

## REFERENCES

1. World Health Organization: Definition, diagnosis and classification of diabetes mellitus and its complications: Report of a WHO Consultation. Part 1: diagnosis and classification of diabetes mellitus. Geneva, World Health Organization, 1999.
2. Wild S, Roglic G, Green A, Sicree R, King H. Global prevalence of diabetes: Estimates for the year 2000 and projections for 2030. *Diabetes Care* 2004; 27: 1047-53.
3. WHO Model List of Essential Medicines, March 2007. 15<sup>th</sup> edition, World Health Organization, p. 21. Retrieved on 2007-11-9.
4. American Diabetes Association. Standards of medical care in diabetes-2007. *Diabetes Care* 2007; 30 (Suppl 1): S4-S41.
5. Kirpichnikov D, McFarlane SI, Sowers JR. Metformin: an update. *Ann Intern Med* 2002; 137(1): 25-33.
6. Effect of intensive blood-glucose control with metformin on complications in overweight patients with type 2 diabetes (UKPDS 34). UK Prospective Diabetes Study (UKPDS) Group. *Lancet* 1998; 352 (9131): 854-65.
7. Dunn CJ, Peters DH. Metformin: a review of its pharmacological properties and therapeutic use in non-insulin-dependent diabetes mellitus. *Drugs* 1995; 49: 721-49.
8. Lord JM, Flight IHK, Norman RJ. Metformin in polycystic ovary syndrome: systematic review and meta-analysis. *BMJ* 2003; 327: 951-3.
9. Marchesini G, Brizi M, Bianchi G, Tomassetti S, Zoli M, Melchionda N. Metformin in non-alcoholic steatohepatitis. *Lancet* 2001; 358: 893-4.
10. Ibáñez L, Ong K, Valls C, Marcos MV, Dunger DB, de Zegher F. Metformin treatment to prevent early puberty in girls with precocious pubarche. *J. Clin. Endocrinol. Metab* 2006; 91: 2888-91.

11. Krentz AJ, Ferner RE, Bailey CJ. Comparative tolerability profiles of oral antidiabetic agents. *Drug Safety* 1994; 11: 223-41.
12. Hermann LS, Melander A. Biguanides: basic aspects and clinical use. In: *International textbook of diabetes mellitus*. Zimmet PZ, Alberti KGMM, DeFronzo RA, Keen H. (eds). New York, John Wiley and Sons, 1992, p. 77-95.
13. Berger W. Incidence of severe side effects during therapy with sulfonylureas and biguanides. *Horm Metab Res* 1985; 15 (Suppl): 111-15.
14. Nation LR, Samson NL. Bioequivalence requirements for generic products. *Pharmacol Ther* 1994; 62: 42-55.
15. Thai FDA, Ministry of Public Health, Thailand. Criteria and guideline for the bioequivalence study of generic drugs. 2000
16. Shargel L, Yu A. Bioavailability and bioequivalence. *Applied biopharmaceutics and pharmacokinetics*. 4<sup>th</sup> ed. New Jersey, Prentice-Hall; 1999, 247- 79.
17. Glucophage Side Effects & Drug Interactions. RxList.com. 2007. Retrieved on September 22, Available at <http://www.rxlist.com/glucofage-drug.htm>
18. Wiernsperger NF, Bailey CJ. The antihyperglycaemic effect of metformin: therapeutic and cellular mechanisms. *Drugs* 1999; 58 (Suppl1): 31-9.
19. Hundal RS, Krssak M, Dufour S, Laurent D, Lebon V, Chandramouli V, et al. Mechanism by which metformin reduces glucose production in type 2 diabetes. *Diabetes* 2000; 49: 2063-9.
20. Perriello G, Misericordia P, Volpi E, Santucci A, Santucci C, Ferrannini E, et al. Acuteantihyperglycemic mechanisms of metformin in NIDDM. Evidence for suppression of lipid oxidation and hepatic glucose production. *Diabetes* 1994; 43: 920-8.
21. Large V, Beylot M. Modifications of citric acid cycle activity and gluconeogenesis in streptozotocin-induced diabetes and effects of metformin. *Diabetes* 1999; 48: 1251-7.
22. Inzucchi SE, Maggs DG, Spollett GR, Page SL, Rife FS, Walton V, et al. Efficacy and metabolic effects of metformin and troglitazone in type II diabetes mellitus. *N Engl J Med* 1998; 338: 867-72.

