiolytic(major) | NA | Evaluation of anxiolytic potency of essential oil and S-(+)-linalool from <i>Cinnamomum osmophloeum</i> ct. linalool leaves in mice | 2 |
| Anxiety | Linalool | Antidepressant(moderate) | NA | Linalool and β-pinene exert their antidepressant-like activity through the monoaminergic pathway | 2 |

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| Anxiety | α -Pinene / β -Pinene | Anxiolytic(moderate) | NA | Expression of BDNF and TH mRNA in the Brain Following Inhaled Administration of α-Pinene | 2 |
| Anxiety | THC (Tetrahydrocannabinol) | Anxiolytic(moderate) | NA | Cannabinoid facilitation of fear extinction memory recall in humans | 4 |
| Anxiety | THC (Tetrahydrocannabinol) | Anxiolytic(moderate) | NA | Effects of delta-9-tetrahydrocannabinol on evaluation of emotional images. | 4 |
| Appetite Loss | CBD (Cannabidiol) | Appetite Stimulant(moderate) | NA | Cannabidiol attenuates the appetitive effects of Delta 9-tetrahydrocannabinol in humans smoking their chosen cannabis | 3 |
| Arthritis | Camphor | Antiinflammatory(moderate) | NA | Study on antiinflammatory effect of different chemotype of Cinnamomum camphora on rat arthritis model induced by Freund's adjuvant | 1 |
| Arthritis | CBD (Cannabidiol) | Antiarthritic(major) | 5/25 mg/kg, | The nonpsychoactive cannabis constituent cannabidiol is an oral anti-arthritic therapeutic in murine collagen-induced arthritis | 2 |
| Asthma | Geraniol | Antiasthma(major) | 100 or 200mg/kg | Effect of treatment with geraniol on ovalbumin-induced allergic asthma in mice | 2 |
| Asthma | THC (Tetrahydrocannabinol) | Bronchodilating activity(moderate) | 15mg | Bronchodilator effect of delta-9-tetrahydrocannabinol administered by aerosol of asthmatic patients | 4 |
| Asthma | THC (Tetrahydrocannabinol) | Bronchodilating activity(moderate) | 20mg | Effects of Smoked Marijuana in Experimentally Induced Asthma | 4 |
| Asthma | THC (Tetrahydrocannabinol) | Bronchodilating activity(moderate) | 15mg | Acute Effects of Smoked Marijuana and Oral Δ9-Tetrahydrocannabinol on Specific Airway Conductance in Asthmatic Subjects | |
| Atherosclerosis | Geraniol | Antiinflammatory(moderate) | 100mg/kg | Geraniol attenuates fibrosis and exerts anti-inflammatory effects on diet induced atherogenesis by NF-κB signaling pathway | 2 |
| Autonomic nerve activity, mood states | Linalool | Sedative(moderate) | NA | Sedative effects of the jasmine tea odor and (R)-(-)-linalool, one of its (major) odor components, on autonomic nerve activity and mood states | 2 |
| Bacterial Contamination | CBD (Cannabidiol) | Antibacterial(moderate) | 50 μ g/ml | Antibacterial activity of Δ9-tetrahydrocannabinol and cannabidiol | 2 |
| Bacterial Contamination | CBD (Cannabidiol) | Antibacterial(moderate) | 50 μ g/ml | Antibacterial Cannabinoids from Cannabis sativa: A Structure-Activity Study | 2 |
| Bacterial Contamination | Caryophyllene | Antibacterial(moderate) | 10,54% of mixture | Chemical Composition, Antioxidant, Anti-Inflammatory and Anti-Proliferative Activities of Essential Oils of Plants from Burkina Faso | 1 |
| Bacterial Contamination | P-Cymene | Antibacterial(moderate) | 0.25-1.25mM | Carvacrol and p-cymene inactivate Escherichia coli O157:H7 in apple juice | 2 |
| Bacterial Contamination | Fenchol (Fenchyl alcohol) | Antibacterial(moderate) | NA | Screening of antibacterial activities of twenty-one oxygenated monoterpenes | 2 |
| Bacterial Contamination | Geranyl Acetate | Antibacterial(major) | 7.6% of mixture | Chemical Composition and Antibacterial Properties of Thymus longicaulis subsp. chaoubardii Oils: Three Chemotypes in the Same Population | 1 |

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| Bacterial Contamination | Humulene | Antibacterial(major) | 14.21% of mixture | In vitro antibacterial properties of essential oil and organic extracts of Premna integrifolia Linn | 1 |
| Bacterial Contamination | Myrcene | Antibacterial(major) | NA | New insights into antibacterial and antioxidant activities of rosemary essential oils and their main components | 1 |
| Bacterial Contamination | Ocimene | Antibacterial(major) | 0.03–40.49% of mixture | Chemical composition and in vitro antibacterial activity of Pistacia terebinthus essential oils derived from wild populations in Kosovo | 1 |
| Bacterial Contamination | α -Pinene / β -Pinene | Antibacterial(major) | α -pinene (19.43%), & β -pinene (6.71%) | Antibacterial Activity and Anticancer Activity of Rosmarinus officinalis L. Essential Oil Compared to That of Its Main Components | 1 |
| Brain Injury | CBD (Cannabidiol) | Neuroprotectant(major) | 300mg | Comparison of Cannabidiol, Antioxidants, and Diuretics in Reversing Binge Ethanol-Induced Neurotoxicity | 2 |
| Brain Injury | CBD (Cannabidiol) | Neuroprotectant(major) | NA | The neuroprotective effect of cannabidiol in an in vitro model of newborn hypoxic-ischemic brain damage in mice is mediated by CB2 and adenosine receptors | 2 |
| Brain Injury | CBD (Cannabidiol) | Neuroprotectant(major) | NA | Neuroprotective Effects of the Nonpsychoactive Cannabinoid Cannabidiol in Hypoxic-Ischemic Newborn Piglets | |
| Brain tumour | Terpinolene | Anticancer(moderate) | 10/25/50/100/200/400mg/L, | Anticancer and Antioxidant Properties of Terpinolene in Rat Brain Cells | 2 |
| Breast Cancer | Linalool | Anticancer (moderate) | NA | Linalool, a plant-derived monoterpene alcohol, reverses doxorubicin resistance in human breast adenocarcinoma cells | 2 |
| Breast Cancer | α -Terpineol | Breast cancer (moderate) | 5.4 μ g/mL | The effect of α-terpineol on cell cycle, apoptosis and Bcl-2 family protein expression of breast cancer cell line MCF-7 | 2 |
| Breast Cancer | Terpinolene | Anticancer (moderate) | 8.4% of mixture | Essential oil constituents, anticancer and antimicrobial activity of Ficus mucoso and Casuarina equisetifolia leaves | 1 |
| Breathing Difficulties | CBD (Cannabidiol) | Antidyspnoea(moderate) | 10mg | Cannabinoid effects on ventilation and breathlessness: A pilot study of efficacy and safety | 4 |
| Breathing Difficulties | THC (Tetrahydrocannabinol) | Bronchodilating activity(moderate) | 20mg | Acute and subacute bronchial effects of oral cannabinoids | 4 |
| Botrytis Cinerea | Terpinolene | Antifungal(moderate) | NA | Antifungal modes of action of tea tree oil and its two characteristic components against Botrytis cinerea | 1 |
| Buccal bacteria | α -trans-Bergamotene | Antibacterial (moderate) | 29.9% of mixture | Chemical composition, antioxidant and antibacterial activities of essential oils from leaves and flowers of Eugenia klotzschiana Berg (Myrtaceae) | 1 |
| Buccal bacteria | Geraniol | Chemopreventive (major) | 250mg/kg | Chemopreventive efficacy of geraniol against 7,12-dimethylbenz[<i>a</i>]anthracene-induced hamster buccal pouch carcinogenesis | 2 |
| Cancer | Borneol | Anticancer(major) | NA | Natural Borneol, a Monoterpenoid Compound, Potentiates Selenocystine-Induced Apoptosis in Human Hepatocellular Carcinoma Cells by Enhancement of Cellular Uptake and Activation of ROS-Mediated DNA Damage | 2 |

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| Cancer | CBD (Cannabidiol) | Anticancer(major) | NA | The Combination of Cannabidiol and Δ9-Tetrahydrocannabinol Enhances the Anticancer Effects of Radiation in an Orthotopic Murine Glioma Model | 2 |
| Cancer | CBD (Cannabidiol) | Anticancer(major) | NA | Antineoplastic Activity of Cannabinoids | 2 |
| Cancer | CBD (Cannabidiol) | Anticancer(major) | NA | In Vitro Anticancer Activity of Plant-Derived Cannabidiol on Prostate Cancer Cell Line | 2 |
| Cancer | CBD (Cannabidiol) | Antiproliferative(moderate) | 1–10 μM | Non-THC (Tetrahydrocannabinol) cannabinoids inhibit prostate carcinoma growth in vitro and in vivo: pro-apoptotic effects and underlying mechanisms | 2 |
| Cancer | CBD (Cannabidiol) | Antiproliferative(moderate) | | Physiological intestinal oxygen modulates the Caco-2 cell model and increases sensitivity to the phytocannabinoid cannabidiol | 2 |
| Cancer | CBD (Cannabidiol) | Antitumor(major) | NA | Modulation of the tumor microenvironment and inhibition of EGF/EGFR pathway: Novel anti-tumor mechanisms of Cannabidiol in breast cancer | 2 |
| Cancer | CBD (Cannabidiol) | Antitumor(major) | NA | Antitumor Activity of Plant Cannabinoids with Emphasis on the Effect of Cannabidiol on Human Breast Carcinoma | 2 |
| Cancer | CBD (Cannabidiol) | Antitumor(major) | NA | Antitumor Effects of Cannabidiol, a Nonpsychoactive Cannabinoid, on Human Glioma Cell Lines | 2 |
| Cancer | CBD (Cannabidiol) | Antitumor(major) | NA | Chemopreventive effect of the non-psychoactive phytocannabinoid cannabidiol on experimental colon cancer | 2 |
| Cancer | CBD (Cannabidiol) | Antitumor(major) | NA | Cannabidiol, a Non-Psychoactive Cannabinoid Compound, Inhibits Proliferation and Invasion in U87-MG and T98G Glioma Cells through a Multitarget Effect | 2 |
| Cancer | CBD (Cannabidiol) | Antitumor(major) | NA | Cannabidiol inhibits human glioma cell migration through a cannabinoid receptor-independent mechanism | 2 |
| Cancer | CBDA (Cannabidiolic Acid) | Anticancer(moderate) | NA | Cannabidiolic acid, a (major) cannabinoid in fiber-type cannabis, is an inhibitor of MDA-MB-231 breast cancer cell migration | 2 |
| Cancer | CBG (Cannabigerol) | Antitumor(major) | NA | Boron trifluoride etherate on silica-A modified lewis acid reagent (VII). Antitumor activity of cannabigerol against human oral epitheloid carcinoma cells | 2 |
| Cancer | CBG (Cannabigerol) | Antitumor(major) | NA | Synthesis and antitumor activity of cannabigerol | 2 |
| Cancer | Caryophyllene | Anticancer(major) | 10.54% of mixture | Chemical Composition, Antioxidant, Anti-Inflammatory and Anti-Proliferative Activities of Essential Oils of Plants from Burkina Faso | 1 |
| Cancer | Caryophyllene oxide | Anticancer(moderate) | 17.9% of mixture | Chemical Composition, Antioxidant, Anti-Inflammatory and Anti-Proliferative Activities of Essential Oils of Plants from Burkina Faso | 1 |

