

Citations and Reference Literature: St. John's Wort

Citations

1. Gerard J. *The Herbal*. Revised and Enlarged. In: Johnson T, ed. 1975 ed. New York: Dover Publications; 1633.
2. St. John's wort. In: Blumenthal M, Busse W, Goldberg A et al. *The Complete German Commission E Monographs*. Austin, Texas: American Botanical Council: Integrative Medicine Communications; 1998:214-215.
3. Upton R. *St. John's wort*. *American Herbal Pharmacopoeia*. Scotts Valley, Calif; 1997.
4. ESCOP. *Hyperici herba*. *ESCP Monographs: the Scientific Foundation for Herbal Medicinal Products*. 2nd ed. Exeter, UK: European Scientific Cooperative on Phytotherapy and Thieme; 2003:257-281.
5. McKenna D, Jones K, Hughes K, Humphrey S. *St John's wort*. *Botanical Medicines*. 2nd ed. Binghamton, NY: Haworth Press; 2002:923-986.
6. Weiss R. *Herbal Medicine*. Meuss A, Translator. 6th ed. Beaconsfield, UK: Beaconsfield Publishers Ltd; 1988.
7. John A, Brockmoller J, Bauer S et al. Pharmacokinetic interaction of digoxin with an herbal extract from St John's wort (*Hypericum perforatum*). *Clin Pharmacol Ther* 1999;66:338-345.
8. Ruschitzka F, Meier PJ, Turina M et al. Acute heart transplant rejection due to Saint John's wort [letter]. *Lancet* 2000;355:548-549.
9. Piscitelli SC, Burstein AH, Chaitt D et al. Indinavir concentrations and St John's wort [letter]. *Lancet* 2000;355:547-548.
10. Ernst E. Second thoughts about safety of St John's wort. *Lancet* 1999;354:2014-2016.
11. Fugh-Berman A, Ernst E. Herb-drug interactions: review and assessment of report reliability. *Br J Clin Pharmacol* 2001;52:587-595.
12. Meyer JR, Generali JA, Karpinski JL. Evaluation of herbal-drug interaction data in tertiary resources. *Hosp Pharm* 2004;39:149-160.
13. Izzo AA. Drug interactions with St. John's wort (*Hypericum perforatum*): a review of the clinical evidence. *Int J Clin Pharmacol Ther* 2004;42:139-148.
14. Mills E, Montori VM, Wu P et al. Interaction of St John's wort with conventional drugs: systematic review of clinical trials. *BMJ* 2004;329:27-30.
15. US Food and Drug Administration (FDA). Guidelines for industry: in vivo drug metabolism/drug interaction studies—study design, data analysis and recommendations for dosing and labeling. 1999 vol: www.fda.gov/cber/gdlns/metabol.pdf; 7/4/04.
16. Committee on Safety of Medicines (CSM). Message from Professor A Breckenridge, Chairman, CSM (UK); February 2000.
17. Irish Medical Board (IMB). *Herbal Medicines Project*: final report; 2001. <http://www.euroherb.com/>.
18. Lumpkin M, Alpert S. Risk of drug interactions with St. John's Wort and indinavir and other drugs. FDA Public Health Advisory. CDER; 2000. <http://www.fda.gov/cder/drug/advisory/stjwort.htm>.
19. Obach RS. Inhibition of human cytochrome P450 enzymes by constituents of St. John's wort, an herbal preparation used in the treatment of depression. *J Pharmacol Exp Ther* 2000;294:88-95.
20. Budzinski JW, Foster BC, Vandenhoeck S, Arnason JT. An in vitro evaluation of human cytochrome P450 3A4 inhibition by selected commercial herbal extracts and tinctures. *Phytomedicine* 2000;7:273-282.
21. Roby CA, Anderson GD, Kantor E et al. St John's wort: effect on CYP3A4 activity. *Clin Pharmacol Ther* 2000;67:451-457.
22. Gurley BJ, Gardner SF, Hubbard MA et al. Cytochrome P450 phenotypic ratios for predicting herb-drug interactions in humans. *Clin Pharmacol Ther* 2002;72:276-287.
23. Wang L-S, Zhou G, Zhu B et al. St John's wort induces both cytochrome P450 3A4-catalyzed sulfoxidation and 2C19-dependent hydroxylation of omeprazole. *Clin Pharmacol Ther* 2004;75:191-197.
24. Markowitz JS, DeVane CL, Boulton DW et al. Effect of St. John's wort (*Hypericum perforatum*) on cytochrome P-450 2D6 and 3A4 activity in healthy volunteers. *Life Sci* 2000;66:L133-L139.
25. Gerwartz N, Ereshefsky B, Lam Y et al. Determination of SJW differential metabolism at CYP2D6 and CYP3A4 using dextromethorphan probe technology. Abstracts from the 39th Annual Meeting, New Clinical Drug Evaluation Unit. Boca Raton, Fla; 1999:130.
26. Wang Z, Gorski JC, Hamman MA et al. The effects of St John's wort (*Hypericum perforatum*) on human cytochrome P450 activity. *Clin Pharmacol Ther* 2001;70:317-326.
27. Dresser GK, Schwarz UI, Wilkinson GR, Kim RB. Coordinate induction of both cytochrome P4503A and MDR1 by St John's wort in healthy subjects. *Clin Pharmacol Ther* 2003;73:41-50.
28. Durr D, Steiger B, Kullak-Ublick GA et al. St John's wort induces intestinal P-glycoprotein/MDR1 and intestinal and hepatic CYP3A4. *Clin Pharmacol Ther* 2000;68:598-604.
29. Wenk M, Todesco L, Krahenbuhl S. Effect of St John's wort on the activities of CYP1A2, CYP3A4, CYP2D6, N-acetyltransferase 2, and xanthine oxidase in healthy males and females. *Br J Clin Pharmacol* 2004;57:495-499.
30. Wang EJ, Barecki-Roach M, Johnson WW. Quantitative characterization of direct P-glycoprotein inhibition by St John's wort constituents hypericin and hyperforin. *J Pharm Pharmacol* 2004;56:123-128.

