Supplementary Information – Online Resource 10

Evaluating cost-utility of continuous glucose monitoring in individuals with type 1 diabetes: a systematic review of methods and quality of studies using decision models and/or empirical data.

de Jong LA^{1*} (ORCID ID: 0000-0001-8814-0670), Li X² (ORCID ID: 0000-0002-0225-6937), Emamipour S³, van der Werf S⁴ (ORCID ID: 0000-0001-5856-7657), Postma MJ^{1,5}, van Dijk PR⁶ (ORCID ID: 0000-0002-9702-6551), Feenstra TL² (ORCID ID: 0000-0002-5788-0454)

¹ Department of Health Sciences, University Medical Center Groningen, University of Groningen, Groningen, the Netherlands

² Unit of PharmacoTherapy, -Epidemiology & -Economics, University of Groningen, Groningen Research Institute of Pharmacy (GRIP), Groningen, the Netherlands

³ Department of Clinical Pharmacy and Pharmacology, University Medical Center Groningen, University of Groningen, Groningen, the Netherlands

⁴Central Medical Library, University Medical Center Groningen, University of Groningen, Groningen, the Netherlands

⁵ Department of Economics, Econometrics and Finance, Faculty of Economics & Business, University of Groningen, Groningen, the Netherlands

⁶ Department of Endocrinology. University Medical Center Groningen, University of Groningen, Groningen, The Netherlands

*Corresponding author: <u>t.l.feenstra@rug.nl</u>

Table 1. Study population of included studies.

Publication (author year, country)	Patient population	Source of baseline clinical characteristics	Age (years)	%men	Baseline HbA1C	Duration of disease (years)	BMI
Emamipour 2022, The Netherlands [1]	Adults with T1D	Observational study (FLARE-NL4 study, [2])	45.6	50.7%	7.8%	NR	NR
Ly 2014, Australia [3]	Children, adolescents and adults with T1D	Based on the RCT itself	18.6	42.9% (CSII); 56.5% (SAP)	7.4% (CSII); 7.6% (SAP)	11.0	NR
Wan 2018, US [4]	Adults with T1D who had elevated HbA1c levels while using MDI	RCT (DIAMOND trial, [5])	51.4 (control); 45.7 (CGM)	77.0% (control); 53.0% (CGM)	8.6% (control); 8.6% (CGM)	23.1 (control); 19.6 (CGM)	26.8 (control); 27.9 (CGM)
Bilir 2018, Sweden [6]	Adults with well-controlled T1D (HbA1c ≤7.5%) using MDI insulin therapy or CSII and testing glucose levels at least 10 times/week.	RCT (IMPACT trial, [7])	43.7	56.9%	6.8%	22.0	25.0
Chaugule 2017, Canada [8]	Adults with T1D who had elevated HbA1c levels while using MDI	RCT (DIAMOND trial, [5])	46.0	53.0%	8.6%	19.0	NR
Conget 2018, Spain [9]	Individuals with T1D at a high risk of hypoglycemia	Unclear	18.6	50.0%	7.5%	12.0	NR
Gomez 2016 , Colombia [10]	Individuals with T1D older than 11 years	Observational study (Gómez 2013, [11])	34.2	53.5%	9.0%	14.0	23.7
Isitt 2022, Australia [12]	Adults with T1D who had elevated HbA1c levels while using MDI	RCT (DIAMOND trial, [5])	47.6	56.0%	8.6%	20.3	27.5
Jendle 2017, Sweden [13]	Individuals with T1D: 1) with increased risk of hypoglycemia; 2) with uncontrolled HbA1c at baseline	1) RCT (Ly 2013, [14]); 2) register (Swedish National Diabetes Register[15]; supplemented by DCCT, [16])	1) 17.4 (SAP) & 19.7 (CSII); 2) 46.0	Cohort 1: SAP 56.5% & CSII 42.9% Cohort 2: 55.7%	1) 7.6% (SAP); 7.4% (CSII); 2) 7.9%	1) 9.8 (SAP); 12.1 (CSII); 2) 24.0	NR
Jendle 2019, Sweden [17]	Individuals with T1D aged 14–75 years who had been using CSII with or without CGM for >6 months.	Single-arm non-randomized trial (Bergenstal 2016, [18])	37.8	44.4%	7.4%	21.7	NR
Jendle 2021, Sweden [19]	Individuals with T1D for >3 months	RCT (FUTURE study, [20])	48.8	53.9%	7.8%	22.8	NR