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| Cancer | Humulene | Anticancer(major) | 32µg/mL | Potentiating effect of β-caryophyllene on anticancer activity of α-humulene, isocaryophyllene and paclitaxel | 2 |
| Cancer | Humulene | Antitumor(moderate) | NA | Antitumor activity of balsam fir oil: production of reactive oxygen species induced by alpha-humulene as possible mechanism of action | 1 |
| Cancer | Linalool | Antitumor(moderate) | NA | Linalool Exhibits Cytotoxic Effects by Activating Antitumor Immunity | 2 |
| Cancer | α-Pinene / β-Pinene | Anticancer(major) | α-pinene (19.43%), | Antibacterial Activity and Anticancer Activity of Rosmarinus officinalis L. Essential Oil Compared to That of Its Main Components | 1 |
| Cancer | α-Pinene / β-Pinene | Anticancer(major) | β-pinene (6.71%) | Antibacterial Activity and Anticancer Activity of Rosmarinus officinalis L. Essential Oil Compared to That of Its Main Components | 1 |
| Cancer | Terpineol | Anticancer(moderate) | 3 or 6mM | α Terpineol: A Potential Anticancer Agent which Acts through Suppressing NF-κB Signalling | 2 |
| Cancer | Terpineol | Antiproliferative(moderate) | NA | Evaluation of the antioxidant and antiproliferative potential of bioflavors | 2 |
| Cardiovascular Complications | CBD (Cannabidiol) | Cardiac Protection(major) | NA | Cannabidiol Attenuates Cardiac Dysfunction, Oxidative Stress, Fibrosis, and Inflammatory and Cell Death Signaling Pathways in Diabetic Cardiomyopathy | 2 |
| Central neuropathic pain) | CBD (Cannabidiol) | Analgesic(moderate) | 25mg/mL | Oromucosal Δ9-tetrahydrocannabinol/cannabidiol for neuropathic pain associated with multiple sclerosis: An uncontrolled, open-label, 2-year extension trial | 3 |
| Cerebral Ischemic Injury | Caryophyllene | Neuroprotective(major) | 10mg/kg | Protective Effect of β-Caryophyllene, a Natural Bicyclic Sesquiterpene, Against Cerebral Ischemic Injury | 2 |
| Certain forms of the cytochrome P-450 isoenzymes | Myrcene | Antimutagenic(minor) | 1,000µg/ml | Evaluation of the mutagenicity of β-myrcene in mammalian cells in vitro | 2 |
| Cervical cancer | α-Terpineol | Cytotoxicity(moderate) | 12.46/13.12 µg/mL, | Cytotoxicity of α-terpineol in HeLa cell line and its effects to apoptosis and cell cycle | 2 |
| Cervical cancer | Camphene | Anticancer(moderate) | NA | The in-vitro evaluation of antibacterial, antifungal and cytotoxic properties of Marrubium vulgare L. essential oil grown in Tunisia | 1 |
| Cervical cancer | Camphene | Antiinflammatory(moderate) | NA | The in-vitro evaluation of antibacterial, antifungal and cytotoxic properties of Marrubium vulgare L. essential oil grown in Tunisia | 1 |
| Chronic Pain | CBD (Cannabidiol) | Antiinflammatory(minor) | 2.5–20mg/kg, | The non-psychoactive cannabis constituent cannabidiol is an orally effective therapeutic agent in rat chronic inflammatory and neuropathic pain | 2 |
| Colitis | CBC (Cannabichromene) | Antiinflammatory(major) | NA | The cannabinoid TRPA1 agonist cannabichromene inhibits nitric oxide production in macrophages and ameliorates murine colitis | 2 |
| Colitis | Eucalyptol | Antiinflammatory(moderate) | 200/400 mg/kg, | 1,8-cineole (eucalyptol), a monoterpene oxide attenuates the colonic damage in rats on acute TNBS-colitis | 2 |

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| Colon cancer | Linalool | Anticancer(moderate) | 100/200 µg/kg, | Anticancer effect of linalool via cancer-specific hydroxyl radical generation in human colon cancer | 2 |
| Chronic inflammatory disorders | Menthol | Antiinflammatory(moderate) | NA | The anti-inflammatory activity of L-menthol compared to mint oil in human monocytes in vitro: a novel perspective for its therapeutic use in inflammatory diseases | 2 |
| Chronic myelogenous leukemia | α-Terpineol | Antiproliferative(major) | 12.66% of mixture | Phytochemical analysis, antiproliferative against k562 humam chronic myelogenous leukemia, antiviral and hypoglycaemic activities of cedrus species and medicinal plants native from Libanon | 1 |
| Crohn's Disease | THC (Tetrahydrocannabinol) | Antiinflammatory(minor) | 115mg | Cannabis induces a clinical response in patients with Crohn's disease: a prospective placebo-controlled study | 4 |
| Cold and mechanical hyperalgesia | Phellandrene | Antihyperanalgesia(moderate) | 11mg/kg | Antihyperalgesic and antidepressive actions of (R)-(+)-limonene, α-phellandrene, and essential oil from Schinus terebinthifolius fruits in a neuropathic pain model | 2 |
| Dementia | THC (Tetrahydrocannabinol) | Neuroprotective(moderate) | 3mg | Effects of tetrahydrocannabinol on balance and gait in patients with dementia: A randomised controlled crossover trial | 4 |
| Depression | CBC (Cannabichromene) | Antidepressant(major) | 20/40/80 mg/kg, | Antidepressant-like effect of delta9-tetrahydrocannabinol and other cannabinoids isolated from Cannabis sativa L. | 2 |
| Depression | CBD (Cannabidiol) | Antidepressant(moderate) | 30mg/kg | Antidepressant-like effects of cannabidiol in mice: possible involvement of 5-HT1A receptors | 2 |
| Depression | CBD (Cannabidiol) | Antidepressant(moderate) | 30mg/kg | Prohedonic Effect of Cannabidiol in a Rat Model of Depression. | 2 |
| Depression | Camphor | Antidepressant(moderate) | 4.91% of mixture | An Investigation of Anti-Depressant Activity of Cinnamomum Camphora Oil in Experimental Mice | 1 |
| Depression | Caryophyllene | Anxiolytic(moderate) | 50mg/kg | β-Caryophyllene, a CB2 receptor agonist produces multiple behavioral changes relevant to anxiety and depression in mice | 2 |
| Depression | Linalool | Antidepressant(moderate) | 50/160/500 mg/kg, | Subchronic Administration of Linalool Decreases Depressive-Like Behaviour in Restrained Rats | 2 |
| Depression | α-Pinene / β-Pinene | Antidepressant(moderate) | NA | Linalool and β-pinene exert their antidepressant-like activity through the monoaminergic pathway | 2 |
| Dermatitis, Skin Lesion | D-Limonene | Skin Repair(major) | NA | Skin Repair Properties of d-Limonene and Perillyl Alcohol in Murine Models | 2 |
| Dermatophytes and Cryptococcus neoformans | Sabinene | Antifungal(moderate) | 29% of mixture | Antifungal, antioxidant and anti-inflammatory activities of Oenanthe crocata L. essential oil | 1 |
| Diabetes | CBD (Cannabidiol) | Antidiabetic(moderate) | 100mg | Efficacy and Safety of Cannabidiol and Tetrahydrocannabivarin on Glycemic and Lipid Parameters in Patients With Type 2 Diabetes: A Randomized, Double-Blind, Placebo-Controlled, Parallel Group Pilot Study | 4 |

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| Diabetes | D-Limonene | Antidiabetic(moderate) | NA | Protective Effects of d-Limonene on Lipid Peroxidation and Antioxidant Enzymes in Streptozotocin-Induced Diabetic Rats | 1 |
| Diabetes | THCV (Tetrahydrocannabivarin) | Antidiabetic(moderate) | 5mg | Efficacy and Safety of Cannabidiol and Tetrahydrocannabivarin on Glycemic and Lipid Parameters in Patients With Type 2 Diabetes: A Randomized, Double-Blind, Placebo-Controlled, Parallel Group Pilot Study | 4 |
| Diabetic Complications | CBD (Cannabidiol) | Antiinflammatory(major) | NA | Cannabidiol Attenuates Cardiac Dysfunction, Oxidative Stress, Fibrosis, and Inflammatory and Cell Death Signaling Pathways in Diabetic Cardiomyopathy | 2 |
| Diabetic Complications | CBD (Cannabidiol) | Antiinflammatory(major) | NA | Cannabidiol attenuates high glucose-induced endothelial cell inflammatory response and barrier disruption | 2 |
| Dystonia | CBD (Cannabidiol) | Antidystonic and Parkinsonism-aggravating(moderate) | 100 to 600mg | Open label evaluation of cannabidiol in dystonic movement disorders | 3 |
| Dystonia | CBD (Cannabidiol) | Antidystonic(moderate) | 200mg | Cannabidiol in dystonic movement disorders | 3 |
| Edema | α -Bisabolol | Antiinflammatory(major) | NA | Anti-nociceptive and anti-inflammatory activities of (-)-α-bisabolol in rodents | 2 |
| Edema | CBC (Cannabichromene) | Antiinflammatory(major) | NA | Anti-inflammatory properties of cannabichromene | 2 |
| Edema | CBC (Cannabichromene) | Antiinflammatory(major) | NA | Biological Activity of Canabichromene, its Homologs and Isomers | 2 |
| Edema | Δ -3-Carene | Antiinflammatory(moderate) | NA | Pharmacological activity of the essential oil of Bupleurum gibraltarium: anti-inflammatory activity and effects on isolated rat uteri | 2 |
| Edema | Eucalyptol | Antiinflammatory(moderate) | NA | Antiinflammatory and antinociceptive effects of 1,8-cineole a terpenoid oxide present in many plant essential oils | 2 |
| Edema | Humulene | Antiinflammatory(major) | NA | Anti-inflammatory effects of compounds alpha-humulene and (-)-trans-caryophyllene isolated from the essential oil of Cordia verbenacea | 2 |
| Edema | Isopulegol | Antiinflammatory(major) | 22.02% of mixture | In Vivo Potential Anti-Inflammatory Activity of Melissa officinalis L. Essential Oil | 2 |
| Edema | Limonene | Antiinflammatory(major) | 25/50/75 mg/kg, | Physio-pharmacological Investigations About the Anti-inflammatory and Antinociceptive Efficacy of (+)-Limonene Epoxide | 2 |
| Edema | Linalool | Antiinflammatory(moderate) | NA | α-Pinene, linalool, and 1-octanol contribute to the topical anti-inflammatory and analgesic activities of frankincense by inhibiting COX-2 | 2 |
| Edema | Phytol | Antiinflammatory(moderate) | 7.5/25/50/75 mg/kg, | Phytol, a diterpene alcohol, inhibits the inflammatory response by reducing cytokine production and oxidative stress | 2 |
| Edema | Terpineol | Antiinflammatory(moderate) | NA | A Study on Anti-Inflammatory and Peripheral Analgesic Action of Salvia sclarea Oil and Its Main Components | 1 |
| Edema | α -Terpineol | Antiinflammatory(major) | 6.2% of mixture | Chemical constituents and antiinflammatory activity of leaf essential oil of Nigerian grown Chenopodium album L. | 1 |

