

## 10 LITERATURE

1. Ramsey PS, Harris DY, Ogburn PL, Jr., Heise RH, Magtibay PM, Ramin KD. Comparative efficacy and cost of the prostaglandin analogs dinoprostone and misoprostol as labor preinduction agents. *Am J Obstet Gynecol* 2003;188:560-565.
2. Lukoschus H, Nierhaus M, Vetter K. Misoprostol in Gynäkologie und Geburtshilfe. *Frauenarzt* 2002;2:154-162.
3. Sanchez-Ramos L, Peterson DE, Delke I, Gaudier FL, Kaunitz AM. Labor induction with prostaglandin E1 misoprostol compared with dinoprostone vaginal insert: a randomized trial. *Obstet Gynecol* 1998;91:401-405.
4. Sanchez-Ramos L, Kaunitz AM. Misoprostol for cervical ripening and labor induction: a systematic review of the literature. *Clin Obstet Gynecol* 2000;43:475-488.
5. Zieman M, Fong SK, Benowitz NL, Banskter D, Darney PD. Absorption kinetics of misoprostol with oral or vaginal administration. *Obstet Gynecol* 1997;90:88-92.
6. Hinshaw K, el-Refaey H, Rispin R, Templeton A. Mid-trimester termination for fetal abnormality: advantages of a new regimen using mifepristone and misoprostol. *Br J Obstet Gynaecol* 1995;102:559-560.
7. Kurzrok R, Lieb CC. Biochemical studies of human semen: II The action of semen in the human uterus. *Proc Soc Exp Biol Med* 1930;28:268-272.
8. Goldblatt MW. Properties of human seminal plasma. *J Physiol* 1935;84:208-218.
9. von Euler US. A depressor substance in the vesicular gland. *J Physiol* 1936;88:213-234.
10. Eliasson R. Prostaglandin-properties, action and significance. *Biochem Pharmacol* 1963;12:405-412.
11. Bergström S, Samuelsson B. Isolation of prostaglandin E1 from human seminal plasma. Prostaglandins and related factors. 11. *J Biol Chem* 1962;237:3005-3006.
12. Anggard E, Samuelsson B. Biosynthesis of prostaglandins from arachidonic acid in guinea pig lung. *J Biol Chem* 1965;240:3518-3521.
13. Karim SM, Filshie GM. Therapeutic abortion using prostaglandin F2alpha. *Lancet* 1970;295:157-159.
14. Karim SM, Filshie GM. Use of prostaglandin E2 for therapeutic abortion. *Br Med J* 1970;261:198-200.
15. Karim SM. The induction of abortion with prostaglandins. *Res Prostaglandins* 1971;1:1-3.
16. Mitchell MD. Biochemistry of the prostaglandins. *Baillière's Clin Obstet Gynaecol* 1992;6:687.
17. König H. Zur Chemie der Prostaglandin-Biogenese, Stoffwechsel, Totalsynthese. *Klin Wochenschr* 1975;53:1041-1048.
18. Ramwell PW, Foegh M, Loeb R, Leovey EM. Synthesis and metabolism of prostaglandins, prostacyclin, and thromboxanes: the arachidonic acid cascade. *Semin Perinatol* 1980;4:3-13.
19. Hoffmann P, Mest HJ. What about the effects of dietary lipids on endogenous prostanoid synthesis? A state-of-the-art review. *Biomed Biochim Acta* 1987;46:639-650.
20. Konturek SJ, Pawlik W. Physiology and pharmacology of prostaglandins. *Dig Dis Sci* 1986;31:6S-19S.
21. Ashby B. Prostaglandins and related autacoids. In: *Brody TM, Larner J, Minneman KP, eds. Human Pharmacology . 3rd ed. St. Louis, Missouri: Von Hoffmann Press* 1998:249-257.
22. Hamberg M, Svensson J, Samuelsson B. Thromboxanes: a new group of biologically active compounds derived from prostaglandin endoperoxides. *Proc Natl Acad Sci USA* 1975;72:2994-2998.

23. Moncada S, Gryglewski R, Bunting S, Vane JR. An enzyme isolated from arteries transforms prostaglandin endoperoxides to an unstable substance that inhibits platelet aggregation. *Nature* 1976;263:663-665.
24. Meisenberg G, Simmons W. Extracellular messengers. *in: Meisenberg G, Simmons WH, eds. Principles of medical biochemistry. St. Louis, USA: Von Hoffmann Press* 1998:569.
25. Christ EJ, van Dorp DA. Comparative aspects of prostaglandin biosynthesis in animal tissues. *Biochim Biophys Acta* 1972;270:537-545.
26. Golub M, Zia P, Matsuno M, Horton R. Metabolism of prostaglandins A1 and E1 in man. *J Clin Invest* 1975;56:1404-1410.
27. Granström E. On the metabolism of prostaglandin F<sub>2</sub> in female subjects. Structures of two metabolites in blood. *Eur J Biochem* 1972;27:462-469.
28. Hamberg M, Samuelsson B. On the metabolism of prostaglandins E<sub>1</sub> and E<sub>2</sub> in man. *J Biol Chem* 1971;246:6713-6721.
29. Bygdeman M. Pharmacokinetics of prostaglandins. *Best Pract Res Clin Obstet Gynaecol* 2003;17:707-716.
30. De Caterina R, Weksler BB. Modulation of arachidonic acid metabolism in human endothelial cells by glucocorticoids. *Thromb Haemost* 1986;55:369-374.
31. Croxtall JD, Flower RJ. Lipocortin 1 mediates dexamethasone-induced growth arrest of the A549 lung adenocarcinoma cell line. *Proc Natl Acad Sci USA* 1992;89:3571-3575.
32. Vane JR. Inhibition of prostaglandin synthesis as a mechanism of action for aspirin-like drugs. *Nat New Biol* 1971;231:232-235.
33. Vermillion ST, Landen CN. Prostaglandin inhibitors as tocolytic agents. *Semin Perinatol* 2001;25:256-262.
34. Besinger RE, Niebyl JR. The safety and efficacy of tocolytic agents for the treatment of preterm labor. *Obstet Gynecol Surv* 1990;45:415-440.
