

Peer-Reviewed Journal Articles and Selected Abstracts for Relevant Information on Long-term Continuous Glucose Monitoring Systems

PIVOTAL STUDIES

Evaluation of accuracy and safety of the 365-day implantable Eversense continuous glucose monitoring system: The ENHANCE study. Bailey TS, Liljenquist DR, Denham DS, Brazg RL, Ioacara S, Masciotti J, Ghosh-Dastidar S, Tweden KS, Kaufman FR. *Diabetes Technol Ther.* 2025 Jan 27. DOI: 10.1089/dia.2024.0592.

Evaluation of accuracy and safety of the next-generation up to 180-day long-term implantable Eversense continuous glucose monitoring system: The PROMISE study. Garg SK, Liljenquist D, Bode B, Christiansen MP, Bailey TS, Brazg RL, Denham DS, Chang AR, Akturk HK, Dehennis A, Tweden KS, Kaufman FR. *Diabetes Technology and Therapeutics.* 2022;24,84–92, DOI: 10.1089/dia.2021.0182.

A prospective multicenter evaluation of the accuracy and safety of an implanted continuous glucose sensor: The PRECISION study. Christiansen MP, Klaff LJ, Bailey TS, Brazg R, Carlson G, Tweden KS. *Diabetes Technology & Therapeutics.* 2019;21(5):231–237. DOI: 10.1089/dia.2019.0020.

A prospective multicenter evaluation of the accuracy of a novel implanted continuous glucose sensor: PRECISE II. Christiansen MP, Klaff LJ, Brazg R, Chang AR, Levy CJ, Lam D, Denham DS, Atiee G, Bode BW, Walters SJ, Kelley L. *Diabetes Technology & Therapeutics* 2018 1;20(3):197–206. DOI: 10.1089/dia.2017.0142.

Accuracy and longevity of an implantable continuous glucose sensor in the PRECISE study: A 180-day, prospective, multicenter, pivotal trial. Kropff J, Choudhary P, Neupane S, Barnard K, Bain SC, Kapitza C, Forst T, Link M, Dehennis A, DeVries JH. *Diabetes Care* 2017;40(1):63–68. DOI: 10.2337/dc16-1525.

REAL WORLD STUDIES

Post-Approval Studies

Long-term safety and people reported outcomes of a long duration implantable CGM system in the US post-approval setting. Tweden KS, Romarowski B, Warren M, Latif K, Oiknine R, Kaufman FR. *Interventions Obes Diabetes.* 2024;6(5). DOI: 10.31031/IOD.2024.06.000648.

Implantable CGM use improves glycemic control in CGM naive patients. Tweden KS, Romarowski B, Mdingi C, Kaufman FR. *Interventions Obes Diabetes.* 2023;6(1). IOD: 10.31031/IOD.2023.06.000635.

Longitudinal analysis of real-world performance of an implantable continuous glucose sensor over multiple sensor insertion and removal cycles. Tweden KS, Deiss D, Rastogi R, Addaguduru S, Kaufman FR. *Diabetes Technology & Therapeutics* 2020;22:422–427. DOI: 10.1089/dia.2019.0342.

Real-world safety of an implantable continuous glucose sensor over multiple cycles of use: A post-market registry study. Deiss D, Irace C, Carlson G, Tweden KS, Kaufman FR. *Diabetes Technology Therapeutics.* 2020;22(1):48–52. DOI: 10.1089/dia.2019.0159.

Glucometrics

994-P: Real-World Evaluation of the Implantable 180-Day Eversense E3 CGM System. Tweden KS, Romarowski B, Mdingi C, Kaufman FR. *Diabetes* 2024;73(Supplement_1):994-P. DOI: 10.2337/db24-994-P.

Real world evaluation of people with type 2 diabetes with a 180-day implantable CGM system – Media Centre | EASD Mdingi, C. et al. European Association for the Study of Diabetes, Abstract and Oral presentation (EASD) #870, 60th Annual Meeting. Madrid, Spain, September 9–13, 2024.

Clinical use of a 180-day implantable glucose sensor improves glycated haemoglobin and time in range in patients with type 1 diabetes. Irace C, Cutruzzola A, Nuzzi A, Assaloni R, Brunato B, Pitocco D, Tartaglione L, Di Molfetta S, Cignarelli A, Laviola L, Citro G, Lovati E, Gnasso A, Tweden KS, Kaufman FR. *Diabetes, Obesity and Metabolism.* 2020;1–6, DOI:10.1111/dom.13993.

Real-world data from the first U.S. commercial users of an implantable continuous glucose sensor. Sanchez P, Ghosh-Dastidar S, Tweden KS et al. *Diabetes Technology & Therapeutics.* 2019;21(12):677–681. DOI: 10.1089/dia.2019.0234.

PERSON REPORTED OUTCOMES

Long-term safety and people reported outcomes of a long duration implantable CGM system in the US post-approval setting. Tweden KS, Romarowski B, Warren M, Latif K, Oiknine R, Kaufman FR. *Interventions Obes Diabetes*. 2024;6(5). DOI: 10.31031/IOD.2024.06.000648. (Duplicate Listing)

Acceptability of implantable continuous glucose monitoring sensor. Barnard KD, Kropff J, Choudhary P, Neupane S, Bain SC, Kapitza C, Forst T, Link M, Mdingi C, DeVries JH. *Journal of Diabetes Science and Technology*. 2018;12(3):634–638. DOI: 10.1177/1932296817735123.