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| Edema | THC (Tetrahydrocannabinol) | Antiinflammatory(minor) | NA | Antipyretic, analgesic and anti-inflammatory effects of Δ9-tetrahydrocannabinol in the rat | 2 |
| Emetic activity | THC (Tetrahydrocannabinol) | Antiemetic(major) | 5mg, 10mg, 15mg | Physiologic observations in a controlled clinical trial of the antiemetic effectiveness of 5, 10, and 15 mg of delta 9-tetrahydrocannabinol in cancer chemotherapy. Ophthalmologic implications | 4 |
| Emetic activity | THC (Tetrahydrocannabinol) | Antiemetic(major) | NA | Antiemetic Effect of Tetrahydrocannabinol Compared With Placebo and Prochlorperazine in Chemotherapy-Associated Nausea and Emesis | 4 |
| Emetic activity | THC (Tetrahydrocannabinol) | Antiemetic(major) | NA | Efficacy of tetrahydrocannabinol in patients refractory to standard antiemetic therapy | 4 |
| Emetic activity | THC (Tetrahydrocannabinol) | Antiemetic(major) | NA | Antiemetic efficacy of levonantradol compared to delta-9-tetrahydrocannabinol for chemotherapy-induced nausea and vomiting. | 4 |
| Emetic activity | THC (Tetrahydrocannabinol) | Antiemetic(major) | NA | Antiemetics in Patients Receiving Chemotherapy for Cancer — A Randomized Comparison of Delta-9-Tetrahydrocannabinol and Prochlorperazine | 4 |
| Emetic activity | THC (Tetrahydrocannabinol) | Antiemetic(major) | NA | The antiemetic activity of tetrahydrocannabinol versus metoclopramide and thiethylperazine in patients undergoing cancer chemotherapy. | 4 |
| Emetic activity | THC (Tetrahydrocannabinol) | Antiemetic(major) | NA | Comparative Trial of the Antiemetic Effects of THC and Haloperidol | 4 |
| Emetic activity | THC (Tetrahydrocannabinol) | Antiemetic(major) | NA | Delta-9-Tetrahydrocannabinol as an Antiemetic in Cancer Patients Receiving High-Dose Methotrexate: A Prospective, Randomized Evaluation | 4 |
| Emetic activity | THC (Tetrahydrocannabinol) | Antiemetic(major) | NA | An efficient new cannabinoid antiemetic in pediatric oncology | 4 |
| Emetic activity | THC (Tetrahydrocannabinol) | Antiemetic(major) | NA | Antiemetic Effect of Delta-9-Tetrahydrocannabinol in Patients Receiving Cancer Chemotherapy | 4 |
| Epilepsy | CBD (Cannabidiol) | Antiepileptic(moderate) | 200-300mg | Chronic administration of cannabidiol to healthy volunteers and epileptic patients | 4 |
| Epilepsy | CBD (Cannabidiol) | Antiepileptic(moderate) | 5-50mg/kg | Cannabidiol as a new treatment for drug-resistant epilepsy in tuberous sclerosis complex | 4 |
| Epilepsy | CBD (Cannabidiol) | Antiepileptic(moderate) | 2-50mg/kg | Cannabidiol in patients with treatment-resistant epilepsy: an open-label interventional trial | 4 |
| Epilepsy | CBD (Cannabidiol) | Antiepileptic(moderate) | NA | Cannabidiol as a Potential Treatment for Febrile Infection-Related Epilepsy Syndrome (FIRES) in the Acute and Chronic Phases | 4 |
| Epilepsy | CBD (Cannabidiol) | Antiepileptic(moderate) | 1-20mg/kg | CBD-enriched medical cannabis for intractable pediatric epilepsy: The current Israeli experience | 4 |
| Epilepsy | CBD (Cannabidiol) | Anticonvulsant(major) | 1mg/kg-100mg/kg | Cannabidiol exerts anti-convulsant effects in animal models of temporal lobe and partial seizures | 2 |

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| Epilepsy | CBD (Cannabidiol) | Anticonvulsant(major) | NA | Cannabis, cannabidiol, and epilepsy--from receptors to clinical response | 2 |
| Epilepsy | CBDV (Cannabidivarin) | Anticonvulsant(moderate) | NA | Cannabis in epilepsy: From clinical practice to basic research focusing on the possible role of cannabidivarin | 2 |
| Epilepsy | CBDV (Cannabidivarin) | Anticonvulsant(moderate) | 50-422mg/kg | Cannabidivarin-rich cannabis extracts are anticonvulsant in mouse and rat via a CB1 receptor-independent mechanism | 2 |
| Epilepsy | CBDV (Cannabidivarin) | Anticonvulsant(moderate) | 400mg/kg | Cannabidivarin (CBDV) suppresses pentylenetetrazole (PTZ)-induced increases in epilepsy-related gene expression | 3 |
| Epilepsy | Linalool | Anticonvulsant(moderate) | NA | Anticonvulsant properties of linalool in glutamate-related seizure models | 2 |
| Epilepsy | THCV (Tetrahydrocannabivarin) | Anticonvulsant(moderate) | 0.25mg/kg | Δ9-Tetrahydrocannabivarin suppresses in vitro epileptiform and in vivo seizure activity in adult rats | 2 |
| Facial Emotion Recognition | CBD (Cannabidiol) | improves recognition of emotional facial(moderate) | 16mg | Acute effects of delta-9-tetrahydrocannabinol, cannabidiol and their combination on facial emotion recognition: a randomised, double-blind, placebo-controlled study in cannabis users | 4 |
| Facial Emotion Recognition | THC (Tetrahydrocannabinol) | improves recognition of emotional facial(moderate) | 8mg | Acute effects of delta-9-tetrahydrocannabinol, cannabidiol and their combination on facial emotion recognition: a randomised, double-blind, placebo-controlled study in cannabis users | 4 |
| Food-related microorganisms | D-Limonene | Antimicrobial(major) | NA | Effects of nisin on the antimicrobial activity of d-limonene and its nanoemulsion | 2 |
| Friend leukemia virus-induced splenomegaly | THC (Tetrahydrocannabinol) | Antileukemic(major) | 200mg/kg | Antineoplastic Activity of Cannabinoids | 2 |
| Fungal Contamination | Borneol | Antifungal(major) | 36.5% of mixture | Borneol-grafted cellulose for antifungal adhesion and fungal growth inhibition | 2 |
| Fungal Contamination | P-Cymene | Antifungal(moderate) | 1000ppm | Studies on Antifungal Properties of Essential Oil of Trachyspermum ammi (L.) Sprague | 1 |
| Fungal Contamination | D-Limonene | Antifungal(minor) | 56% of mixture, | Antifungal Activity of Thapsia villosa Essential Oil against Candida, Cryptococcus, Malassezia, Aspergillus and Dermatophyte Species | 1 |
| Fungal Contamination | Farnesene | Antifungal(major) | 14.6–16.4% of mixture | Chemical Composition and in vitro Antifungal Properties of Essential Oils from Leaves and Flowers of Erigeron floribundus (H.B. et K.) Sch. Bip. From Cameroon | 1 |
| Fungal Contamination | Myrcene | Antifungal(moderate) | 47.7–84.6% of mixture | Essential oils from Distichoselinum tenuifolium: Chemical composition, cytotoxicity, antifungal and anti-inflammatory properties | 1 |
| Fungal Contamination | Nerolidol | Antifungal(major) | NA | Evaluation of antifungal activity in essential oil of the Syzygium aromaticum (L.) by extraction, purification and analysis of its main component eugenol | 1 |
| Fungal Contamination | Ocimene | Antifungal(moderate) | 30.4% of mixture | Antifungal activity of the essential oil of Angelica (major) against Candida, Cryptococcus, Aspergillus and dermatophyte species | 1 |

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| Fungal Contamination | Phellandrene | Antifungal(moderate) | 1.7/1.8 mL/L, | Anti-fungal activity, mechanism studies on α-Phellandrene and Nonanal against <i>Penicillium cyclopium</i> | 2 |
| Fungal Contamination | Sabinene | Antifungal(moderate) | 31.1% of mixture | In Vivo Antifungal Activity of the Essential Oil of <i>Bupleurum gibraltarium</i> against <i>Plasmopara halstedii</i> in Sunflower | 1 |
| Gastric ulcer | α -Bisabolol | Gastroprotective(minor) | NA | (-)-α-Bisabolol-induced gastroprotection is associated with reduction in lipid peroxidation, superoxide dismutase activity and neutrophil migration | 2 |
| Gastric ulcer | Isopulegol | Gastroprotective(moderate) | NA | Gastroprotective activity of isopulegol on experimentally induced gastric lesions in mice: investigation of possible mechanisms of action | 2 |
| Gastric ulcer | Limonene | Gastroprotective(major) | NA | Gastroprotective mechanisms of Citrus lemon (<i>Rutaceae</i>) essential oil and its (major)ity compounds: limonene and β-pinene: Involvement of heat-shock protein-70, vasoactive intestinal peptide, glutathione, sulfhydryl compounds, nitric oxide and prostaglandin E2 | 1 |
| Gastric ulcer | α -Pinene / β -Pinene | Gastroprotective(moderate) | NA | Gastroprotective effect of alpha-pinene and its correlation with antiulcerogenic activity of essential oils obtained from <i>Hyptis</i> species | 1 |
| Glaucoma | CBD (Cannabidiol) | Antiglaucoma(minor) | 20/40 mg, | Effect of Sublingual Application of Cannabinoids on Intraocular Pressure: A Pilot Study | 4 |
| Glaucoma | CBG (Cannabigerol) | Antiglaucoma(moderate) | NA | A Comparison of the Ocular and Central Effects of Δ9-Tetrahydrocannabinol and Cannabigerol | 2 |
| Glaucoma | THC (Tetrahydrocannabinol) | Antiglaucoma(moderate) | 2.8% of mixture | Effects of tetrahydrocannabinol on arterial and intraocular hypertension | 2 |
| Glaucoma | THC (Tetrahydrocannabinol) | Antiglaucoma(minor) | 12mg | Marijuana smoking and reduced pressure in human eyes: drug action or epiphenomenon? | 2 |
| Glaucoma | THC (Tetrahydrocannabinol) | Antiglaucoma(minor) | 0.4% of mixture | Topical Δ9-Tetrahydrocannabinol and Aqueous Dynamics in Glaucoma | 4 |
| Glioblastoma multiforme | CBD (Cannabidiol) | Anticancer(major) | NA | A Combined Preclinical Therapy of Cannabinoids and Temozolomide against Glioma | 2 |
| Glioblastoma multiforme | THC (Tetrahydrocannabinol) | Anticancer(major) | NA | A Combined Preclinical Therapy of Cannabinoids and Temozolomide against Glioma | 2 |
| Glioblastoma multiforme | THC (Tetrahydrocannabinol) | Antitumor(moderate) | NA | A pilot clinical study of Δ9-tetrahydrocannabinol in patients with recurrent glioblastoma multiforme | 4 |
| Glutamate induced pain | Linalool | Antinociceptive(minor) | NA | Evidence for the involvement of ionotropic glutamatergic receptors on the antinociceptive effect of (-)-linalool in mice | 2 |
| HaCaT keratinocytes | Sabinene | Cytotoxicity(minor) | 26.2% of mixture | Essential Oil of <i>Juniperus communis</i> subsp. <i>alpina</i> (Suter). Čelak Needles: Chemical Composition, Antifungal Activity and Cytotoxicity | 1 |

