



## REFERENCES

- [1] O'Donnell, A. B., Araujo, A. B. & McKinlay, J. B. (2004). The health of normally aging men: the Massachusetts male aging study (1987-2004). Experimental Gerontology, 39, 975-984.
- [2] Thai Erectile Dysfunction Epidemiologic Study Group (TEDES). (2000). An epidemiological study of erectile dysfunction in Thailand (Part 1: Prevalence). Journal of the Medical Association of Thailand, 83, 872-879.
- [3] Giuliano, F. et al. (2002). Prevalence of erectile dysfunction in France: results of an epidemiological survey of a representative sample of 1004 men. European Urology, 42, 382-389.
- [4] Jung, A. & Schill, W. (2004). Male sexuality with advancing age. European Journal of Obstetrics & Gynecology and Reproductive Biology, 113, 123-125.
- [5] Kulkarni, S. K. & Reddy, D. S. (1998). Pharmacotherapy of male erectile dysfunction with sildenafil. Indian Journal of Pharmacology, 30, 367-378.
- [6] Kim, N. N. et al. (2000). Cross – regulation of intracellular cGMP and cAMP in cultured human corpus cavernosum smooth muscle cells. Molecular Cell Biology Research Communication, 4, 10-14.
- [7] Kukreja, R. C. et al. (2005). Pharmacological preconditioning with sildenafil: basic mechanisms and clinical implications. Vascular Pharmacology, 42, 219-232.
- [8] Niyomdham, C. (1992). Note on Thai and Indo-Chinese Phaseoleae (*Leguminosae-Papilionoideae*). Nordic Journal of Botany, 12, 344-345.
- [9] Smitinand T. Thai plant names, (2001). The Forest herbarium, Bangkok : Royal Forest Department.
- [10] Sunthorn, A. (1931). The remedy pamphlet of Kwao Khreu tuber of Luang Anusarnsunthorn. Chiang Mai : Chiang Mai Upatipongsa Press.
- [11] Roengsumran, S. et al. (2000). Flavonoid glycoside from *Butea superba* Roxb. and their cAMP phosphodiesterase inhibitory activity. Journal of Scientific Research, 25, 169-176.

- [12] Chansakaow, S. et al. (2000). Identification of deoxymiroestrol as the actual rejuvenating principle of "Kwao Keur", *Pueraria mirifica*. The known microestrol may be an artifact. *Journal of Natural Products*, 63, 173-175.
- [13] Malaivijitnound, S. et al. (2004). Different effects of *Pueraria mirifica*, a herb containing phytoestrogens, on LH and FSH secretion in gonadectomized female and male rats. *Journal of Pharmacological Sciences*, 96, 428-435.
- [14] Cherdshewasart, W. et al (2004). The differential anti-proliferation effect of white (*Pueraria mirifica*), red (*Butea superba*), and black (*Mucuna collettii*) Kwao Krua plants on the growth of MCF-7 cells. *Journal of Ethnopharmacology*, 93, 255-260.
- [15] Ruksilp, T. (1994). *Chemical constituents of the tuberous roots of Butea superba Roxb.* Master thesis, Chulalongkorn University, Bangkok.
- [16] Phansawan, B. et al (2003). Anitoxidative activity of Kwao Kreur. *The 3<sup>rd</sup> world Congress on Medicinal Plant and Aromatic Plants for Human Welfare*, Chiang Mai : Chiang Mai University.
- [17] Nuengchamnong, N. et al. (2005). HPLC coupled on-line to ESI-MS and a DPPH-based assay for the rapid identification of anti-oxidants in *Butea superba*. *Phytochemical Analysis*, 16, 422-428.
- [18] Yadava, R. N. & Reddy, K. I. (1998). A new bio-active flavonol glycoside from the stems of *Butea superba* Roxb. *Journal of Asian Natural Products Research*, 1, 139-145.
- [19] Pinmongkholgul, S. 2003. *Comparison of the effects of Red Hwao Keur (Butea superba Roxb.) from two different areas on reproductive organs, reproductive behavior and erection in male Albino rat (Rattus Norvegicus)*. Master thesis, Suranaree University of Technology, Nakon Ratchasima.
- [20] Cherdshewasart, W. & Nimsakul, N. (2003). Clinical trial of *Butea superba*, an alternative herbal treatment erectile dysfunction. *Asian Journal of Andrology*, 5, 243-246.

