

Bibliography

- Abou-Sleiman, P. M., Muqit, M. M. K. & Wood, N. W. 2006. Expanding insights of mitochondrial dysfunction in Parkinson's disease. *Nature reviews neuroscience*. 7: 207-219.
- Agid, Y., Destée, A., Durif, F., Montastruc, J. L. & Pollak, P. 1997. Tolcapone, romocriptine, and Parkinson's disease. *The lancet*. 350: 712-713.
- Anderson, M. C., Hasan, F., Mccrodden, J. M. & Tipton, K. F. 1993. Monoamine oxidase inhibitors and the cheese effect. *Neurochemical research*. 18: 1145-1149.
- Avner, D. L. 2000. Clinical experience with pantoprazole in gastroesophageal reflux disease. *Clinical therapeutics*. 22: 1169-1185.
- Bach, A. W., Lan, N. C., Johnson, D. L., Abell, C. W., Bembenek, M. E., Kwan, S. W., Seeburg, P. H. & Shih, J. C. 1988. cDNA cloning of human liver monoamine oxidase A and B: molecular basis of differences in enzymatic properties. *Proceedings of the national academy of sciences of the United States of America*. 85: 4934-4938.
- Baker, G. B., Coutts, R. T., Mckenna, K. F. & Sherry-Mckenna, R. L. 1992. Insights into the mechanisms of action of the MAO inhibitors phenelzine and tranylcypromine: a review. *Journal of psychiatry and neuroscience*. 17: 206-214.
- Barden, T. P., Peter, J. B. & Merkatz, I. R. 1980. Ritodrine hydrochloride: a betamimetic agent for use in preterm labor. *Journal of the American college of obstetricians and gynecologists*. 56: 1-6.
- Bergström, M., Westerberg, G., Németh, G., Traut, M., Gross, G., Greger, G., Müller-Peltzer, H., Safer, A., Eckernäs, S. Å., Grahnér, A. & Långström, B. 1997. MAO-A inhibition in brain after dosing with esuprone, moclobemide and placebo in healthy volunteers: *in vivo* studies with positron emission tomography. *European journal of clinical pharmacology*. 52: 121-128.
- Bertler, Å. & Rosengren, E. 1959. Occurrence and distribution of catechol amines in brain. *Acta physiologica Scandinavica*. 47: 350-361.
- Binda, C., Aldeco, M., Geldenhuys, W. J., Tortorici, M., Mattevi, A. & Edmondson, D. E. 2011. Molecular insights into human monoamine oxidase B inhibition by the glitazone anti-diabetes drugs. *ACS medicinal chemistry letters*. 3: 39-42.
- Binda, C., Li, M., Hubálek, F., Restelli, N., Edmondson, D. E. & Mattevi, A. 2003. Insights into the mode of inhibition of human mitochondrial monoamine oxidase B from high-resolution crystal structures. *Proceedings of the national academy of sciences of the United States of America*. 100: 9750-9755.