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| Halatosis | α -Bisabolol | Antimicrobial(minor) | NA | The antimicrobial activity of alpha-bisabolol and tea tree oil against Solobacterium moorei, a Gram-positive bacterium associated with halitosis | 2 |
| Hepatocellular carcinoma | Terpineol | Anticancer(moderate) | 10/20 mg/kg, | 4-Terpineol exhibits potent in vitro and in vivo anticancer effects in Hep-G2 hepatocellular carcinoma cells by suppressing cell migration and inducing apoptosis and sub-G1 cell cycle arrest | 2 |
| House fly (Musca domestica L.) | Pulegone | Insecticide(minor) | 69.70% of mixture | Insecticidal activity of essential oils from native medicinal plants of Central Argentina against the house fly, Musca domestica (L.) | 1 |
| High heart rate and upset mood | Linalool | Sedative(moderate) | NA | Sedative effects of the jasmine tea odor and (R)-(-)-linalool, one of its (major) odor components, on autonomic nerve activity and mood states | 2 |
| HIV-infected | THC (Tetrahydrocannabinol) | Appetite Stimulant(moderate) | NA | A pilot study of the effects of cannabis on appetite hormones in HIV-infected adult men | 4 |
| Human chronic ulcers | D-Limonene | Healing property(moderate) | 245mg/kg | Healing actions of essential oils from Citrus aurantium and d-limonene in the gastric mucosa: the roles of VEGF, PCNA, and COX-2 in cell proliferation | 1 |
| Human immune diseases | CBG (Cannabigerol) | Immunosuppressive(moderate) | NA | A Cannabigerol Derivative Suppresses Immune Responses and Protects Mice from Experimental Autoimmune Encephalomyelitis | 2 |
| Huntington's Disease | CBD (Cannabidiol) | Neuroprotective(moderate) | 10mg/kg | Controlled clinical trial of cannabidiol in Huntington's disease | 4 |
| Huntington's Disease | CBG (Cannabigerol) | Neuroprotectant(moderate) | NA | VCE-003.2, a novel cannabigerol derivative, enhances neuronal progenitor cell survival and alleviates symptomatology in murine models of Huntington's disease | 2 |
| Huntington's Disease | CBG (Cannabigerol) | Neuroprotectant(moderate) | NA | Neuroprotective Properties of Cannabigerol in Huntington's Disease: Studies in R6/2 Mice and 3-Nitropropionate-lesioned Mice | 2 |
| Hyperalgesia | P-Cymene | Antihyperalgesic(moderate) | 25/50/100 mg/kg, | The anti-hyperalgesic and anti-inflammatory profiles of p-cymene: Evidence for the involvement of opioid system and cytokines | 2 |
| Hyperalgesia | P-Cymene | Antiinflammatory(moderate) | 25/50/100 mg/kg, | The anti-hyperalgesic and anti-inflammatory profiles of p-cymene: Evidence for the involvement of opioid system and cytokines | 2 |
| Hyperalgesia | Limonene | Antihyperalgesic(moderate) | 10mg/kg | Limonene modulates the hyperalgesia and depressive-like behaviour through IL-1 and NFB regulation in mice | 2 |
| Hyperalgesia | Myrcene | Analgesic(minor) | NA | Myrcene mimics the peripheral analgesic activity of lemongrass tea | 2 |
| Hyperlipidemic | Camphene | Antihyperlipidemic(moderate) | 30 μ g/gr | Camphene, a Plant-Derived Monoterpene, Reduces Plasma Cholesterol and Triglycerides in Hyperlipidemic Rats Independently of HMG-CoA Reductase Activity | 2 |

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| Hyperlocomotion | CBD (Cannabidiol) | Antipsychotic(moderate) | 15–60mg/kg | Cannabidiol inhibits the hyperlocomotion induced by psychotomimetic drugs in mice | 2 |
| Hypernociception | Phellandrene | Antinociceptive(major) | 50mg/kg | Cannabidiol inhibits the hyperlocomotion induced by psychotomimetic drugs in mice | 2 |
| Immobility | CBD (Cannabidiol) | Antidepressant(moderate) | 10–60nmol | Antidepressant-like effect of cannabidiol injection into the ventral medial prefrontal cortex—Possible involvement of 5-HT_{1A} and CB₁ receptors | 2 |
| Immobility | Limonene | Antidepressant(moderate) | 10mg/kg | Antidepressant-like effect of cannabidiol injection into the ventral medial prefrontal cortex—Possible involvement of 5-HT_{1A} and CB₁ receptors | 2 |
| Immobility | Phellandrene | Antidepressant(moderate) | 10mg/kg | Antihyperalgesic and antidepressive actions of (R)-(+)-limonene, α-phellandrene, and essential oil from <i>Schinus terebinthifolius</i> fruits in a neuropathic pain model | 1 |
| Immobility | THC (Tetrahydrocannabinol) | Antidepressant(moderate) | 2.5mg/kg | Antidepressant-like effect of Δ^9-tetrahydrocannabinol and other cannabinoids isolated from <i>Cannabis sativa</i> L. | 2 |
| Immune System related diseases | CBD (Cannabidiol) | Auto-immunity(moderate) | 2.5 or 5mg/kg | Cannabidiol-induced lymphopenia does not involve NKT and NK Cells | 2 |
| Inflammation | α -Bisabolol | Antiinflammatory(moderate) | NA | Inhibitory effects of (-)-α-bisabolol on LPS-induced inflammatory response in RAW264.7 macrophages | 2 |
| Inflammation | Borneol | Antiinflammatory(major) | NA | Analgesic and Anti-inflammation Effect of Borneol | 2 |
| Inflammation | Camphene | Antinociceptive(major) | NA | Antinociceptive Activity and Redox Profile of the Monoterpenes (+)-Camphene, p-Cymene, and Geranyl Acetate in Experimental Models | 2 |
| Inflammation | CBC (Cannabichromene) | Antiinflammatory(major) | 10mg/kg | Inhibitory effect of cannabichromene, a (major) non-psychoactive cannabinoid extracted from <i>Cannabis sativa</i>, on inflammation-induced hypermotility in mice | 2 |
| Inflammation | CBD (Cannabidiol) | Antiinflammatory(moderate) | 5–40mg/kg | Oral anti-inflammatory activity of cannabidiol, a non-psychoactive constituent of cannabis, in acute carrageenan-induced inflammation in the rat paw | 2 |
| Inflammation | CBDA (Cannabidiolic Acid) | Antiinflammatory(moderate) | NA | Evaluation of the Cyclooxygenase Inhibiting Effects of Six Major Cannabinoids Isolated from <i>Cannabis sativa</i> | 2 |
| Inflammation | CBDA (Cannabidiolic Acid) | Antiinflammatory(moderate) | NA | Cannabidiolic Acid as a Selective Cyclooxygenase-2 Inhibitory Component in Cannabis | 2 |
| Inflammation | Caryophyllene oxide | Antiinflammatory(major) | 12.5/ 25 mg/kg, | Analgesic and anti-inflammatory activity of Caryophyllene oxide from <i>Annona squamosa</i> L. bark | 2 |
| Inflammation | p-Cymene | Antiinflammatory(moderate) | 25/50/100 mg/kg, | Evaluation of the Anti-Inflammatory and Antinociceptive Properties of p-Cymene in Mice | 2 |
| Inflammation | Linalool | Antiinflammatory(major) | NA | Anti-inflammatory effects of linalool in RAW 264.7 macrophages and lipopolysaccharide-induced lung injury model | |

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| Inflammation | Myrcene | Antiinflammatory(moderate) | 47.7–84.6% of mixture | Essential oils from <i>Distichoselinum tenuifolium</i>: Chemical composition, cytotoxicity, antifungal and anti-inflammatory properties | 1 |
| Inflammation | α -Pinene / β -Pinene | Antiinflammatory(moderate) | NA | α-Pinene Exhibits Anti-Inflammatory Activity Through the Suppression of MAPKs and the NF-κB Pathway in Mouse Peritoneal Macrophages | 2 |
| Inflammation | Sabinene | Antiinflammatory (major) | 29% of mixture | Antifungal, antioxidant and anti-inflammatory activities of <i>Oenanthe crocata</i> L. essential oil | 1 |
| Insomnia | CBD (Cannabidiol) | Improve Sleep(moderate) | 6-12 / 25mg, | Effectiveness of Cannabidiol Oil for Pediatric Anxiety and Insomnia as Part of Posttraumatic Stress Disorder: A Case Report | 3 |
| Intestinal inflammation | THC (Tetrahydrocannabinol) | Antiinflammatory(moderate) | NA | Chronic Administration of Δ9-Tetrahydrocannabinol Induces Intestinal Anti-Inflammatory MicroRNA Expression during Acute Simian Immunodeficiency Virus Infection of Rhesus Macaques | 2 |
| Irritable bowel syndrome | CBG (Cannabigerol) | Antiinflammatory(major) | NA | Beneficial effect of the non-psychotropic plant cannabinoid cannabigerol on experimental inflammatory bowel disease | 2 |
| Ischaemia-reperfusion injury | THCV (Tetrahydrocannabivarin) | Antiinflammatory(moderate) | NA | Δ8-Tetrahydrocannabivarin prevents hepatic ischaemia/reperfusion injury by decreasing oxidative stress and inflammatory responses through cannabinoid CB₂ receptors | 2 |
| Leishmania species | Nerolidol | Antileishmanial(moderate) | 100 μ M | Antileishmanial Activity of the Terpene Nerolidol | 2 |
| Leukemia | α -Terpineol | Antiproliferative(minor) | NA | Antioxidant and antiproliferative activities of essential oils of some wild Portuguese Thymus | 1 |
| Lipopolysaccharide induced acute lung injury | Cymene | Antiinflammatory(major) | NA | Protective effect of p-cymene on lipopolysaccharide-induced acute lung injury in mice | 2 |
| Lipopolysaccharide plus interferon gamma triggered macrophages | Sabinene | Antiinflammatory(moderate) | 29% of mixture | Antifungal, antioxidant and anti-inflammatory activities of <i>Oenanthe crocata</i> L. essential oil | 1 |
| Liver cancer | Terpineol | Anticancer (moderate) | 320 μ g/ml | γ-terpineol inhibits cell growth and induces apoptosis in human liver cancer BEL-7402 cells in vitro | 2 |
| Low feeding behaviour | CBN (Cannabinol) | Appetite Stimulant(minor) | NA | Cannabinol and cannabidiol exert opposing effects on rat feeding patterns | 2 |
| LPS-stimulated human macrophages | Terpineol-4-ol | Antiinflammatory(moderate) | NA | Terpinen-4-ol and alpha-terpineol (tea tree oil components) inhibit the production of IL-1β, IL-6 and IL-10 on human macrophages | 2 |
| Lung adenocarcinoma | β -Myrcene | Antitumor(major) | 9.29% of mixture | Composition and antitumor activities of essential oil from the fruits of <i>Dasymaschalon trichophorum</i> | 1 |
| Lung cancer | Linalool | Anticancer (minor) | NA | A comparative study of cytotoxic, membrane and DNA damaging effects of <i>Origanum (majorana)</i>'s essential oil and its oxygenated monoterpene component linalool on parental and epirubicin-resistant H1299 cells | 2 |

