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Committee on Herbal Medicinal Products (HMPC)

List of references supporting the assessment of *Juniperus communis* L., galbulus (pseudo-fructus)

Final – Revision 1

The European Medicines Agency acknowledges that copies of the underlying works used to produce this monograph were provided for research only with exclusion of any commercial purpose.

Agrawal OP, Bharadwaj S, Mathur R. Antifertility effects of fruits of *Juniperus communis*. *Planta Medica* 1980, 40(Suppl.):98-101

Anonymus. Royal Decree of 29 August 1997 concerning the manufacturing and commercialising of food supplements with plants or plant preparations. *Belgian State Journal* 21/11/1997 (updated in 2017)

Anonymus. WFO (World Flora Online 2022): *Juniperus communis* L. Published on the Internet. Available at: <http://www.worldfloraonline.org/taxon/wfo-0000355532>. Accessed 16/01/2022

Argento A, Tiraferri E, Marzaloni M. Oral anticoagulants and medicinal plants. An emerging interaction. [Article in Italian]. *Annali italiani di medicina interna* 2000, 15(2):139-43

Babulka P. Arzneipflanzen und Phytotherapie in Ungarn. *Zeitschrift Phytotherapie* 2000, 21:257-263

Bais S, Patel NJ. A review on the therapeutic potential and safety profile of *Juniperus communis* L. *International Journal of Pharmaceutical and Biological Sciences* 2018, 9(4):103-110

Bais S, Singh Gill N, Rana N, Shandil S. A phytopharmacological Review on a Medicinal Plant: *Juniperus communis*. *International Scholarly Research Notices* vol. 2014, 2014:634723, in press, doi <http://dx.doi.org/10.1155/2014/634723>

Banerjee S, Mukherjee A, Chatterjee TK. Evaluation of analgesic activities of methanolic extract of medicinal plant *Juniperus communis* L. *International Journal of Pharmacy and Pharmaceutical Sciences* 2012, 4(5):547-550

Banerjee S, Singh H, Chatterjee TK. Evaluation of anti-diabetic and anti-hyperlipidemic potential of methanolic extract of *Juniperus communis* (L.) in streptozotocin-nicotinamide induced diabetic rats. *Internat Journal of Pharmaceutical and Biological Sciences* 2013, 4(3):10-17

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- Barnes J, Anderson LA, Phillipson JD. Herbal Medicines, 3rd ed. Pharmaceutical Press, London 2007, 386-388
- Barzegarnejad A, Azadbakht M, Emadian O, Ahmadi M. Effect of some fractions of the extract of *Juniperus communis* fruit on solving kidney stones *in vitro*. *Journal of Mazandaran University of Medical Sciences* 2014, 23:110
- BHP – British Herbal Pharmacopoeia. Anniversary Edition Celebrating 50 years of the British Herbal Medicine Association. British Herbal Medicine Association, Bournemouth 1983, 124
- BHP- British Herbal Pharmacopoeia. 4th ed. British Herbal Medicine Association, Exeter 1996, 117-118
- BHP- British Herbal Pharmacopoeia. Part One. British Herbal Medicine Association, West Yorkshire 1976, 125
- Bruneton J. Pharmacognosie. Phytochimie des Plantes médicinales, 3^{ième} ed. Editions Tec & Doc, Paris 1999, 586-588
- Commission E. *Juniperus communis*. Monographie der Kommission E. Bundesanzeiger Nr. 228 vom 05/12/1984
- Czygan FC. Warning vor unkritischem Gebrauch von Wacholderbeeren. *Zeitschrift für Phytotherapie* 1987, 8:10
- DAB 10 – Deutsches Arzneibuch 10. Wissenschaftliche Verlagsgesellschaft, Stuttgart 1991
- De Smet PAGM, Keller K, Hänsel R, Chandler RF. Adverse Effects of Herbal Drugs Vol. 2. Springer-Verlag, Berlin / Heidelberg 1993, 217-228
- Delfosse M. Drogues végétales et plantes médicinales. APB, Brussels 1998, 221-222
- Dodonaeus R. Herbarius oft Cruydt-Boeck. De Plantijnsche Druckerije 1608, 1428
- EMA. Guideline on risk assessment of medicinal products on human reproduction and lactation: from data to labelling (EMA/CHMP/203927/2005). European Medicines Agency 24/07/2008
- Emami SA, Asili J, Mohaghegi Z, Hassanzadeh MK. Antioxidant activity of leaves and fruits of Iranian conifers. *Evidence Based Complementary and Alternative Medicine* 2007, 4:313-319
- ESCOP Monographs 2nd ed. *Juniperi pseudo-fructus* – Juniper. European Scientific Cooperation on Phytotherapy, editor. Thieme Verlag, Stuttgart 2003, 282-285
- Fernandez A, Cock IE. The therapeutic properties of *Juniperus communis* L.: antioxidant capacity, bacterial growth inhibition, anticancer activity and toxicity. *Pharmacognosy Journal* 2016, 8(3):273-280
- Gallagher AM, Flatt PR, Duffy G, Abdel-Wahab YHA. The effects of traditional antidiabetic plants on *in vitro* glucose diffusion. *Nutrition Research* 2003, 23(3):413-424
- Gray AM, Flatt PR. Nature's own pharmacy: the diabetes perspective. *Proceedings of the Nutrition Society* 1997, 56:507-517
- Hänsel R, Keller K, Rimpler H, Schneider G. editors Hagers Handbuch der Pharmazeutischen Praxis. Drogen EO, Springer Verlag, Berlin 1993, 561-579
- Kaufmann C, Saxer M, Lampert ML. Unexpected decrease of the INR in a patient with phenprocoumon treatment during the intake of juniper berries: A case study. *International Journal of Clinical Pharmacy* 2013, 35:5 SUPPL. 2:868