- [21] Manosroi, J. et al. (2003). Immunomodulating activities of extracts and aromatic oils from Thai medicinal plants. The 3<sup>rd</sup> world Congress on Medicinal Plant and Aromatic Plants for Human Welfare, Chiang Mai : Chiang Mai University.
- [22] Ingkaninan, K. et al. (2003). Screening for acetylcholinesterase inhibitory activity in plants used in Thai traditional rejuvenating and neurotic remedies. Journal of Ethnopharmacology, 89, 261-264.
- [23] Bhuntaku, P. (2003). Subchronic effects of Red Kwao Khrua (*Butea superba Roxb.*) on physiological changes in male rats (*Rattus norvegicus*). Senior Project, Chulalongkorn University, Bangkok.
- [24] Pongpanparadon, A., Aritajat, S. & Saenphet, K. (2002). The toxicology of *Butea superba*, Roxb. Southeast Asian Journal of Tropical Medicine and Public Health, 33 (supply), 33, 155-158.
- [25] Chavalittumrong, P. et al. (2001). Chronic toxicity of *Butea superba* Roxb. Journal of Medical Science, 3, 182-195.
- [26] Moore, K. L. & Dalley, A. F. (1999). Clinically Oriented Anatomy (4<sup>th</sup> ed). Philadelphia: Lippincott Williams and Wilkins.
- [27] Lipshultz, L. I. & Howards, S. S. (1991). Infertility in the male (2<sup>nd</sup> ed). USA : Mosby Year Book.
- [28] Kirby, R. S., Carson, C. & Webster, G. D. (1991). Impotence: diagnosis and management of male erectile dysfunction. Jordon Hill: Oxford.
- [29] Argiolas, A. & Melis, M. R. (2005). Central control of penile erection: role of the paraventricular nucleus of the hypothalamus. Progress in Neurobiology, 76, 1-21.
- [30] Giuliano, F. & Rampin, O. (2000). Central neural regulation of penile erection. Neuroscience and Biobehavioral Reviews, 24, 517-533.
- [31] Giuliano, F. et al. (1997). Erectile response to hypothalamic stimulation in rats: role of peripheral nerves. American Journal of Physiology, 273, R1990-R1997.
- [32] Burnett, A. L. (1995). Role of nitric oxide in the physiology of erection. Biology of Reproduction, 52, 485-489.

- [33] Gonzalez-Cadavid, N. F. et al. (2000). Expression of penile neuronal nitric oxide synthase variants in the rat and mouse penile nerves. Biology of Reproduction, 63, 704-714.
- [34] Hallen, K. et al. (2005). Nerve-induced release of nitric oxide from the rabbit corpus cavernosum is modulated by cyclic guanosine 3', 5'-monophosphate. Neuroscience, 133, 169-174.
- [35] Ding, Y-Q. et al. (1995). Colocalization of vasoactive intestinal polypeptide and nitric oxide in penis-innervating neurons in the major pelvic ganglion of the rat. Neuroscience Research, 22, 129-131.
- [36] Kubin, M., Wagner, G. & Fugl-Meyer, A. R. (2003). Epidemiology of erectile dysfunction. International Journal of Impotence Research, 15, 63-71.
- [37] Shiri, R. et al. (2003). Effect of chronic diseases on incidence of erectile dysfunction. Urology, 62, 1097-1102.
- [38] Kim, S. W. et al. (2001). Potential predictors of asymptomatic ischemic heart disease in patients with vasculogenic erectile dysfunction. Urology, 58, 441-445.
- [39] Shiri, R. et al. (2004). Effect of life-style factors on incidence of erectile dysfunction. International Journal of Impotence Research, 16, 389-394.
- [40] El-Sakka, A. I. (2005). Prevalence of Peyronie's disease among patients with erectile dysfunction. Andrology, 1-6.
- [41] Fecik, S. E. (1998). Drug-induced sexual dysfunction. Medical Update for Psychiatrists, 3, 176-181.
- [42] Davis-Joseph, B., Tieffer, L. & Melman, A. (1995). Accuracy of the initial history and physical examination to establish the etiology of erectile dysfunction. Urology, 45, 498-502.
- [43] Hansen, P. V. et al. (1990). Long-term recovery of spermatogenesis after radiotherapy in patients with testicular cancer. Radiotherapy and Oncology, 18, 117-125.
- [44] Foster, R. S. et al. (1994). Fertility considerations in nerve-sparing retroperitoneal lymph node dissection. World Journal of Urology, 12, 136-138.