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| Macrophages and keratinocytes | Sabinene | Cytotoxicity(moderate) | 29.% of mixture | Antifungal, antioxidant and anti-inflammatory activities of <i>Oenanthe crocata</i> L. essential oil | 1 |
| Malaria | Nerolidol | Antimalarial(moderate) | 1000mg/kg | Antimalarial activity of the terpene nerolidol | 2 |
| Malaria | α -Terpineol | Antimalarial(moderate) | 22.6% of mixture | Composition and antimalarial activity in vitro of the essential oil of <i>Tetradenia riparia</i> | 1 |
| Malassezia furfur | Terpinolene | Antifungal(major) | NA | Chemical Composition and Antifungal Activity of Plant Essential Oils against <i>Malassezia furfur</i> | 1 |
| Mechanical hyperalgesia | Limonene | Antihyperanalgesia(moderate) | 10mg/kg | Antihyperalgesic and antidepressive actions of (R)-(+)-limonene, α-phellandrene, and essential oil from <i>Schinus terebinthifolius</i> fruits in a neuropathic pain model | 2 |
| Metabolic bone disorders | Δ -3-Carene | Bone stimulant(moderate) | NA | Low Concentration of 3-Carene Stimulates the Differentiation of Mouse Osteoblastic MC3T3-E1 Subclone 4 Cells | 2 |
| Microbiological Contamination | Borneol | Antimicrobial(moderate) | 4.91% of mixture | Chemical Composition and Antimicrobial Activity of Essential Oil of Thyme (<i>Thymus vulgaris</i>) from Eastern Morocco | 1 |
| Microbiological Contamination | Camphene | Antimicrobial(moderate) | NA | The in-vitro evaluation of antibacterial, antifungal and cytotoxic properties of <i>Marrubium vulgare</i> L. essential oil grown in Tunisia | 1 |
| Microbiological Contamination | CBC (Cannabichromene) | Antimicrobial(major) | NA | Biological Activity of Cannabichromene, its Homologs and Isomers | 2 |
| Microbiological Contamination | CBC (Cannabichromene) | Antimicrobial(moderate) | | Antibacterial Cannabinoids from <i>Cannabis sativa</i> Wa: A Structure-Activity Study | 2 |
| Microbiological Contamination | Caryophyllene | Antimicrobial(moderate) | 7.8–500g/mL | Effects of β-caryophyllene and <i>Murraya paniculata</i> essential oil in the murine hepatoma cells and in the bacteria and fungi 24-h time-kill curve studies | 2 |
| Microbiological Contamination | Caryophyllene oxide | Antimicrobial(moderate) | 60 to 80 μ g/ml | Compositions and antimicrobial activities of the essential oils of two <i>Hypericum</i> species from Turkey | 1 |
| Microbiological Contamination | Cedrol | Antimicrobial(minor) | 6.3% of mixture | Volatile constituents of propolis from various regions of Greece–Antimicrobial activity | 1 |
| Microbiological Contamination | β -Cedrene | Antimicrobial(moderate) | 6.1% of mixture | Chemical Composition, Antioxidant, Antimicrobial and Cytotoxic Activities of Essential Oil from <i>Premna microphylla</i> Turczaninow | 1 |
| Microbiological Contamination | P-Cymene | Antimicrobial(major) | NA | Antimicrobial and Antioxidant Activity of the Essential Oil and Methanol Extracts of <i>Thymus pectinatus</i> Fisch. et Mey. Var. <i>pectinatus</i> (Lamiaceae) | 1 |
| Microbiological Contamination | Farnesene | Antimicrobial(major) | 51.5% of mixture | Chemical Composition, Antioxidant Properties, α-Glucosidase Inhibitory, and Antimicrobial Activity of Essential Oils from <i>Acacia mollissima</i> and <i>Acacia cyclops</i> Cultivated in Tunisia | 1 |
| Microbiological Contamination | Guaiol | Antimicrobial(minor) | 8,2% of mixture | Chemical composition and evaluation of antibacterial and antioxidant activities of the essential oil of <i>Croton urucurana</i> Baillon (Euphorbiaceae) stem bark | 1 |

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| Microbiological Contamination | Isoborneol | Antimicrobial(moderate) | 14.66% of mixture | Gastroprotective activity of isopulegol on experimentally induced gastric lesions in mice: investigation of possible mechanisms of action | 1 |
| Microbiological Contamination | D-Limonene | Antimicrobial | 94% of mixture | Orange Essential Oils. Antimicrobial Activities against | 1 |
| Microbiological Contamination | D-Limonene | (moderate) | | | 1 |
| Microbiological Contamination | Myrcene | Antimicrobial(moderate) | NA | Antimicrobial activity of the essential oil and different fractions of Juniperus communis L. and a comparison with some commercial antibiotics | 1 |
| Microbiological Contamination | α -Pinene / β -Pinene | Antimicrobial(major) | 10,5% of mixture | Antimicrobial activity of the essential oil and different fractions of Juniperus communis L. and a comparison with some commercial antibiotics | 1 |
| Microbiological Contamination | Terpineol | Antimicrobial(major) | NA | Antimicrobial effect of vapours of terpineol, (R)-(-)-linalool, carvacrol, (S)-(-)-perillaldehyde and 1,8-cineole on airborne microbes using a room diffuser | 2 |
| Microbiological Contamination | α -Terpineol | Antimicrobial(minor) | 13,0% of mixture | Antimicrobial Activity of Commercial Samples of Thyme and Marjoram Oils | 1 |
| Microbiological Contamination | Terpinolene | Antimicrobial(moderate) | 8.4% of mixture | Essential oil constituents, anticancer and antimicrobial activity of Ficus mucosa and Casuarina equisetifolia leaves | 1 |
| Mosquito | Eucalyptol | Larvicidal(minor) | 100mg/L | Bioactivity of Dianthus caryophyllus, Lepidium sativum, Pimpinella anisum, and Illicium verum essential oils and their (major) components against the West Nile vector Culex pipiens | 1 |
| Mosquito | Geraniol | Insect repellent(major) | NA | Efficacy of the botanical repellents geraniol, linalool, and citronella against mosquitoes | 2 |
| MRSA | CBG (Cannabigerol) | Antibacterial(moderate) | NA | Antibacterial Cannabinoids from Cannabis sativa: A Structure-Activity Study | 2 |
| MRSA | CBN (Cannabinol) | Antibacterial(moderate) | NA | Antibacterial Cannabinoids from Cannabis sativa: A Structure-Activity Study | 2 |
| Multiple Sclerosis | CBD (Cannabidiol) | Analgesic(moderate) | 2-10inhalations | A double-blind, randomized, placebo-controlled, parallel-group study of THC (Tetrahydrocannabinol)/CBD (Cannabidiol) oromucosal spray in combination with the existing treatment regimen, in the relief of central neuropathic pain in patients with multiple sclerosis | 3 |
| Multiple Sclerosis | CBD (Cannabidiol) | Analgesic(moderate) | 2.5mg | Randomized, controlled trial of cannabis-based medicine in central pain in multiple sclerosis | 3 |
| Multiple Sclerosis | CBD (Cannabidiol) | Antinociceptive(moderate) | NA | Cannabinoid-induced effects on the nociceptive system: a neurophysiological study in patients with secondary progressive multiple sclerosis | 4 |
| Multiple Sclerosis | CBD (Cannabidiol) | Antispasticity(moderate) | NA | Randomized controlled trial of cannabis-based medicine in spasticity caused by multiple sclerosis | 4 |
| Multiple Sclerosis | CBD (Cannabidiol) | Antispasticity(moderate) | NA | Clinical experience with THC:CBD oromucosal spray in patients with multiple sclerosis-related spasticity | 4 |
| Multiple Sclerosis | CBD (Cannabidiol) | Antispasticity(minor) | 12mg | The effect of cannabinoids on the stretch reflex in multiple sclerosis spasticity | 4 |

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| Multiple Sclerosis | CBD (Cannabidiol) | Improve neurogenic symptoms(moderate) | 2.5–120mg | A preliminary controlled study to determine whether whole-plant cannabis extracts can improve intractable neurogenic symptoms | 4 |
| Multiple Sclerosis | CBD (Cannabidiol) | Urinary Protection(moderate) | 2.5mg | An open-label pilot study of cannabis-based extracts for bladder dysfunction in advanced multiple sclerosis | 4 |
| Multiple Sclerosis | THC (Tetrahydrocannabinol) | Analgesic(moderate) | NA | A double-blind, randomized, placebo-controlled, parallel-group study of THC (Tetrahydrocannabinol)/CBD (Cannabidiol) oromucosal spray in combination with the existing treatment regimen, in the relief of central neuropathic pain in patients with multiple sclerosis | 4 |
| Multiple Sclerosis | THC (Tetrahydrocannabinol) | Analgesic(moderate) | 2.7mg | Randomized, controlled trial of cannabis-based medicine in central pain in multiple sclerosis | 4 |
| Multiple Sclerosis | THC (Tetrahydrocannabinol) | Analgesic(minor) | 10mg | Does the cannabinoid dronabinol reduce central pain in multiple sclerosis? Randomised double blind placebo controlled crossover trial | 4 |
| Multiple Sclerosis | THC (Tetrahydrocannabinol) | Antiemetic(moderate) | 15mg/m ² | Efficacy of tetrahydrocannabinol in patients refractory to standard antiemetic therapy.Efficacy, safety and tolerability of an orally administered cannabis extract in the treatment of spasticity in patients with multiple sclerosis: a randomized, double-blind, placebo-controlled, crossover study | 3 |
| Multiple Sclerosis | THC (Tetrahydrocannabinol) | Antinociceptive(moderate) | NA | Cannabinoid-induced effects on the nociceptive system: a neurophysiological study in patients with secondary progressive multiple sclerosis | 4 |
| Multiple Sclerosis | THC (Tetrahydrocannabinol) | Antispasticity(moderate) | 33% of mixture | The effect of cannabis on urge incontinence in patients with multiple sclerosis: a multicentre, randomised placebo-controlled trial (CAMS-LUTS) | 4 |
| Multiple Sclerosis | THC (Tetrahydrocannabinol) | Antispasticity(moderate) | NA | Cannabinoids in multiple sclerosis (CAMS) study: safety and efficacy data for 12 months follow up | 4 |
| Multiple Sclerosis | THC (Tetrahydrocannabinol) | Antispasticity(moderate) | NA | Randomized controlled trial of cannabis-based medicine in spasticity caused by multiple sclerosis | 4 |
| Multiple Sclerosis | THC (Tetrahydrocannabinol) | Antispasticity(moderate) | NA | Smoked cannabis for spasticity in multiple sclerosis: a randomized, placebo-controlled trial | 4 |
| Multiple Sclerosis | THC (Tetrahydrocannabinol) | Antispasticity(moderate) | NA | Cannabinoids for treatment of spasticity and other symptoms related to multiple sclerosis (CAMS study): multicentre, randomised placebo-controlled trial | 4 |
| Multiple Sclerosis | THC (Tetrahydrocannabinol) | Antispasticity(moderate) | NA | Safety, tolerability, and efficacy of orally administered cannabinoids in MS | 4 |
| Multiple Sclerosis | THC (Tetrahydrocannabinol) | Antispasticity(moderate) | >7.5mg | Delta-9-THC in the Treatment of Spasticity Associated with Multiple Sclerosis | 4 |
| Multiple Sclerosis | THC (Tetrahydrocannabinol) | Antispasticity(moderate) | 2.5-15mg | The effect of cannabinoids on the stretch reflex in multiple sclerosis spasticity | 4 |