Kamble 2012, US [21]	Adults with inadequately controlled T1D	RCT (STAR 3 study, [22])	41.2	56.8%	8.3%	20.2	27.9
Lambadiari 2022, Greece [23]	Individuals with T1D	AHCL vs SAP plus PLGM: RCT (MiniMed 780G US pivotal trial, [24]); AHCL vs MDI plus isCGM: observational study (FUTURE study, [20])	AHCL vs SAP plus PLGM: 38.3; AHCL vs MDI plus isCGM: 45.8	AHCL vs SAP plus PLGM: 45.2%; AHCL vs MDI plus isCGM: 53.9%	AHCL vs SAP plus PLGM: 7.5%; AHCL vs MDI plus isCGM: 7.8%	AHCL vs SAP plus PLGM: 23.0; AHCL vs MDI plus isCGM: 22.8	NR
Nicolucci 2018, Italy [25]	Individuals with T1D: 1) at increased risk of hypoglycemia; 2) with uncontrolled HbA1c	1) RCT (Ly 2013, [14]); 2) meta- analysis (Pickup 2011, [26])	1) 17.4 (control); 19.7 (interventio n); 2) 27.0	1) 56.5% (control); 42.9% (interventio n); 2) 48.5%	1) 7.6% (control); 7.4% (interventio n); 2) 8.1%	1) 9.8 (control); 12.1 (interventio n); 2) 13.2	NR
Riemsma 2016, UK [27]	Individuals with T1D who are eligible for an insulin pump	Single-arm non-randomized trial (Bergenstal 2016, [18]) supplemented by various sources.	41.6	38.0%	7.3%	27.1	27.6
Roze 2015, Sweden [28]	Individuals with T1D	Meta-analysis (Pickup 2011, [26])	27.0	45.5%	8.6%	13.0	23.8
Roze 2016, France [29]	Individuals with T1D: 1) with an elevated risk for hypoglycemia due to impaired awareness of hypoglycemia; 2) with uncontrolled HbA1c	1) RCT (Ly 2013, [14]); 2) RCT (Riveline 2012, [30])	36.0	53.0%	9.0%	17.0	25.0
Roze 2016, UK [31]	Individuals with T1D with poor glycemic control	Meta-analysis (Pickup 2011, [26])	27.0	48.5%	10.0%	13.0	NR
Roze 2017, Denmark [32]	Individuals with T1D: 1) with hyperglycemia at baseline; 2) with an increased risk for hypoglycemia	1) meta-analysis (Pickup 2011, [26]); 2) RCT (Ly 2013, [14])	1) 27; 2) 18.6	1) 48.5%; 2) 49.5%	1) 8.1%; 2) 7.5%	1) 13.2; 2) 11.0	NR
Roze 2019, The Netherlands [33]	Individuals with T1D: 1) with hyperglycemia at baseline; 2) with an increased risk for hypoglycemia	1) meta-analysis (Pickup 2011, [26] supplemented by DCCT, [16]); 2) RCT (Ly 2013, [14])	1) 27.0; 2) 18.6	1) 48.5%; 2) 49.5%	1) 8.0%; 2) 7.5%	1) 13.2; 2) 11.1	NR
Roze 2019, Turkey [34]	Individuals with T1D: 1) with poor glycemic control at baseline; 2) at increased risk for hypoglycemia	1) meta-analysis (Pickup JC 2011, [26]); 2) RCT (Ly 2013, [14])	1) 27.0; 2) 18.7	1) 48.5%; 2) 49.5%	1) 9.0%; 2) 7.5%	1) 13.2; 2) 11.2	NR