35. Arosh JA, Banu SK, Chapdelaine P, Madore E, Sirois J, Fortier MA. Prostaglandin biosynthesis, transport, and signaling in corpus luteum: a basis for autoregulation of luteal function. *Endocrinology* 2004;145:2551-2560.
36. Tanaka S, Shimoya Y, Azumaguchi A, Hata H, Endo T, Yamamoto H, Sato T, Hashimoto M. Studies on the prostaglandin E<sub>2</sub> receptor in human corpora lutea. *Nippon Sanka Fujinka Gakkai Zasshi* 1981;33:1888-1896.
37. Diaz FJ, Anderson LE, Wu YL, Rabot A, Tsai SJ, Wiltbank MC. Regulation of progesterone and prostaglandin F<sub>2</sub>α production in the CL. *Mol Cell Endocrinol* 2002;191:65-80.
38. Shirasuna K, Asaoka H, Acosta TJ, Wijayagunawardane MP, Ohtani M, Hayashi KG, Matsui M, Miyamoto A. Real-time dynamics of prostaglandin F<sub>2</sub>α release from uterus and corpus luteum during spontaneous luteolysis in the cow. *Reproduction* 2004;128:189-195.
39. Tanaka S, Shimoya Y, Hamamatsu M, Hashimoto M. Binding sites for prostaglandin F<sub>2</sub>α in human corpora lutea. *Asia Oceania J Obstet Gynaecol* 1983;9:445-451.
40. Coceani F, Olley PM, Lock JE. Prostaglandins, ductus arteriosus, pulmonary circulation: current concepts and clinical potential. *Eur J Clin Pharmacol* 1980;18:75-81.
41. Skidgel RA, Friedman WF, Printz MP. Prostaglandin biosynthetic activities of isolated fetal lamb ductus arteriosus, other blood vessels, and lung tissue. *Pediatr Res* 1984;18:12-18.
42. Hammerman C. Patent ductus arteriosus. Clinical relevance of prostaglandins and prostaglandin inhibitors in PDA pathophysiology and treatment. *Clin Perinatol* 1995;22:457-479.
43. Saxena A, Sharma M, Kothari SS, Juneja R, Reddy SC, Sharma R, Bhan A, Venugopal P. Prostaglandin E<sub>1</sub> in infants with congenital heart disease: Indian experience. *Indian Pediatr* 1998;35:1063-1069.

44. Dinarevic S, Kurtagic S, Maksic H. [Use of prostaglandins in neonatal cardiology]. *Med Arh* 2000;54:279-282.
45. Fuchs AR, Fuchs F, Husslein P, Soloff MS. Oxytocin receptors in the human uterus during pregnancy and parturition. *Am J Obstet Gynecol* 1984;150:734-741.
46. Mitchell BF, Fang X, Wong S. Oxytocin: a paracrine hormone in the regulation of parturition? *Rev Reprod* 1998;3:113-122.
47. Husslein P, Fuchs AR, Fuchs F. Oxytocin and the initiation of human parturition. I. Prostaglandin release during induction of labor by oxytocin. *Am J Obstet Gynecol* 1981;141:688-693.
48. Fuchs AR, Fuchs F, Husslein P, Soloff MS, Fernström MJ. Oxytocin receptors and human parturition: a dual role for oxytocin in the initiation of labor. *Science* 1982;215:1396-1398.
49. Molnar M, Rigo J, Jr., Romero R, Hertelendy F. Oxytocin activates mitogen-activated protein kinase and up-regulates cyclooxygenase-2 and prostaglandin production in human myometrial cells. *Am J Obstet Gynecol* 1999;181:42-49.
50. Garfield RE, Puri CP, Csapo AI. Endocrine, structural, and functional changes in the uterus during premature labor. *Am J Obstet Gynecol* 1982;142:21-27.
51. Garfield RE. Control of myometrial function in preterm versus term labor. *Clin Obstet Gynecol* 1984;27:572-591.
52. Carsten ME. Prostaglandins and cellular calcium transport in the pregnant human uterus. *Am J Obstet Gynecol* 1973;117:824-832.
53. Carsten ME, Miller JD. A new look at uterine muscle contraction. *Am J Obstet Gynecol* 1987;157:1303-1315.
54. Luckas MJ, Taggart MJ, Wray S. Intracellular calcium stores and agonist-induced contractions in isolated human myometrium. *Am J Obstet Gynecol* 1999;181:468-476.
55. Molnar M, Rigo J, Jr., Hertelendy F. Signal transduction in human myometrial cells. *Acta Physiol Hung* 1996;84:89-97.
56. Sullivan MH, Roseblade CK, Rendell NB, Taylor GW, Elder MG. Metabolism of prostaglandins E2 and F2 alpha by human fetal membranes. *Biochim Biophys Acta* 1992;1123:342-346.
57. Reece MS, McGregor JA, Allen KG, Mathias MM, Harris MA. Prostaglandins in selected reproductive tissues in preterm and full-term gestations. *Prostaglandins Leukot Essent Fatty Acids* 1996;55:303-307.
58. Darne J, McGarrigle HH, Lachelin GC. Saliva oestriol, oestradiol, oestrone and progesterone levels in pregnancy: spontaneous labour at term is preceded by a rise in the saliva oestriol:progesterone ratio. *Br J Obstet Gynaecol* 1987;94:227-235.
59. Majzoub JA, Karalis KP. Placental corticotropin-releasing hormone: function and regulation. *Am J Obstet Gynecol* 1999;180:S242-246.
60. Whittle WL, Holloway AC, Lye SJ, Gibb W, Challis JR. Prostaglandin production at the onset of ovine parturition is regulated by both estrogen-independent and estrogen-dependent pathways. *Endocrinology* 2000;141:3783-3791.
61. Mitchell MD, Edwin SS, Lundin-Schiller S, Silver RM, Smotkin D, Trautman MS. Mechanism of interleukin-1 beta stimulation of human amnion prostaglandin biosynthesis: mediation via a novel inducible cyclooxygenase. *Placenta* 1993;14:615-625.
62. Mitchell MD, Dudley DJ, Edwin SS, Schiller SL. Interleukin-6 stimulates prostaglandin production by human amnion and decidual cells. *Eur J Pharmacol* 1991;192:189-191.
