

REFERENCES

- Akhondradeh, S. and Abbasi, S.H. 2006. Herbal medicine in the treatment of Alzheimer's disease. Am. J. Alzheimers Dis. Other Demen. 21(2): 113-118.
- Alwahhabi, F.K. 2005. Successfully switching acetylcholinesterase inhibitor therapy in probable Lewy body dementia. J. Psychopharmacol. 19(2): 214-216.
- Aoki, S., Watanabe, Y., Sanagawa, M., Setiawan, A., Kotoku, N. and Kobayashi, M. 2006. Cortistatins A, B, C, and D, anti-angiogenic steroidal alkaloids, from the marine sponge *Corticium simplex*. J. Am. Chem. Soc. 128: 3148-3149.
- Atta-ur-Rahman and Choudhary, M.I. 1999. Diterpenoid and steroid alkaloids. Nat. Prod. Rep. 16: 619-635.
- Atta-ur-Rahman, Akhtar, M.N., Choudhary, M.I., Tsuda, Y., Sener, B., Khalid, A. and Parvez, M. 2002a. New steroid alkaloids from *Fritillaria imperialis* and their cholinesterase inhibiting activities. Chem. Pharm. Bull. 50(8): 1013-1016.
- Atta-ur-Rahman, Zaheer-ul-Haq, Khalid, A., Anjum, S., Khan, M.R. and Choudhary, M.I. 2002b. Pregnan-type steroid alkaloids of *Sarcococca saligna*: A new class of cholinesterase inhibitors. Helv. Chim. Acta. 85: 678-688.
- Atta-ur-Rahman, Feroz, F., Naeem, I., Zaheer-ul-Haq, Nawaz, S.A., Khan, N., Khan, M.R. and Choudhary, M.I. 2004a. New pregnane-type steroid alkaloids from *Sarcococca saligna* and their cholinesterase inhibitory activity. Steroids. 69: 735-741.
- Atta-ur-Rahman, Zaheer-ul-Haq, Feroz, F., Khalid, A., Nawaz, S.A., Khan, M.R. and Choudhary, M.I. 2004b. New cholinesterase-inhibiting steroid alkaloids from *Sarcococca saligna*. Helv. Chim. Acta. 87: 439-448.
- Aupperle, P. 2006. Management of aggression, agitation, and psychosis in dementia: focus on atypical antipsychotics. Am. J. Alzheimers Dis. Other Demen. 21(2): 101-108.
- Babar, Z.U., Ata, A. and Meshkatalasadat, M.H. 2006. New bioactive steroid alkaloids from *Buxus hyrcana*. Steroids. 71: 1045-1051.
- Borbone, N., De Marino, S., Iorizzi, M., Zollo, F., Debitus, C., Esposito, G. and Iuvone, T. 2002. Minor steroid alkaloids from the marine sponge *Corticium* sp. J. Nat. Prod. 65: 1206-1209.

- Bullock, R. 2002. New drugs for Alzheimer's disease and other dementias. *Brit. J. Psychiat.* 180: 35-139.
- Chemnitius, J.M., Haselmeye, K.H., Gonska, B.D., Kreuzer, H. and Zech, R. 1996. Indirect parasympathomimetic activity of metoclopramide: Reversible inhibition of acetylcholinesterase from human central nervous system and blood. *Pharmacol. Res.* 34: 65-72.
- Choo, C.Y., Hirasawa, Y., Karimata, C., Koyama, K., Sekiguchi, M., Kobayashi, J. and Morita, H. 2007. Carinatumins A-C, new alkaloids from *Lycopodium carinatum* inhibiting acetylcholinesterase. *Bioorg. Med. Chem.* 15: 1703-1707.
- Choudhary, M.I., Shahnaz, S., Paeveen, S., Khalid, A., Ayatollahi, A.M., Atta-ur-Rahman and Parvez, M. 2003. New triterpenoid alkaloid cholinesterase inhibitors from *Buxus hyrcana*. *J. Nat. Prod.* 66: 739-742.
- Choudhary, M.I., Devkota, K.P., Nawaz, S.A., Shaheen, F. and Atta-ur-Rahman. 2004. Cholinesterase-inhibiting new steroid alkaloids from *Sarcococca hookeriana* of Nepalese origin. *Helv. Chim. Acta.* 87: 1099-1107.
- Choudhary, M.I., Devkota, K.P., Nawaz, S.A., Ranjit, R. and Atta-ur-Rahman. 2005. Cholinesterase inhibitory pregnane-type steroid alkaloids from *Sarcococca hookeriana*. *Steroids.* 70: 295-303.
- Coyle, J.T., Price, D.L. and DeLong, M.R. 1983. Alzheimer's disease: A disorder of cortical cholinergic innervation. *Science.* 219(4589): 1184-1190.
- De Marino, S., Zollo, F., Iorizzi, M. and Debitus, C. 1998. A new steroid alkaloid from a marine sponge *Corticium* sp. *Tetrahedron Lett.* 39: 7611-7614.
- De Marino, S., Iorizzi, M., Zollo, F., Roussakis, C. and Debitus, C. 1999. Plakinamines C and D and three other new steroid alkaloids from the sponge *Corticium* sp. *Eur. J. Org. Chem.* 697-701.
- Ellman, G.L., Lourtney, D.K., Andres, V. and Gmelin, G. 1961. A new and rapid colorimetric determination of acetylcholinesterase activity. *Biochem. Pharmacol.* 7: 88-95.
- Endress, M.E., Hesse, M., Nilsson, S., Guggisberg, A. and Zhu, J.P. 1990. The systematic position of the *Holarrheninae* (*Apocynaceae*). *Pl. Syst. Evol.* 171: 157-185.