- [45] Rosen, R. C. et al. (1997). The international index of erectile function (IIEF): a multidimensional scale for assessment of erectile dysfunction. *Urology*, 49, 822-830.
- [46] Pasqualotto, F. F. et al. (2005). Semen profile, testicular volume, and hormonal levels in infertile patients with varicoceles compared with fertile men with and without varicoceles. *Fertility and Sterility*, 83, 74-77.
- [47] Kaiser, F. E. & Korenman, S. G. (1988). Impotence in diabetic man. *American Journal of Medicine*, 85, 147-152.
- [48] Chen, J., Greenstein, A. & Matzkin, H. (2000). Is a second injection of vasoactive medication necessary during color duplex doppler evaluation of young patients with veno-occlusive erectile dysfunction? *Urology*, 55, 927-930.
- [49] Chiou, R. K. et al. (1998). Hemodynamic patterns of pharmacologically induced erection: evaluation by color Doppler sonography. *Journal of Urology*, 159, 120-121.
- [50] The, H. S. et al. (2002). Penile colour duplex ultrasonography as a screening tool for venogenic erectile dysfunction. *Annals of the Academy of Medicine Singapore*, 31, 165-169.
- [51] Yang, C. C. & Bradley, W. E. (1999). Somatic innervation of the human bulbocavernosus muscle. *Clinical Neurophysiology*, 110, 412-418.
- [52] Bagheri, H. et al. (1995). Evidence for activation of both adrenergic and cholinergic nervous pathways by yohimbine, an alpha 2-adrenoceptor antagonist. *Fundamental & Clinical Pharmacology*, 9, 248-254.
- [53] Clark, J. T., Smith, E. R. & Davidson, J. M. (1983). Enhancement of sexual motivation in male rats by yohimbine. *Science*, 225, 847-849.
- [54] Vogt, H. J. et al. (1997). Double -blind, placebo-controlled safety and efficacy trial with yohimbine hydrochloride in the treatment of nonorganic erectile dysfunction. *International Journal of Impotence Research*, 9, 155-161.

- [55] Ernst, E. & Pittler, M. H. (1998). Yohimbine for erectile dysfunction: a systematic review and meta-analysis of randomized clinical trials. Journal of Urology, 159, 433-436.
- [56] Sonda, L. P., Mazo, R. & Chancellor, M. B. (1990). The role of yohimbine for the treatment of erectile impotence. Journal of Sex & Marital Therapy, 16, 15-21.
- [57] Labret, T. et al. (2002). Efficacy and safety of a novel combination of L-arginine glutamate and yohimbine hydrochloride: A new oral therapy for erectile dysfunction. European Urology, 41, 608-613.
- [58] Goldstein, I. I. (2000). Oral phentolamine: an alpha-1, alpha-2 adrenergic antagonist for the treatment of erectile dysfunction. International Journal of Impotence Research, 12(S1), S75-S80.
- [59] Goldstein, I. et al. (2001). Vasomax for the treatment of male erectile dysfunction. World Journal of Urology, 19, 51-56.
- [60] Jeremy, J. Y. et al. (1997). Effects of sildenafil, a type-5 cGMP phosphodiesterase inhibitor, and papaverine on cyclic GMP and cyclic AMP levels in the rabbit corpus cavernosum *in vitro*. British Journal of Urology, 79, 958-963.
- [61] Rajfer, J. et al. (1992). Nitric oxide as a mediator of relaxation of the corpus cavernosum in response to nonadrenergic, noncholinergic neurotransmission. New England Journal of Medicine, 326, 90-94.
- [62] Corbin, J. D., Francis, S. H. & Osterloh, I. H. (2000). Effects of sildenafil on cAMP and cGMP levels in isolated human cavernous and cardiac tissue. Urology, 56, 545-548
- [63] Montorsi, F. et al. (1999). Efficacy and safety of fixed -dose oral sildenafil in the treatment of erectile dysfunction of various etiologies. Urology, 53, 1011-1018.
- [64] Kloner, R. A. & Jarow, J. P. (1999). Erectile dysfunction and sildenafil citrate and cardiologists. American Journal of Cardiology, 83, 576-582.