Roze 2020, UK [35]	Individuals with T1D: 1) reflecting the DIAMOND trial T1D population; 2) reflecting the DIAMOND trial T1D population with baseline HbA1c at least 8.5% (69 mmol/mol)	RCT (DIAMOND trial, [5])	1) 48.0; 2) 46.0	NR	1) 8.6%; 2) 9.1%	20.0	NR
Roze 2021, Canada [36]	Adults with T1D	RCT (DIAMOND trial, [5])	47.6	56.0%	8.6%	20.3	27.5
Roze 2021, UK [37]	Adults and adolescents with T1D	RCT (DIAMOND trial, [5])	47.6	56.0%	8.6%	20.3	27.5
Roze 2021, France [38]	Adults with T1D	Single-arm non-randomized trial (Garg 2017/Bergenstal 2016, [18,39])	37.8	44.4%	7.4%	21.7	NR
Serné 2022, The Netherlands [40]	Individuals with T1D	RCT (FUTURE study, [20])	45.8	54.0%	7.8%	22.8	NR
Zhao 2021, China [41]	Individuals with T1D and treated by insulin	Epidemiological studies (Zhou 2020 and Tang 2019, [42,43])	33.3	55.6%	10.3%	0.0	21.4
Garcia-Lorenzo 2018, Spain [44]	Individuals with T1D without complications at baseline.	Meta-analysis conducted for the purpose of the study	26.0	NR	NR	NR	NR
Health Quality Ontario 2018, Canada [45]	Individuals with T1D	RCT (DCCT, [16])	27.0	NR	8.8%	6.0	NR
Huang 2010, US	Individuals with T1D with HbA1c	RCT (Juvenile Diabetes Research	HbA1C	HbA1C	HbA1C	HbA1C	NR
[46]	level of \leq 10.0% who are currently on	Foundation-CGM trials, [47])	≥7.0%: 44.7	≥7.0%:	≥7.0%:	≥7.0%: 21.8	
	CSII or MDI.		(control)	74.0%	7.6%(contro	(control)	
			and 41.2	(control)	l) and 7.6%	and 23.6	
			(CGM);	and 69.0%	(CGM);	(CGM);	
			HbA1C<7.0	(CGM);	HbA1C<7.0	HbA1C<7.0	
			%: 31.8	NDAIC<7.0	%: 0.5%	%: 18.2	
			and 29.4	/0.07.0/0	(control)	(control)	
			(CGM)	and 64.0%	(CGM)	(CGM)	
			(0011)	(CGM)	(0011)	(00.11)	
McQueen 2011, US	Adults with T1D	RCT (Juvenile Diabetes Research	40.0	NR	7.6%	~20.0	NR
[48]		Foundation-CGM trial, [47])					
Pease 2020,	Adults with T1D	Register (Australian National	18.0	46.7%	8.5%	10.0	NR
Australia [49]		Diabetes Audit, [50])					

Pease 2022, Australia [51]	Young people with T1D	RCT (Abraham 2021, [52])	12.0	45.0%	8.0% (age ≤21) or 8.5% (age >21)	7.0	NR
Rotondi 2022, Canada [53]	Adults with T1D aged 18–64 years	NR	NR	NR	8.1%	NR	NR

Abbreviations: BMI, body mass index; CGM, continuous glucose monitoring; CSII, continuous subcutaneous insulin infusion; DCCT, Diabetes Control and Complications Trial; isCGM, intermittently-scanned continuous glucose monitoring; MDI, multiple daily injections; NR, not reported; RCT, randomized controlled trial; rt-CGM, real-time continuous glucose monitoring; SAP, sensor-augmented pump; T1D, type 1 diabetes.