- Binda, C., Newton-Vinson, P., Hubálek, F., Edmondson, D. E. & Mattevi, A. 2002. Structure of human monoamine oxidase B, a drug target for the treatment of neurological disorders. *Nature structural biology*. 9: 22-26.
- Binda, C., Wang, J., Pisani, L., Caccia, C., Carotti, A., Salvati, P., Edmondson, D. E. & Mattevi, A. 2007. Structures of human monoamine oxidase B complexes with selective noncovalent inhibitors: safinamide and coumarin analogs. *Journal of medicinal chemistry*. 50: 5848-5852.
- Blandini, F. 2005. Neuroprotection by rasagiline: a new therapeutic approach to Parkinson's disease? *CNS drug reviews*. 11: 183-194.
- Botting, R. M. 2000. Mechanism of action of acetaminophen: is there a cyclooxygenase 3?. *Clinical infectious diseases*. 31: 202-210.
- Boyd, A. S. 2012. Leflunomide in dermatology. *Journal of the American academy of dermatology*. 66: 673-679.
- Budd, K. 1999. The role of tramadol in acute pain management. *Acute pain*. 2: 189-196.
- Brennan, P.J., Young, D.B. 2008. Handbook of anti-tuberculosis agents. 88:102-105.
- Caccia, C., Maj, R., Calabresi, M., Maestroni, S., Faravelli, L., Curatolo, L., Salvati, P. & Fariello, R. G. 2006. Safinamide: from molecular targets to a new anti-Parkinson drug. *Neurology*. 67: S18-S23.
- Callingham, B. A. 1993. Drug interactions with reversible monoamine oxidase-A inhibitors. *Clinical neuropharmacology*. 16: S42-S50.
- Capone, M. L., Tacconelli, S., Sciulli, M. G., Anzellotti, P., Di Francesco, L., Merciaro, G., Di Gregorio, P. & Patrignani, P. 2007. Human pharmacology of naproxen sodium. *The journal of pharmacology and experimental therapeutics*. 322: 453-460.
- Carmona, M. J. C., Martins, L. M., Vane, M. F., Longo, B. A., Paredes, L. S. & Sá Malbouisson, L. M. 2010. Comparison of the effects of dobutamine and milrinone on hemodynamic parameters and oxygen supply in patients undergoing cardiac surgery with low cardiac output after anesthetic induction. *Revista Brasileira de anestesiologia*. 60: 237-246.
- Chen, K., Wu, H. F., Grimsby, J. & Shih, J. C. 1994. Cloning of a novel monoamine oxidase cDNA from trout liver. *Molecular pharmacology*. 46: 1226-1233.
- Cheon, E. W., Park, C. H., Kim, Y. S., Cho, C. H., Chung, Y. C., Kwon, J. G., Yoo, J. M., Choi, W. S. & Cho, G. J. 2006. Protective effects of betaxolol in eyes with kainic acid-induced neuronal death. *Brain research*. 1069: 75-85.

Chesselet, M. F. 2003. Dopamine and Parkinson's disease: is the killer in the house? *Molecular psychiatry*. 8: 369-370.

Chiba, K., Trevor, A. & Castagnoli, N. 1984. Metabolism of the neurotoxic tertiary amine, MPTP, by brain monoamine oxidase. *Biochemical and biophysical research communications*. 120: 574–578.

Chimenti, F., Fioravanti, R., Bolasco, A., Chimenti, P., Secci, D., Rossi, F., Yáñez, M., Orallo, F., Ortuso, F., Alcaro, S., Cirilli, R., Ferretti, R. & Sanna, M. L. 2010. A new series of flavones, thioflavones, and flavanones as selective monoamine oxidase-B inhibitors. *Bioorganic & medicinal chemistry*. 18: 1273-1279.

Connor, E. E. 1998. Sulfonamide antibiotics. *Primary care update for Ob/Gyns*. 5: 32-35.

Curet, O., Damoiseau-Ovens, G., Sauvage, C., Sontag, N., Avenet, P., Depoortere, H., Caille, D., Bergis, O. & Scatton, B. 1998. Preclinical profile of befloxatone, a new reversible MAO-A inhibitor. *Journal of affective disorders*. 51: 287-303.

Czeizel, A. E., Kazy, Z. & Puhó, E. 2004. Tolnaftate spray treatment during pregnancy. *Reproductive toxicology*. 18: 443-444.

Dairam, A., Antunes, E. M., Saravanan, K. S. & Daya, S. 2006. Non-steroidal anti-inflammatory agents, tolmetin and sulindac, inhibit liver tryptophan 2,3-dioxygenase activity and alter brain neurotransmitter levels. *Life sciences*. 79: 2269-2274.

Dauer, W. & Przedborski, S. 2003. Parkinson's disease: Mechanisms and models. *Neuron*. 39: 889-909.

De Colibus, L., Li, M., Binda, C., Lustig, A., Edmondson, D. E. & Mattevi, A. 2005. Three-dimensional structure of human monoamine oxidase A (MAO A): relation to the structures of rat MAO A and human MAO B. *Proceedings of the national academy of sciences of the United States of America*. 102: 12684-12689.

Dragicevic, N., Delic, V., Cao, C., Copes, N., Lin, X., Mamcarz, M., Wang, L., Arendash, G. W. & Bradshaw, P. C. 2012. Caffeine increases mitochondrial function and blocks melatonin signaling to mitochondria in Alzheimer's mice and cells. *Neuropharmacology*. 63: 1368-1379.

Edmondson, D. E., Binda, C., Wang, J., Upadhyay, A. K. & Mattevi, A. 2009. Molecular and mechanistic properties of the membrane-bound mitochondrial monoamine oxidases. *Biochemistry*. 48: 4220-4230.

