

Citations and Reference Literature: S-Adenosylmethionine

Citations

1. Caruso I, Pietrogrande V. Italian double-blind multicenter study comparing S-adenosylmethionine, naproxen, and placebo in the treatment of degenerative joint disease. *Am J Med* 1987;83:66-71.
2. Konig B. A long-term (two years) clinical trial with S-adenosylmethionine for the treatment of osteoarthritis. *Am J Med* 1987;83:89-94.
3. Berger R, Nowak H. A new medical approach to the treatment of osteoarthritis: report of an open phase IV study with ademetionine (Gumbaral). *Am J Med* 1987;83:84-88.
4. Cozens DD, Barton SJ, Clark R et al. Reproductive toxicity studies of ademetionine. *Arzneimittelforschung* 1988;38:1625-1629.
5. Carney MW, Chary TK, Bottiglieri T, Reynolds EH. Switch and S-adenosylmethionine. *Ala J Med Sci* 1988;25:316-319.
6. Carney MW, Chary TK, Bottiglieri T, Reynolds EH. The switch mechanism and the bipolar/unipolar dichotomy. *Br J Psychiatry* 1989;154:48-51.
7. Kagan BL, Sultzer DL, Rosenlicht N, Gerner RH. Oral S-adenosylmethionine in depression: a randomized, double-blind, placebo-controlled trial. *Am J Psychiatry* 1990;147:591-595.
8. Stramentinoli G, Pezzoli C, Galli-Kienle M. Protective role of S-adenosyl-l-methionine against acetaminophen induced mortality and hepatotoxicity in mice. *Biochem Pharmacol* 1979;28:3567-3571.
9. Bray GP, Treder JM, Williams R. S-Adenosylmethionine protects against acetaminophen hepatotoxicity in two mouse models. *Hepatology* 1992;15:297-301.
10. Corrales F, Ochoa P, Rivas C et al. Inhibition of glutathione synthesis in the liver leads to S-adenosyl-l-methionine synthetase reduction. *Hepatology* 1991;14:528-533.
11. Bellido I, Gomez-Luque A, Plaza A et al. S-Adenosyl-l-methionine prevents 5-HT(1A) receptors up-regulation induced by acute imipramine in the frontal cortex of the rat. *Neurosci Lett* 2002;321:110-114.
12. Pancheri P, Scapicchio P, Chiaie RD. A double-blind, randomized parallel-group, efficacy and safety study of intramuscular S-adenosyl-l-methionine 1,4-butanedisulphonate (SAMe) versus imipramine in patients with major depressive disorder. *Int J Neuropsychopharmacol* 2002;5:287-294.
13. Bressa GM. S-Adenosyl-l-methionine (SAMe) as antidepressant: meta-analysis of clinical studies. *Acta Neurol Scand Suppl* 1994;154:7-14.
14. Berlanga C, Ortega-Soto HA, Ontiveros M, Senties H. Efficacy of S-adenosyl-l-methionine in speeding the onset of action of imipramine. *Psychiatry Res* 1992;44:257-262.
15. Iruela LM, Minguez L, Merino J, Monedero G. Toxic interaction of S-adenosylmethionine and clomipramine. *Am J Psychiatry* 1993;150:522.
16. Charlton CG, Crowell B Jr. Parkinson's disease-like effects of S-adenosyl-l-methionine: effects of L-dopa. *Pharmacol Biochem Behav* 1992;43:423-431.
17. Benson R, Crowell B, Hill B et al. The effects of L-dopa on the activity of methionine adenosyltransferase: relevance to L-dopa therapy and tolerance. *Neurochem Res* 1993;18:325-330.
18. Cheng H, Gomes-Trolin C, Aquilonius SM et al. Levels of L-methionine S-adenosyltransferase activity in erythrocytes and concentrations of S-adenosylmethionine and S-adenosylhomocysteine in whole blood of patients with Parkinson's disease. *Exp Neurol* 1997;145:580-585.
19. Muller T, Woitalla D, Hauptmann B et al. Decrease of methionine and S-adenosylmethionine and increase of homocysteine in treated patients with Parkinson's disease. *Neurosci Lett* 2001;308:54-56.
20. Crowell BG Jr, Benson R, Shockley D, Charlton CG. S-Adenosyl-l-methionine decreases motor activity in the rat: similarity to Parkinson's disease-like symptoms. *Behav Neural Biol* 1993;59:186-193.
21. Charlton CG, Mack J. Substantia nigra degeneration and tyrosine hydroxylase depletion caused by excess S-adenosylmethionine in the rat brain: support for an excess methylation hypothesis for parkinsonism. *Mol Neurobiol* 1994;9:149-161.
22. Liu X, Lamango N, Charlton C. L-Dopa depletes S-adenosylmethionine and increases S-adenosyl homocysteine: relationship to the wearing-off effects. *Soc Neurosci* 1998;24:1469.
23. Bottiglieri T. S-Adenosyl-l-methionine (SAMe): from the bench to the bedside—molecular basis of a pleiotrophic molecule. *Am J Clin Nutr* 2002;76:1151S-1157S.
24. Carrieri PB, Indaco A, Gentile S et al. S-Adenosylmethionine treatment of depression in patients with Parkinson's disease: a double-blind, crossover study versus placebo. *Curr Ther Res* 1990;48:154-160.
- 24a. Di Rocco A, Rogers JD, Brown R, et al. S-Adenosyl-Methionine improves depression in patients with Parkinson's disease in an open-label clinical trial. *Mov Disord* 2000;15(6):1225-1229.
25. Bennion LJ, Mott DM, Howard BV. Oral contraceptives raise the cholesterol saturation of bile by increasing biliary cholesterol secretion. *Metabolism* 1980;29:18-22.