23. Jeng CY, Sheu WH, Fuh MM, Chen YD, Reaven GM. Relationship between hepatic glucose production and fasting plasma glucose concentration in patients with NIDDM. *Diabetes* 1994; 43: 1440-4.
24. Ebert BL, Firth JD, Ratcliffe PJ. Hypoxia and mitochondrial inhibitors regulate expression of glucose transporter-1 via distinct Cis-acting sequences. *J Biol Chem* 1995; 270: 29083-9.
25. Hundal HS, Ramlal T, Reyes R, Leiter LA, Klip A. Cellular mechanism of metformin action involves glucose transporter translocation from an intracellular pool to the plasma membrane in L6 muscle cells. *Endocrinology* 1992; 131: 1165-73.
26. Dominguez LJ, Davidoff AJ, Srinivas PR, Standley PR, Walsh MF, Sowers JR. Effects of metformin on tyrosine kinase activity, glucose transport, and intracellularcalcium in rat vascular smooth muscle. *Endocrinology* 1996; 137: 113-21.
27. Patane` G, Piro S, Rabuazzo AM, Anello M, Vigneri R, Purrello F. Metformin restores insulin secretion altered by chronic exposure to free fatty acids or high glucose: a directmetformin effect on pancreatic beta-cells. *Diabetes* 2000; 49(5): 735-40.
28. Ikeda T, Iwata K, Murakami H. Inhibitory effect of metformin on intestinal glucose absorption in the perfused rat intestine. *Biochem Pharmacol* 2000; 59: 887-90.
29. Scheen AJ. Clinical pharmacokinetics of metformin. *Clin Pharmacokinet* 1996; 30: 359-71.
30. Cullen E, Liao J, Lukacsko P, Niecestro R, Friedhoff L. Pharmacokinetics and dose proportionality of extended-release metformin following administration of 1000, 1500, 2000 and 2500 mg in healthy volunteers. *Biopharm Drug Dispos* 2004; 25(6): 261-3.
31. Pentikainen PJ. Bioavailability of metformin. Comparison of solution, rapidly dissolving tablet, and three sustained release products. *J Clin Pharnacol Ther Toxicol* 1986; 24: 213-20.
32. Vidon N, Chaussade S, Noel M, Franchisseur C, Huchet B, Bernier JJ. Metformin in the digestive tract. *Diabetes Res Clin Practice* 1988; 4 223-29.

33. Sambol NC, Brookes LG, Chiang J, Goodman AM, Lin ET, Liu CY, et al. Food intake and dosage level, but not tablet vs solution dosage form, affect the absorption of metformin hel in man. *Br J Clin Pharmacol* 1996; 42: 510–12.
34. Marathe PH, Wen Y, Norton J, Greene DS, Barbhaiya RH, Wilding IR. Effect of altered gastric emptying and gastrointestinal motility on metformin absorption. *Br J Clin Pharmacol* 2000; 50: 325–32.
35. Robert F, Fendri S, Hary L, Lacroix C, Andréjak M and Lalau JD, Kinetics of plasma and erythrocyte metformin after acute administration in healthy subjects. *Diabetes Metab* 2003; 29: 279-83.
36. Haupt E, Knick B, Koschinsky T, Liebermeister H, Schneider J, Hirche H. Oral antidiabetic combination therapy with sulphonylureas and metformin. *Diabetes Metab* 1991; 17: 224-31.
37. Zarghi A, Foroutan SM, Shafaati A, Khoddam A. Rapid determination of metformin in human plasma using ion-pair HPLC. *J Pharm Biomed Anal* 2003 Feb 5; 31(1): 197-200.
38. Porta V, Schramm SG, Kano EK, Koono EE, Armando YP, Fukuda K, Serra CH. HPLC-UV determination of metformin in human plasma for application in pharmacokinetics and bioequivalence studies. *J Pharm Biomed Anal* 2008; 46(1): 143-7.
39. Sauter R, Steinijs VW, Diletti E, Bohm A, Schultz HU. Presentation of results from bioequivalence studies. *Int J Clin Pharmacol Ther Toxicol* 1992; 30 (Suppl. 1): S7-30.
40. Diletti E, Hauschke D, Steinijs VW 1991 Sample size determination for bioequivalence assessment by means of confidence intervals. *Int J Clin Pharmacol Ther Toxicol*. 1: 1-8.
41. Al Hawari S, Al Gaai E, Yusuf A, Abdelgaleel A, Hammami MM. Bioequivalence study of two metformin formulations. *Arzneimittelforschung*. 2007; 57(4): 192-5.
42. Kathleen M. Giacomini OCT1 Required For Therapeutic Effects Of Diabetes Drug Metformin *Journal of Clinical Investigation* 2007 7:00 PST

43. Metformin (Metformin Hydrochloride)-Description and Clinical Pharmacology. Druglib.com. 2007. Retrieved on March 31, Available at [http://www.druglib.com/druginfo/metformin/description\\_pharmacology](http://www.druglib.com/druginfo/metformin/description_pharmacology)
44. Babich MM, Pike I, Shiffman ML. Metformin-induced acute hepatitis. Am J Med 1998; 104: 490-492. Deutsch M, Kountouras D, Dourakis SP. Metformin hepatotoxicity. Ann Intern Med 2004; 140: W25.



ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่  
Copyright© by Chiang Mai University  
All rights reserved