63. Van Meir CA, Sangha RK, Walton JC, Matthews SG, Keirse MJ, Challis JR. Immunoreactive 15-hydroxyprostaglandin dehydrogenase (PGDH) is reduced in fetal

- membranes from patients at preterm delivery in the presence of infection. *Placenta* 1996;17:291-297.
64. McLaren J, Taylor DJ, Bell SC. Increased concentration of pro-matrix metalloproteinase 9 in term fetal membranes overlying the cervix before labor: implications for membrane remodeling and rupture. *Am J Obstet Gynecol* 2000;182:409-416.
  65. Cherouny PH, Pankuch GA, Romero R, Botti JJ, Kuhn DC, Demers LM, Appelbaum PC. Neutrophil attractant/activating peptide-1/interleukin-8: association with histologic chorioamnionitis, preterm delivery, and bioactive amniotic fluid leukoattractants. *Am J Obstet Gynecol* 1993;169:1299-1303.
  66. Rizzo G, Capponi A, Rinaldo D, Tedeschi D, Arduini D, Romanini C. Interleukin-6 concentrations in cervical secretions identify microbial invasion of the amniotic cavity in patients with preterm labor and intact membranes. *Am J Obstet Gynecol* 1996;175:812-817.
  67. Romero R, Brody DT, Oyarzun E, Mazor M, Wu YK, Hobbins JC, Durum SK. Infection and labor. III. Interleukin-1: a signal for the onset of parturition. *Am J Obstet Gynecol* 1989;160:1117-1123.
  68. Inglis SR, Jeremias J, Kuno K, Lescale K, Peeper Q, Chervenak FA, Witkin SS. Detection of tumor necrosis factor-alpha, interleukin-6, and fetal fibronectin in the lower genital tract during pregnancy: relation to outcome. *Am J Obstet Gynecol* 1994;171:5-10.
  69. Willi MJ, Winkler M, Fischer DC, Reineke T, Maul H, Rath W. Chorioamnionitis: elevated interleukin-6 and interleukin-8 concentrations in the lower uterine segment. *J Perinat Med* 2002;30:292-296.
  70. Elliott CL, Slater DM, Dennes W, Poston L, Bennett PR. Interleukin 8 expression in human myometrium: changes in relation to labor onset and with gestational age. *Am J Reprod Immunol* 2000;43:272-277.
  71. Elliott CL, Loudon JA, Brown N, Slater DM, Bennett PR, Sullivan MH. IL-1beta and IL-8 in human fetal membranes: changes with gestational age, labor, and culture conditions. *Am J Reprod Immunol* 2001;46:260-267.
  72. Calder AA, Greer IA. Prostaglandins and the cervix. *Baillieres Clin Obstet Gynaecol* 1992;6:771-786.
  73. Wikland M, Lindblom B, Wiquist N. Myometrial response to prostaglandins during labor. *Gynecol Obstet Invest* 1984;17:131-138.
  74. Rath W, Osmers R, Adelman-Grill BC, Stuhlsatz HW, Szevereny M, Kuhn W. Biochemical changes in human cervical connective tissue after intracervical application of prostaglandin E2. *Prostaglandins* 1993;45:375-384.
  75. Rath W, Osmers R, Stuhlsatz HW, Adelman-Grill BC. Biochemische Grundlagen der Zervixreifung und Muttermundseröffnung. *Z Geburtshilfe Perinatol* 1994;50:657-664.
  76. Winkler M, Rath W. Changes in the cervical extracellular matrix during pregnancy and parturition. *J Perinat Med* 1999;27:45-60.
  77. Giannopoulos G, Jackson K, Kredentser J, Tulchinsky D. Prostaglandin E and F2 alpha receptors in human myometrium during the menstrual cycle and in pregnancy and labor. *Am J Obstet Gynecol* 1985;153:904-910.
  78. Senior J, Marshall K, Sangha R, Clayton JK. In vitro characterization of prostanoid receptors on human myometrium at term pregnancy. *Br J Pharmacol* 1993;108:501-506.
  79. Senior J, Marshall K, Sangha R, Baxter GS, Clayton JK. In vitro characterization of prostanoid EP-receptors in the non-pregnant human myometrium. *Br J Pharmacol* 1991;102:747-753.
  80. Coleman RA, Smith WL, Narumiya S. International Union of Pharmacology classification of prostanoid receptors: properties, distribution, and structure of the receptors and their subtypes. *Pharmacol Rev* 1994;46:205-229.

81. Brodth-Eppley J, Myatt L. Changes in expression of contractile FP and relaxatory EP2 receptors in pregnant rat myometrium during late gestation, at labor, and postpartum. *Biol Reprod* 1998;59:878-883.
82. Smith GC, Wu WX, Nathanielsz PW. Effects of gestational age and labor on expression of prostanoid receptor genes in baboon uterus. *Biol Reprod* 2001;64:1131-1137.
83. Brodth-Eppley J, Myatt L. Prostaglandin receptors in lower segment myometrium during gestation and labor. *Obstet Gynecol* 1999;93:89-93.
84. Matsumoto T, Sagawa N, Yoshida M, Mori T, Tanaka I, Mukoyama M, Kotani M, Nakao K. The prostaglandin E2 and F2 alpha receptor genes are expressed in human myometrium and are down-regulated during pregnancy. *Biochem Biophys Res Commun* 1997;238:838-841.
85. Calder A, Embrey MP. Letter: Prostaglandins and the unfavourable cervix. *Lancet* 1973;302:1322-1323.
86. Bernstein P, Leyland N, Gurland P, Gare D. Cervical ripening and labor induction with prostaglandin E2 gel: a placebo-controlled study. *Am J Obstet Gynecol* 1987;156:336-340.
87. Davey DA, Macnab M. Oral and intravaginal prostaglandin E2 for cervical ripening and induction of labour. *S Afr Med J* 1979;55:837-842.
88. Keirse MJ. Prostaglandins in preinduction cervical ripening. Meta-analysis of worldwide clinical experience. *J Reprod Med* 1993;38:89-100.
89. MacKenzie IZ, Castle BM, Mountford L, Ferguson J, Brennecke S, Embrey MP. Prostaglandin release from preparations used vaginally for the induction of labour. *Prostaglandins* 1987;34:939-946.