Citations and Reference Literature: S-Adenosylmethionine

26. Snowball S, Taylor W. Effects of short-term treatment with a combined oestrogen-progestin oral contraceptive on biliary lipids and cholesterol saturation index in young women. *J Steroid Biochem* 1985;22:257-261.
27. Nicastri PL, Diaferia A, Tartagni M et al. A randomised placebo-controlled trial of ursodeoxycholic acid and S-adenosylmethionine in the treatment of intrahepatic cholestasis of pregnancy. *Br J Obstet Gynaecol* 1998;105:1205-1207.
28. Laifer SA, Stiller RJ, Siddiqui DS et al. Ursodeoxycholic acid for the treatment of intrahepatic cholestasis of pregnancy. *J Matern Fetal Med* 2001;10:131-135.
29. Di Padova C, Tritapepe R, Di Padova F et al. S-Adenosyl-l-methionine antagonizes oral contraceptive-induced bile cholesterol supersaturation in healthy women: preliminary report of a controlled randomized trial. *Am J Gastroenterol* 1984;79:941-944.
30. Frezza M, Tritapepe R, Pozzato G, Di Padova C. Prevention of S-adenosylmethionine of estrogen-induced hepatobiliary toxicity in susceptible women. *Am J Gastroenterol* 1988;83:1098-1102.
31. Lengyel G, Feher R, Gardo S, Feher J. [Ursodeoxycholic acid treatment in intrahepatic cholestasis of pregnancy: a case report]. *Orv Hetil* 2002;143:2885-2888.
32. Floreani A, Paternoster D, Melis A, Grella PV. S-Adenosylmethionine versus ursodeoxycholic acid in the treatment of intrahepatic cholestasis of pregnancy: preliminary results of a controlled trial. *Eur J Obstet Gynecol Reprod Biol* 1996;67:109-113.
33. Roncaglia N, Locatelli A, Arrehini A et al. A randomised controlled trial of ursodeoxycholic acid and S-adenosyl-l-methionine in the treatment of gestational cholestasis. *Bjog* 2004;111:17-21.
34. Alpert JE, Papakostas G, Mischoulon D et al. S-Adenosyl-l-methionine (SAMe) as an adjunct for resistant major depressive disorder: an open trial following partial or nonresponse to selective serotonin reuptake inhibitors or venlafaxine. *J Clin Psychopharmacol* 2004;24:661-664.
35. De la Cruz JP, Merida M, Gonzalez-Correia JA et al. Effects of S-adenosyl-l-methionine on blood platelet activation. *Gen Pharmacol* 1997;29:651-655.
36. De La Cruz JP, Gonzalez-Correia JA, Martin-Auriolles E et al. Effects of S-adenosyl-l-methionine on platelet thromboxane and vascular prostacyclin. *Biochem Pharmacol* 1997;53:1761-1763.
37. Vidarabine (Vira-A). *Med Lett Drugs Ther* 1977;19:42-43.
38. Cantoni GL, Aksamit RR, Kim IK. Methionine biosynthesis and vidarabine therapy. *N Engl J Med* 1982;307:1079.
39. Fabianowska-Majewska K, Duley JA, Simmonds HA. Effects of novel anti-viral adenosine analogues on the activity of S-adenosylhomocysteine hydrolase from human liver. *Biochem Pharmacol* 1994;48:897-903.