- [65] Hsieh, G. C. et al. (2004). Central mechanisms regulating penile erection in conscious rats: the dopaminergic systems related to the proerectile effect to apomorphine. Journal of Pharmacology and Experimental Therapeutics, 308, 330-338.
- [66] Montorsi, F. et al. (2003). Apomorphine-induced brain modulation during sexual stimulation: a new look at central phenomena related to erectile dysfunction. International Journal of Impotence Research, 15, 203-209.
- [67] Heaton, J. P. W. et al. (1995). Recovery of erectile dysfunction by the oral administration of apomorphine. Urology, 45, 200-206.
- [68] Moody, J. A. et al. (1997). Effects of long-term oral administration of L-arginine on the rat erectile response. Journal of Urology, 158, 942-947.
- [69] Chen, J. et al. (1999). Effect of oral administration of high-dose nitric oxide donor L-arginine in men with organic erectile dysfunction: results of a double-blind, randomized, placebo-controlled study. BJU International, 83, 269-273.
- [70] Angulo, J. et al. (2003). Activation and potentiation of the NO/cGMP pathway by NG-hydroxyl-L-arginine in rabbit corpus cavernosum under normoxic and hypoxic conditions and ageing. British Journal of Pharmacology, 138, 63-70.
- [71] Sparwasser, C. et al. (1994). Smooth muscle tone regulation in rabbit cavernosal and spongiosal tissue by cyclic AMP- and cyclic GMP-dependent mechanisms. Journal of Urology, 152, 2159-2163.
- [72] Pilatz, A. et al. (2005). *In vitro* viability of human cavernosal endothelial and fibroblastic cells after exposure to papaverine/phentolamine and prostaglandin E1. BJU International, 95, 1351-1357.
- [73] Linet, O. I. et al. (1996). Efficacy and safety of intracavernosal alprostadil in men with erectile dysfunction. New England Journal of Medicine, 334, 873-877.
- [74] Padma-Nathan, H. et al. (1997). Treatment of men with erectile dysfunction with transurethral alprostadil. New England Journal of Medicine, 336, 1-7.
- [75] Andersson, K. E. (2001). Pharmacology of penile erectile. Pharmacological Reviews, 53, 417-450.

- [76] Kaplan, S. A. et al. (1998). Combination therapy using oral alpha-blockers and intracavernosal injection in men with erectile dysfunction. *Urology*, 52, 739-743.
- [77] Shirai, M. et al. (1990). Content and distribution of vasoactive intestinal polypeptide (VIP) in cavernous tissue of human penis. *Urology*, 35, 360-363.
- [78] Fahrenkrung, J. (1993). Transmitter role of vasoactive intestinal peptide. *Pharmacology & Toxicology*, 72, 354-363.
- [79] Hedlund, P. et al. (1995). Pituitary adenylate cyclase activity polypeptide, helospectin, and vasoactive intestinal polypeptide in human corpus cavernosum. *British Journal of Pharmacology*, 116, 2258-2266.
- [80] Dinsmore, W. W. et a. (1999). Treating men with predominantly nonpsychogenic erectile dysfunction with intracavernosal vasoactive intestinal polypeptide and phentolamine mesylate in a novel autoinjector system: a multicentre double-blind placebo-controlled study. *BJU International*, 83, 274-279.
- [81] Juenemann, K. P. et al. (1987). The role of vasoactive intestinal polypeptide as a neurotransmitter in canine penile erection: a combined in vivo and immunohistochemical study. *Journal of Urology*, 138, 871-877.
- [82] McMahon, C. G. (1996). A pilot study of the role of intracavernous injection of vasoactive intestinal peptide (VIP) and phentolamine mesylate in the treatment of erectile dysfunction. *International Journal of Impotence Research*, 8, 233-236.
- [83] Cos..ta, P. et al. (1992). Pharmacokinetics of moxisylyte in healthy volunteers after intravenous and oral administration. *Journal of Pharmaceutical Sciences*, 81, 1223-1226.
- [84] Imagawa, A. et al. (1989). Effect of moxysylate hydrochloride on isolated human penile corpus cavernosum tissue. *Life Science*, 44, 619-623.
- [85] Buvat, J. et al. (1989). Safety of intracavernous injections using an alpha-blocking agent. *Journal of Urology*, 141, 1364-1367.
- [86] Buvat, J. et al. (1998). Double-blind multicenter study comparing alprostadil alpha-cyclodextrin with moxisylyte chlorhydrate in patients with chronic erectile dysfunction. *Journal of Urology*, 141, 116-119.