90. Keirse MJ. Therapeutic uses of prostaglandins. *Baillières Clin Obstet Gynaecol* 1992;6:787-808.
91. Hales KA, Rayburn WF, Turnbull GL, Christensen HD, Patatanian E. Double-blind comparison of intracervical and intravaginal prostaglandin E2 for cervical ripening and induction of labor. *Am J Obstet Gynecol* 1994;171:1087-1091.
92. Ottinger WS, Menard MK, Brost BC. A randomized clinical trial of prostaglandin E2 intracervical gel and a slow release vaginal pessary for preinduction cervical ripening. *Am J Obstet Gynecol* 1998;179:349-353.
93. Magerlein BJ, DuCharme DW, Magee WE, Miller WL, Robert A, Weeks JR. Synthesis and biological properties of 16-alkylprostaglandins. *Prostaglandins* 1973;4:143-145.
94. Collins PW. Misoprostol: discovery, development, and clinical applications. *Med Res Rev* 1990;10:149-172.
95. Borgida AF, Rodis JF, Hanlon W, Craffey A, Ciarleglio L, Campbell WA. Second-trimester abortion by intramuscular 15-methyl-prostaglandin F2 alpha or intravaginal prostaglandin E2 suppositories: a randomized trial. *Obstet Gynecol* 1995;85:697-700.
96. Christensen NJ, Bygdeman M. Cervical dilatation with 16,16-dimethyl-trans-delta 2-PGE1 methyl ester (Cervagem) prior to vacuum aspiration. A double-blind, placebo-controlled randomized study. *Contraception* 1984;29:457-464.
97. Thong KJ, Robertson AJ, Baird DT. A retrospective study of 932 second trimester terminations using gemeprost (16,16 dimethyl-trans delta 2 PGE1 methyl ester). *Prostaglandins* 1992;44:65-74.
98. Ho PC, Tsang SS, Ma HK. Reducing the induction to abortion interval in termination of second trimester pregnancies: a comparison of mifepristone with laminaria tent. *Br J Obstet Gynaecol* 1995;102:648-651.
99. Bygdeman M, Gemzell K, Gottlieb C, Swahn ML. Uterine contractility and interaction between prostaglandins and antiprogestins. Clinical implications. *Ann N Y Acad Sci* 1991;626:561-567.

100. Couzinet B, Le Strat N, Ulmann A, Baulieu EE, Schaison G. Termination of early pregnancy by the progesterone antagonist RU 486 (Mifepristone). *N Engl J Med* 1986;315:1565-1570.
101. Ashok PW, Templeton A, Wagaarachchi PT, Flett GM. Factors affecting the outcome of early medical abortion: a review of 4132 consecutive cases. *BJOG* 2002;109:1281-1289.
102. Bauer RF. Misoprostol preclinical pharmacology. *Dig Dis Sci* 1985;30:118S-125S.
103. Garris RE, Kirkwood CF. Misoprostol: a prostaglandin E1 analogue. *Clin Pharm* 1989;8:627-644.
104. Schönhöfer PS. Brazil: misuse of misoprostol as an abortifacient may induce malformations. *Lancet* 1991;337:1534-1535.
105. Coelho HL, Teixeira AC, Santos AP, Forte EB, Morais SM, La Vecchia C, Tognoni G, Herxheimer A. Misoprostol and illegal abortion in Fortaleza, Brazil. *Lancet* 1993;341:1261-1263.
106. Coelho HL, Teixeira AC, Cruz Mde F, Gonzaga SL, Arrais PS, Luchini L, La Vecchia C, Tognoni G. Misoprostol: the experience of women in Fortaleza, Brazil. *Contraception* 1994;49:101-110.
107. Costa SH, Vessey MP. Misoprostol and illegal abortion in Rio de Janeiro, Brazil. *Lancet* 1993;341:1258-1261.
108. Rabe T, Basse H, Thuro H, Kiesel L, Runnebaum B. Wirkung des PGE1-Methylanalogs Misoprostol auf den schwangeren Uterus im ersten Trimester. *Geburtshilfe Frauenheilkd* 1987;47:324-331.
109. Karim A. Antiulcer prostaglandin misoprostol: single and multiple dose pharmacokinetic profile. *Prostaglandins* 1987;33 Suppl:40-50.
110. Dajani EZ, Driskill DR, Bianchi RG, Collins PW, Pappo R. SC-29333: a potent inhibitor of canine gastric secretion. *Am J Dig Dis* 1976;21:1049-1057.
111. Collins PW, Dajani EZ, Driskill DR, Bruhn MS, Jung CJ, Pappo R. Synthesis and gastric antisecretory properties of 15-deoxy-16-hydroxyprostaglandin E analogues. *J Med Chem* 1977;20:1152-1159.
112. Sanvordeker D. Stabilization of 16-oxygenated prostanoid acid derivatives. *U.S. Patent 4* 1981;301:146.
113. Kararli TT, Catalano T, Needham TE, Finnegan PM. Mechanism of misoprostol stabilization in hydroxypropyl methylcellulose. *Adv Exp Med Biol* 1991;302:275-289.
114. Karim A, Rozek LF, Smith ME, Kowalski KG. Effects of food and antacid on oral absorption of misoprostol, a synthetic prostaglandin E1 analog. *J Clin Pharmacol* 1989;29:439-443.
115. Schoenhard G, Oppermann J, Kohn FE. Metabolism and pharmacokinetic studies of misoprostol. *Dig Dis Sci* 1985;30:126S-128S.
116. Ramsey PS, Ogburn PL, Jr., Harris DY, Heise RH, Ramin KD. Effect of vaginal pH on efficacy of misoprostol for cervical ripening and labor induction. *Am J Obstet Gynecol* 2000;182:1616-1619.
117. Tsai BS, Kessler LK, Stolzenbach J, Schoenhard G, Bauer RF. Expression of gastric antisecretory and prostaglandin E receptor binding activity of misoprostol by misoprostol free acid. *Dig Dis Sci* 1991;36:588-593.