Reference Literature

- [No authors listed.] S-adenosyl-L-methionine for treatment of depression, osteoarthritis, and liver disease: summary, evidence report/technology assessment: number 64: AHRQ publication no. 02-E033. Rockville, MD: Agency for Healthcare Research and Quality; 2002.
- Angelico M, Gandin C, Nistri A, et al. Oral S-adenosyl-L-methionine (SAMe) administration enhances bile salt conjugation with taurine in patients with liver cirrhosis. *Scand J Clin Lab Invest* 1994;54:459-464.
- Avila MA, Garcia-Trevijano ER, Martinez-Chantar ML, et al. S-adenosylmethionine revisited: its essential role in the regulation of liver function. *Alcohol* 2002;27(3):163-167. (Review)
- Ballerini FB, Anguera AL, Alcaraz P, et al. SAM in the management of postconcussion syndrome. *Med Clin (Barc)* 1983;80:161-164.
- Bell KM, Plon L, Bunney WE Jr, et al. S-adenosylmethionine treatment of depression: a controlled clinical trial. *Am J Psychiatry* 1988;145(9):1110-1114.
- Bell KM, Potkin SG, Carreon D, et al. S-adenosylmethionine blood levels in major depression: changes with drug treatment. *Acta Neurol Scand* 1994;154(Suppl):15-18.
- Bellido I, Gomez-Luque A, Plaza A, et al. S-adenosyl-L-methionine prevents 5-HT(1A) receptors up-regulation induced by acute imipramine in the frontal cortex of the rat. *Neurosci Lett* 2002;321(1-2):110-114.
- Bennion LJ, Ginsberg RL, Gernick MB, et al. Effects of oral contraceptives on the gallbladder bile of normal women. *N Engl J Med* 1976;294(4):189-192.
- Bennion LJ, Mott DM, Howard BV. Oral contraceptives raise the cholesterol saturation of bile by increasing biliary cholesterol secretion. *Metabolism* 1980;29(1):18-22.
- Berger R, Nowak H. A new medical approach to the treatment of osteoarthritis: report of an open phase IV study with ademetionine (Gumbaral). *Am J Med* 1987;83:84-88.
- Bombardieri G, Milani A, Bernardi L, et al. Effects of S-adenosyl-L-methionine (SAMe) in the treatment of Gilbert's syndrome. *Curr Ther Res* 1985;37:580-585.

