

OrbeShield™ – Key References

Posters:

Measey T, Pouliot M, Brown D, Authier S, Donini O. OrbeShield® Efficacy in a Preclinical Partial Body Irradiation Göttingen mini-pig Model of Acute Radiation Syndrome. Poster presented at the Radiation Research Society 62nd Annual International Meeting. **2016.**



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Pouliot M, Brown D, Authier S, Donini O. Gastrointestinal Structure and Function in a Preclinical Partial Body Irradiation (PBI) Göttingen Mini-pig Model of Acute Radiation Syndrome. Poster presented at the Radiation Research Society 62nd Annual International Meeting. **2016.**



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Papers:

Adams NP, Bestall JB, Malouf R, Lasserson TJ, Jones PW. Inhaled beclomethasone versus placebo for chronic asthma. Cochrane Database of Systematic Reviews. 2005;1.

Andersson P, Ryrfeldt A. Biotransformation of the topical glucocorticoids budesonide and beclomethasone 17 alpha,21 dipropionate in human liver and lung homogenate. J Pharm Pharmacol 1984;36:763-765.

Barnes NC. The properties of inhaled corticosteroids: similarities and differences. Primary Care Respiratory J. 2007;16:149-154.

Brogden RN, Pinder RM, Sawyer PR, Speight TM, Avery GS. Beclomethasone dipropionate inhaler: A review of its pharmacology, therapeutic value and adverse effects. I. Asthma. Drugs. 1975;10:166-210.

Brogden RN, Heel RC, Speight TM and Avery GS. Beclomethasone dipropionate. A reappraisal of its pharmacodynamic properties and therapeutic efficacy after a decade of use in asthma and rhinitis. Drugs. 1984;29:99-126.

Burggraaf J, van Haarst AD, Fockens P, Schoemaker HC, Krauwinkel WJJ and Cohen AF. The gastrointestinal passage and release of beclomethasone dipropionate from oral delivery systems in ileostomy volunteers. Br. J. Clin. Pharmacol. 1998;46:207-214

Buttgereit F, Burmester G-R, Lipworth BJ. Optimised glucocorticoid therapy: the sharpening of an old spear. Lancet. 2005;365:801-803.

Campieri M, Cottone M, Miglio F et al. Beclomethasone dipropionate enemas versus prednisolone sodium phosphate enemas in the treatment of distal ulcerative colitis. Aliment. Pharmacol. Ther. 1998;112:361-366.

Daley-Yates PT, Price AC, Sisson JR, Pereira A, Dallow N. Beclomethasone dipropionate: absolute bioavailability, pharmacokinetics and metabolism following intravenous, oral, intranasal and inhaled administration in man. *British Journal of Clinical Pharmacology*. 2001;51:400-409.

Elkon KB, Sher R, Seftel HC. Immunological studies of eosinophilic gastro-enteritis and treatment with disodium cromoglycate and beclomethasone dipropionate. *S Afr Med J*. 1977;52:838-841.

Harris DM. Some properties of beclomethasone dipropionate and related steroids in man. *Postgrad Med J*. 1975;51:20-25.

Harris DM. Properties and therapeutic uses of some corticosteroids with enhanced topical potency. *Journal of Steroid Biochemistry*. 1975;6(5):711.

Hockenbery DM, Cruickshank S, Rodell TC et al. A randomized, placebo-controlled trial of oral beclomethasone dipropionate as a prednisone-sparing therapy for gastrointestinal graft-versus-host disease. *Blood*. 2007a;109:4557-4563.

Hockenbery DM. Oral beclomethasone dipropionate in gastrointestinal graft-versus-host disease. *Expert Rev Clin Immunol*, 2007b. 3(5): 695-700.

Isaar M, Sahasranaman S, Buchwald P, Hochhaus G. Differences in the glucocorticoid to progesterone receptor selectivity of inhaled glucocorticoids. *Eur Respir J* 2006;27:511-516.

Johansson SA, Andersson KE, Brattsand R et al. Topical and systemic glucocorticoid potencies of budesonide and beclomethasone dipropionate in man. *Eur J Respir Dis Suppl*. 1982;22:523-529.

Komarov, EA, et al. Dual effect of p53 on radiation sensitivity in vivo: p53 promotes hematopoietic injury, but protects from gastro-intestinal syndrome in mice. *Oncogene*, 2004. 23(19): 3265-71.

Komarova EA, et al. p53 is a suppressor of inflammatory response in mice. *FASEB J*, 2005. 19(8): 1030-2.

Kumana CR, Seaton T, Meghji M, Castelli M, Benson R and Sivakumaran T. Beclomethasone dipropionate enemas for treating inflammatory bowel disease without producing Cushing's syndrome or hypothalamic pituitary adrenal suppression. *Lancet*. 1982;1: 579-583.

Levine DS, Rubin CE. Topical beclomethasone dipropionate enemas improve distal ulcerative colitis and idiopathic proctitis without systemic toxicity. *Gastroenterology*. 1985;88:1473.