118. Wilson RJ, Rhodes SA, Wood RL, Shield VJ, Noel LS, Gray DW, Giles H. Functional pharmacology of human prostanoid EP(2) and EP(4) receptors. *Eur J Pharmacol* 2004;501:49-58.
119. Asboth G, Phaneuf S, Lopez Bernal AL. Prostaglandin E receptors in myometrial cells. *Acta Physiol Hung* 1997;85:39-50.
120. Khan RU, El-Refaey H. Pharmacokinetics and adverse-effect profile of rectally administered misoprostol in the third stage of labor. *Obstet Gynecol* 2003;101:968-974.

121. Khan RU, El-Refaey H, Sharma S, Sooranna D, Stafford M. Oral, rectal, and vaginal pharmacokinetics of misoprostol. *Obstet Gynecol* 2004;103:866-870.
122. Danielsson KG, Marions L, Rodriguez A, Spur BW, Wong PY, Bygdeman M. Comparison between oral and vaginal administration of misoprostol on uterine contractility. *Obstet Gynecol* 1999;93:275-280.
123. Abdel-Aleem H, Villar J, Gulmezoglu AM, Mostafa SA, Youssef AA, Shokry M, Watzer B. The pharmacokinetics of the prostaglandin E1 analogue misoprostol in plasma and colostrum after postpartum oral administration. *Eur J Obstet Gynecol Reprod Biol* 2003;108:25-28.
124. El-Refaey H, O'Brien P, Morafa W, Walder J, Rodeck C. Use of oral misoprostol in the prevention of postpartum haemorrhage. *Br J Obstet Gynaecol*, 1997:336-339.
125. Marcisz C, Jonderko G, Gina R, Szkliniarz J. Effect of misoprostol, a synthetic equivalent of prostaglandin E1, on bronchodilation in bronchial spasm. *Pol Tyg Lek* 1992;47:733-734.
126. Bennett KA, Butt K, Crane JM, Hutchens D, Young DC. A masked randomized comparison of oral and vaginal administration of misoprostol for labor induction. *Obstet Gynecol* 1998;92:481-486.
127. Urban R, Lemancewicz A, Urban J, Skotnicki MZ, Kretowska M. Misoprostol and dinoprostone therapy for labor induction: a Doppler comparison of uterine and fetal hemodynamic effects. *Eur J Obstet Gynecol Reprod Biol* 2003;106:20-24.
128. Sciscione AC, Nguyen L, Manley JS, Shlossman PA, Colmorgen GH. Uterine rupture during preinduction cervical ripening with misoprostol in a patient with a previous Caesarean delivery. *Aust NZ J Obstet Gynaecol* 1998;38:96-97.
129. Blanchette HA, Nayak S, Erasmus S. Comparison of the safety and efficacy of intravaginal misoprostol (prostaglandin E1) with those of dinoprostone (prostaglandin E2) for cervical ripening and induction of labor in a community hospital. *Am J Obstet Gynecol* 1999;180:1551-1559.
130. Hill DA, Chez RA, Quinlan J, Fuentes A, LaCombe J. Uterine rupture and dehiscence associated with intravaginal misoprostol cervical ripening. *J Reprod Med* 2000;45:823-826.
131. Plaut MM, Schwartz ML, Lubarsky SL. Uterine rupture associated with the use of misoprostol in the gravid patient with a previous cesarean section. *Am J Obstet Gynecol* 1999;180:1535-1542.
132. Mathews JE, Mathai M, George A. Uterine rupture in a multiparous woman during labor induction with oral misoprostol. *Int J Gynaecol Obstet* 2000;68:43-44.
133. Wing DA, Lovett K, Paul RH. Disruption of prior uterine incision following misoprostol for labor induction in women with previous cesarean delivery. *Obstet Gynecol* 1998;91:828-830.
134. Choy-Hee L, Raynor BD. Misoprostol induction of labor among women with a history of cesarean delivery. *Am J Obstet Gynecol* 2001;184:1115-1117.
135. Sanchez-Ramos L. Two sides to the Cytotec debate. *Birth Gaz* 2000;16:7, 48-49.
136. Bennett BB. Uterine rupture during induction of labor at term with intravaginal misoprostol. *Obstet Gynecol* 1997;89:832-833.
137. Thomas A, Jophy R, Maskhar A, Thomas RK. Uterine rupture in a primigravida with misoprostol used for induction of labour. *BJOG* 2003;110:217-218.
138. Bique C, Bugalho A, Bergström S. Labor induction by vaginal misoprostol in grand multiparous women. *Acta Obstet Gynecol Scand* 1999;78:198-201.
139. Bond GR, Van Zee A. Overdosage of misoprostol in pregnancy. *Am J Obstet Gynecol* 1994;171:561-562.

140. Austin J, Ford MD, Rouse A, Hanna E. Acute intravaginal misoprostol toxicity with fetal demise. *J Emerg Med* 1997;15:61-64.
141. Fonseca W, Alencar AJ, Mota FS, Coelho HL. Misoprostol and congenital malformations. *Lancet* 1991;338:56.
142. Fonseca W, Alencar AJ, Pereira RM, Misago C. Congenital malformation of the scalp and cranium after failed first trimester abortion attempt with misoprostol. *Clin Dysmorphol* 1993;2:76-80.
143. Gonzalez CH, Marques-Dias MJ, Kim CA, Sugayama SM, Da Paz JA, Huson SM, Holmes LB. Congenital abnormalities in Brazilian children associated with misoprostol misuse in first trimester of pregnancy. *Lancet* 1998;351:1624-1627.
144. Gonzalez CH, Vargas FR, Perez AB, Kim CA, Brunoni D, Marques-Dias MJ, Leone CR, Correa Neto J, Llerena Junior JC, de Almeida JC. Limb deficiency with or without Mobius sequence in seven Brazilian children associated with misoprostol use in the first trimester of pregnancy. *Am J Med Genet* 1993;47:59-64.
145. Los FJ, Brandenburg H, Niermeijer MF. Vascular disruptive syndromes after exposure to misoprostol or chorionic villus sampling. *Lancet* 1999;353:843-844.
146. Schuler L, Ashton PW, Sanseverino MT. Teratogenicity of misoprostol. *Lancet* 1992;339:437.
147. Kotsonis FN, Dodd DC, Regnier B, Kohn FE. Preclinical toxicology profile of misoprostol. *Dig Dis Sci* 1985;30:142S-146S.
