

Dr. Zisser's Publications

- 1: Bailey T, Zisser H, Chang A. New features and performance of a next-generation SEVEN-day continuous glucose monitoring system with short lag time. *Diabetes Technol Ther.* 2009 Dec;11(12):749-55. PubMed PMID: 20001675.
- 2: Bailey TS, Zisser HC, Garg SK. Reduction in hemoglobin A1C with real-time continuous glucose monitoring: results from a 12-week observational study. *Diabetes Technol Ther.* 2007 Jun;9(3):203-10. PubMed PMID: 17561790.
- 3: Bevier WC, Zisser HC, Jovanovic L, Finan DA, Palerm CC, Seborg DE, Doyle FJ 3rd. Use of continuous glucose monitoring to estimate insulin requirements in patients with type 1 diabetes mellitus during a short course of prednisone. *J Diabetes Sci Technol.* 2008 Jul;2(4):578-83. PubMed PMID: 19885233; PubMed Central PMCID: PMC2769767.
- 4: Bevier WC, Zisser H, Palerm CC, Finan DA, Seborg DE, Doyle FJ, Wollitzer AO, Jovanovic L. Calculating the insulin to carbohydrate ratio using the hyperinsulinaemic-euglycaemic clamp-a novel use for a proven technique. *Diabetes Metab Res Rev.* 2007 Sep;23(6):472-8. PubMed PMID: 17315240.
- 5: Bondia J, Dassau E, Zisser H, Calm R, Vehí J, Jovanovic L, Doyle FJ. Coordinated Basal-bolus infusion for tighter postprandial glucose control in insulin pump therapy. *J Diabetes Sci Technol.* 2009 Jan;3(1):89-97. PubMed PMID: 20046653; PubMed Central PMCID: PMC2769848.
- 6: Byrne EZ, Zisser HC, Jovanovic L. Continuous glucose monitoring: is it helpful in pregnancy? *Curr Diabetes Rev.* 2008 Aug;4(3):223-6. Review. PubMed PMID: 18690904.
- 7: Chitayat L, Zisser H, Jovanovic L. Continuous glucose monitoring during pregnancy. *Diabetes Technol Ther.* 2009 Jun;11 Suppl 1:S105-11. PubMed PMID: 19469669.
- 8: Dassau E, Jovanovic L, Doyle FJ 3rd, Zisser HC. Enhanced 911/global position system wizard: a telemedicine application for the prevention of severe hypoglycemia--monitor, alert, and locate. *J Diabetes Sci Technol.* 2009 Nov 1;3(6):1501-6. PubMed PMID: 20144406; PubMed Central PMCID: PMC2787052.
- 9: Dassau E, Palerm CC, Zisser H, Buckingham BA, Jovanovic L, Doyle FJ. In silico evaluation platform for artificial pancreatic beta-cell development--a dynamic simulator for closed-loop control with hardware-in-the-loop. *Diabetes Technol Ther.* 2009 Mar;11(3):187-94. PubMed PMID: 19191486.
- 10: Dassau E, Zisser H, C Palerm C, A Buckingham B, Jovanovic L, J Doyle F 3rd. Modular artificial beta-cell system: a prototype for clinical research. *J Diabetes Sci Technol.* 2008 Sep;2(5):863-72. PubMed PMID: 19885271; PubMed Central PMCID: PMC2769791.
- 11: Ellingsen C, Dassau E, Zisser H, Grosman B, Percival MW, Jovanovic L, Doyle

FJ 3rd. Safety constraints in an artificial pancreatic beta cell: an implementation of model predictive control with insulin on board. *J Diabetes Sci Technol*. 2009 May 1;3(3):536-44. PubMed PMID: 20144293; PubMed Central PMCID: PMC2769860.

12: Finan DA, Doyle FJ 3rd, Palerm CC, Bevier WC, Zisser HC, Jovanovic L, Seborg DE. Experimental evaluation of a recursive model identification technique for type 1 diabetes. *J Diabetes Sci Technol*. 2009 Sep 1;3(5):1192-202. PubMed PMID: 20144436; PubMed Central PMCID: PMC2769906.