- [87] Fischer, J. A. & Born, W. (1985). Novel peptides from the calcitonin gene: expression, receptors and biological function. Peptides, 6(supply), 265-271.
- [88] Brayden, J. E. et al. (1991). Role of potassium channels in the vascular response to endogenous and pharmacological vasodilators. Blood Vessels, 28, 147-153.
- [89] Stief, C. G. et al. (1991). Calcitonin gene related peptide: a possible role in human penile erection and its therapeutic application in important patient. Journal of Urology, 146, 1010-1014.
- [90] Djamilian, M. et al. (1993). Followup results of a combination of calcitonin gene – related peptide and prostaglandin E1 in the treatment of erectile dysfunction. Journal of Urology, 149, 1296-1298.
- [91] Truss, M. C. et al. (1994). Role of the nitric oxide donor linsidomine chlorhydrate (SIN-1) in the diagnosis and treatment of erectile dysfunction. Urology, 44, 553-556.
- [92] Stief, C. G. et al. (1992). Preliminary results with the nitric oxide donor linsidomine chlorhydrate in the treatment of human erectile dysfunction. Journal of Urology, 148, 1437-1440.
- [93] Artz, J. D. et al. (2002). Effects of nitroglycerin on soluble guanylate cyclase. Journal of Biological Chemistry, 277, 18253-18256.
- [94] Christ, G. J. et al. (1995). Characterization of nitroglycerine-induced relaxation in human corpus cavernosum smooth muscle: implications to erectile physiology and dysfunction. Canadian Journal of Physiology and Pharmacology, 73, 1714-1726.
- [95] Claes, H. & Baert, L. (1989). Transcutaneous nitroglycerin therapy in the treatment of impotence. Urologia internationalis, 44, 309-312.
- [96] Kim, E. D., el-Rashidy, R. & Mcvary, K. T. (1995). Papaverine topical gel for treatment of erectile dysfunction. Journal of Urology, 153, 361-365.
- [97] Olesn, E. A. et al. (2002). A randomized clinical trial of 5% topical minoxidil versus 2% topical minoxidil and placebo in the treatment of androgenetic alopecia in men. Journal of the American Academy of Dermatology, 47, 377-385.

- [98] Radomski, S. B., Herschorn, S. & Rangaswamy, S. (1994). Topical minoxidil in the treatment of male erectile dysfunction. *Journal of Urology*, 151, 1225-1226.
- [99] Cavallini, G. (1994). Minoxidil versus nitroglycerine: a prospective, double-blind, controlled trial in transcutaneous therapy for organic impotence. *International Journal of Impotence Research*, 6, 205-212.
- [100] McVary, K. T. et al. (1999). Topical prostaglandin E1 SEPA gel for the treatment of erectile dysfufnction. *Journal of Urology*, 162, 726-732.
- [101] Kim, E. D. & McVary, K. T. (1995). Topical prostaglandin-E1 for the treatment of erectile dysfunction. *Journal of Urology*, 153, 1828-1830.
- [102] Melnik, T. & Abdo, C. H. (2005). Psychogenic erectile dysfunction: comparative study of three therapeutic approaches. *Journal of Sex & Marital Therapy*, 31, 243-255.
- [103] Dutta, T. C. & Francois, J. (1999). Vacuum constriction devices for erectile dysfunction: a long term, prospective study of patients with mild, moderate, and severe dysfunction. *Urology*, 54, 891-893.
- [104] Mulhall, J. P., et al. (2004). Effect of testosterone supplementation on sexual function in hypogonadal men with erectile dysfunction. *Urology*, 63, 348-353.
- [105] Gerstenbluth, R. E. et al. (2002). Prostate-specific antigen changes in hypogonadal men treated with testosterone replacement. *Journal of Andrology*, 23, 922-926.
- [106] Maggi, M. et al. (2000). Erectile dysfunction: from biochemical pharmacology to advances in medical therapy. *European Journal of Endocrinology*, 143, 143-154.
- [107] Mizusawa, H. et al. (2001). Morphological and functional in vitro and in vivo characterization of the mouse corpus cavernosum. *British Journal of Pharmacology*, 132, 1333-1341.
- [108] Mizysawa, H., Ishizuka, O. & Nishizawa, O. (2003). Animal models for studying penile hemodynamics. *Asian Journal of Andrology*, 4, 225-228.
- [109] Escrig, A., Gonzalez-Mora, J. L. & Mas, M. (1999). Nitric oxide release in penile corpora cavernosa in a rat model of erection. *Journal of Physiology*, 516, 261-269.