148. Downie WW. Misuse of misoprostol. *Lancet* 1991;338:247.
149. Preutthipan S, Herabutya Y. Vaginal misoprostol for cervical priming before operative hysteroscopy: a randomized controlled trial. *Obstet Gynecol* 2000;96:890-894.
150. Ngai SW, Chan YM, Liu KL, Ho PC. Oral misoprostol for cervical priming in non-pregnant women. *Hum Reprod* 1997;12:2373-2375.
151. Ngai SW, Chan YM, Tang OS, Ho PC. The use of misoprostol for pre-operative cervical dilatation prior to vacuum aspiration: a randomized trial. *Hum Reprod* 1999;14:2139-2142.
152. Singh K, Fong YF, Prasad RN, Dong F. Randomized trial to determine optimal dose of vaginal misoprostol for preabortion cervical priming. *Obstet Gynecol* 1998;92:795-798.
153. Singh K, Fong YF, Prasad RN, Dong F. Vaginal misoprostol for pre-abortion cervical priming: is there an optimal evacuation time interval? *Br J Obstet Gynaecol* 1999;106:266-269.
154. Esteve JL, Varela L, Velazco A, Tanda R, Cabezas E, Sanchez C. Early abortion with 800 micrograms of misoprostol by the vaginal route. *Contraception* 1999;59:219-225.
155. Ashok PW, Penney GC, Flett GM, Templeton A. An effective regimen for early medical abortion: a report of 2000 consecutive cases. *Hum Reprod* 1998;13:2962-2965.
156. Mund M. Der medikamentöse Schwangerschaftsabbruch mit Mifepristone. *Frauenarzt* 2001;42 (9):952-955.
157. von Hertzen H, Honkanen H, Piaggio G, Bartfai G, Erdenetungalag R, Gemzell-Danielsson K, Gopalan S, Horga M, Jerve F, Mittal S, Ngoc NT, Peregoudov A, Prasad RN, Pretnar-Darovec A, Shah RS, Song S, Tang OS, Wu SC. WHO multinational study of three misoprostol regimens after mifepristone for early medical abortion. I: Efficacy. *BJOG* 2003;110:808-818.
158. Fiala C, Winikoff B, Helstrom L, Hellborg M, Gemzell-Danielsson K. Acceptability of home-use of misoprostol in medical abortion. *Contraception* 2004;70:387-392.
159. Wong KS, Ngai CS, Wong AY, Tang LC, Ho PC. Vaginal misoprostol compared with vaginal gemeprost in termination of second trimester pregnancy. A randomized trial. *Contraception* 1998;58:207-210.



160. Nuutila M, Toivonen J, Ylikorkala O, Halmesmaki E. A comparison between two doses of intravaginal misoprostol and gemeprost for induction of second-trimester abortion. *Obstet Gynecol* 1997;90:896-900.
161. Eng NS, Guan AC. Comparative study of intravaginal misoprostol with gemeprost as an abortifacient in second trimester missed abortion. *Aust NZ J Obstet Gynaecol* 1997;37:331-334.
162. Jain JK, Kuo J, Mishell DR, Jr. A comparison of two dosing regimens of intravaginal misoprostol for second-trimester pregnancy termination. *Obstet Gynecol* 1999;93:571-575.
163. le Roux PA, Pahal GS, Hoffman L, Nooh R, El-Refaey H, Rodeck CH. Second trimester termination of pregnancy for fetal anomaly or death: comparing mifepristone/misoprostol to gemeprost. *Eur J Obstet Gynecol Reprod Biol* 2001;95:52-54.
164. Mariani Neto C, Leao EJ, Barreto EM, Kenj G, De Aquino MM, Tuffi VH. Use of misoprostol for labor induction in stillbirth. *Rev Paul Med* 1987;105:325-328.
165. Margulies M, Campos Perez G, Voto LS. Misoprostol to induce labour. *Lancet* 1992;339:64.
166. Fletcher HM, Mitchell S, Simeon D, Frederick J, Brown D. Intravaginal misoprostol as a cervical ripening agent. *Br J Obstet Gynaecol* 1993;100:641-644.
167. Sanchez-Ramos L, Chen AH, Kaunitz AM, Gaudier FL, Delke I. Labor induction with intravaginal misoprostol in term premature rupture of membranes: a randomized study. *Obstet Gynecol* 1997;89:909-912.
168. Kramer RL, Gilson GJ, Morrison DS, Martin D, Gonzales JL, Qualls CR. A randomized trial of misoprostol and oxytocin for induction of labor: safety and efficacy. *Obstet Gynecol* 1997;89:387-391.
169. Wing DA, Paul RH. Induction of labor with misoprostol for premature rupture of membranes beyond thirty-six weeks' gestation. *Am J Obstet Gynecol* 1998;179:94-99.
170. Varaklis K, Gumina R, Stubblefield PG. Randomized controlled trial of vaginal misoprostol and intracervical prostaglandin E2 gel for induction of labor at term. *Obstet Gynecol* 1995;86:541-544.
171. Buser D, Mora G, Arias F. A randomized comparison between misoprostol and dinoprostone for cervical ripening and labor induction in patients with unfavorable cervixes. *Obstet Gynecol* 1997;89:581-585.
172. Surbek DV, Boesiger H, Hoesli I, Pavic N, Holzgreve W. A double-blind comparison of the safety and efficacy of intravaginal misoprostol and prostaglandin E2 to induce labor. *Am J Obstet Gynecol* 1997;177:1018-1023.
173. Gottschall DS, Borgida AF, Mihalek JJ, Sauer F, Rodis JF. A randomized clinical trial comparing misoprostol with prostaglandin E2 gel for preinduction cervical ripening. *Am J Obstet Gynecol* 1997;177:1067-1070.
174. Wing DA, Jones MM, Rahall A, Goodwin TM, Paul RH. A comparison of misoprostol and prostaglandin E2 gel for preinduction cervical ripening and labor induction. *Am J Obstet Gynecol* 1995;172:1804-1810.