Levine DS, Raisys VA, Ainaridi V. Coating of oral beclomethasone dipropionate capsules with cellulose acetate phthalate enhances delivery of topically active anti-inflammatory drug to the terminal ileum. *Gastroenterology*. 1987;92:1037-1044.

Levine, DS. Immune modulating therapies for idiopathic inflammatory bowel disease. *Adv Pharmacol*. 1994;25:171-234.

Libretto, SE. Review of the toxicology of beclomethasone dipropionate. *Archives of toxicology*. 1995;69(8):509.

Lipworth BJ. Systemic adverse events of inhaled corticosteroids. *Arch Int Med*. 1999;159:941-955.

Lofberg R, Ostergaard Thomsen O, Langholz E et al. Budesonide versus prednisolone retention enemas in active distal ulcerative colitis. *Aliment Pharmacol Ther*. 1994;8:623-629.

Lofberg R, Rutgeerts P, Malchow H et al. Budesonide prolongs time to relapse in ileal and ileocaecal Crohn's disease. A placebo controlled one year study. *Gut*. 1996;39:82-86.

MacVittie, TJ, Bennett A, et al. The prolonged gastrointestinal syndrome in rhesus macaques: the relationship between gastrointestinal, hematopoietic, and delayed multi-organ sequelae following acute, potentially lethal, partial-body irradiation. *Health physics*. 2012;103(4):427.

MacVittie, TJ, Farese AM, et al. The acute gastrointestinal subsyndrome of the acute radiation syndrome: a rhesus macaque model. *Health physics*. 2012;103(4):411.

MacVittie, TJ. The MCART Consortium animal models series. *Health physics*. 2012;103(4):340.

McDonald GB, Bouvier M, Hockenbery DM et al. Oral beclomethasone dipropionate for treatment of intestinal graft-versus-host disease: a randomized, controlled trial. *Gastroenterology*. 1998;115:28-35.

Martin LE, Harrison C, Tanner RJN. Metabolism of beclomethasone dipropionate by animals and man. *Postgrad Med J*. 1975;51:11-20.

Mettler, FA, Jr. and GL Voelz, Major radiation exposure--what to expect and how to respond. *N Engl J Med*, 2002. 346(20): 1554-61.

Mulder CJ, Endert E, van der HH et al. Comparison of beclomethasone dipropionate (2 and 3 mg) and prednisolone sodium phosphate enemas (30 mg) in the treatment of ulcerative proctitis. An adrenocortical approach. *Neth J Med*. 1989;35:18-24.

Paris F, et al. Endothelial apoptosis as the primary lesion initiating intestinal radiation damage in mice. *Science*. 2001;293(5528):293-297.

Potten CS. A comprehensive study of the radiobiological response of the murine (BDF1) small intestine. *Int J Radiat Biol*. 1990;58(6):925-973.

Potten CS and Booth C. The role of radiation-induced and spontaneous apoptosis in the homeostasis of the gastrointestinal epithelium: a brief review. *Comp Biochem Physiol B*. 1997a;118(3):473-478.

Potten CS, Booth C and Pritchard DM. The intestinal epithelial stem cell: the mucosal governor. *Int J Exp Pathol*. 1997b;78(4):219-243.

Rhen T and Cidlowski JA. Antiinflammatory action of glucocorticoids--new mechanisms for old drugs. *N Engl J Med*, 2005. 353(16): 1711-23.

Ricks RC, Berger ME, O'Hara FM (Eds.). The medical basis for radiation-accident preparedness. The clinical care of victims. Proceedings of the fourth international REACT/TS conference on the medical basis for radiation-accident preparedness. Parthenon Publishing Group, Boca Raton, FL. 2001;1-10.

Rizello F, Gionchetti P, D'Arienzo A et al. Oral beclomethasone dipropionate in the treatment of active ulcerative colitis: a double blind placebo controlled study. *Aliment Pharmacol Ther*. 2002;16:1109-1116.

Rutgeerts P, Lofberg R, Malchow H et al. A comparison of budesonide with prednisolone for active Crohn's disease. *N Engl J Med*. 1994;331:842-845.

van der Heide H, van den Brandt-Gradel V, Tytgat GNJ et al. Comparison of beclomethasone dipropionate and prednisolone 21-phosphate enemas in the treatment of ulcerative proctitis. *J Clin Gastroenterol*. 1988;10:169-172.

Williams JP, et al. Animal models for medical countermeasures to radiation exposure. *Radiat Res*, 2010. 173(4): 557-78.

Withers HR. Regeneration of intestinal mucosa after irradiation. *Cancer*. 1971;28(1):75-81. Withers HR and Elkind MM. Radiosensitivity and fractionation response of crypt cells of mouse jejunum. *Radiat Res*. 1969;38(3):598-613.

Wurthwein G, Rohdewald P. Activation of beclomethasone dipropionate by hydrolysis to beclomethasone-17-monopropionate. *Biopharm Drug Dispos*. 1990;11:381-394.