Citations and Reference Literature: St. John's Wort

31. Markowitz JS, Donovan JL, DeVane CL et al. Effect of St. John's wort on drug metabolism by induction of cytochrome p450 3A4 enzyme. *Obstet Gynecol Surv* 2004;59:358-359.
32. Komoroski BJ, Zhang S, Cai H et al. Induction and inhibition of cytochromes p450 by the St. John's wort constituent hyperforin in human hepatocyte cultures. *Drug Metab Dispos* 2004;32:512-518.
33. Chen Y, Ferguson SS, Negishi M, Goldstein JA. Induction of human CYP2C9 by rifampicin, hyperforin, and phenobarbital is mediated by the pregnane X receptor. *J Pharmacol Exp Ther* 2004;308:495-501.
34. Madabushi R, Frank B, Drewelow B et al. Hyperforin in St. John's wort drug interactions. *Eur J Clin Pharmacol* 2006;1-9.
35. Bailey DG, Dresser GK, Bend JR. Bergamottin, lime juice, and red wine as inhibitors of cytochrome P450 3A4 activity: comparison with grapefruit juice. *Clin Pharmacol Ther* 2003;73:529-537.
36. Huang SM, Hall SD, Watkins P et al. Drug interactions with herbal products and grapefruit juice: a conference report. *Clin Pharmacol Ther* 2004;75:1-12.
37. Rengelshausen J, Banfield M, Riedel KD et al. Opposite effects of short-term and long-term St John's wort intake on voriconazole pharmacokinetics. *Clin Pharmacol Ther* 2005;78:25-33.
38. Xie HG, Kim RB. St John's wort-associated drug interactions: short-term inhibition and long-term induction? *Clin Pharmacol Ther* 2005;78:19-24.
39. Moore LB, Goodwin B, Jones SA et al. St. John's wort induces hepatic drug metabolism through activation of the pregnane X receptor. *Proc Natl Acad Sci U S A* 2000;97:7500-7502.
40. Watkins RE, Maglich JM, Moore LB et al. 2.1 A crystal structure of human PXR in complex with the St. John's wort compound hyperforin. *Biochemistry* 2003;42:1430-1438.
41. Jones SA, Moore LB, Shenk JL et al. The pregnane X receptor: a promiscuous xenobiotic receptor that has diverged during evolution. *Mol Endocrinol* 2000;14:27-39.
42. Kliewer SA. The nuclear pregnane X receptor regulates xenobiotic detoxification. *J Nutr* 2003;133:2444S-2447S.
43. Waxman DJ. P450 gene induction by structurally diverse xenochemicals: central role of nuclear receptors CAR, PXR, and PPAR. *Arch Biochem Biophys* 1999;369:11-23.
44. Schwarz D, Kisselev P, Roots I. St. John's wort extracts and some of their constituents potently inhibit ultimate carcinogen formation from benzo[a]pyrene-7,8-dihydrodiol by human CYP1A1. *Cancer Res* 2003;63:8062-8068.
45. Brockmoller J, Kirchheiner J, Meisel C, Roots I. Pharmacogenetic diagnostics of cytochrome P450 polymorphisms in clinical drug development and in drug treatment. *Pharmacogenomics* 2000;1:125-151.
46. Dorne JLCM, Walton K, Renwick AG. Human variability for metabolic pathways with limited data (CYP2A6, CYP2C9, CYP2E1, ADH, esterases, glycine and sulphate conjugation). *Food Chem Toxicol* 2004;42:397-421.
47. Foster BC, Vandenhoek S, Hana J et al. In vitro inhibition of human cytochrome P450-mediated metabolism of marker substrates by natural products. *Phytomedicine* 2003;10:334-342.
48. Henderson L, Yue QY, Bergquist C et al. St John's wort (*Hypericum perforatum*): drug interactions and clinical outcomes. *Br J Clin Pharmacol* 2002;54:349-356.
49. Hennessy M, Kelleher D, Spiers JP et al. St John's wort increases expression of P-glycoprotein: implications for drug interactions. *Br J Clin Pharmacol* 2002;53:75-82.
50. Dresser GK, McDonald W, Kim RB, Bailey DG. Evaluation of herbal products as potential inhibitors of MDR1. *Clin Pharmacol Ther* 2004;75:P79.
51. Zhou S, Lim LY, Chowbay B. Herbal modulation of P-glycoprotein. *Drug Metab Rev* 2004;36:57-104.
52. Traber MG. Vitamin E, nuclear receptors and xenobiotic metabolism. *Arch Biochem Biophys* 2004;423:6-11.
53. Maglich JM, Stoltz CM, Goodwin B et al. Nuclear pregnane X receptor and constitutive androstane receptor regulate overlapping but distinct sets of genes involved in xenobiotic detoxification. *Mol Pharmacol* 2002;62:638-646.
54. Moore LB, Maglich JM, McKee DD et al. Pregnan X receptor (PXR), constitutive androstane receptor (CAR), and benzoate X receptor (BXR) define three pharmacologically distinct classes of nuclear receptors. *Mol Endocrinol* 2002;16:977-986.
55. Moore JT, Kliewer SA. Use of the nuclear receptor PXR to predict drug interactions. *Toxicology* 2000;153:1-10.
56. Moore LB, Parks DJ, Jones SA et al. Orphan nuclear receptors constitutive androstane receptor and pregnane X receptor share xenobiotic and steroid ligands. *J Biol Chem* 2000;275:15122-15127.
57. Forman BM. Polymorphisms in promiscuous PXR: an explanation for interindividual differences in drug clearance? *Pharmacogenetics* 2001;11:551-552.
58. Lamba J, Lamba V, Schuetz E. Genetic variants of PXR (NR1I2) and CAR (NR1I3) and their implications in drug metabolism and pharmacogenetics. *Curr Drug Metab* 2005;6:369-383.