- Eslami, M.S. and Espinoza, R.T. 2003. Update on treatment for Alzheimer's disease part I: Primary treatments. *Clin. Genet.* 11(12): 42-48.
- Faulkner, D.J. 2002. Marine natural products. *Nat. Prod. Rep.* 19: 1-48.
- Francis, P.T., Palmer, A.M., Snape, M. and Wilcock, G.K. 1999. The cholinergic hypothesis of Alzheimer's disease: A review of progress. *J. Neurol. Neurosurg. Psychiatry.* 66: 137-147.
- Guyot, M. 2000. Intricate aspects of sponge chemistry. *Zoosymtema.* 22(2): 419-431.
- Hecker, J.R. and Snellgrove, C.A. 2003. Pharmacological management of Alzheimer's disease. *J. Pharm. Pract. Res.* 33(1): 24-29.
- Hoe, H. J., Hong, S.C., Cho, H. Y., Hong, B., Kim, H. K., Kim, E. K. and Shin, D. H. 2002. Inhibitory effect of Zeatin, isolated from *Fiatoua villosa*, on acetylcholinesterase activity from PC12 cell. *Mol. Cells.* 13(1): 113-117.
- Hooper, J.N.A. 2000. 'Sponguide' guide to sponge collection and identification (Aug. 2000 version). Queensland Museum.
- Houghton, P.J. and Howes, M.J.R. 2005. Natural products and derivatives affecting neurotransmission relevant to Alzheimer's and Parkinson's disease. *Neurosignals.* 14: 6-22.
- Ingkaninan, K., Changwijit, K. and Suwanborirux, K. 2006. Vobasinal-iboga bisindole alkaloids, potent acetylcholinesterase inhibitors from *Tabernaemontana divaricata* root. *J. Pharm. Pharmacol.* 58(6): 847-852.
- Jurek, J., Scheuer, P. and Kelly-borges, M. 1994. Two steroid alkaloids from a sponge, *Corticium* sp. *J. Nat. Prod.* 57(7): 1004-1007.
- Kalauni, S.K., Choudhary, M.I., Khalid, A., Manandhar, M.D., Shaheen, F., Atta-ur-Rahman and Gewali, M.B. 2002. New cholinesterase inhibiting steroid alkaloids from the leaves of *Sarcococca coriacea* of Nepalese origin. *Chem. Pharm. Bull.* 50(11): 1423-1426.
- Keyzers, R.A., Northcote, P.T. and Webb, V. 2002. Clathriol, a novel polyoxygenated 14 β steroid isolated from the New Zealand marine sponge *Clathria lissosclera*. *J. Nat. Prod.* 65: 598-600.
- Khalid, A., Zaheer-ul-Haq, Anjum, S., Khan, R., Atta-ur-Rakman and Choudhary, M.I. 2004a. Kinetics and structure-activity relationship studies on pregnane-type steroid alkaloids that inhibit cholinesterase. *Bioorg. Med. Chem.* 12: 1995-2003.