175. Wing DA, Rahall A, Jones MM, Goodwin TM, Paul RH. Misoprostol: an effective agent for cervical ripening and labor induction. *Am J Obstet Gynecol* 1995;172:1811-1816.
176. Sanchez-Ramos L, Kaunitz AM, Del Valle GO, Delke I, Schroeder PA, Briones DK. Labor induction with the prostaglandin E1 methyl analogue misoprostol versus oxytocin: a randomized trial. *Obstet Gynecol* 1993;81:332-336.
177. Fletcher H, Mitchell S, Frederick J, Simeon D, Brown D. Intravaginal misoprostol versus dinoprostone as cervical ripening and labor-inducing agents. *Obstet Gynecol* 1994;83:244-247.

178. Fletcher HM, Mitchell S, Simeon D, Frederick J, Brown D. Intravaginal misoprostol as a cervical ripening agent. *Br J Obstet Gynaecol* 1993;100:641-644.
179. Sanchez-Ramos L, Kaunitz AM, Wears RL, Delke I, Gaudier FL. Misoprostol for cervical ripening and labor induction: a meta-analysis. *Obstet Gynecol* 1997;89:633-642.
180. Wing DA, Paul RH. A comparison of differing dosing regimens of vaginally administered misoprostol for preinduction cervical ripening and labor induction. *Am J Obstet Gynecol* 1996;175:158-164.
181. Farah LA, Sanchez-Ramos L, Rosa C, Del Valle GO, Gaudier FL, Delke I, Kaunitz AM. Randomized trial of two doses of the prostaglandin E1 analog misoprostol for labor induction. *Am J Obstet Gynecol* 1997;177:364-369; discussion 369-371.
182. Windrim R, Bennett K, Mundle W, Young DC. Oral administration of misoprostol for labor induction: a randomized controlled trial. *Obstet Gynecol* 1997;89:392-397.
183. Toppozada MK, Anwar MY, Hassan HA, El-Gazaerly WS. Oral or vaginal misoprostol for induction of labor. *Int J Gynaecol Obstet* 1997;56:135-139.
184. Wing DA, Ham D, Paul RH. A comparison of orally administered misoprostol with vaginally administered misoprostol for cervical ripening and labor induction. *Am J Obstet Gynecol* 1999;180:1155-1160.
185. Wing DA, Fassett MJ, Guberman C, Tran S, Parrish A, Guinn D. A comparison of orally administered misoprostol to intravenous oxytocin for labor induction in women with favorable cervical examinations. *Am J Obstet Gynecol* 2004;190:1689-1694; discussion 1694-1686.
186. Muzonzini G, Hofmeyr G. Buccal or sublingual misoprostol for cervical ripening and induction of labour. *Cochrane Database Syst Rev* 2004:CD004221.
187. Ngai SW, To WK, Lao T, Ho PC. Cervical priming with oral misoprostol in pre-labor rupture of membranes at term. *Obstet Gynecol* 1996;87:923-926.
188. Crane JM, Delaney T, Hutchens D. Oral misoprostol for premature rupture of membranes at term. *Am J Obstet Gynecol* 2003;189:720-724.
189. Frohn WE, Simmons S, Carlan SJ. Prostaglandin E2 gel versus misoprostol for cervical ripening in patients with premature rupture of membranes after 34 weeks. *Obstet Gynecol* 2002;99:206-210.
190. Bugalho A, Bique C, Machungo F, Faaundes A. Induction of labor with intravaginal misoprostol in intrauterine fetal death. *Am J Obstet Gynecol* 1994;171:538-541.
191. Ho PC, Ngai SW, Liu KL, Wong GC, Lee SW. Vaginal misoprostol compared with oral misoprostol in termination of second-trimester pregnancy. *Obstet Gynecol* 1997;90:735-738.
192. Chong YS, Chua S, El-Refaey H, Choo WL, Chanrachakul B, Tai BC, Rodeck C, Arulkumaran S. Postpartum intrauterine pressure studies of the uterotonic effect of oral misoprostol and intramuscular syntometrine. *BJOG* 2001;108:41-47.
193. Bamigboye AA, Merrell DA, Hofmeyr GJ, Mitchell R. Randomized comparison of rectal misoprostol with Syntometrine for management of third stage of labor. *Acta Obstet Gynecol Scand* 1998;77:178-181.
194. O'Brien P, El-Refaey H, Gordon A, Geary M, Rodeck CH. Rectally administered misoprostol for the treatment of postpartum hemorrhage unresponsive to oxytocin and ergometrine: a descriptive study. *Obstet Gynecol* 1998;92:212-214.
195. Blanchard K, Clark S, Winikoff B, Gaines G, Kabani G, Shannon C. Misoprostol for women's health: a review. *Obstet Gynecol* 2002;99:316-332.
196. Bishop EH. Pelvic scoring for elective induction. *Obstet Gynecol* 1964;24:266-268.
197. Kolderup L, McLean L, Grullon K, Safford K, Kilpatrick SJ. Misoprostol is more efficacious for labor induction than prostaglandin E2, but is it associated with more risk? *Am J Obstet Gynecol* 1999;180:1543-1550.

198. Rozenberg P, Chevret S, Goffinet F, Durand-Zaleski I, Ville Y, Vayssiere C, Roberto A, Lahna Z, Nisand I, Fisch C, Chaumet-Riffaud P, Chastang C. Induction of labour with a viable infant: a randomised clinical trial comparing intravaginal misoprostol and intravaginal dinoprostone. *BJOG* 2001;108:1255-1262.
199. Wing DA, Ortiz-Omphroy G, Paul RH. A comparison of intermittent vaginal administration of misoprostol with continuous dinoprostone for cervical ripening and labor induction. *Am J Obstet Gynecol* 1997;177:612-618.
200. El-Sherbiny MT, El-Gharieb IH, Gewely HA. Vaginal misoprostol for induction of labor: 25 vs. 50 microg dose regimen. *Int J Gynaecol Obstet* 2001;72:25-30.
201. Sanchez-Ramos L, Kaunitz AM, Delke I. Labor induction with 25 microg versus 50 microg intravaginal misoprostol: a systematic review. *Obstet Gynecol* 2002;99:145-151.