References

- 1. Emamipour S, van Dijk PR, Bilo HJG, Edens MA, van der Galiën O, Postma MJ, et al. Personalizing the Use of a Intermittently Scanned Continuous Glucose Monitoring (isCGM) Device in Individuals With Type 1 Diabetes: A Cost-Effectiveness Perspective in the Netherlands (FLARE-NL 9). J Diabetes Sci Technol. 2022.
- 2. Fokkert M, Van Dijk P, Edens M, Barents E, Mollema J, Slingerland R, et al. Improved well-being and decreased disease burden after 1-year use of flash glucose monitoring (FLARE-NL4). BMJ Open Diabetes Res Care. 2019 Dec 9;7(1).
- 3. Ly TT, Brnabic AJM, Eggleston A, Kolivos A, McBride ME, Schrover R, et al. A cost-effectiveness analysis of sensor-augmented insulin pump therapy and automated insulin suspension versus standard pump therapy for hypoglycemic unaware patients with type 1 diabetes. Value Health. 2014;17(5):561–9.
- 4. Wan W, Skandari MR, Minc A, Nathan AG, Winn A, Zarei P, et al. Cost-effectiveness of Continuous Glucose Monitoring for Adults With Type 1 Diabetes Compared With Self-Monitoring of Blood Glucose: The DIAMOND Randomized Trial. Diabetes Care. 2018 Jun 1;41(6):1227–34.
- 5. Beck RW, Riddlesworth T, Ruedy K, Ahmann A, Bergenstal R, Haller S, et al. Effect of Continuous Glucose Monitoring on Glycemic Control in Adults With Type 1 Diabetes Using Insulin Injections: The DIAMOND Randomized Clinical Trial. JAMA. 2017 Jan 24;317(4):371–8.
- 6. Bilir SP, Hellmund R, Wehler B, Li H, Munakata J, Lamotte M. Cost-effectiveness Analysis of a Flash Glucose Monitoring System for Patients with Type 1 Diabetes Receiving Intensive Insulin Treatment in Sweden. Eur Endocrinol. 2018 Sep 1;14(2):73–9.
- 7. Bolinder J, Antuna R, Geelhoed-Duijvestijn P, Kröger J, Weitgasser R. Novel glucose-sensing technology and hypoglycaemia in type 1 diabetes: a multicentre, nonmasked, randomised controlled trial. Lancet. 2016 Nov 5;388(10057):2254–63.
- 8. Chaugule S, Graham C. Cost-effectiveness of G5 Mobile continuous glucose monitoring device compared to self-monitoring of blood glucose alone for people with type 1 diabetes from the Canadian societal perspective. J Med Econ. 2017 Nov 2;20(11):1128–35.
- 9. Conget I, Martín-Vaquero P, Roze S, Elías I, Pineda C, Álvarez M, et al. Cost-effectiveness analysis of sensor-augmented pump therapy with low glucose-suspend in patients with type 1 diabetes mellitus and high risk of hypoglycemia in Spain. Endocrinol Diabetes Nutr. 2018 Aug 1;65(7):380–6.
- 10. Gomez AM, Alfonso-Cristancho R, Orozco JJ, Lynch PM, Prieto D, Saunders R, et al. Clinical and economic benefits of integrated pump/CGM technology therapy in patients with type 1 diabetes in Colombia. Endocrinol Nutr. 2016 Nov 1;63(9):466–74.
- 11. Gómez AM, Grizales AM, Veloza A, Marín A, Muñoz OM, Rondón MA. Factores asociados con el control glucémico óptimo en pacientes tratados con bomba de insulina y monitorización continua de glucosa en tiempo real. Avances en Diabetología. 2013 May 1;29(3):74–80.