Edmondson, D. E., Mattevi, A., Binda, C., Li, M. & Hubálek, F. 2004. Structure and mechanism of monoamine Oxidase. *Current medicinal chemistry*. 11: 1983-1993.

Fang, J., Hwang, T. & Leu, Y. 2003. Effect of enhancers and retarders on percutaneous absorption of flurbiprofen from hydrogels. *International journal of pharmaceutics*. 250: 313-325.

Fernandez, H. H. & Chen, J. J. 2007 Monoamine oxidase-B inhibition in the treatment of Parkinson's disease. *Pharmacotherapy*. 27: 174s-185s.

Foley, P., Gerlach, M., Youdim, M. B. H. & Riederer, P. 2000. MAO-B inhibitors: multiple roles in the therapy of neurodegenerative disorders? *Parkinsonism and related disorders*. 6: 25-47.

Fowler, C. J. & Tipton, K. F. 1984. On the substrate specificities of the two forms of monoamine oxidase. *Journal of pharmacy and pharmacology*. 36: 111-115.

Fowler, C. J., Wiberg, A., Orelund, L., Marcusson, J. & Winblad, B. 1980. The effect of age on the activity and molecular properties of human brain monoamine oxidase. *J Neural Transm*. 49: 1-20.

Fowler, J. S., Logan, J., Ding, Y. S., Franceschi, D., Wang, G. J., Volkow, N. D., Pappas, N., Schlyer, D., Gatley, S. J., Alexoff, D., Felder, C., Biegon, A. & Zhu, W. 2001. Non-MAO A binding of clorgyline in white matter in human brain. *Journal of neurochemistry*. 79: 1039-1046.

Fowler, J. S., Volkow, N. D., Wang, G. J., Logan, J., Pappas, N., Shea, C. & Macgregor, R. 1997. Age-related increases in brain monoamine oxidase B in living healthy human subjects. *Neurobiology of aging*. 18: 431-435.

Fumoleau, P., Giovannini, M., Rolland, F., Votan, B., Paillarse, J. M. & the French Ondansetron Study Group. 1997. Ondansetron suppository: an effective treatment for the prevention of emetic disorders induced by cisplatin-based chemotherapy. *Oral oncology*. 33: 354-358.

Gareri, P., Stilo, G., Bevacqua, I., Mattace, R., Ferreri, G. & De Sarro, G. 1998. Antidepressant drugs in the elderly. *General pharmacology*. 30: 465-475.

Geldenhuys, W. J., Youdim, M. B. H., Carroll, R. T. & Van Der Schyf, C. J. 2011. The emergence of designed multiple ligands for neurodegenerative disorders. *Progress in neurobiology*. 94: 347-359.

Gisbert, J. P. & Pajares, J. M. 2004. Esomeprazole-based therapy in *Helicobacter pylori* eradication: a meta-analysis. *Digestive and liver disease*. 36: 253-259.

Glover, V., Halket, J. M., Watkins, P. J., Clow, A., Goodwin, B. L. & Sandler, M. 1988. Isatin: identity with the purified endogenous monoamine oxidase inhibitor tribulin. *Journal of neurochemistry*. 51: 656-659.

Grünblatt, E., Mandel, S., Jacob-Hirsch, J., Zeligson, S., Amariglio, N., Rechavi, G., Li, J., Ravid, R., Roggendorf, W., Riederer, P. & Youdim, M. B. H. 2004. Gene expression profiling of parkinsonian substantia nigra pars compacta; alterations in ubiquitin-proteasome, heat shock protein, iron and oxidative stress regulated proteins, cell adhesion=cellular matrix and vesicle trafficking genes. *Journal of neural transmission*. 111: 1543-1573.

Hamaue, N., Minami, M., Terado, M., Hirafuji, M., Endo, T., Machida, M., Hiroshige, T., Ogata, A., Tashiro, K., Saito, H. & Parvez, S. H. 2004. Comparative study of the effects of isatin, an endogenous MAO-inhibitor, and selegiline on bradykinesia and dopamine levels in a rat model of Parkinson's disease induced by the japanese encephalitis virus. *Neurotoxicology*. 25: 205-213.