Citations and Reference Literature: St. John's Wort

59. Pascussi JM, Gerbal-Chaloin S, Drocourt L et al. The expression of CYP2B6, CYP2C9 and CYP3A4 genes: a tangle of networks of nuclear and steroid receptors. *Biochim Biophys Acta* 2003;1619:243-253.
60. Treasure JE. Warding off evil in the 21st century: St. John's wort as a xenosensory activator? *J Am Herbalists Guild* 2005;6:48-51.
61. Janousek J, Hilscherova K, Blaha L, Holoubek I. Environmental xenobiotics and nuclear receptors: interactions, effects and in vitro assessment. *Toxicol In Vitro* 2006;20:18-37.
62. Pal D, Mitra AK. MDR- and CYP3A4-mediated drug-herbal interactions. *Life Sci* 2006;78:2131-2145.
63. Ernst E. St John's wort supplements endanger the success of organ transplantation. *Arch Surg* 2002;137:316-319.
64. Dresser GK, Schwarz UI, Wilkinson GR, Kim RB. Coordinate induction of both cytochrome P4503A and MDR1 by St John's wort in healthy subjects. *Clin Pharmacol Ther* 2003;73:41-50.
65. Lin JH. Drug-drug interaction mediated by inhibition and induction of P-glycoprotein. *Adv Drug Deliv Rev* 2003;55:53-81.
66. Lin JH, Yamazaki M. Role of P-glycoprotein in pharmacokinetics: clinical implications. *Clin Pharmacokinet* 2003;42:59-98.
67. Di Marco MP, Edwards DJ, Wainer IW, Ducharme MP. The effect of grapefruit juice and seville orange juice on the pharmacokinetics of dextromethorphan: the role of gut CYP3A and P-glycoprotein. *Life Sci* 2002;71:1149-1160.
68. Bhardwaj RK, Glaeser H, Becquemont L et al. Piperine, a major constituent of black pepper, inhibits human P-glycoprotein and CYP3A4. *J Pharmacol Exp Ther* 2002;302:645-650.
69. Benet LZ, Cummins CL. The drug efflux-metabolism alliance: biochemical aspects. *Adv Drug Deliv Rev* 2001;50 Suppl 1:S3-S11.
70. Cummins CL, Jacobsen W, Benet LZ. Unmasking the dynamic interplay between intestinal P-glycoprotein and CYP3A4. *J Pharmacol Exp Ther* 2002;300:1036-1045.
71. Cummins CL, Wu CY, Benet LZ. Sex-related differences in the clearance of cytochrome P450 3A4 substrates may be caused by P-glycoprotein. *Clin Pharmacol Ther* 2002;72:474-489.
72. Backman JT, Olkkola KT, Neuvonen PJ. Rifampin drastically reduces plasma concentrations and effects of oral midazolam. *Clin Pharmacol Ther* 1996;59:7-13.
73. Tsunoda SM, Harris RZ, Christians U et al. Red wine decreases cyclosporine bioavailability. *Clin Pharmacol Ther* 2001;70:462-467.
74. Burstein AH, Horton RL, Dunn T et al. Lack of effect of St John's wort on carbamazepine pharmacokinetics in healthy volunteers. *Clin Pharmacol Ther* 2000;68:605-612.