Klančnik A, Zorko Š, Toplak N, Kovač M, Bucar F, Jeršek B, *et al.* Antiadhesion activity of juniper (*Juniperus communis* L.) preparations against *Campylobacter jejuni* evaluated with PCR based methods. *Phytotherapy Research* 2018, 32:542–550

Kneipp S. My water cure as tested more than 30 years. William Blackwood & Sons, Edinburgh & London 1891, 96-97. Available at: <https://archive.org/details/mywatercureastes00kneiuoft/page/n7/mode/2up?view=theater>. Accessed 16/05/2022

Lantto TA, Laakso I, Dorman HJD, Mauriala T, Hiltunen R, Kõks S, *et al.* Cellular stress and p53-associated apoptosis by *Juniperus communis* L. berry extract treatment in the human SH-SY5Y neuroblastoma cells. *International Journal of Molecular Sciences* 2016, 17, 1113, in press, <https://doi.org/10.3390/ijms17071113>

Lantto TA, Raasmaja A, Hiltunen R. Toxicity and apoptotic effects of selected compounds and extracts from edible plants. *Planta Medica* 2012, 78, in press, doi PD104 10.1055/s-0032-1320462

Lasheras B, Turillas P, Cenarruzabeitia E. Etude pharmacologique préliminaire de *Prunus spinosa* L., *Amelanchier ovalis* Medikus, *Juniperus communis* L. et *Urtica dioica* L. *Plantes Médicinales Phytothérapeutiques* 1986, 20:219-226

Leclerc H. Précis de Phytothérapie. Essais de phytothérapeutique par les plantes Françaises. 5th ed. Masson et C, Editeurs, Paris 1966, 64-65

Lee CC, Hsiao CY, Lee SC, Huang XF, Chang KF, Lee MS, *et al.* Suppression of oral cancer by induction of cell cycle arrest and apoptosis using *Juniperus communis* extract. *Bioscience Reports* 2020, 40, in press, doi BSR20202083 <https://doi.org/10.1042/BSR20202083>

Li CY, Lee SC, Lai WL, Chang KF, Huang XF, Hung PY, *et al.* Cell cycle arrest and apoptosis induction by *Juniperus communis* extract in esophageal squamous cell carcinoma through activation of p53-induced apoptosis pathway. *Food Science and Nutrition* 2021, 9:1088–1098

Markkanen T, Mäkinen ML, Nikoskelainen J, Ruohonen J, Nieminen K, Jokinen P, *et al.* Antiherpetic agent from juniper tree (*Juniperus communis*), its purification, identification, and testing in primary human amnion cell cultures. *Drugs under Experimental and Clinical Research* 1981, 7:691-697

Mascolo N, Autore G, Capasso F, Menghini A, Fasulo MP. Biological screening of Italian medicinal plants for anti-inflammatory activity. *Phytotherapy Research* 1987, 1:28-31

Mathias CG, Maibach HI, Mitchell JC. Plant dermatitis-patch test results (1975-1978). Note to *Juniperus* extracts. *Contact Dermatitis* 1979, 5(5):336-337

Muftah H, Özçelik B, Oyardı O, Kutluk I, Orhan N. A comparative evaluation of *Juniperus* species with antimicrobial magistrals. *Pakistan Journal of Pharmaceutical Sciences* 2020, 33(4):1443-1449

ÖAB 90 - Österreichisches Arzneibuch. Verlag der Österreichischen Staatsdruckereien, Wien 1991