- 12. Isitt JJ, Roze S. Long-term cost-effectiveness of Dexcom G6 real-time continuous glucose monitoring system in people with type 1 diabetes in Australia: Response to letter from Hellmund, Richard and Welsh, Zoe. Diabet Med. 2023 Feb 1;40(2).
- 13. Jendle J, Smith-Palmer J, Delbaere A, de Portu S, Papo N, Valentine W, et al. Cost-Effectiveness Analysis of Sensor-Augmented Insulin Pump Therapy with Automated Insulin Suspension Versus Standard Insulin Pump Therapy in Patients with Type 1 Diabetes in Sweden. Diabetes Ther. 2017 Oct 1;8(5):1015–30.
- 14. Ly TT, Nicholas JA, Retterath A, Lim EM, Davis EA, Jones TW. Effect of sensor-augmented insulin pump therapy and automated insulin suspension vs standard insulin pump therapy on hypoglycemia in patients with type 1 diabetes: a randomized clinical trial. JAMA. 2013 Sep 25;310(12):1240–7.
- 15. Swedisch National Diabetes Register. Annual report [Internet]. 2013 [cited 2023 Oct 13]. Available from: https://www.ndr.nu/pdfs/Annual_Report_NDR_2013.pdf
- 16. DM N, PA C, JY B, SM G, JM L, TJ O, et al. Intensive diabetes treatment and cardiovascular disease in patients with type 1 diabetes. N Engl J Med. 2005 Dec 22;353(25):2643–53.
- 17. Jendle J, Pöhlmann J, De Portu S, Smith-Palmer J, Roze S. Cost-Effectiveness Analysis of the MiniMed 670G Hybrid Closed-Loop System Versus Continuous Subcutaneous Insulin Infusion for Treatment of Type 1 Diabetes. Diabetes Technol Ther. 2019 Mar 1;21(3):110–8.
- 18. Bergenstal RM, Garg S, Weinzimer SA, Buckingham BA, Bode BW, Tamborlane W V., et al. Safety of a Hybrid Closed-Loop Insulin Delivery System in Patients With Type 1 Diabetes. JAMA. 2016 Oct 4;316(13):1407–8.
- 19. Jendle J, Buompensiere MI, Holm AL, de Portu S, Malkin SJP, Cohen O. The Cost-Effectiveness of an Advanced Hybrid Closed-Loop System in People with Type 1 Diabetes: a Health Economic Analysis in Sweden. Diabetes Ther. 2021 Nov 1;12(11):2977–91.
- 20. Charleer S, De Block C, Van Huffel L, Broos B, Fieuws S, Nobels F, et al. Quality of Life and Glucose Control After 1 Year of Nationwide Reimbursement of Intermittently Scanned Continuous Glucose Monitoring in Adults Living With Type 1 Diabetes (FUTURE): A Prospective Observational Real-World Cohort Study. Diabetes Care. 2020 Feb 1;43(2):389–97.
- 21. Kamble S, Schulman KA, Reed SD. Cost-effectiveness of sensor-augmented pump therapy in adults with type 1 diabetes in the United States. Value Health. 2012 Jul;15(5):632–8.
- 22. Davis SN, Horton ES, Battelino T, Rubin RR, Schulman KA, Tamborlane W V. STAR 3 randomized controlled trial to compare sensor-augmented insulin pump therapy with multiple daily injections in the treatment of type 1 diabetes: research design, methods, and baseline characteristics of enrolled subjects. Diabetes Technol Ther. 2010 Apr 1;12(4):249–55.
- 23. Lambadiari V, Ozdemir Saltik AZ, De Portu S, Buompensiere MI, Kountouri A, Korakas E, et al. Cost-Effectiveness Analysis of an Advanced Hybrid Closed-Loop Insulin Delivery System in People with Type 1 Diabetes in Greece. Diabetes Technol Ther. 2022 May 1;24(5):316–23.
- 24. Carlson AL, Sherr JL, Shulman DI, Garg SK, Pop-Busui R, Bode BW, et al. Safety and Glycemic Outcomes During the MiniMed[™] Advanced Hybrid Closed-Loop System Pivotal Trial in Adolescents and Adults with Type 1 Diabetes. Diabetes Technol Ther. 2022 Mar 1;24(3):178–89.
- 25. Nicolucci A, Rossi MC, D'Ostilio D, Delbaere A, de Portu S, Roze S. Cost-effectiveness of sensor-augmented pump therapy in two different patient populations with type 1 diabetes in Italy. Nutr Metab Cardiovasc Dis. 2018 Jul 1;28(7):707–15.
- 26. Pickup JC, Freeman SC, Sutton AJ. Glycaemic control in type 1 diabetes during real time continuous glucose monitoring compared with self monitoring of blood glucose: meta-analysis of randomised controlled trials using individual patient data. BMJ. 2011 Jul 16;343(7815).
- 27. Riemsma R, Ramos IC, Birnie R, Büyükkaramikli N, Armstrong N, Ryder S, et al. Integrated sensor-augmented pump therapy systems [the MiniMed® Paradigm[™] Veo system and the Vibe[™] and G4® PLATINUM CGM (continuous glucose monitoring) system] for managing blood glucose levels in type 1 diabetes: a systematic review and economic evaluation. Health Technol Assess. 2016 Feb 1;20(17):1–252.