Harfenist, M., Heuser, D. J., Joyner, C. T., Batchelor, J. F. & White, H. L. 1996. Selective inhibitors of monoamine oxidase. 3. Structure-activity relationship of tricyclics bearing imidazoline, oxadiazole, or tetrazole groups. *Journal of medicinal chemistry*. 39: 1857-63.

Harvey, B. H., Duvenhage, I., Viljoen, F., Scheepers, N., Malan, S. F., Wegener, G., Brink, C. B. & Petzer, J. P. 2010. Role of monoamine oxidase, nitric oxide synthase and regional brain monoamines in the antidepressant-like effects of methylene blue and selected structural analogues. *Biochemical pharmacology*. 80: 1580–1591.

Holt, A., Sharman, D. F., Baker, G. B. & Palcic, M. M. 1997. A continuous spectrophotometric assay for monoamine oxidase and related enzymes in tissue homogenates. *Analytical biochemistry*. 244: 384-392.

Ildiz, G. O. & Akyuz, S. 2012. Conformational analysis and vibrational study of sulphanilamide. *Vibrational spectroscopy*. 58: 12-18.

Innocenti, A., Firnges, M. A., Antel, J., Wurl, M., Scozzafava, A. & Supuran, C. T. 2005. Carbonic anhydrase inhibitors. Inhibition of the membrane-bound human and bovine isozymes IV with sulphonamides. *Bioorganic & medicinal chemistry letters*. 15: 1149-1154.

Inoue, H., Castagnoli, K., Van Der Schyf, C., Mabic, S., Igarashi, K. & Castagnoli, N. 1999. Species-dependent differences in monoamine oxidase A and B-catalyzed oxidation of various C4 substituted 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridinyl derivatives. *Journal of pharmacology and experimental therapeutics*. 291: 856–864.

Jahng, J. W., Houpt, T. A., Wessel, T. C., Chen, K., Shih, J. C. & Joh, T. H. 1997. Localization of monoamine oxidase A and B Mrna in the rat brain by *in situ* hybridization. *Synapse*. 25: 30-36.

Jansen Steur, E. N. & Ballering, L. A. 1999. Combined and selective monoamine oxidase inhibition in the treatment of depression in Parkinson's disease. *Advances in neurology*. 80: 505-508.

- Johnston, J. P. 1968. Some observations upon a new inhibitor of monoamine oxidase in brain tissue. *Biochemical pharmacology*. 17: 1285-1297.
- Kalaria, R. N., Mitchell, M. J. & Harik, S. I. 1988. Monoamine oxidases of the human brain and liver. *Brain*. 111: 1441–1451.
- Kerr, J. S., Fairweather, D. B. & Hindmarch, I. 1992. The effects of acute and repeated doses of moclobemide on psychomotor performance and cognitive function in healthy elderly volunteers. *Human psychopharmacology*. 7: 273-279.
- Khalil, A. A., Davies, B. & Castagnoli Jr, N. 2006. Isolation and characterization of a monoamine oxidase B selective inhibitor from tobacco smoke. *Bioorganic & medicinal chemistry*. 14: 3392-3398.
- Khan, S. Z. 2006. Mitochondrial complex-1 in Parkinson's disease. *Neurology India*. 54: 351.
- Knoll, J. 1988. Extension of life span of rats by long-term (-) Deprenyl treatment. *Mount Sinai journal of medicine*. 55: 67-74.
- Lamarre-Cliche, M., du Souich, P., de Champlain, J. & Larochelle, P. 2008. Pharmacokinetic and pharmacodynamic effects of midodrine on blood pressure, the autonomic nervous system, and plasma natriuretic peptides: a prospective, randomized, single-blind, two-period, crossover, placebo-controlled study. *Clinical therapeutics*. 30: 1629-1638.
- Langer, T. & Wolber, G. 2004. Pharmacophore definition and 3D searches. *Drug discovery today: technologies*. 1: 203-207.
- Langston, J. W., Ballard, P., Tetrud, J. W. & Irwin, I. 1983. Chronic Parkinsonism in humans due to a product of meperidine-analog synthesis. *Science*. 219: 979 –980.
- Lees, A. J., Hardy, J. & Revesz, T. 2009. Parkinson's disease. *The lancet*. 373: 2055-2066.
- Legoabe, L., Kruger, J., Petzer, A., Bergh, J. J. & Petzer, J. P. 2011. Monoamine oxidase inhibition by selected anilide derivatives. *European journal of medicinal chemistry*. 46: 5162-5174.
- Lewitt, P. A. & Taylor, D. C. 2008. Protection against Parkinson's disease progression: clinical experience. *Neurotherapeutics*. 5: 210-225.