75. Armstrong SC, Cozza KL, Sandson NB. Six patterns of drug-drug interactions. *Psychosomatics* 2003;44:255-258.
76. Xie R, Tan LH, Polasek EC et al. CYP3A and P-glycoprotein activity induction with St. John's wort in healthy volunteers from 6 ethnic populations. *J Clin Pharmacol* 2005;45:352-356.
77. Gurley BJ, Gardner SF, Hubbard MA et al. Clinical assessment of effects of botanical supplementation on cytochrome P450 phenotypes in the elderly: St John's wort, garlic oil, Panax ginseng and Ginkgo biloba. *Drugs Aging* 2005;22:525-539.
78. Izzo AA, Ernst E. Interactions between herbal medicines and prescribed drugs: a systematic review. *Drugs* 2001;61:2163-2175.
79. Butterweck V, Derendorf H, Gaus W et al. Pharmacokinetic herb-drug interactions: are preventive screenings necessary and appropriate? *Planta Med* 2004;70:784-791.
80. Williamson EM. Interactions between herbal and conventional medicines. *Expert Opin Drug Saf* 2005;4:355-378.
81. Treasure JE. MEDLINE and the mainstream manufacture of misinformation. *J Am Herbalists Guild* 2006;6:50-56.
82. Singh YN. Potential for interaction of kava and St. John's wort with drugs. *J Ethnopharmacol* 2005;100:108-113.
83. Arold G, Donath F, Maurer A et al. No relevant interaction with alprazolam, caffeine, tolbutamide, and digoxin by treatment with a low-hyperforin St John's wort extract. *Planta Med* 2005;71:331-337.
84. Medina MA, Martinez-Poveda B, Amores-Sanchez MI, Quesada AR. Hyperforin: more than an antidepressant bioactive compound? *Life Sci* 2006;79:105-111.
85. Walter G, Rey JM, Harding A. Psychiatrists' experience and views regarding St John's wort and "alternative" treatments. *Aust N Z J Psychiatry* 2000;34:992-996.
86. Schulz V. Incidence and clinical relevance of the interactions and side effects of Hypericum preparations. *Phytomedicine* 2001;8:152-160.
87. Di Carlo G, Borrelli F, Izzo AA, Ernst E. St John's wort: Prozac from the plant kingdom. *Trends Pharmacol Sci* 2001;22:292-297.
88. Bladt S, Wagner H. Inhibition of MAO by fractions and constituents of Hypericum extract. *J Geriatr Psychiatry Neurol* 1994;7 Suppl 1:S57-59.
89. Cott JM. In vitro receptor binding and enzyme inhibition by Hypericum perforatum extract. *Pharmacopsychiatry* 1997;30 Suppl 2:108-112.
90. Singer A, Wonnemann M, Muller WE. Hyperforin, a major antidepressant constituent of St. John's wort, inhibits serotonin uptake by elevating free intracellular Na⁺. *J Pharmacol Exp Ther* 1999;290:1363-1368.