13: Finan DA, Zisser H, Jovanovic L, Bevier WC, Seborg DE. Practical issues in the identification of empirical models from simulated type 1 diabetes data. *Diabetes Technol Ther*. 2007 Oct;9(5):438-50. PubMed PMID: 17931052.

14: Garber A, Henry R, Ratner R, Garcia-Hernandez PA, Rodriguez-Pattzi H, Olvera-Alvarez I, Hale PM, Zdravkovic M, Bode B; LEAD-3 (Mono) Study Group. Liraglutide versus glimepiride monotherapy for type 2 diabetes (LEAD-3 Mono): a randomised, 52-week, phase III, double-blind, parallel-treatment trial. *Lancet*. 2009 Feb 7;373(9662):473-81. Epub 2008 Sep 24. PubMed PMID: 18819705.

15: Garg S, Zisser H, Schwartz S, Bailey T, Kaplan R, Ellis S, Jovanovic L. Improvement in glycemic excursions with a transcutaneous, real-time continuous glucose sensor: a randomized controlled trial. *Diabetes Care*. 2006 Jan; 29(1):44-50. PubMed PMID: 16373894.

16: Gillis R, Palerm CC, Zisser H, Jovanovic L, Seborg DE, Doyle FJ. Glucose estimation and prediction through meal responses using ambulatory subject data for advisory mode model predictive control. *J Diabetes Sci Technol*. 2007 Nov;1(6):825-33. PubMed PMID: 19885154; PubMed Central PMCID: PMC2769674.

17: Klonoff DC, Cobelli C, Kovatchev B, Zisser HC. Progress in development of an artificial pancreas. *J Diabetes Sci Technol*. 2009 Sep 1;3(5):1002-4. PubMed PMID: 20144412; PubMed Central PMCID: PMC2769889.

18: Marchetti G, Barolo M, Jovanovic L, Zisser H, Seborg DE. An improved PID switching control strategy for type 1 diabetes. *IEEE Trans Biomed Eng*. 2008 Mar;55(3):857-65. PubMed PMID: 18334377.

19: Marchetti G, Barolo M, Jovanovič L, Zisser H, Seborg DE. A Feedforward-Feedback Glucose Control Strategy for Type 1 Diabetes Mellitus. *J Process Control*. 2008 Feb; 18(2):149-162. PubMed PMID: 19190726; PubMed Central PMCID: PMC2597856.

20: Marchetti G, Barolo M, Jovanovic L, Zisser H, Seborg DE. An improved PID switching control strategy for type 1 diabetes. *Conf Proc IEEE Eng Med Biol Soc*. 2006;1:5041-4. PubMed PMID: 17947128.

21: Owens C, Zisser H, Jovanovic L, Srinivasan B, Bonvin D, Doyle FJ 3rd. Run-to-run control of blood glucose concentrations for people with Type 1 diabetes mellitus. *IEEE Trans Biomed Eng*. 2006 Jun;53(6):996-1005. PubMed PMID: 16761826.

22: Palerm CC, Zisser H, Jovanovič L, Doyle FJ. A Run-to-Run Control Strategy to

Adjust Basal Insulin Infusion Rates in Type 1 Diabetes. *J Process Control*. 2008;18(3-4):258-265. PubMed PMID: 18709180; PubMed Central PMCID: PMC2516944.

23: Palerm CC, Zisser H, Bevier WC, Jovanovic L, Doyle FJ 3rd. Prandial insulin dosing using run-to-run control: application of clinical data and medical expertise to define a suitable performance metric. *Diabetes Care*. 2007 May;30(5):1131-6. Epub 2007 Feb 15. PubMed PMID: 17303792.

24: Palerm CC, Rodríguez-Fernández M, Bevier WC, Zisser H, Banga JR, Jovanovic L, Doyle FJ 3rd. Robust parameter estimation in a model for glucose kinetics in type 1 diabetes subjects. *Conf Proc IEEE Eng Med Biol Soc*. 2006;1:319-22. PubMed PMID: 17946395.

25: Patek SD, Bequette BW, Breton M, Buckingham BA, Dassau E, Doyle FJ 3rd, Lum J, Magni L, Zisser H. In silico preclinical trials: methodology and engineering guide to closed-loop control in type 1 diabetes mellitus. *J Diabetes Sci Technol*. 2009 Mar 1;3(2):269-82. PubMed PMID: 20144358; PubMed Central PMCID: PMC2771529.