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| Multiple Sclerosis | THC (Tetrahydrocannabinol) | Antispasticity(moderate) | NA | A double-blind, randomized, placebo-controlled, parallel-group study of Sativex, in subjects with symptoms of spasticity due to multiple sclerosis | 4 |
| Multiple Sclerosis | THC (Tetrahydrocannabinol) | Antispasticity(moderate) | NA | The perceived effects of smoked cannabis on patients with multiple sclerosis | 4 |
| Multiple Sclerosis | THC (Tetrahydrocannabinol) | Antispasticity(moderate) | 4sprays | Clinical experience with THC:CBD oromucosal spray in patients with multiple sclerosis-related spasticity | |
| Multiple Sclerosis | THC (Tetrahydrocannabinol) | Antitremor(moderate) | NA | Tetrahydrocannabinol for tremor in multiple sclerosis | 3 |
| Multiple Sclerosis | THC (Tetrahydrocannabinol) | Urinary Protection(moderate) | 2.5mg | An open-label pilot study of cannabis-based extracts for bladder dysfunction in advanced multiple sclerosis | 3 |
| Multiple Sclerosis | THC (Tetrahydrocannabinol) | Improve neurogenic symptoms(moderate) | 2.5–120mg | A preliminary controlled study to determine whether whole-plant cannabis extracts can improve intractable neurogenic symptoms | 4 |
| Myocardial contractility related disorders | Eucalyptol | Contractile Activity (cardiac muscle)(moderate) | 0.01/0.05/0.1/0.5 mM, | Eucalyptol, an essential oil, reduces contractile activity in rat cardiac muscle | 1 |
| Nausea | CBD (Cannabidiol) | Antiemetic(moderate) | 20mg/kg | Cannabidiol, a non-psychoactive component of cannabis, attenuates vomiting and nausea-like behaviour via indirect agonism of 5-HT1A somatodendritic autoreceptors in the dorsal raphe nucleus | 2 |
| Nausea | CBD (Cannabidiol) | Antiemetic(moderate) | 5mg/kg | Interaction between non-psychoactive cannabinoids in marijuana: effect of cannabigerol (CBG) on the anti-nausea or anti-emetic effects of cannabidiol (CBD) in rats and shrews | 2 |
| Nausea | CBDA (Cannabidiolic Acid) | Antiemetic(moderate) | 0.5 mg/kg | Cannabidiol, a non-psychoactive component of cannabis, attenuates vomiting and nausea-like behaviour via indirect agonism of 5-HT1A somatodendritic autoreceptors in the dorsal raphe nucleus | 2 |
| Nausea | CBDA (Cannabidiolic Acid) | Antiemetic(moderate) | 0.1-5 microgram/kg | Effect of low doses of cannabidiolic acid and ondansetron on LiCl-induced conditioned gaping (a model of nausea-induced behaviour) in rats | 2 |
| Nausea | CBDA (Cannabidiolic Acid) | Antiemetic(moderate) | 0.5-1 microgram/kg | Effect of combined oral doses of Δ9-tetrahydrocannabinol (THC) and cannabidiolic acid (CBDA) on acute and anticipatory nausea in rat models | 2 |
| Nausea | THC (Tetrahydrocannabinol) | Antiemetic(moderate) | 8.4mg-16.9mg | Antiemetic efficacy of smoked marijuana: subjective and behavioral effects on nausea induced by syrup of ipecac | 4 |
| Nausea | THC (Tetrahydrocannabinol) | Antiemetic(moderate) | NA | Amelioration of cancer chemotherapy-induced nausea and vomiting by delta-9-tetrahydrocannabinol | 4 |
| Nausea | THCV (Tetrahydrocannabivarin) | Antinausea(minor) | 10mg/kg | Evaluation of the potential of the phytocannabinoids, | 2 |
| Nausea | THCV (Tetrahydrocannabivarin) | Antinausea(minor) | 10mg/kg | | 2 |
| Neurodegeneration | THCA (Tetrahydrocannabinolic Acid) | Neuroprotective(moderate) | 10µM | Effects of cannabinoids Δ(9)-tetrahydrocannabinol, Δ(9)-tetrahydrocannabinolic acid and cannabidiol in MPP+ affected murine mesencephalic cultures | 2 |

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| Neuroinflammation | CBG (Cannabigerol) | Antiinflammatory(moderate) | NA | A Cannabigerol Quinone Alleviates Neuroinflammation in a Chronic Model of Multiple Sclerosis | 2 |
| Neurological disorders | THC (Tetrahydrocannabinol) | Neuroprotectant(moderate) | NA | Cannabidiol and (-)Δ9-tetrahydrocannabinol are neuroprotective antioxidants | 2 |
| Neuropathic Pain | Linalool | Antiinflammatory(moderate) | NA | (-)-Linalool Attenuates Allodynia in Neuropathic Pain Induced by Spinal Nerve Ligation in C57/Bl6 Mice | 2 |
| Neuropathic Pain | THC (Tetrahydrocannabinol) | Analgesic(major) | 25mg | Smoked cannabis for chronic neuropathic pain: a randomized controlled trial | 4 |
| Nociception | Isopulegol | Antinociceptive(moderate) | NA | Antinociceptive and anti-inflammatory potential of Isopulegol and possible mechanisms of action in rodents | 2 |
| Nociception | Linalool | Antinociceptive(moderate) | NA | Intraplantar injection of bergamot essential oil induces peripheral antinociception mediated by opioid mechanism | 2 |
| Obesity | α-Cedrene | Antiobesity(moderate) | 10-20/50-100 mg/kg, | In vivo absorption and disposition of α-cedrene, a sesquiterpene constituent of cedarwood oil, in female and male rats | 2 |
| Obesity | THCV (Tetrahydrocannabivarin) | Antiobesity(moderate) | NA | Efficacy and Safety of Cannabidiol and Tetrahydrocannabivarin on Glycemic and Lipid Parameters in Patients | 4 |
| Obesity | THCV (Tetrahydrocannabivarin) | Antiobesity(moderate) | NA | The cannabinoid Δ9-tetrahydrocannabivarin (THCV) ameliorates insulin sensitivity in two mouse models of obesity | 4 |
| Obesity | THCV (Tetrahydrocannabivarin) | Antiobesity(moderate) | 3mg/kg | Synthetic and plant-derived cannabinoid receptor antagonists show hypophagic properties in fasted and non-fasted mice | 4 |
| Obesity | THCV (Tetrahydrocannabivarin) | Stimulates neural effects(moderate) | 10mg | Neural Effects of Cannabinoid CB1 Neutral Antagonist Tetrahydrocannabivarin on Food Reward and Aversion in Healthy Volunteers | 4 |
| Oral mucositis | Borneol | Antiinflammatory(moderate) | 1.2% of mixture, 2.4% of mixture | Anti-inflammatory and healing action of oral gel containing borneol monoterpene in chemotherapy-induced mucositis in rats (Rattus norvegicus) | 2 |
| Oral submucous fibrosis | Borneol | Antifibrosis(moderate) | 18.75 to 300µg/ml | Influence of borneol on primary mice oral fibroblasts: a penetration enhancer may be used in oral submucous fibrosis | 2 |
| Osteoarthritis | β-Myrcene | Antiinflammatory(moderate) | NA | Evaluation of the anti-inflammatory, anti-catabolic and pro-anabolic effects of E-caryophyllene, myrcene and limonene in a cell model of osteoarthritis | 2 |
| Osteoporosis | CBD (Cannabidiol) | Bone Stimulant(moderate) | NA | Regulation of bone by cannabinoid and cannabinoid-like receptors | 2 |
| Oxidative-stress related disorders | α-trans-Bergamotene | Antioxidant(major) | 29.9% of mixture | Chemical composition, antioxidant and antibacterial activities of essential oils from leaves and flowers of Eugenia klotzschiana Berg. (Myrtaceae) | 1 |
| Oxidative-stress related disorders | CBG (Cannabigerol) | Antioxidant(moderate) | NA | Cannabinoid CB2 receptors are involved in the protection of RAW264.7 macrophages against the oxidative stress: an in vitro study. | 2 |

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| Oxidative-stress related disorders | Caryophyllene | Antioxidant(moderate) | 10.54% of mixture | Chemical Composition, Antioxidant, Anti-Inflammatory and Anti-Proliferative Activities of Essential Oils of Plants from Burkina Faso | 1 |
| Oxidative-stress related disorders | Caryophyllene oxide | Antioxidant(moderate) | 17.9% of mixture | Chemical Composition, Antioxidant, Anti-Inflammatory and Anti-Proliferative Activities of Essential Oils of Plants from Burkina Faso | 1 |
| Oxidative-stress related disorders | β -Cedrene | Antioxidant(major) | 6.1% of mixture | Chemical Composition, Antioxidant, Antimicrobial and Cytotoxic Activities of Essential Oil from Premna microphylla Turczaninow | 1 |
| Oxidative-stress related disorders | Cymene | Antioxidant(moderate) | NA | Evaluation of p-cymene, a natural antioxidant | 2 |
| Oxidative-stress related disorders | P-Cymene | Antioxidant(moderate) | NA | Antimicrobial and Antioxidant Activity of the Essential Oil and Methanol Extracts of Thymus pectinatus Fisch. et Mey. Var. pectinatus (Lamiaceae) | 1 |
| Oxidative-stress related disorders | Farnesene | Antioxidant(major) | 51.5% of mixture | Chemical Composition, Antioxidant Properties, α-Glucosidase Inhibitory, and Antimicrobial Activity of Essential Oils from Acacia mollissima and Acacia cyclops Cultivated in Tunisia | 1 |
| Oxidative-stress related disorders | Guaiol | Antioxidant(moderate) | 8,2% of mixture | Chemical composition and evaluation of antibacterial and antioxidant activities of the essential oil of Croton urucurana Baillon (Euphorbiaceae) stem bark | 1 |
| Oxidative-stress related disorders | Myrcene | Antioxidant(major) | 0.01 μ g/ml | Protective effect of linalool, myrcene and eucalyptol against t-butyl hydroperoxide induced genotoxicity in bacteria and cultured human cells | 2 |
| Oxidative-stress related disorders | Nerolidol | Antioxidant(major) | NA | Antioxidant evaluation of polyhydroxylated nerolidols from redroot pigweed (Amaranthus retroflexus) leaves | 2 |
| Oxidative-stress related disorders | Sabinene | Antioxidant(moderate) | 29% of mixture | Antifungal, antioxidant and anti-inflammatory activities of <i>Oenanthe crocata</i> L. essential oil | 1 |
| Oxidative-stress related disorders | Terpineol | Antioxidant(moderate) | NA | Evaluation of the antioxidant and antiproliferative potential of bioflavors | 2 |
| Oxidative-stress related disorders | α -Terpineol | Antioxidant(major) | NA | Influence of the cultivation system in the aroma of the volatile compounds and total antioxidant activity of passion fruit | 1 |
| Oxidative-stress related disorders | Terpinolene | Antioxidant(moderate) | 11mg/L, | Anticancer and Antioxidant Properties of Terpinolene in Rat Brain Cells | 2 |
| Oxidative-stress related disorders | THC (Tetrahydrocannabinol) | Neuroprotectant(moderate) | NA | Reactive oxygen species and p38 phosphorylation regulate the protective effect of Δ9-tetrahydrocannabinol in the apoptotic response to NMDA | 2 |
| Oxidative-stress related disorders | | Antioxidant(minor) | NA | Understanding the Molecular Aspects of Tetrahydrocannabinol and Cannabidiol as Antioxidants | 2 |
| Pain | Borneol | Analgesic(major) | NA | A clinical and mechanistic study of topical borneol-induced analgesia | 4 |