- Li, F., Hayashi, T., Jin, G., Deguchi, K., Nagotani, S., Nagano, I., Shoji, M., Chan, P. H. & Abe, K. 2005. The protective effect of dantrolene on ischemic neuronal cell death is associated with reduced expression of endoplasmic reticulum stress markers. *Brain research*. 1048: 59-68.
- Liu, Y., Liu, G., Liu, Y., Li, S., Jia, J., Zhang, M., Lu, C., Zhang, Y., Li, X. & Yu, C. 2009. Pharmacokinetic and bioequivalence comparison between orally disintegrating and conventional tablet formulations of flurbiprofen: a single-dose, randomized-sequence, open-label, two-period crossover study in healthy chinese male volunteers. *Clinical therapeutics*. 31: 1787-1795.
- Lorist, M. M. & Tops, M. 2003. Caffeine, fatigue, and cognition. *Brain and cognition*. 53: 82-94.
- Ma, J., Yoshimura, M., Yamashita, E., Nakagawa, A., Ito, A. & Tsukihara, T. 2004. Structure of rat monoamine oxidase A and its specific recognitions for substrates and inhibitors. *Journal of molecular biology*. 338: 103-114.
- Magyar, K., Szende, B., Jenei, V., Tábi, T., Pálfi, M. & Szöko, É. 2010. R-Deprenyl: pharmacological spectrum of its activity. *Neurochemical research*. 35: 1922-1932.
- Melena, J., Wood, J. P. M. & Osborne, N. N. 1999. Betaxolol, a β_1 -adrenoceptor antagonist, has an affinity for L-type Ca^{2+} channels. *European journal of pharmacology*. 378: 317-322.
- Miwa, N., Kurosaki, K., Yoshida, Y., Kurokawa, M., Saito, S. & Shiraki, K. 2005. Comparative efficacy of acyclovir and vidarabine on the replication of varicella-zoster virus. *Antiviral research*. 65: 49-55.
- Moneghini, M., Carcano, A., Zingone, G. & Perissutti, B. 1998. Studies in dissolution enhancement of atenolol. Part I. *International journal of pharmaceutics*. 175: 177-183.
- Muguet, D., Broussolle, E. & Chazot, G. 1995. Apomorphine in patients with Parkinson's disease. *Biomedicine and pharmacotherapy*. 49: 197-209.
- Munguia, R. & Daniel, S. J. 2008. Ototopical antifungals and otomycosis: a review. *International journal of pediatric otorhinolaryngology*. 72: 453-459.
- Nandigama, R. K., Newton-Vinson, P. & Edmondson, D. E. 2002. Phentermine inhibition of recombinant human liver monoamine oxidases A and B. *Biochemical pharmacology*. 63: 865-9.
- Nasu, T., Oosako, H. & Shibata, H. 1996. Dantrolene blocks the tonic contraction and calcium influx evoked by K^+ in ileal longitudinal smooth muscle. *General pharmacology*. 27: 513-517.