- Khalid, A., Zaheer-ul-Haq, Ghayur, M.N., Feroz, F., Atta-ur-Rahman, Gilani, A.H. and Choudhary, M.I. 2004b. Cholinesterase inhibitory and spasmolytic potential of steroid alkaloids. *J. Steroid Biochem.* 92: 477-484.
- Kim, D.K., Lee, K.T., Baek, N.I., Kim, S.H., Park, H.W., Lim, J.P., Shin, T.Y., Eom, D.O., Yang, J.H. and Eun, J.S. 2004. Acetylcholinesterase inhibitors from the aerial parts of *Corydalis speciosa*. *Arch. Pharm. Res.* 27(11): 1127-1131.
- Lee, H.S., Seo, Y., Rho, J.R., Shin, J. and Paul, V.J. 2001. New steroid alkaloids from an undescribed sponge of the genus *Corticium*. *J. Nat. Prod.* 64: 1474-1476.
- McCarthy, P.J., Pitts, T.P., Gunawardana, G.P., Kelly-Borges, M. and Pomponi, S.A. 1992. Antifungal activity of meridine, a natural product from the marine sponge *Corticium* sp. *J. Nat. Prod.* 55(11): 1664-1668.
- Mukherjee, P.K., Kumar, V., Mal, M. and Houghton, P.J. 2007. Acetylcholinesterase inhibitors from plants. *Phytomedicine.* 14: 289-300.
- Newman, D.J. and Cragg, G.M. 2004. Marine natural products and related compounds in clinical and advanced preclinical trials. *J. Nat. Prod.* 67: 1216-1238.
- Park, C.H., Kim, S.H., Choi, W., Lee, Y.J., Kim, J.S., Kang, S.S. and Suh, Y.H. 1996. Novel anticholinesterase and antiamnisiac activities of dehydroevodiamine, a constitute of *Evodia rutaecarpa*. *Planta Med.* 62(5): 405-409.
- Pawlik, J.R. 1993. Marine invertebrate chemical defenses. *Chem. Rev.* 93: 1911-1922.
- Rhee, I.K., van der Meent, M., Ingkaninan, K. and Verpoorte, R. 2001. Screening for acetylcholinesterase inhibitors from Amaryllidaceae using silica gel thin-layer chromatography in combination with bioactivity staining. *J. Chromatogr. A.* 915: 217-223.
- Ridley, C.P. and Faulkner, D.J. 2003. New cytotoxic steroid alkaloids from the Philippine sponge *Corticium niger*. *J. Nat. Prod.* 66: 1536-1539.
- Skehan, P., Storeng, R., Scudier, D., Monks, A., Mc Mahon, J., Vistica, D., Warren, J.T., Bokesch, H., Kenney, S. and Boyd, M.R. 1990. New colorimetric cytotoxicity assay for anticancer-drug screening. *J. Natl. Cancer Inst.* 82: 1107-1112.

- Viegas, C.Jr., Bolzani, V.D.S., Barreiro, E.J. and Fraga, C.A.M. 2005. New anti-Alzheimer's drugs from biodiversity: The role of the natural acetylcholinesterase inhibitors. *Mini-Rev. Med. Chem.* 5: 915-926.
- Wang, T. and Wang, T. 1998. Reversal of scopolamine-induces deficits in radial performance by (-)-huperzine A: Comparison with E2020 and tacrine. *Eur. J. Pharmacol.* 349: 137-142.
- Wang, X.C. and Wang, R. 2005. Neuroprotective effects of huperzine A. *Neurosignals.* 14: 71-82.
- Zaheer-ul-Haq, Wellenzohn, B., Liedl, K.R. and Rode, B.M. 2003a. Molecular docking studies of natural cholinesterase-inhibiting steroid alkaloids from *Sarcococca saligna*. *J. Med. Chem.* 46: 5087-5090.
- Zaheer-ul-Haq, Wellenzohn, B., Tonmunphean, S., Khalid, A., Choudhary, M.I. and Rode, B.M. 2003b. 3D-QSAR studies on natural acetylcholinesterase inhibition of *Sarcococca saligna* by Comparative Molecular Field Analysis (CoMFA). *Bioorg. Med. Chem. Lett.* 13: 4375-4380.
- Zarotsky, V., Sramek, J.J. and Cutler, N.R. 2003. Galantamine hydrobromide: An agent for Alzheimer's disease. *Am. J. Health-Syst. Ph.* 60: 446-452.