Citations and Reference Literature: St. John's Wort

91. Wonnemann M, Singer A, Siebert B, Muller WE. Evaluation of synaptosomal uptake inhibition of most relevant constituents of St. John's wort. *Pharmacopsychiatry* 2001;34 Suppl 1:S148-S151.
92. Wonnemann M, Singer A, Muller WE. Inhibition of synaptosomal uptake of 3H-l-glutamate and 3H-GABA by hyperforin, a major constituent of St. John's wort: the role of amiloride sensitive sodium conductive pathways. *Neuropharmacology* 2000;23:188-197.
93. Simmen U, Burkard W, Berger K et al. Extracts and constituents of *Hypericum perforatum* inhibit the binding of various ligands to recombinant receptors expressed with the Semliki Forest virus system. *J Recept Signal Transduct Res* 1999;19:59-74.
94. Muller WE, Singer A, Wonnemann M. Hyperforin: antidepressant activity by a novel mechanism of action. *Pharmacopsychiatry* 2001;34 Suppl 1:S98-S102.
95. Eckert GP, Muller WE. Effects of hyperforin on the fluidity of brain membranes. *Pharmacopsychiatry* 2001;34 Suppl 1:S22-S25.
96. Gobbi M, Moia M, Pirona L et al. In vitro binding studies with two *Hypericum perforatum* extracts—hyperforin, hypericin and biapigenin—on 5-HT₆, 5-HT₇, GABA(A)/benzodiazepine, sigma, NPY-Y1/Y2 receptors and dopamine transporters. *Pharmacopsychiatry* 2001;34 Suppl 1:S45-S48.
97. Muller WE. Current St John's wort research from mode of action to clinical efficacy. *Pharmacol Res* 2003;47:101-109.
98. Mennini T, Gobbi M. The antidepressant mechanism of *Hypericum perforatum*. *Life Sci* 2004;75:1021-1027.
99. Koch E, Chatterjee SS. Hyperforin stimulates intracellular calcium mobilisation and enhances extracellular acidification in DDT1-MF2 smooth muscle cells. *Pharmacopsychiatry* 2001;34 Suppl 1:S70-S73.
100. Krishtal O, Lozovaya N, Fisunov A et al. Modulation of ion channels in rat neurons by the constituents of *Hypericum perforatum*. *Pharmacopsychiatry* 2001;34 Suppl 1:S74-S82.
101. Sternbach H. The serotonin syndrome. *Am J Psychiatry* 1991;148:705-713.
102. Hilton SE, Maradit H, Moller HJ. Serotonin syndrome and drug combinations: focus on MAOI and RIMA. *Eur Arch Psychiatry Clin Neurosci* 1997;247:113-119.
103. Radomski JW, Dursun SM, Reveley MA, Kutcher SP. An exploratory approach to the serotonin syndrome: an update of clinical phenomenology and revised diagnostic criteria. *Med Hypotheses* 2000;55:218-224.
104. Von Halling Laier MG, Gram LF. [Serotonin syndrome and malignant neuroleptic syndrome: a review based on the material from the National Board of Adverse Drug Reactions]. *Ugeskr Laeger* 1996;158:6933-6937.
105. Woelk H. Comparison of St John's wort and imipramine for treating depression: randomised controlled trial. *BMJ* 2000;321:536-539.
106. Schrader E. Equivalence of St John's wort extract (Ze 117) and fluoxetine: a randomized, controlled study in mild-moderate depression. *Int Clin Psychopharmacol* 2000;15:61-68.
107. Cott JM, Rosenthal N, Blumenthal M. St John's wort and major depression. *JAMA* 2001;286:42; author reply 44-45.
108. Walsh BT, Seidman SN, Sysko R, Gould M. Placebo response in studies of major depression: variable, substantial, and growing. *JAMA* 2002;287:1840-1847.
109. Barbui C, Cipriani A, Brambilla P, Hotopf M. "Wish bias" in antidepressant drug trials? *J Clin Psychopharmacol* 2004;24:126-130.
110. Markowitz JS, Donovan JL, DeVane CL et al. Effect of St John's wort on drug metabolism by induction of cytochrome P450 3A4 enzyme. *JAMA* 2003;290:1500-1504.
111. Stockley I. Stockley's Drug Interactions. 6th ed. London: Pharmaceutical Press; 2002.
112. Johne A, Schmider J, Brockmoller J et al. Decreased plasma levels of amitriptyline and its metabolites on comedication with an extract from St. John's wort (*Hypericum perforatum*). *J Clin Psychopharmacol* 2002;22:46-54.
113. Jakovljevic V, Popovic M, Mimica-Dukic N et al. Pharmacodynamic study of *Hypericum perforatum* L. *Phytomedicine* 2000;7:449-453.
114. Irefin S, Sprung J. A possible cause of cardiovascular collapse during anesthesia: long-term use of St. John's wort. *J Clin Anesth* 2000;12:498-499.
115. Choo EF, Leake B, Wandel C et al. Pharmacological inhibition of P-glycoprotein transport enhances the distribution of HIV-1 protease inhibitors into brain and testes. *Drug Metab Dispos* 2000;28:655-660.
116. Huang L, Wring SA, Woolley JL et al. Induction of P-glycoprotein and cytochrome P450 3A by HIV protease inhibitors. *Drug Metab Dispos* 2001;29:754-760.
117. De Maat MM, Hoetelmans RM, Math RA et al. Drug interaction between St John's wort and nevirapine. *AIDS* 2001;15:420-421.
118. Stebbing J, Bower M. Comparative pharmacogenomics of antiretroviral and cytotoxic treatments. *Lancet Oncol* 2006;7:61-68.
119. Hebert MF. Contributions of hepatic and intestinal metabolism and P-glycoprotein to cyclosporine and tacrolimus oral drug delivery. *Adv Drug Deliv Rev* 1997;27:201-214.