- Nicotra, A. & Parvez, S. H. 1999. Methods for assaying monoamine oxidase A and B activities: recent developments. *Biogenic amines*. 15: 307-320.
- Nicotra, A., Pierucci, F., Parvez, H. & Senatori, O. 2004. Monoamine oxidase expression during development and aging. *Neurotoxicology*. 25: 155-165.
- Nies, A. S. & Shand, D. G. 1975. Clinical pharmacology of propranolol. *Circulation*. 52: 6-15.
- Novaroli, L., Reist, M., Favre, E., Carotti, A., Catto, M. & Carrupt, P. A. 2005. Human recombinant monoamine oxidase B as reliable and efficient enzyme source for inhibitor screening. *Bioorganic & medicinal chemistry*. 13: 6212-6217.
- Olanow, C. W., Hauser, R. A., Gauger, L., Malapira, T., Koller, W., Hubble, J., Bushenbark, K., Lilienfeld, D. & Esterlitz, J. 1995. The effect of deprenyl and levodopa on the progression of Parkinson's disease. *Annals of neurology*. 38: 771-777.
- Petrides, P. E., Gisslinger, H., Steurer, M., Linkesch, W., Krumpl, G., Schüller, A. & Widmann, R. 2009. Pharmacokinetics, bioequivalence, tolerability, and effects on platelet counts of two formulations of anagrelide in healthy volunteers and patients with thrombocythemia associated with chronic myeloproliferation. *Clinical therapeutics*. 31: 386-398.
- Petzer, A., Harvey, B. H., Wegener, G. & Petzer, J. P. 2012. Azure B, a metabolite of methylene blue, is a high-potency, reversible inhibitor of monoamine oxidase. *Toxicology and applied pharmacology*. 258: 403-409.
- Ramachandrai, C. T., Subramanyam, N., Bar, K. J., Baker, G. & Yeragani, V. K. 2011. Antidepressants: from MAOIs to SSRIs and more. *Indian journal of psychiatry*. 53: 180-182.
- Ramsay, R. R., Dunford, C. & Gillman, P. K. 2007. Methylene blue and serotonin toxicity: inhibition of monoamine oxidase A (MAO A) confirms a theoretical prediction. *British journal of pharmacology*. 152: 946-951.
- Rebrin, I., Geha, R. M., Chen, K. & Shih, J. C. 2001. Effects of carboxyl-terminal truncations on the activity and solubility of human monoamine oxidase B. *Journal of biological chemistry*. 276: 29499-29506.
- Riederer, P., Lachenmayer, L. & Laux, G. 2004. Clinical applications of MAO-inhibitors. *Current medicinal chemistry*. 11: 2033-2043.
- Rozman, B. 2002. Clinical Pharmacokinetics of Leflunomide. *Clinical pharmacokinetics*. 41: 421-430.

Saura, J., Nadal, E., van den Berg, B., Vila, M., Bombi, J. A. & Mahy, N. 1996. Localization of monoamine oxidases in human peripheral tissues. *Life sciences*. 59: 1341–1349.

Singer, T. P., Ramsay, R. R., McKeown, K., Trevor, A., Castagnoli Jr, N. E. 1988. Mechanism of the neurotoxicity of 1-methyl-4-phenylpyridinium (MPP)⁺, the toxic bioactivation product of 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP). *Toxicology*. 49: 17-23.

Son, S. Y., Ma, J., Kondou, Y., Yoshimura, M., Yamashita, E. & Tsukihara, T. 2008. Structure of human monoamine oxidase A at 2.2-Å. Resolution: the control of opening the entry for substrates/inhibitors. *Proceedings of the national academy of sciences of the United States of America*. 105: 5739-5744.

Srirangam, R. & Soumyajit, M. 2010. Passive asymmetric transport of hesperetin across isolated rabbit cornea. *International journal of pharmaceutics*. 394: 60-67.

Stocchi, F., Vacca, L., Grassini, P., De Pandis, M. F., Battaglia, G., Cattaneo, C. & Fariello, R. G. 2006. Symptom relief in Parkinson disease by safinamide: Biochemical and clinical evidence of efficacy beyond MAO-B inhibition. *Neurology*. 67: 24-29.

Thase, M. E., Trivedi, M. H. & Rush, A. J. 1995. MAOIs in the contemporary treatment of depression. *Neuropsychopharmacology*. 12: 185-219.

The Parkinson Study Group. 1996. Effect of lazabemide on the progression of disability in early Parkinson's disease. *Annals of Neurology*. 40: 99-107.

Tipton, K. F., Boyce, S., O'sullivan, J., Davey, G. P. & Healy, J. 2004. Monoamine oxidases: certainties and uncertainties. *Current medicinal chemistry*. 11: 1965-1982.

Turkman, H., Zengin, G. & Buyukkircali, B. 2011. Synthesis of sulfanilamide derivatives and investigation of *in vitro* inhibitory activities and antimicrobial and physical properties. *Bioorganic chemistry*. 39: 114-119.

Weinstock, M., Luques, L., Poltyrev, T., Bejar, C. & Shoham, S. 2011. Ladostigil prevents age-related glial activation and spatial memory deficits in rats. *Neurobiology of aging*. 32: 1069-1078.