Citations and Reference Literature: S-Adenosylmethionine

- Bottiglieri T. S-Adenosyl-L-methionine (SAMe): from the bench to the bedside: molecular basis of a pleiotrophic molecule. *Am J Clin Nutr* 2002;76(5):1151S-1157S. (Review)
- Bottiglieri T, Hyland K, Reynolds EH. The clinical potential of ademetionine (S-adenosylmethionine) in neurological disorders. *Drugs* 1994;48:137-152. (Review)
- Bressa GM. S-adenosyl-l-methionine (SAMe) as antidepressant: meta-analysis of clinical studies. *Acta Neurol Scand* 1994;154(Suppl): 7-14.
- Carney MW, Edeh J, Bottiglieri T, et al. Affective illness and S-adenosyl methionine: a preliminary report. *Clin Neuropharmacol* 1986;9(4):379-385.
- Carrasco R, Perez-Mateo M, Gutierrez A, et al Effect of different doses of S-adenosyl-L-methionine on paracetamol hepatotoxicity in a mouse model. *Methods Find Exp Clin Pharmacol* 2000;22(10):737-740.
- Carretero MV, Latasa MU, Garcia-Trevijano ER, et al Inhibition of liver methionine adenosyltransferase gene expression by 3-methylcolanthrene: protective effect of S-adenosylmethionine. *Biochem Pharmacol* 2001;61(9):1119-1128.
- Carrieri PB, Indaco A, Gentile S, et al. S-adenosylmethionine treatment of depression in patients with Parkinson's disease: a double-blind, crossover study versus placebo. *Curr Ther Res* 1990;48:154-160.
- Caruso I, Pietrogrande V. Italian double-blind multicenter study comparing S-adenosylmethionine, naproxen, and placebo in the treatment of degenerative joint disease. *Am J Med* 1987;83:66-71.
- Chiang PK. Biological effects of inhibitors of S-adenosylhomocysteine hydrolase. *Pharmacol Ther* 1998;77(2):115-134. (Review)
- Chiang PK, Gordon RK, Tal J, et al. S-Adenosylmethionine and methylation. *FASEB J* 1996;10:471-480. (Review)
- Chishty M, Reichel A, Abbott NJ, et al. S-adenosylmethionine is substrate for carrier mediated transport at the blood-brain barrier in vitro. *Brain Res* 2002;942(1-2):46-50.
- De Vanna M, Rigamonti R. Oral S-adenosyl-L-methionine in depression. *Curr Ther Res* 1992;52:478-485.
- Delle Chiaie R, Pancheri P, Scapicchio P. Efficacy and tolerability of oral and intramuscular S-adenosyl-L-methionine 1,4-butanedisulfonate (SAMe) in the treatment of major depression: comparison with imipramine in 2 multicenter studies. *Am J Clin Nutr* 2002;76(5):1172S-1176S.
- Detich N, Hamm S, Just G, et al. The methyl donor S-adenosylmethionine inhibits active demethylation of DNA: a candidate novel mechanism for the pharmacological effects of S-adenosylmethionine. *J Biol Chem* 2003;278(23):20812-20820.
- Di Rocco A, Rogers JD, Brown R, et al. S-adenosyl-methionine improves depression in patients with Parkinson's disease in an open-label clinical trial. *Mov Disord* 2000;15(6):1225-1229.
- Domljan Z, Vrhovac B, Durrigl T, et al. A double-blind trial of ademetionine vs naproxen in activated gonarthrosis. *Int J Clin Pharmacol Ther* 1989;27:329-333.
- Evans PJ, Whiteman M, Tredger JM, et al. Antioxidant properties of S-adenosyl-L-methionine: a proposed addition to organ storage fluids. *Free Radic Biol Med* 1997;23(7):1002-1008.
- Fava M, Giannelli A, Rapisarda V, et al. Rapidity of onset of the antidepressant effect of parenteral S-adenosyl-L-methionine. *Psychiatry Res* 1995;56(3):295-297.
- Fava M, Rosenbaum JF, MacLaughlin R, et al. Neuroendocrine effects of S-adenosyl-L-methionine, a novel putative antidepressant. *J Psychiatr Res* 1990;24:177-184.
- Fetrow CW, Avila JR. Efficacy of the dietary supplement S-adenosyl-L-methionine. *Ann Pharmacother* 2001;35(11):1414-1425.
- Fugh-Berman A, Cott JM. Dietary supplements and natural products as psychotherapeutic agents. *Psychosom Med* 1999;61(5):712-728. (Review)
- Gatto G, Caleri D, Michelacci S, et al. Analgesizing effect of a methyl donor (S-adenosylmethionine) in migraine: an open clinical trial. *Int J Clin Pharmacol Res* 1986;6:15-17.
- Glorioso S, Todesco S, Mazzi A, et al. Double-blind multicentre study of the activity of S-adenosylmethionine in hip and knee osteoarthritis. *Int J Clin Pharmacol Res* 1985;5:39-49.
- Harmand MF, Vilamitjana J, Maloche E, et al. Effects of S-adenosylmethionine on human articular chondrocyte differentiation: an in vitro study. *Am J Med* 1987;83(Suppl 5A):48-54.
- Jacobsen S, Danneskiold-Samsøe B, Andersen RB. Oral S-adenosylmethionine in primary fibromyalgia: double-blind clinical evaluation. *Scand J Rheumatol* 1991;20:294-302.
- Kagan BL, Sultzer DL, Rosenlicht N, et al. Oral S-adenosyl-methionine in depression: a randomized, double-blind, placebo-controlled trial. *Am J Psychiatry* 1990;147:591-595.
- Konig B. A long-term (two years) clinical trial with S-adenosylmethionine for the treatment of osteoarthritis. *Am J Med* 1987;83:89-94.
- Lieber CS. Herman Award lecture, 1993: a personal perspective on alcohol, nutrition, and the liver. *Am J Clin Nutr* 1993;58:430-442. (Review)