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| Pain | CBD (Cannabidiol) | Analgesic(moderate) | NA | An open-label extension study to investigate the long-term safety and tolerability of THC (Tetrahydrocannabinol)/CBD (Cannabidiol) oromucosal spray and oromucosal THC (Tetrahydrocannabinol) spray in patients with terminal cancer-related pain refractory to strong opioid analgesics | 4 |
| Pain | CBD (Cannabidiol) | Analgesic(moderate) | NA | Multicenter, Double-Blind, Randomized, Placebo-Controlled, Parallel-Group Study of the Efficacy, Safety, and Tolerability of THC:CBD Extract and THC Extract in Patients with Intractable Cancer-Related Pain | 4 |
| Pain | CBD (Cannabidiol) | Analgesic(moderate) | NA | A double-blind, randomized, placebo-controlled, parallel group study of THC/CBD spray in peripheral neuropathic pain treatment | 4 |
| Pain | CBD (Cannabidiol) | Analgesic(moderate) | 2.5mg | Initial experiences with medicinal extracts of cannabis for chronic pain: Results from 34 'N of 1' studies | 4 |
| Pain | Camphor | Analgesic(moderate) | NA | Camphor activates and strongly desensitizes the transient receptor potential vanilloid subtype 1 channel in a vanilloid-independent mechanism | 2 |
| Pain | Caryophyllene oxide | Anesthetic(moderate) | 12.5mg/kg | Analgesic and anti-inflammatory activity of Caryophyllene oxide from Annona squamosa L. bark | 2 |
| Pain | Eucalyptol | Analgesic(moderate) | NA | Antiinflammatory and antinociceptive effects of 1,8-cineole a terpenoid oxide present in many plant essential oils | 2 |
| Pain | Linalool | Analgesic(moderate) | NA | Odour-induced analgesia mediated by hypothalamic orexin neurons in mice | 2 |
| Pain | THC (Tetrahydrocannabinol) | Analgesic(moderate) | NA | An open-label extension study to investigate the long-term safety and tolerability of THC (Tetrahydrocannabinol)/CBD (Cannabidiol) oromucosal spray and oromucosal THC (Tetrahydrocannabinol) spray in patients with terminal cancer-related pain refractory to strong opioid analgesics | 4 |
| Pain | THC (Tetrahydrocannabinol) | Analgesic(moderate) | NA | Multicenter, Double-Blind, Randomized, Placebo-Controlled, Parallel-Group Study of the Efficacy, Safety, and Tolerability of THC:CBD Extract and THC Extract in Patients with Intractable Cancer-Related Pain | 4 |
| Pain | THC (Tetrahydrocannabinol) | Analgesic(moderate) | NA | A double-blind, randomized, placebo-controlled, parallel group study of THC/CBD spray in peripheral neuropathic pain treatment | 4 |
| Pain | THC (Tetrahydrocannabinol) | Analgesic(moderate) | NA | Synergistic affective analgesic interaction between delta-9-tetrahydrocannabinol and morphine | 4 |
| Pain | THC (Tetrahydrocannabinol) | Analgesic(moderate) | NA | Initial experiences with medicinal extracts of cannabis for chronic pain: Results from 34 'N of 1' studies | 4 |

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| Pain | THC (Tetrahydrocannabinol) | Analgesic(moderate) | 12.3ng/ml/mg | The pharmacokinetics, efficacy, safety, and ease of use of a novel portable metered-dose cannabis inhaler in patients with chronic neuropathic pain: a phase 1a study | 4 |
| Pain | THC (Tetrahydrocannabinol) | Analgesic(moderate) | 2.9%-2.95% of mixture | A preliminary evaluation of the relationship of cannabinoid blood concentrations with the analgesic response to vaporized cannabis | 4 |
| Pain | THC (Tetrahydrocannabinol) | Analgesic(moderate) | NA | Open-Label, Add-on Study of Tetrahydrocannabinol for Chronic Nonmalignant Pain | 4 |
| Pain | THC (Tetrahydrocannabinol) | Analgesic(moderate) | 2.5-15mg | Delta-9-THC based monotherapy in fibromyalgia patients on experimentally induced pain, axon reflex flare, and pain relief | 4 |
| Pain | THC (Tetrahydrocannabinol) | Antinociceptive(moderate) | 1mg-5mg/kg | Dopamine D2 receptor antagonists prevent Δ9-tetrahydrocannabinol-induced antinociception in rats | 2 |
| Pain | THC (Tetrahydrocannabinol) | Antinociceptive(moderate) | 4mg/kg | Low dose combination of morphine and Δ9-tetrahydrocannabinol circumvents antinociceptive tolerance and apparent desensitization of receptors | 2 |
| Parkinson's disease | CBD (Cannabidiol) | Neuroprotectant(moderate) | 300mg | Effects of cannabidiol in the treatment of patients with Parkinson's disease: An exploratory double-blind trial | 4 |
| Parkinson's disease | CBD (Cannabidiol) | Sleep Improvement(moderate) | NA | Cannabidiol can improve complex sleep-related behaviours associated with rapid eye movement sleep behaviour disorder in Parkinson's disease patients: a case series | 4 |
| Parkinson's disease | CBD (Cannabidiol) | Antidystonic (moderate) | 100-600mg | Open label evaluation of cannabidiol in dystonic movement disorders | 3 |
| Parkinson's disease | Caryophyllene | Antioxidant(moderate) | 50mg/kg | β-Caryophyllene, a phytocannabinoid attenuates oxidative stress, neuroinflammation, glial activation, and salvages dopaminergic neurons in a rat model of Parkinson disease | 2 |
| Parkinson's disease | Caryophyllene | Antiinflammatory(minor) | 50mg/kg | β-Caryophyllene, a phytocannabinoid attenuates oxidative stress, neuroinflammation, glial activation, and salvages dopaminergic neurons in a rat model of Parkinson disease | 2 |
| Parkinson's disease | THC (Tetrahydrocannabinol) | Antitremor(moderate) | NA | Survey on cannabis use in Parkinson's disease: subjective improvement of motor symptoms | 3 |
| Parkinson's disease | THC (Tetrahydrocannabinol) | Antitremor(moderate) | NA | Cannabis (medical marijuana) treatment for motor and non-motor symptoms of Parkinson disease: an open-label observational study | 3 |
| Pathological memory T cells and in Autoimmune diseases | CBD (Cannabidiol) | Antiinflammatory(major) | NA | Pathways and gene networks mediating the regulatory effects | 2 |
| | | | | | 2 |
| Pediculus humanus humanus | Geraniol | Insect repellent(moderate) | NA | Repellency of essential oils and their components to the human body louse, Pediculus humanus humanus | 1 |
| Periodontal disease | β-Caryophyllene | Antibacterial(major) | NA | Use of β-caryophyllene to combat bacterial dental plaque formation in dogs | 2 |

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| Periodontopathic and cariogenic bacteria | Terpineol | Antimicrobial(minor) | NA | Antimicrobial effect of linalool and α-terpineol against periodontopathic and cariogenic bacteria | 2 |
| Peripheral pain response | CBD (Cannabidiol) | Analgesic(moderate) | NA | (\pm)-Cannabidiol analogues which bind cannabinoid receptors but exert peripheral activity only | 2 |
| Phytopathogenic bacteria | Camphene | Antibacterial(major) | 5000 MIC, mg/L | Evaluation of antibacterial properties and biochemical effects of monoterpenes on plant pathogenic bacteria | 2 |
| Phytopathogenic fungi | Camphene | Antifungal(major) | NA | Chemical composition and antifungal activity of Artemisia nilagirica essential oil growing in nort | 1 |
| Phytopathogenic fungi | β -Caryophyllene | Antifungal(moderate) | 16.98% of mixture | Chemical composition and antifungal properties of the essential oil and various extracts of Mikania scandens (L.) Willd | 1 |
| Phytopathogenic fungi | Cymene | Antifungal(moderate) | 2% of mixture | Antifungal, phytotoxic and insecticidal properties of essential oil isolated from Turkish Origanum acutidens and its three components, carvacrol, thymol and p-cymene | 1 |
| Phytopathogenic fungi | P-Cymene | Antifungal(major) | NA | Antifungal Effects of Volatile Compounds from Black Zira (Bunium persicum) and Other Spices and Herbs | 1 |
| Pleurisy | α -trans-Bergamotene | Antiinflammatory(moderate) | 7% of mixture | Pharmacological evaluation of Copaifera multijuga oil in rats | 1 |
| Posttraumatic stress disorder (PTSD) | CBD (Cannabidiol) | Anxiolytic(moderate) | 32mg | Cannabidiol enhances consolidation of explicit fear extinction in humans | 4 |
| Posttraumatic stress disorder (PTSD) | CBD (Cannabidiol) | Anxiolytic(moderate) | NA | Cannabidiol blocks long-lasting behavioral consequences of predator threat stress: Possible involvement of 5HT_{1A} receptors | 4 |
| Posttraumatic stress disorder (PTSD) | THC (Tetrahydrocannabinol) | Antidepressant(moderate) | 5mg | Preliminary, open-label, pilot study of add-on oral Δ₉-tetrahydrocannabinol in chronic post-traumatic stress disorder | 3 |
| Posttraumatic stress disorder (PTSD) | THC (Tetrahydrocannabinol) | Anxiolytic(moderate) | NA | Cannabinoid facilitation of fear extinction memory recall in humans | 4 |
| Pro-inflammatory cytokines TNF- α and IL-6 | Phellandrene | Antiinflammatory(moderate) | 50/100/200 mg/kg, | α-Phellandrene, a cyclic monoterpene, attenuates inflammatory response through neutrophil migration inhibition and mast cell degranulation | 2 |
| Prostate cancer | Geraniol | Anticancer(major) | NA | Geraniol induces cooperative interaction of apoptosis and autophagy to elicit cell death in PC-3 prostate cancer cells | 2 |
| Prostate cancer | Linalool | Anticancer (moderate) | NA | Anticancer Activity of Linalool Terpenoid: Apoptosis Induction and Cell Cycle Arrest in Prostate Cancer Cells | 2 |
| Psychotic Experiences | CBD (Cannabidiol) | Antipsychotic(minor) | NA | Cannabis with high cannabidiol content is associated with fewer psychotic experiences | 3 |
| Red imported fire ant (Solenopsis invicta Buren) | Camphor | Insecticide(major) | 36.61% of mixture | Fumigant Toxicity and Repellence Activity of Camphor Essential Oil from Cinnamomum camphora Siebold Against Solenopsis invicta Workers (Hymenoptera:Formicidae) | 1 |
| Reflexes | Linalool | Anesthetic(moderate) | 0.01 – 10 μ g/ml | Local Anaesthetic Activity of the Essential Oil of Lavandula angustifolia | 1 |