Citations and Reference Literature: St. John's Wort

120. Kwei GY, Alvaro RF, Chen Q et al. Disposition of ivermectin and cyclosporin A in CF-1 mice deficient in MDR1a P-glycoprotein. *Drug Metab Dispos* 1999;27:581-587.
121. Wu CY, Benet LZ, Hebert MF et al. Differentiation of absorption and first-pass gut and hepatic metabolism in humans: studies with cyclosporine. *Clin Pharmacol Ther* 1995;58:492-497.
122. Bauer S, Stormer E, Johnne A et al. Alterations in cyclosporin A pharmacokinetics and metabolism during treatment with St John's wort in renal transplant patients. *Br J Clin Pharmacol* 2003;55:203-211.
123. Mandelbaum A, Pertzbom F, Martin-Facklam M, Wiesel M. Unexplained decrease of cyclosporin trough levels in a compliant renal transplant patient. *Nephrol Dial Transplant* 2000;15:1473-1474.
124. Mai I, Kruger H, Budde K et al. Hazardous pharmacokinetic interaction of Saint John's wort (*Hypericum perforatum*) with the immunosuppressant cyclosporin. *Int J Clin Pharmacol Ther* 2000;38:500-502.
125. Breidenbach T, Kliem V, Burg M et al. Profound drop of cyclosporin A whole blood trough levels caused by St. John's wort (*Hypericum perforatum*). *Transplantation* 2000;69:2229-2230.
126. Barone GW, Gurley BJ, Ketel BL et al. Drug interaction between St. John's wort and cyclosporine. *Ann Pharmacother* 2000;34:1013-1016.
127. Karliova M, Treichel U, Malago M et al. Interaction of *Hypericum perforatum* (St. John's wort) with cyclosporin A metabolism in a patient after liver transplantation. *J Hepatol* 2000;33:853-855.
128. Mueller SC, Uehleke B, Woehling H et al. Effect of St John's wort dose and preparations on the pharmacokinetics of digoxin. *Clin Pharmacol Ther* 2004;75:546-557.
129. Kullak-Ublick GA, Ismail MG, Stieger B et al. Organic anion-transporting polypeptide B (OATP-B) and its functional comparison with three other OATPs of human liver. *Gastroenterology* 2001;120:525-533.
130. Dresser GK, Bailey DG, Leake BF et al. Fruit juices inhibit organic anion transporting polypeptide-mediated drug uptake to decrease the oral availability of fexofenadine. *Clin Pharmacol Ther* 2002;71:11-20.
131. Mikkaichi T, Suzuki T, Onogawa T et al. Isolation and characterization of a digoxin transporter and its rat homologue expressed in the kidney. *Proc Natl Acad Sci USA* 2004;101:3569-3574.
132. Andelic S. [Bigeminy: the result of interaction between digoxin and St. John's wort]. *Vojnosanit Pregl* 2003;60:361-364.
133. Dresser GK, Bailey DG. The effects of fruit juices on drug disposition: a new model for drug interactions. *Eur J Clin Invest* 2003;33 Suppl 2:10-16.
134. Peebles KA, Baker RK, Kurz EU et al. Catalytic inhibition of human DNA topoisomerase II α by hypericin, a naphthodianthrone from St. John's wort (*Hypericum perforatum*). *Biochem Pharmacol* 2001;62:1059-1070.
135. Block KI, Gyllenhaal C. Clinical corner. Herb-drug interactions in cancer chemotherapy: theoretical concerns regarding drug metabolizing enzymes. *Integr Cancer Ther* 2002;1:83-89.
136. Wang Z, Hamman MA, Huang SM et al. Effect of St John's wort on the pharmacokinetics of fexofenadine. *Clin Pharmacol Ther* 2002;71:414-420.
137. Frye RF, Fitzgerald SM, Lagattuta TF, Egorin MJ. Effect of St. John's wort on imatinib mesylate pharmacokinetics. *Clin Pharmacol Ther* 2004;75:P96.
138. Rochat B. Role of cytochrome P450 activity in the fate of anticancer agents and in drug resistance: focus on tamoxifen, paclitaxel and imatinib metabolism. *Clin Pharmacokinet* 2005;44:349-366.
139. Mathijssen RH, Loos WJ, Verweij J, Sparreboom A. Pharmacology of topoisomerase I inhibitors irinotecan (CPT-11) and topotecan. *Curr Cancer Drug Targets* 2002;2:103-123.
140. Mathijssen RH, van Alphen RJ, Verweij J et al. Clinical pharmacokinetics and metabolism of irinotecan (CPT-11). *Clin Cancer Res* 2001;7:2182-2194.
141. Rivory LP. Metabolism of CPT-11: impact on activity. *Ann NY Acad Sci* 2000;922:205-215.
142. Perry M. The Chemotherapy Source Book. 3rd ed. Philadelphia: Lippincott, Williams & Wilkins; 2001.
143. Mansky PJ, Straus SE. St. John's wort: more implications for cancer patients. *J Natl Cancer Inst* 2002;94:1187-1188.
144. Sparreboom A, Cox MC, Acharya MR, Figg WD. Herbal remedies in the United States: potential adverse interactions with anticancer agents. *J Clin Oncol* 2004;22:2489-2503.
145. Xie HG. Additional discussions regarding the altered metabolism and transport of omeprazole after long-term use of St John's wort. *Clin Pharmacol Ther* 2005;78:440-441.
146. Donovan JL, DeVane CL, Lewis JG et al. Effects of St John's wort (*Hypericum perforatum* L.) extract on plasma androgen concentrations in healthy men and women: a pilot study. *Phytother Res* 2005;19:901-906.
147. Hall SD, Wang Z, Huang SM et al. The interaction between St John's wort and an oral contraceptive. *Clin Pharmacol Ther* 2003;74:525-535.