Citations and Reference Literature: S-Adenosylmethionine

- Lieber CS. S-adenosyl-L-methionine: its role in the treatment of liver disorders. *Am J Clin Nutr* 2002;76(5):1183S-1187S. (Review)
- Lieber CS, Packer L. S-Adenosylmethionine: molecular, biological, and clinical aspects: an introduction. *Am J Clin Nutr* 2002;76(5):1148S-1150S. (Review)
- Loehrer FM, Angst CP, Haefeli WE, et al. Low whole-blood S-adenosylmethionine and correlation between 5-methyltetrahydrofolate and homocysteine in coronary artery disease. *Arterioscler Thromb Vasc Biol* 1996;16:727-733.
- Loenen WA. S-adenosylmethionine: jack of all trades and master of everything? *Biochem Soc Trans* 2006;34(Pt 2):330-333. (Review)
- Maccagno A. Double-blind controlled clinical trial of oral S-adenosylmethionine versus piroxicam in knee osteoarthritis. *Am J Med* 1987;83(Suppl 5A):72-77.
- Marcolongo R, Giordano N, Colombo B, et al. Double-blind multicentre study of the activity of s-adenosyl-methionine in hip and knee osteoarthritis. *Curr Ther Res* 1985;37:82-94.
- Martinez-Chantar ML, Garcia-Trevijano ER, Latasa MU, et al. Importance of a deficiency in S-adenosyl-L-methionine synthesis in the pathogenesis of liver injury. *Am J Clin Nutr* 2002;76(5):1177S-1182S. (Review)
- Mato JM, Cámara J, Fernández J, et al. S-adenosylmethionine in alcoholic liver cirrhosis: a randomized, placebo-controlled, double-blind, multicenter clinical trial. *J Hepatol* 1999;30:1081-1089.
- Miccoli L, Porro V, Bertolino A. Comparison between the antidepressant activity and of S-adenosylmethionine (SAMe) and that of some tricyclic drugs. *Acta Neurol (Napoli)* 1978;33 (3):243-255.
- Mischoulon D, Fava M. Role of S-adenosyl-L-methionine in the treatment of depression: a review of the evidence *Am J Clin Nutr* 2002;76(5):1158S-1161S. (Review)
- Montrone F, Fumagalli M, Sarzi Puttini P, et al. Double-blind study of S-adenosyl-methionine versus placebo in hip and knee arthrosis. *Clin Rheumatol* 1985;4:484-485.
- Muller T, Woitalla D, Hauptmann B, et al. Decrease of methionine and S-adenosylmethionine and increase of homocysteine in treated patients with Parkinson's disease. *Neurosci Lett* 2001;308(1):54-56.
- Muscettola G, Galzenati M, Balbi A. SAMe versus placebo: a double blind comparison in major depressive disorders. *Adv Biochem Psychopharmacol* 1982;32:151-156.
- Nguyen M, Gregan A. S-adenosylmethionine and depression. *Aust Fam Physician* 2002;31(4):339-343. (Review)
- Osman E, Owen JS, Burroughs AK. S-adenosyl-L-methionine: a new therapeutic agent in liver disease? *Aliment Pharmacol Ther* 1993;7:21-28. (Review)
- Pancheri P, Scapicchio P, Chiaie RD. A double-blind, randomized parallel-group, efficacy and safety study of intramuscular S-adenosyl-L-methionine 1,4-butanedisulphonate (SAMe) versus imipramine in patients with major depressive disorder. *Int J Neuropsychopharmacol* 2002;5(4):287-294.