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| Retinal Inflammatory | CBD (Cannabidiol) | Antiinflammatory(moderate) | NA | Mediation of Cannabidiol Anti-inflammation in the Retina by Equilibrative Nucleoside Transporter and A2A Adenosine Receptor | 2 |
| Rheumatoid arthritis | β -Caryophyllene | Antiinflammatory(major) | 100300 mg/kg, | Anti-Arthritic and Anti-Inflammatory Activity of Beta-Caryophyllene against Freund's Complete Adjuvant Induced Arthritis in Wistar Rats | 2 |
| Rheumatic Diseases | CBD (Cannabidiol) | Antiinflammatory(moderate) | NA | Cannabidiol—transdermal delivery and anti-inflammatory effect in a murine model | 2 |
| Schizophrenia | CBD (Cannabidiol) | Antipsychotic(moderate) | 0.3/3/10/30 μ M, | Cannabidiol enhances anandamide signaling and alleviates psychotic symptoms of schizophrenia | 4 |
| Schizophrenia | THC (Tetrahydrocannabinol) | Antipsychotic(moderate) | 2.5/5 mg, | Delta-9-tetrahydrocannabinol effects in schizophrenia: implications for cognition, psychosis, and addiction | 4 |
| Seizures | Caryophyllene | Anticonvulsant(minor) | 100mg/kg | Anticonvulsant activity of β-caryophyllene against pentylene-tetrazol-induced seizures | 2 |
| Seizures | | Neuroprotective(major) | NA | Neuroprotective Effects of Trans-Caryophyllene Against Kainic Acid Induced Seizure Activity and Oxidative Stress in Mice | 2 |
| Seizures | Isopulegol | Anticonvulsant(major) | NA | Effects of isopulegol on pentylene-tetrazol-induced convulsions in mice: possible involvement of GABAergic system and antioxidant activity | 2 |
| Sepsis | CBD (Cannabidiol) | Antiinflammatory(minor) | NA | Effect of cannabidiol on sepsis-induced motility disturbances in mice: involvement of CB1 receptors and fatty acid amide hydrolase | 2 |
| Sitophilus granarius and Tribolium confusum adults | Cymene | Insecticidal(moderate) | 2% of mixture | Antifungal, phytotoxic and insecticidal properties of essential oil isolated from Turkish Origanum acutidens and its three components, carvacrol, thymol and p-cymene | 1 |
| Skin tumorigenesis | D-Limonene | Chemopreventive(major) | 50/100 mg/kg, | d-Limonene modulates inflammation, oxidative stress and Ras-ERK pathway to inhibit murine skin tumorigenesis | 2 |
| Sleep Apnea | THC (Tetrahydrocannabinol) | Improves sleep(moderate) | 20mg | Around-the-clock oral THC (Tetrahydrocannabinol) effects on sleep in male chronic daily cannabis smokers | 3 |
| Sleep deprivation | Limonene | Relaxant(moderate) | 100/200 mg/kg, | Central effects of citral, myrcene and limonene, constituents of essential oil chemotypes from Lippia alba (Mill.) n.e. Brown | 2 |
| Sleep deprivation | Myrcene | Relaxant(moderate) | 100/200 mg/kg, | Central effects of citral, myrcene and limonene, constituents of essential oil chemotypes from Lippia alba (Mill.) n.e. Brown | 2 |
| Spasticity | CBD (Cannabidiol) | Antispasticity(minor) | NA | Randomized controlled trial of cannabis-based medicine in spasticity caused by multiple sclerosis | 4 |
| Spasticity | THC (Tetrahydrocannabinol) | Antispasticity(moderate) | 5-10mg | Treatment of human spasticity with delta 9-tetrahydrocannabinol | 4 |
| Spasticity | THC (Tetrahydrocannabinol) | Antispasticity(moderate) | 31mg | The treatment of spasticity with Δ9-tetrahydrocannabinol in persons with spinal cord injury | 4 |

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| Spasticity | THC (Tetrahydrocannabinol) | Antispasticity(moderate) | 33% of mixture | The effect of cannabis on urge incontinence in patients with multiple sclerosis: a multicentre, randomised placebo-controlled trial (CAMS-LUTS) | 4 |
| Spasticity | THC (Tetrahydrocannabinol) | Antispasticity(moderate) | NA | Cannabinoids in multiple sclerosis (CAMS) study: safety and efficacy data for 12 months follow up | 4 |
| Spasticity | THC (Tetrahydrocannabinol) | Antispasticity(moderate) | NA | Randomized controlled trial of cannabis-based medicine in spasticity caused by multiple sclerosis | 4 |
| Spasticity | THC (Tetrahydrocannabinol) | Antispasticity(moderate) | NA | Smoked cannabis for spasticity in multiple sclerosis: a randomized, placebo-controlled trial | 4 |
| Spasticity | THC (Tetrahydrocannabinol) | Antispasticity(moderate) | NA | Cannabinoids for treatment of spasticity and other symptoms related to multiple sclerosis (CAMS study): multicentre, randomised placebo-controlled trial | 4 |
| Spasticity | THC (Tetrahydrocannabinol) | Antispasticity(moderate) | NA | Safety, tolerability, and efficacy of orally administered cannabinoids in MS | 4 |
| Spasticity | THC (Tetrahydrocannabinol) | Antispasticity(moderate) | >7.5mg | Delta-9-THC in the Treatment of Spasticity Associated with Multiple Sclerosis | 4 |
| Spasticity | THC (Tetrahydrocannabinol) | Antispasticity(moderate) | 2.5-15mg | The effect of cannabinoids on the stretch reflex in multiple sclerosis spasticity | 4 |
| Spasticity | THC (Tetrahydrocannabinol) | Antispasticity(moderate) | NA | A double-blind, randomized, placebo-controlled, parallel-group study of Sativex, in subjects with symptoms of spasticity due to multiple sclerosis | 4 |
| Spasticity | THC (Tetrahydrocannabinol) | Antispasticity(moderate) | NA | The perceived effects of smoked cannabis on patients with multiple sclerosis | 4 |
| Spasticity | THC (Tetrahydrocannabinol) | Antispasticity(moderate) | 4sprays | Clinical experience with THC:CBD oromucosal spray in patients with multiple sclerosis-related spasticity | 4 |
| Spinal injury | CBD (Cannabidiol) | Neuroprotectant(moderate) | 20mg/kg | Cannabidiol-treated Rats Exhibited Higher Motor Score After Cryogenic Spinal Cord Injury | 2 |
| Stress | Guaiol | Anesthetic(minor) | NA | Anesthetic activity and bio-guided fractionation of the essential oil of <i>Aloysia gratissima</i> (Gillies & Hook.) Tronc. in silver catfish <i>Rhamdia quelen</i> | 1 |
| Superficial scald | Farnesene | Antioxidant(minor) | NA | Superficial scald, a functional disorder of stored apples. V.—Oxidation of α-farnesene and its inhibition by diphenylamine | 2 |
| Tension of the blood vessel walls | Borneol | Vasorelaxant(moderate) | NA | Investigation of Mechanisms Involved in (-)-Borneol-Induced Vasorelaxant Response on Rat Thoracic Aorta | 2 |
| Thrombosis | Borneol | Anthrombotic(moderate) | NA | The Antithrombotic Effect of Borneol Related to Its Anticoagulant Property | 2 |
| TNBS-induced intestinal inflammation | D-Limonene | Antiinflammatory(major) | 10mg/kg | Oral administration of d-Limonene controls inflammation in rat colitis and displays anti-inflammatory properties as diet supplementation in humans | 2 |
| Tonic-clonic seizure | CBN (Cannabinol) | Anticonvulsant(moderate) | NA | Anticonvulsant properties of Δ^9-tetrahydrocannabinol and other cannabinoids | 2 |

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| Tourette | THC (Tetrahydrocannabinol) | Antihyperactivity(moderate) | 10mg | Delta 9-tetrahydrocannabinol (THC (Tetrahydrocannabinol)) is effective in the treatment of tics in Tourette syndrome: a 6-week randomized trial | 4 |
| Tourette | THC (Tetrahydrocannabinol) | Antihyperactivity(moderate) | NA | Oral Δ9-Tetrahydrocannabinol Improved Refractory Gilles de la Tourette Syndrome in an Adolescent by Increasing Intracortical Inhibition: A Case Report | 4 |
| Tourette | THC (Tetrahydrocannabinol) | Antihyperactivity(moderate) | 10mg | Treatment of Tourette's Syndrome With Delta-9-Tetrahydrocannabinol | 4 |
| Traumatic Brain Injury | THC (Tetrahydrocannabinol) | Neuroprotective(moderate) | NA | Effect of marijuana use on outcomes in traumatic brain injury | 3 |
| Transient lower oesophageal sphincter relaxations | THC (Tetrahydrocannabinol) | Antigastroesophageal reflux(moderate) | 20mg | Effect of Delta(9)-tetrahydrocannabinol, a cannabinoid receptor agonist, on the triggering of transient lower oesophageal sphincter relaxations in dogs and humans | 4 |
| Tribolium castaneum | Pulegone | Insecticidal(moderate) | 0.8-26.6% of mixture | Chemical characterization and insecticidal properties of essential oils from different wild populations of Mentha suaveolens subsp. timija (Briq.) Harley from Morocco | 1 |
| Tumor | CBN (Cannabinol) | Antitumor(moderate) | 50/100/200mg/kg, | Antineoplastic Activity of Cannabinoids | 2 |
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| Tumor | β-Caryophyllene | Antitumor(major) | NA | β-Caryophyllene potently inhibits solid tumor growth and lymph node metastasis of B16F10 melanoma cells in high-fat diet-induced obese C57BL/6N mice | 2 |
| Uveitis | CBD (Cannabidiol) | Antiinflammatory(major) | 5mg/kg | Neuroprotective effects of cannabidiol in endotoxin-induced uveitis: critical role of p38 MAPK activation | 2 |
| Vomiting | THC (Tetrahydrocannabinol) | Antiemetic(moderate) | NA | Tetrahydrocannabinol vs. prochlorperazine. The effects of two antiemetics on patients undergoing radiotherapy | 3 |
| Writhe | p-Cymene | Antinociceptive(major) | 25/50/100mg/kg, | Evaluation of the Anti-Inflammatory and Antinociceptive Properties of p-Cymene in Mice | 2 |
| Writhe | Limonene | Antinociceptive(moderate) | 25/50/75mg/kg, | Physio-pharmacological Investigations About the Anti-inflammatory and Antinociceptive Efficacy of (+)-Limonene Epoxide | 2 |
| Writhe | Linalool | Antinociception(moderate) | 25/75/100mg/kg, | (-)-Linalool produces antinociception in two experimental models of pain | 2 |
| Writhe | Terpineol | Analgesic(moderate) | NA | A Study on Anti-Inflammatory and Peripheral Analgesic Action of Salvia sclarea Oil and Its Main Components | 2 |