Citations and Reference Literature: St. John's Wort

148. Pfrunder A, Schiesser M, Gerber S et al. Interaction of St John's wort with low-dose oral contraceptive therapy: a randomized controlled trial. *Br J Clin Pharmacol* 2003;56:683-690.
149. Pregnancies prompt herb warning. BBC News; Feb 6, 2002.
150. Yue QY, Bergquist C, Gerden B. Safety of St John's wort (*Hypericum perforatum*). *Lancet* 2000;355:576-577.
151. Barditch-Crovo P, Trapnell CB, Ette E et al. The effects of rifampin and rifabutin on the pharmacokinetics and pharmacodynamics of a combination oral contraceptive. *Clin Pharmacol Ther* 1999;65:428-438.
152. LeBel M, Masson E, Guibert E et al. Effects of rifabutin and rifampicin on the pharmacokinetics of ethinylestradiol and norethindrone. *J Clin Pharmacol* 1998;38:1042-1050.
153. Komoroski BJ, Parise RA, Egorin MJ et al. Effect of the St. John's wort constituent hyperforin on docetaxel metabolism by human hepatocyte cultures. *Clin Cancer Res* 2005;11:6972-6979.
154. Wada A, Sakaeda T, Takara K et al. Effects of St John's wort and hypericin on cytotoxicity of anticancer drugs. *Drug Metab Pharmacokinet* 2002;17:467-474.
155. Engels FK, Ten Tije AJ, Baker SD et al. Effect of cytochrome P450 3A4 inhibition on the pharmacokinetics of docetaxel. *Clin Pharmacol Ther* 2004;75:448-454.
156. Engels FK, Sparreboom A, Mathot RA, Verweij J. Potential for improvement of docetaxel-based chemotherapy: a pharmacological review. *Br J Cancer* 2005;93:173-177.
157. Cozza K, Armstrong S, Oesterheld J. *Drug Interaction Principles for Medical Practice*. 2nd ed. Washington, DC: American Psychiatric Publishing; 2003.
158. Neuvonen PJ, Pohjola-Sintonen S, Tacke U, Vuori E. Five fatal cases of serotonin syndrome after moclobemide-citalopram or moclobemide-clomipramine overdoses. *Lancet* 1993;342:1419.
159. Gordon JB. SSRIs and St. John's wort: possible toxicity? *Am Fam Physician* 1998;57:950, 953.
160. Nierenberg AA, Burt T, Matthews J, Weiss AP. Mania associated with St. John's wort. *Biol Psychiatry* 1999;46:1707-1708.
161. Prost N, Tichadou L, Rodor F et al. [St. John's wort–venlafaxine interaction]. *Presse Med* 2000;29:1285-1286.
162. Spinella M, Eaton LA. Hypomania induced by herbal and pharmaceutical psychotropic medicines following mild traumatic brain injury. *Brain Inj* 2002;16:359-367.
163. Sugimoto K, Ohmori M, Tsuruoka S et al. Different effects of St John's wort on the pharmacokinetics of simvastatin and pravastatin. *Clin Pharmacol Ther* 2001;70:518-524.
164. Bogman K, Peyer AK, Torok M et al. HMG-CoA reductase inhibitors and P-glycoprotein modulation. *Br J Pharmacol* 2001;132:1183-1192.
165. Bolley R, Zulke C, Kammerl M et al. Tacrolimus-induced nephrotoxicity unmasked by induction of the CYP3A4 system with St John's wort. *Transplantation* 2002;73:1009.
166. Hebert MF, Park JM, Chen Y-L et al. Effects of St. John's wort (*Hypericum perforatum*) on tacrolimus pharmacokinetics in healthy volunteers. *J Clin Pharmacol* 2004;44:89-94.
167. Mai I, Stormer E, Bauer S et al. Impact of St John's wort treatment on the pharmacokinetics of tacrolimus and mycophenolic acid in renal transplant patients. *Nephrol Dial Transplant* 2003;18:819-822.
168. Tannergren C, Engman H, Knutson L et al. St John's wort decreases the bioavailability of R- and S-verapamil through induction of the first-pass metabolism. *Clin Pharmacol Ther* 2004;75:298-309.
169. Maurer A, Johne A, Bauer S et al. Interaction of St John's Wort extract with phenprocoumon. *European Journal Clinical Pharmacology* 1999;55:(abstract 22).
170. Keller C, Matzdorff AC, Kemkes-Matthes B. Pharmacology of warfarin and clinical implications. *Semin Thromb Hemost* 1999;25:13-16.
171. He M, Korzekwa KR, Jones JP et al. Structural forms of phenprocoumon and warfarin that are metabolized at the active site of CYP2C9. *Arch Biochem Biophys* 1999;372:16-28.
172. Noldner M, Chatterjee S. Effects of two different extracts of St. John's wort and some of their constituents on cytochrome P450 activities in rat liver microsomes. *Pharmacopsychiatry* 2001;34 Suppl 1:S108-S110.
173. Wadelius M, Sorlin K, Wallerman O et al. Warfarin sensitivity related to CYP2C9, CYP3A5, ABCB1 (MDR1) and other factors. *Pharmacogenomics J* 2004;4:40-48.
174. Takahashi H, Echizen H. Pharmacogenetics of CYP2C9 and interindividual variability in anticoagulant response to warfarin. *Pharmacogenomics J* 2003;3:202-214.
175. Scordo MG, Pengo V, Spina E et al. Influence of CYP2C9 and CYP2C19 genetic polymorphisms on warfarin maintenance dose and metabolic clearance. *Clin Pharmacol Ther* 2002;72:702-710.