26: Percival MW, Zisser H, Jovanovic L, Doyle FJ 3rd. Closed-loop control and advisory mode evaluation of an artificial pancreatic Beta cell: use of proportional-integral-derivative equivalent model-based controllers. *J Diabetes Sci Technol*. 2008 Jul;2(4):636-44. PubMed PMID: 19885240; PubMed Central PMCID: PMC2769776.

27: Pettitt DJ, Ospina P, Howard C, Zisser H, Jovanovic L. Efficacy, safety and lack of immunogenicity of insulin aspart compared with regular human insulin for women with gestational diabetes mellitus. *Diabet Med*. 2007 Oct;24(10):1129-35. PubMed PMID: 17888133; PubMed Central PMCID: PMC2121124.

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29: Rosenstock J, Bergenstal R, Defronzo RA, Hirsch IB, Klonoff D, Boss AH, Kramer D, Petrucci R, Yu W, Levy B; 0008 Study Group. Efficacy and safety of Technosphere inhaled insulin compared with Technosphere powder placebo in insulin-naive type 2 diabetes suboptimally controlled with oral agents. *Diabetes Care*. 2008 Nov;31(11):2177-82. Epub 2008 Aug 4. PubMed PMID: 18678610; PubMed Central PMCID: PMC2571070.

30: Salmi DJ, Zisser HC, Jovanovic L. Screening for and treatment of polycystic ovary syndrome in teenagers. *Exp Biol Med (Maywood)*. 2004 May;229(5):369-77. Review. PubMed PMID: 15096648.

31: Wang Y, Percival MW, Dassau E, Zisser HC, Jovanovic L, Doyle FJ 3rd. A novel adaptive basal therapy based on the value and rate of change of blood glucose. *J Diabetes Sci Technol*. 2009 Sep 1;3(5):1099-108. PubMed PMID: 20144423; PubMed Central PMCID: PMC2769919.

32: Zisser H, Palerm CC, Bevier WC, Doyle FJ 3rd, Jovanovic L. Clinical update on optimal prandial insulin dosing using a refined run-to-run control algorithm. *J*

Diabetes Sci Technol. 2009 May 1;3(3):487-91. PubMed PMID: 20144286; PubMed Central PMCID: PMC2769876.

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34: Zisser H. Quantifying the impact of a short-interval interruption of insulin-pump infusion sets on glycemic excursions. Diabetes Care. 2008 Feb;31(2):238-9. Epub 2007 Dec 4. PubMed PMID: 18056889.

35: Zisser H, Jovanovic L. OmniPod Insulin Management System: patient perceptions, preference, and glycemic control. Diabetes Care. 2006 Sep;29(9):2175. PubMed PMID: 16936173.

36: Zisser H, Jovanovic L, Thorsell A, Kupperman A, Taylor LJ, Ospina P, Hod M. The fidgety fetus hypothesis: fetal activity is an additional variable in determining birth weight of offspring of women with diabetes. Diabetes Care. 2006 Jan;29(1):63-7. PubMed PMID: 16373897.

37: Zisser H, Jovanovic L, Doyle F 3rd, Ospina P, Owens C. Run-to-run control of meal-related insulin dosing. Diabetes Technol Ther. 2005 Feb;7(1):48-57. PubMed PMID: 15738703.

38: Zisser HC, Bevier W, Dassau E, Jovanovic L. Siphon effects on continuous subcutaneous insulin infusion pump delivery performance. J Diabetes Sci Technol. 2010 Jan 1;4(1):98-103. PubMed PMID: 20167172; PubMed Central PMCID: PMC2825629.

39: Zisser HC, Bailey TS, Schwartz S, Ratner RE, Wise J. Accuracy of the SEVEN continuous glucose monitoring system: comparison with frequently sampled venous glucose measurements. J Diabetes Sci Technol. 2009 Sep 1;3(5):1146-54. PubMed PMID: 20144429; PubMed Central PMCID: PMC2769895.

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41: Zisser HC, Guyton DL. Photographic simulation of image quality through bifocal intraocular lenses. Am J Ophthalmol. 1989 Sep 15;108(3):324-6. PubMed PMID: 2774041.