202. Srisomboon J, Singchai S. A comparison between 25 micrograms and 50 micrograms of intravaginal misoprostol for labor induction. *J Med Assoc Thai* 1998;81:779-783.
203. Kwon JS, Davies GA, Mackenzie VP. A comparison of oral and vaginal misoprostol for induction of labour at term: a randomised trial. *BJOG* 2001;108:23-26.
204. Bennett BB. Uterine rupture during induction of labor at term with intravaginal misoprostol. *Obstet Gynecol* 1997;89:832-833.
205. Hofmeyr GJ, Alfirevic Z, Matonhodze B, Brocklehurst P, Campbell E, Nikodem VC. Titrated oral misoprostol solution for induction of labour: a multi-centre, randomised trial. *BJOG* 2001;108:952-959.
206. Carlan SJ, Blust D, O'Brien WF. Buccal versus intravaginal misoprostol administration for cervical ripening. *Am J Obstet Gynecol* 2002;186:229-233.
207. McKenna DS, Ester JB, Proffitt M, Waddell KR. Misoprostol outpatient cervical ripening without subsequent induction of labor: a randomized trial. *Obstet Gynecol* 2004;104:579-584.
208. Incerpi MH, Fassett MJ, Kjos SL, Tran SH, Wing DA. Vaginally administered misoprostol for outpatient cervical ripening in pregnancies complicated by diabetes mellitus. *Am J Obstet Gynecol* 2001;185:916-919.
209. Stitely ML, Browning J, Fowler M, Gendron RT, Gherman RB. Outpatient cervical ripening with intravaginal misoprostol. *Obstet Gynecol* 2000;96:684-688.
210. Zust S, Hosli I, Surbek D, Holzgreve W. Nebenwirkungen von Misoprostol beim Einsatz im Rahmen der Schwangerschaft. *Z Geburtshilfe Neonatol* 2001;205:43-48.
211. Carlan SJ, Bouldin S, Blust D, O'Brien WF. Safety and efficacy of misoprostol orally and vaginally: a randomized trial. *Obstet Gynecol* 2001;98:107-112.
212. Danielian P, Porter B, Ferri N, Summers J, Templeton A. Misoprostol for induction of labour at term: a more effective agent than dinoprostone vaginal gel. *Br J Obstet Gynaecol* 1999;106:793-797.
213. Hofmeyr GJ, Matonhodze BB, Alfirevic Z, Campbell E, de Jager M, Nikodem C. Titrated oral misoprostol solution--a new method of labour induction. *S Afr Med J* 2001;91:775-776.
214. Mundle WR, Young DC. Vaginal misoprostol for induction of labor: a randomized controlled trial. *Obstet Gynecol* 1996;88:521-525.
215. Schröder AK, Tauchert S, Diedrich K. Geburtseinleitung mit Misoprostol: eine effektive, sichere und kostengünstige Alternative. [Induction of labour at term with misoprostol: an effective, safe and inexpensive alternative]. *Zentralbl Gynäkol* 2004;126:154-158.
216. Lazarus JV, Lalonde A. Reducing postpartum hemorrhage in Africa. *Int J Gynaecol Obstet* 2005;88:89-90.
217. AbouZahr C, Wardlaw T. Maternal mortality in 2000: Estimates developed by WHO, UNICEF and UNFPA. *Geneva: World Health Organisation* 2000;at [www.who.int/reproductive-health/publications/maternal\\_mortality\\_2000](http://www.who.int/reproductive-health/publications/maternal_mortality_2000).

218. AbouZahr C. Global burden of maternal death and disability. *Br Med Bull* 2003;67:1-11.
219. WHO. Global estimates of maternal mortality for 1995: results of an in-depth view, analysis and estimation strategy (Statement). *Geneva: World Health Organisation* 1995:2001.
220. AbouZahr C. Safe motherhood: a brief history of the global movement 1947-2002. *Br Med Bull* 2003;67:13-25.
221. Li XF, Fortney JA, Kotelchuck M, Glover LH. The postpartum period: the key to maternal mortality. *Int J Gynaecol Obstet* 1996;54:1-10.
222. McCormick ML, Sanghvi HC, Kinzie B, McIntosh N. Preventing postpartum hemorrhage in low-resource settings. *Int J Gynaecol Obstet* 2002;77:267-275.
223. Potts M, Campbell M. Three meetings and fewer funerals-misoprostol in postpartum haemorrhage. *Lancet* 2004;364:1110-1111.
224. Cullen M. Important drug warning concerning unapproved use of intravaginal or oral misoprostol in pregnant women for induction of labor or abortion. *Searle Health Care Practitioner Letter* 23. August 2000.
225. U.S. Department of Health and Human Services. FDA approves mifepristone for the termination of early pregnancy. *Food and drug administration* 2000:Accessed September 28, 2000 at <http://www.fda.gov/bbs/topics/NEWS/NEW00737.html>.
226. ACOG news release. ACOG writes FDA on safety of misoprostol. *American College of Obstetricians and Gynecologists* 2000:Accessed October 26, 2000, at [http://www.acog.org/from\\_home/publications/press\\_releases/nr2010-2027-2000.cfm](http://www.acog.org/from_home/publications/press_releases/nr2010-2027-2000.cfm).
227. Hofmeyr GJ, Gulmezoglu AM. Vaginal misoprostol for cervical ripening and induction of labour. *Cochrane Database Syst Rev* 2003:CD000941.
228. ACOG. ACOG committee opinion. New U.S. Food and Drug Administration labeling on Cytotec (misoprostol) use and pregnancy. Number 283, May 2003. *Int J Gynaecol Obstet* 2003;82:137-138.
229. Expert Committee on the Selection and Use of Essential Medicines. The 14th WHO Model List of Essential Medicines. *Geneva: World Health Organisation* 2005:Accessed March, 2005, at: <http://www.who.int/medicines/publications/essentialmedicines/en/>.
230. FIGO motions of the Executive Board of FIGO. Active Management of the Third Stage of Labour. *Fédération Internationale de Gynécologie et d'Obstétrique* 2005:Accessed in London, September 18 and 19, 2005.
231. Goldberg AB, Greenberg MB, Darney PD. Misoprostol and pregnancy. *N Engl J Med* 2001;344:38-47.