- [110] Claes, H., Bijnens, B. & Baert, L. (1996). The hemodynamic influence of the ischiocavernosus muscles on erectile function. Journal of Urology, 156, 986-990.
- [111] Ohl, D. A. & Menge, A. C. (1996). Assesment of sperm function and clinical aspects of impaired sperm function. Frontiers in Bioscience, 1, e96-e108.
- [112] Vyt, P. et al. (2004). Motility assessment of porcine spermatozoa: a comparison of methods. Reproduction in Domestic Animals, 39, 447-453.
- [113] Ecobichon, D. J. (1997). The basis of toxicology testing. (2<sup>nd</sup> Edition). New York: CRC press.
- [114] Schlede, E. et al. (2005). Oral acute toxic class method: a successful alternative to the oral LD<sub>50</sub> test. Regulatory Toxicology and Pharmacology, 42, 15-23.
- [115] Ingkaninan, K. and Meechaiyo, N. (2001). Chemical analysis of *B. superba* extracts. Phitsanulok : Naresuan University.
- [116] Quinlan, D. M., Nelson, R. J. & Walsh, P. C. (1991). Cavernous nerve grafts restore erectile function in denervated rats. Journal of Urology, 145, 378-379.
- [117] Bavister, B. D. & Andrews, J. C. (1988). A rapid sperm motility bioassay procedure for quality-control testing of water and culture media. Journal of in vitro fertilization and embryo transfer : IVF, 5, 67-75.
- [118] Schkede, E. et al. (2005). Oral acute toxic class method: a successful alternative to the oral LD<sub>50</sub> test. Regulatory Toxicology and Pharmacology, 42, 15-23.
- [119] Ratnasooriya, W. D., Jayakody, J. R. & Dharmasiri, M. G. (2004). Sodium nitroprusside impairs sexual competence of male rats. Human & Experimental Toxicology, 23, 187-192.
- [120] Venkatesh, K. et al. (2001). Allosteric sites of phosphodiesterase-5 (PDE5). European Journal of Biochemistry, 268, 3304-3312.
- [121] Zollner, U. et al. (1999). Evaluation of a cut-off value for sperm motility after different hours of incubation to select the suitable reproductive technology (IVF or ICSI). Acta Obstetricia et Gynecologica Scandinavica, 78, 326-331.

- [122] Claassens, O. E., Wehr, J. B. & Harrison, K. L. (2000). Optimizing sensitivity of the human sperm motility assay for embryo toxicity testing. Human Reproduction, 15, 1586-1591.
- [123] Donnelly, E. T. et al. (1997). Sperm nitric oxide and motility: the effects of nitric oxide synthase stimulation and inhibition. Molecular Human Reproduction, 3, 755-762.
- [124] Sheynkin, Y. R. et al. (1999). Effect of methylene blue, indigo carmine, and renografin on human sperm motility. Urology, 53, 214-217.
- [125] Lefievre, L., De Lamirande, E. & Gagnon, C. (2000). The cyclic GMP-specific phosphodiesterase inhibitor, sildenafil, stimulates human sperm motility and capacitation but not acrosome reaction. Journal of Andrology, 21, 929-937.
- [126] Belen Herrero, M. et al. (2000). Nitric oxide interacts with the cAMP pathway to modulate capacitation of human spermatozoa. Free Radical Biology & Medicine, 15, 522-536.
- [127] Calamera, J. C. et al. (1998). Modified sperm stress test: a simple assay that predicts sperm-related abnormal in vitro fertilization. Human Reproduction, 13, 2484-2488.
- [128] Elisabetta, M. et al. (1997). A sperm survival test and in-vitro fertilization outcome in the presence of male factor infertility. Human Reproduction, 12, 1969-1973.
- [129] Pertiwi, A. K. D., Kwan, T. K. & Gower, D. B. (2002). Pregnenolone metabolites in rat testis: endogenous concentrations, and intracellular distribution in whole testes during incubation in vitro. Journal of Steroid Biochemistry & Molecular Biology, 81, 363-367.