- 28. Roze S, Saunders R, Brandt AS, de Portu S, Papo NL, Jendle J. Health-economic analysis of real-time continuous glucose monitoring in people with Type 1 diabetes. Diabet Med. 2015 May 1;32(5):618–26.
- 29. Roze S, Smith-Palmer J, Valentine W, Payet V, De Portu S, Papo N, et al. Cost-Effectiveness of Sensor-Augmented Pump Therapy with Low Glucose Suspend Versus Standard Insulin Pump Therapy in Two Different Patient Populations with Type 1 Diabetes in France. Diabetes Technol Ther. 2016 Feb 1;18(2):75–84.
- 30. Riveline JP, Schaepelynck P, Chaillous L, Renard E, Sola-Gazagnes A, Penfornis A, et al. Assessment of patient-led or physician-driven continuous glucose monitoring in patients with poorly controlled type 1 diabetes using basal-bolus insulin regimens: a 1-year multicenter study. Diabetes Care. 2012 May;35(5):965–71.
- 31. Roze S, Smith-Palmer J, Valentine WJ, Cook M, Jethwa M, De Portu S, et al. Long-term health economic benefits of sensor-augmented pump therapy vs continuous subcutaneous insulin infusion alone in type 1 diabetes: a U.K. perspective. J Med Econ. 2016 Mar 3;19(3):236–42.
- 32. Roze S, de Portu S, Smith-Palmer J, Delbaere A, Valentine W, Ridderstråle M. Cost-effectiveness of sensor-augmented pump therapy versus standard insulin pump therapy in patients with type 1 diabetes in Denmark. Diabetes Res Clin Pract. 2017 Jun 1;128:6–14.
- 33. Roze S, Smith-Palmer J, De Portu S, Delbaere A, De Brouwer B, De Valk HW. Cost-effectiveness of sensor-augmented insulin pump therapy vs continuous subcutaneous insulin infusion in patients with type 1 diabetes in the Netherlands. Clinicoecon Outcomes Res. 2019;11:73–82.
- 34. Roze S, Smith-Palmer J, De Portu S, Özdemir Saltik AZ, Akgül T, Deyneli O. Cost-Effectiveness of Sensor-Augmented Insulin Pump Therapy Versus Continuous Insulin Infusion in Patients with Type 1 Diabetes in Turkey. Diabetes Technol Ther. 2019 Dec 1;21(12):727–35.
- 35. Roze S, Isitt J, Smith-Palmer J, Javanbakht M, Lynch P. Long-term Cost-Effectiveness of Dexcom G6 Real-time Continuous Glucose Monitoring Versus Self-Monitoring of Blood Glucose in Patients With Type 1 Diabetes in the U.K. Diabetes Care. 2020 Oct 1;43(10):2411–7.
- 36. Roze S, Isitt JJ, Smith-Palmer J, Lynch P. Evaluation of the Long-Term Cost-Effectiveness of the Dexcom G6 Continuous Glucose Monitor versus Self-Monitoring of Blood Glucose in People with Type 1 Diabetes in Canada. Clinicoecon Outcomes Res. 2021;13:717–25.
- 37. Roze S, Buompensiere MI, Ozdemir Z, de Portu S, Cohen O. Cost-effectiveness of a novel hybrid closed-loop system compared with continuous subcutaneous insulin infusion in people with type 1 diabetes in the UK. J Med Econ. 2021;24(1):883–90.
- 38. Roze S, Isitt JJ, Smith-Palmer J, Lynch P, Klinkenbijl B, Zammit G, et al. Long-Term Cost-Effectiveness the Dexcom G6 Real-Time Continuous Glucose Monitoring System Compared with Self-Monitoring of Blood Glucose in People with Type 1 Diabetes in France. Diabetes Ther. 2021 Jan 1;12(1):235–46.
- 39. Garg SK, Weinzimer SA, Tamborlane W V., Buckingham BA, Bode BW, Bailey TS, et al. Glucose Outcomes with the In-Home Use of a Hybrid Closed-Loop Insulin Delivery System in Adolescents and Adults with Type 1 Diabetes. Diabetes Technol Ther. 2017 Mar 1;19(3):155–63.
- 40. Serné EH, Roze S, Buompensiere MI, Valentine WJ, De Portu S, de Valk HW. Cost-Effectiveness of Hybrid Closed Loop Insulin Pumps Versus Multiple Daily Injections Plus Intermittently Scanned Glucose Monitoring in People With Type 1 Diabetes in The Netherlands. Adv Ther. 2022 Apr 1;39(4):1844–56.
- 41. Zhao X, Ming J, Qu S, Li HJ, Wu J, Ji L, et al. Cost-Effectiveness of Flash Glucose Monitoring for the Management of Patients with Type 1 and Patients with Type 2 Diabetes in China. Diabetes Ther. 2021 Dec 1;12(12):3079–92.
- 42. Tang X, Yan X, Zhou H, Yang X, Niu X, Liu J, et al. Prevalence and identification of type 1 diabetes in Chinese adults with newly diagnosed diabetes. Diabetes Metab Syndr Obes. 2019;12:1527–41.
- 43. Zhou X, Wang X, An Y, Su Q, Li B, Chen H. Characteristics of type 1 diabetes patients aged 60 and older in Shanghai. Journal of Endocrine Disorders. 2020;6(2):1039.
- 44. García-Lorenzo B, Rivero-Santana A, Vallejo-Torres L, Castilla-Rodríguez I, García-Pérez S, García-Pérez L, et al. Cost-effectiveness analysis of real-time continuous monitoring glucose compared to self-monitoring of blood glucose for diabetes mellitus in Spain. J Eval Clin Pract. 2018 Aug 1;24(4):772–81.