Westlund, K. N., Denney, R. M., Kochersperger, L. M., Rose, R. M. & Abell, C. W. 1985. Distinct monoamine oxidase A and B populations in primate brain. *Science*. 230: 181–183.

Westlund, K. N., Denney, R. M., Rose, R. M. & Abell, C. W. 1988. Localization of distinct monoamine oxidase A and Monoamine oxidase B cell populations in human brainstem. *Neuroscience*. 25: 439-456.

- Willoughby, J., Glover, V., Sandler, M., Albanese, A., Jenner, P. & Marsden, C. D. 1988. Monoamine oxidase activity and distribution in marmoset brain: implications for MPTP toxicity. *Neuroscience letters*. 90: 100 –106.
- Yamada, M. & Yasuhara, H. 2004. Clinical pharmacology of MAO inhibitors: safety and future. *Neurotoxicology*. 25: 215-221.
- Yamakage, M., Iwasaki, S., Jeong, S., Satoh, J. & Namiki, A. 2009. Beta-1 selective adrenergic antagonist landiolol and esmolol can be safely used in patients with airway hyperreactivity. *Heart and lung: journal of acute and critical care*. 38: 48-55.
- Yang, Y., Wolfram, J., Shen, H., Fang, X. & Ferrari, M. 2012. Hesperetin: an inhibitor of the transforming growth factor- β (TGF- β) signalling pathway. *European journal of medicinal chemistry*. 58: 390-395.
- Youdim, M. B. H. & Bakhle, Y. S. 2006. Monoamine oxidase: isoforms and inhibitors in Parkinson's disease and depressive illness. *British journal of pharmacology*. 147: 287-296.
- Youdim, M. B. H., Edmondson, D. & Tipton, K. F. 2006. The therapeutic potential of monoamine oxidase inhibitors. *Nature reviews neuroscience*. 7: 295-309.
- Youdim, M. B. H. & Weinstock, M. 2004. Therapeutic applications of selective and non-selective inhibitors of monoamine oxidase A and B that do not cause significant tyramine potentiation. *Neurotoxicology*. 25: 243-250.

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Mom and Dad, thank you for all your sacrifices over the years. Thank you for supporting me and always being there for me when I needed you the most. Dawie, you are my rock and I will always love you.

Annexure A – Letter of permission



Ms. A. Pienaar

1 June 2013

To whom it may concern:

Dear Sir / Madam

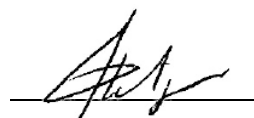
CO-AUTHORSHIP ON RESEARCH PAPERS

The undersigned, as co-authors of the research articles listed below, hereby give permission to Ms. Anke Pienaar to submit the papers as part of the degree M.Sc. in Pharmaceutical Chemistry at the North-West University, Potchefstroom Campus.

I. The inhibition of monoamine oxidase by esomeprazole

II. The interactions of caffeine with monoamine oxidase

Yours sincerely,

A handwritten signature in black ink, appearing to read 'J.P. Petzer', written over a horizontal line.

Prof. J.P. Petzer

A handwritten signature in black ink, appearing to read 'A. Petzer', written over a horizontal line.

Dr. A. Petzer

Annexure B – Author instructions

Life Sciences



LIFE SCIENCES

AUTHOR INFORMATION PACK

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DESCRIPTION

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1 Park HY, Lim H, Pyo H, Kwon YS. Downregulation of matrix metalloproteinase-13 by the root extract of *Caythula officinalis* Kuan and its constituents in IL-1 β -treated chondrocytes. *Planta Med* 2011; 75: 1528–1530

2 Kerner W, Pfeiffer EF. The artificial pancreas. In: Samols E (ed). *The endocrine pancreas*. New York: Raven Press, 1991: 441–456

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Annexure C – Contributions of authors

Author	Contributions	Consent*
A. Pienaar	Responsible for planning the study and carrying out the modeling and enzymology. Writing of the dissertation and articles.	
Prof. J.P. Petzer	Technical assistance with the modeling section of this study and the writing of the articles. Planning of the study.	
Dr. A. Petzer	Technical assistance with the enzymology section of the study.	

*I declare that I have approved the articles and that my role in the study was as indicated above. I hereby give my consent that the articles may be published as part of the dissertation of A. Pienaar.

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