Okragla E, Chraniuk M, Wolska L. Microtox test as a tool to assess antimicrobial properties of herbal infusions used in urinary tract infections. *Acta Poloniae Pharmaceutica - Drug Research* 2017, 74(3):895-901

Ph. Eur. 10.0. European Pharmacopoeia 10th ed. Juniperi galbulus. Council of Europe. 07/2019:1532

Ph. Eur. 6.0. European Pharmacopoeia 6th ed. Juniperi pseudo-fructus. Council of Europe. 01/2008:1532

Ph. Eur. 8.0. European Pharmacopoeia corrected 10th ed. Juniper oil – Juniperi aetheroleum. European Pharmacopoeia. Council of Europe. 07/2013:1832

Ph. Fr. X. Pharmacopée Française [French pharmacopoeia]. Xe édition. La Commission Nationale de Pharmacopée. Paris 1996

Ph. Helv. VII. Pharmacopoea Helvetica VII. Office central fédéral des imprimés et du matériel. Switzerland Pharmakopöekommission. Bern 1987

Prakash AO, Saxena V, Shukla S, Tewari RK, Mathur S, A Gupta, *et al.* Anti-implantation activity of some indigenous plants in rats. *Acta Europaea Fertilitatis* 1985, 16:441-448

Prakash AO. Potentialities of some indigenous plants for antifertility activity. *International Journal of Crude Drug Research* 1986, 24:19-24

Sánchez de Medina F, Gámez MJ, Jiménez I, Jiménez J, Osuna JI, Zarzuelo A. Hypoglycemic activity of Juniper "berries". *Planta Medica* 1994, 60:197-200

Schilcher H, Fischer M, Frank B, Kammerer S, Wegener T, editors Leitfaden Phytotherapy, Urban & Fischer München 2016, 331-332

Schilcher H, Heil BM. Nierentoxizität von Wacholderbeerbereitungen. *Zeitschrift für Phytotherapie* 1994, 15:205-213

Schilcher H, Leuschner F. Untersuchungen auf mögliche nephrotoxische Wirkungen von aetherischem Wacholderbeeröl. *Arzneimittel-Forschung/Drug Research* 1997, 47:855-888

Schneider I, Gibbons S, Bucar F. Inhibitory activity of *Juniperus communis* on 12(S)-HETE production in human platelets. *Planta Medica* 2004, 70:471-474

Stanic G, Samarzija I, Blazevic N. Time-dependent diuretic response in rats treated with juniper berry preparation. *Phytotherapy Research* 1998, 12:494-497

Swanston-Flatt SK, Day C, Bailey CJ, Flatt PR. Traditional plant treatments for diabetes. Studies in normal and streptozotocin diabetic mice. *Diabetologia* 1990, 33:462-464

Tam TW, Liu R, Saleem A, Arnason JT, Krantis A, Haddad PS, *et al.* The effect of Cree traditional medicinal teas on the activity of human cytochrome P450-mediated metabolism. *Journal of Ethnopharmacology* 2014, 155:841-846

Tyler VE. *The Honest Herbal: a sensible guide to the use of herbs and related remedies.* George F. Stickley, Philadelphia 1982, 263

Van Hellemont J. *Medicinale Planten.* APB, Brussels 1985, 325-326

Van Slambrouck S, Daniels AL, Hooten CJ, Brock SL, Jenkins AR, Ogasawara MA, *et al.* Effects of crude aqueous medicinal plant extracts on growth and invasion of breast cancer cells. *Oncology Reports* 2007, 17:1487-1492

Vollmer H, Hübner K. Untersuchungen über die diuretische Wirkung der Fructus Juniperi, Radix Levistici, Radix Ononidis, Folia Betulae, Radix Liquiritiae und Herba Equiseti an Ratten. *Naunyn-Schmiedeberg's Archives of Experimental Pathology and Pharmacology* 1937, 186:592-605

Vollmer H, Weidlich R. Untersuchungen über die diuretische Wirkung der Fructus Juniperi, Radix Levistici, Radix Liquiritiae und Herba Violae tricoloris An Kaninchen und Mäusen. *Naunyn-Schmiedeberg's Archives of Experimental Pathology and Pharmacology* 1937, 186:574-583

Weiss RF, Fintelmann V. Lehrbuch der Phytotherapie. 9th ed. Hippokrates Verlag, Stuttgart 1999, 253-255

Wichtl M. Herbal Drugs and Phytopharmaceuticals. 3rd ed. CRC Press, Boca Raton 2004, 323

Wichtl M. Herbal Drugs and Phytopharmaceuticals. CRC Press, London 1994, 283-285

Wichtl M. Teedrogen. Ein Handbuch für Apotheker und Ärzte. Wissenschaftliche Verlagsgesellschaft mbH, Stuttgart 1984, 347