- 45. Health Quality Ontario. Continuous Monitoring of Glucose for Type 1 Diabetes: A Health Technology Assessment. Ont Health Technol Assess Ser. 2018 Feb 21;18(2):1-160. eCollection 2018.
- 46. Huang ES, O'Grady M, Basu A, Winn A, John P, Lee J, et al. The cost-effectiveness of continuous glucose monitoring in type 1 diabetes. Diabetes Care. 2010 Jun;33(6):1269–74.
- 47. WV T, RW B, BW B, B B, HP C, R C, et al. Continuous glucose monitoring and intensive treatment of type 1 diabetes. N Engl J Med. 2008 Oct 2;359(14):1464–76.
- 48. McQueen RB, Ellis SL, Campbell JD, Nair K V., Sullivan PW. Cost-effectiveness of continuous glucose monitoring and intensive insulin therapy for type 1 diabetes. Cost Eff Resour Alloc. 2011 Sep 14;9.
- 49. Pease A, Zomer E, Liew D, Earnest A, Soldatos G, Ademi Z, et al. Cost-Effectiveness Analysis of a Hybrid Closed-Loop System Versus Multiple Daily Injections and Capillary Glucose Testing for Adults with Type 1 Diabetes. Diabetes Technol Ther. 2020 Nov 1;22(11):812–21.
- 50. Pease A, Earnest A, Ranasinha S, Nanayakkara N, Liew D, Wischer N, et al. Burden of cardiovascular risk factors and disease among patients with type 1 diabetes: results of the Australian National Diabetes Audit (ANDA). Cardiovasc Diabetol. 2018 Jun 2;17(1).
- 51. Pease A, Callander E, Zomer E, Abraham MB, Davis EA, Jones TW, et al. The Cost of Control: Cost-effectiveness Analysis of Hybrid Closed-Loop Therapy in Youth. Diabetes Care. 2022 Sep 1;45(9):1971–80.
- 52. Abraham MB, De Bock M, Smith GJ, Dart J, Fairchild JM, King BR, et al. Effect of a Hybrid Closed-Loop System on Glycemic and Psychosocial Outcomes in Children and Adolescents With Type 1 Diabetes: A Randomized Clinical Trial. JAMA Pediatr. 2021;175(12).
- 53. Rotondi MA, Wong O, Riddell M, Perkins B. Population-Level Impact and Cost-effectiveness of Continuous Glucose Monitoring and Intermittently Scanned Continuous Glucose Monitoring Technologies for Adults With Type 1 Diabetes in Canada: A Modeling Study. Diabetes Care. 2022 Sep 1;45(9):2012–9.