CLINICAL REVIEWS

Review of the long-term implantable Senseonics continuous glucose monitoring system and other continuous glucose monitoring systems. Joseph JI. *Journal of Diabetes Science and Technology*. 2021;15(1):167–173. DOI: 10.1177/1932296820911919.

Clinical practice recommendations on the routine use of Eversense, the first long-term implantable continuous glucose monitoring system. Deiss D, Szadkowska A, Gordon D, Mallipedhi A, Schütz-Fuhrmann I, Aguilera E, Ringsell C, De Block C, Irace C. *Diabetes Technology & Therapeutics*. 2019;21(5):254–64. DOI: 10.1089/dia.2018.0397.

Device profile of the Eversense continuous glucose monitoring system for glycemic control in type-1 diabetes: Overview of its safety and efficacy. Irace C, Cutruzzola A, Tweden K, Kaufman FR. *Expert Review of Medical Devices*. 2021;18(10):909–914. DOI: 10.1080/17434440.2021.1982380.

HEAD-TO-HEAD TRIALS

Implantable and transcutaneous continuous glucose monitoring system: a randomized cross over trial comparing accuracy, efficacy and acceptance. Boscari F, Vettoretti M, Cavallin F, Amato AML, Uliana A, Vallone V, Avogaro A, Facchinetti A, Bruttomesso D. *Journal of Endocrinological Investigation*. 2022;45(1):115–124. DOI: 10.1007/s40618-021-01624-2.

Comparing the accuracy of transcutaneous sensor and 90-day implantable glucose sensor. Boscari F, Vettoretti M, Amato AML, Vallone V, Uliana A, Iori E, Avogaro A, Facchinetti A, Bruttomesso D. *Nutrition, Metabolism & Cardiovascular Diseases*. 2021;31:650–657. DOI: 10.1016/j.numecd.2020.09.006.

Performance of the Eversense versus the Free Style Libre Flash glucose monitor during exercise and normal daily activities in subjects with type 1 diabetes mellitus. Fokkert M, van Dijk PR, Edens MA, Hernandez AD, Slingerland R, Gans R, Alvarez ED, Bilo H. *BMJ Open Diab Res Care* 2020;8:e001193. DOI:10.1136/bmjdr-2020-001193.

A three-way accuracy comparison of the Dexcom G5, Abbott Freestyle Libre Pro, and Senseonics Eversense continuous glucose monitoring devices in a home-use study of subjects with type 1 diabetes. Jafri RZ, Balliro CA, El-Khatib F, Maheno MM, Hillard M, O'Donovan A, Selagamsetty R, Zheng H, Damiano E, Russell SJ. *Diabetes Technology and Therapeutics*. 2020;22(11):846–852. DOI: 10.1089/dia.2019.0449.

OTHER ORIGINAL STUDIES

Reduction of clinically important low glucose excursions with a long-term implantable continuous glucose monitoring system in adults with type 1 diabetes prone to hypoglycaemia: The France adoption randomized clinical trial. Renard E, Riveline J-P, Hanaire H, Guerci B, on behalf of the investigators of France Adoption Clinical Trial. *Diabetes Obes Metab*. 2022;1-9. DOI: 10.1111/dom.14644.

A novel and easy method to locate and remove first approved long-term implantable glucose sensors. Akturk HK and Brackett S. *Diabetes Technology & Therapeutics*. 2020;22:1–3. DOI: 10.1089/dia.2020.0023.

The implanted glucose monitoring system Eversense: An alternative for diabetes patients with isobornyl acrylate allergy. Oppel E, Kamann S, Heinemann L, Reichl FX, Högg C. *Contact Dermatitis*. 2020;82(2):101–104. DOI: 10.1111/cod.13392.

First assessment of the performance of an implantable continuous glucose monitoring system through 180 days in a primarily adolescent population with type 1 diabetes. Aronson R, Abitbol A, Tweden KS. *Diabetes, Obesity and Metabolism*. 2019;21(7):1689–1694. DOI: 10.1111/dom.13726.

Interference assessment of various endogenous and exogenous substances on the performance of the Eversense long-term implantable continuous glucose monitoring system. Lorenz C, Sandoval W, Mortellaro M. *Diabetes Technol Ther*. 2018;20(5):344–352. DOI: 10.1089/dia.2018.0028.

Long-term home study on nocturnal hypoglycemic alarms using a new fully implantable continuous glucose monitoring system in type 1 diabetes. Wang X, Ioacara S, DeHennis A. *Diabetes Technol Ther*. 2015;17(11):780–786. DOI: 10.1089/dia.2014.0375.

Multisite study of an implanted continuous glucose sensor over 90 days in patients with diabetes mellitus. Dehennis A, Mortellaro MA, Ioacara S. *Journal Diabetes Science and Technology*. 2015;9(5) 951–956. DOI: 10.1177/1932296815596760.

Performance characterization of an abiotic and fluorescent-based continuous glucose monitoring system in patients with type 1 diabetes. Mortellaro M, DeHennis A. *Biosens Bioelectron*. 2014;61:227–231. DOI: 10.1016/j.bios.2014.05.022.

Increased in vivo stability and functional lifetime of an implantable glucose sensor through platinum catalysis. Colvin AE, Jiang H. *J Biomed Mater Res*. 2013;101A:1274–1282. DOI: 10.1002/jbm.a.34424.