Supplementary Information – Online Resource 4

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.

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Table 1. ~~**Utility instruments used in the included studies.**~~ Summary of cost-effectiveness outcomes

Publication (author year, country)	Cohort/Scenario	Original currency and price year	Incremental costs (2022 US$)	Incremental QALYs	ICER (cost per QALY; 2022 US$
Emamipour 2022, The Netherlands [1]	-	EUR 2016	-$2,192	0.030	Dominant
Huang 2010, US [30]	Within-trial, HbA1c ≥ 7.0%	USD 2008[b]	NR	NR	$600,288
	Within-trial, HbA1c < 7.0%		NR	NR	$554,248
	Long-term, HbA1c ≥ 7.0%		$79,803	0.600	$134,002
	Long-term, HbA1c < 7.0%		$118,666	1.110	$118,666
Ly 2014, Australia [2]	-	AUD 2013	$1,320	0.037	$15,456
Wan 2018, US [3]	Within-trial analysis	USD 2015	$3,151	NR	NR
	Long-term analysis		$68,114	0.540	$121,043
Bilir 2018, Sweden [4]	-	SEK 2016	$32,685	0.801	$40,790
Chaugule 2017, Canada [5]	-	CAD 2016	$111,236	3.354	$33,163
Conget 2018, Spain [6]	NHS perspective	EUR 2016	$92,466	1.880	$49,262
	Societal perspective		$79,606	1.880	$42,410
Gomez 2016 , Colombia [7]	-	USD 2014	$110,286	3.810	$28,899
Isitt 2022, Australia [8]	rt-CGM vs SMBG	AUD 2020[a]	$16,921	1.199	$14,119
	rt-CGM vs isCGM		$8,669	0.569	$15,243
Jendle 2017, Sweden [9]	Cohort with increased risk of hypoglycemia	SEK 2015	$37,131	1.877	$19,782
	Cohort with uncontrolled HbA1c at baseline		$38,052	1.067	$35,646
Jendle 2019, Sweden [10]	-	SEK 2018	$42,039	1.900	$22,161
Jendle 2021, Sweden [11]	-	SEK 2019[c]	$96,415	1.950	$49,532
Kamble 2012, US [12]	SAPT with 3-d sensor	USD 2010	$115,842	0.376	$308,210
	SAPT with 6-d sensor		$84,786	0.376	$225,586
Lambadiari 2022, Greece [13]	vs SAP + PLGM	EUR 2015	-$22,853	0.284	Dominant
	vs MDI + isCGM		$179,383	2.708	$66,246
Nicolucci 2018, Italy [14]	Cohort at increased risk of hypoglycemia	EUR 2014	$119,372	1.877	$63,597
	Cohort with uncontrolled HbA1c		$122,957	1.448	$84,908
Riemsma 2016, UK [15]	vs MDI + SMBG	GBP 2014	$138,844	0.664	$209,197
	vs CSII + SMBG		$86,151	0.083	$1,039,211
Roze 2015, Sweden [16]	-	SEK 2011	$39,894	0.760	$52,378

Roze 2016, France [17]	Cohort with an elevated risk for hypoglycemia due to impaired awareness of hypoglycemia	EUR 2014	$57,278	1.187	$48,258
	Cohort with uncontrolled HbA1c		$50,530	1.435	$35,206
Roze 2016, UK [18]	-	GBP 2013	$64,111	2.990	$21,447
Roze 2017, Denmark [19]	Cohort with hyperglycemia at baseline	DKK 2015	$41,386	1.450	$28,580
	Cohort with an increased risk for hypoglycemia		$30,887	1.880	$16,455
Roze 2019, The Netherlands [20]	Cohort with hyperglycemia at baseline	EUR 2014	$68,922	1.770	$38,965
	Cohort with an increased risk for hypoglycemia		$57,563	2.160	$26,604
Roze 2019, Turkey [21]	Cohort with poor glycemic control at baseline	TRY 2016	$80,866	1.403	$57,638
	Cohort at increased risk for hypoglycemia		$90,216	1.733	$52,069
Roze 2020, UK [22]	Cohort reflecting the DIAMOND trial T1D population	GBP 2018	$23,100	1.490	$15,512
	Cohort reflecting the DIAMOND trial T1D population with baseline HbA1c at least 8.5% (69 mmol/mol)		$21,383	1.390	$15,382
Roze 2021, Canada [23]	-	CAD 2019	$32,762	2.088	$15,690
Roze 2021, UK [24]	-	GBP 2018	$57,491	1.730	$33,141
Roze 2021, France [25]	-	EUR 2020	$32,198	1.380	$23,339
Serné 2022, The Netherlands [26]	-	EUR 2020	$22,082	2.230	$9,898
Zhao 2021, China [27]	RCT scenario	CNY 2021	$14,505	1.220	$1,524
	RWE scenario		-$430	1.320	Dominant
Garcia-Lorenzo 2018, Spain [28]	-	EUR 2017	$224,678	0.046	$4,858,767
Health Quality Ontario 2018, Canada [29]	CGM + MDI vs SMBG + MDI	CAD 2017	$100,300	0.094	$1,071,144
	SAP vs SMBG + MDI		$128,211	0.132	$973,669
	CGM + insulin pump vs SMBG + insulin pump		$77,888	0.104	$752,234
	SAP vs SMBG + insulin pump		$78,299	0.137	$572,088
McQueen 2011, US [31]	-	USD 2007	$33,198	0.523	$63,477
Pease 2020, Australia [32]	-	AUD 2019	$105,672	3.724	$29,828
Pease 2022, Australia [33]	-	AUD 2021	$28,803	1.150	$24,966
Rotondi 2022, Canada [34]	CGM vs SMBG	CAD 2021	NR	NR	$31,165
	isCGM vs SMBG		NR	NR	$15,564

[a] NR; assumed price level two years before publication year.

[b] NR; assumed the same price level as the year the trial was published.

[c] NR; assumed the same price level for all costs as for the productivity losses.
Abbreviations: AUD, Australian dollars; CAD, Canadian dollars; CGM, continuous glucose monitoring; CNY, Chinese Yen; DKK, Danish Krone; EUR, euros; GBP, Great British pound; isCGM, intermittently-scanned continuous glucose monitoring; MDI, multiple daily injections; NR, not reported; RCT, randomized-controlled trial; SAP, sensor-augmented pump; SEK, Swedish krona; SMBG, self-monitoring of blood glucose; TRY, Turkish lira; T1D, type 1 diabetes; UK, United Kingdom; US, United States.

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