- Piacentino R, Malara D, Zacco F, et al. Preliminary study of the use of s. adenosyl methionine in the management of male sterility. *Minerva Ginecol* 1991;43:191-193. [Italian]
- Pies R. Adverse neuropsychiatric reactions to herbal and over-the-counter "antidepressants." *J Clin Psychiatry* 2000;61(11):815-820. (Review)
- Poirier LA, Wise CK, Delongchamp RR, et al. Blood determinations of S-adenosylmethionine, S-adenosylhomocysteine, and homocysteine: correlations with diet. *Cancer Epidemiol Biomarkers Prev* 2001;10(6):649-655.
- Richardson B. Impact of aging on DNA methylation. *Ageing Res Rev* 2003;2:3:245-261.
- Saletu B, Anderer P, Di Padova C, et al. Electrophysiological neuroimaging of the central effects of S-adenosyl-L-methionine by mapping of electroencephalograms and event-related potentials and low-resolution brain electromagnetic tomography. *Am J Clin Nutr* 2002;76(5):1162S-1171S.
- Saletu B, Anderer P, Linzmayer L, et al. Pharmacodynamic studies on the central mode of action of S-adenosyl-L-methionine (SAMe) infusions in elderly subjects, utilizing EEG mapping and psychometry. *J Neural Transm* 2002;109(12):1505-1526.
- Salmaggi P, Bressa GM, Nicchia G, et al. Double-blind, placebo-controlled study of S-adenosyl-L-methionine in depressed postmenopausal women. *Psychother Psychosom* 1993;59(1):34-40.
- Schumacher HR. Osteoarthritis: the clinical picture, pathogenesis, and management with studies on a new therapeutic agent, S-adenosylmethionine. *Am J Med* 1987;83(Suppl 5A):1-4. (Review)
- Stramentinoli G, Di Padova C, Gualano M, et al. Ethynodiol-induced impairment of bile secretion in the rat: protective effects of S-adenosyl-L-methionine and its implication in estrogen metabolism. *Gastroenterology* 1981;80(1):154-158.
- Tavoni A, Jeracitano G, Cirigliano G. Evaluation of S-adenosylmethionine in secondary fibromyalgia: a double-blind study. *Clin Exp Rheumatol* 1998;16:106-107. (Letter)
- Tavoni A, Vitali C, Bombardieri S, et al. Evaluation of S-adenosylmethionine in primary fibromyalgia: a double-blind crossover study. *Am J Med* 1987;83(Suppl 5A):107-110.

Citations and Reference Literature: S-Adenosylmethionine

- Turner MA, Yang X, Yin D, et al. Structure and function of S-adenosylhomocysteine hydrolase. *Cell Biochem Biophys* 2000;33(2): 101-125. (Review)
- Vetter G. Double-blind comparative clinical trial with S-adenosylmethionine and indomethacin in the treatment of osteoarthritis. *Am J Med* 1987;83(Suppl 5A):78-80.
- Volkmann H, Norregaard J, Jacobsen S, et al. Double-blind, placebo-controlled cross-over study of intravenous S-adenosyl-L-methionine in patients with fibromyalgia. *Scand J Rheumatol* 1997;26:206-211.