Citations and Reference Literature: St. John's Wort

176. Kamali F, Khan TI, King BP et al. Contribution of age, body size, and CYP2C9 genotype to anticoagulant response to warfarin. *Clin Pharmacol Ther* 2004;75:204-212.
177. Takahashi H, Wilkinson GR, Caraco Y et al. Population differences in S-warfarin metabolism between CYP2C9 genotype-matched Caucasian and Japanese patients. *Clin Pharmacol Ther* 2003;73:253-263.
178. Jiang X, Williams KM, Liauw WS et al. Effect of St John's wort and ginseng on the pharmacokinetics and pharmacodynamics of warfarin in healthy subjects. *Br J Clin Pharmacol* 2004;57:592-599.
179. Wells PS, Holbrook AM, Crowther NR, Hirsh J. Interactions of warfarin with drugs and food. *Ann Intern Med* 1994;121:676-683.
180. Uehleke B. Hypericum interactions: an update. Sixth International ESCOP Scientific Symposium. Bonn Germany; 2001. <http://www.phytotherapy.org/gphy/6IS-ESCP.htm>.
181. Khawaja IS, Marotta RF, Lippmann S. Herbal medicines as a factor in delirium. *Psychiatr Serv* 1999;50:969-970.
182. Zullino D, Borgeat F. Hypertension induced by St. John's wort: a case report. *Pharmacopsychiatry* 2003;36:32.
183. Patel S, Robinson R, Burk M. Hypertensive crisis associated with St. John's wort. *Am J Med* 2002;112:507-508.
184. Hopfner M, Maaser K, Theiss A et al. Hypericin activated by an incoherent light source has photodynamic effects on esophageal cancer cells. *Int J Colorectal Dis* 2003;18:239-247.
185. Ladner DP, Klein SD, Steiner RA, Walt H. Synergistic toxicity of delta-aminolaevulinic acid-induced protoporphyrin IX used for photodiagnosis and Hypericum extract, a herbal antidepressant. *Br J Dermatol* 2001;144:916-918.
186. Kelty CJ, Brown NJ, Reed MW, Ackroyd R. The use of 5-aminolaevulinic acid as a photosensitiser in photodynamic therapy and photodiagnosis. *Photochem Photobiol Sci* 2002;1:158-168.
187. Nebel A, Schneider BJ, Baker RK, Kroll DJ. Potential metabolic interaction between St. John's wort and theophylline [letter]. *Ann Pharmacother* 1999;33:502.
188. Morimoto T, Kotegawa T, Tsutsumi K et al. Effect of St. John's wort on the pharmacokinetics of theophylline in healthy volunteers. *J Clin Pharmacol* 2004;44:95-101.