

Box S1

Search Strategies

Medline Search Strategy:

1. exp Diabetes Mellitus/
2. Diabet*.mp.
3. T1DM.mp.
4. T2DM.mp.
5. "Impaired glucose tolerance".mp.
6. "Impaired fasting glucose".mp.
7. pre-diabetes.mp.
8. prediabetes.mp.
9. LADA.mp.
10. MODY.mp.
11. IDDM.mp.
12. NIDDM.mp.
13. Hyperglyc*.mp.
14. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13
15. Glycated Hemoglobin A/
16. HbA1c.mp.
17. A1c.mp.
18. HgbA1c.mp.
19. Hb1c.mp.
20. "Hb A1".mp.
21. "Hb A1a+b".mp.
22. "Hb A1b".mp.
23. HbA1.mp.
24. "Glycated H?emoglobin".mp.
25. "Glycosylated h?emoglobin".mp.
26. Glycoh?emoglobin.mp.
27. "H?emoglobin A(1)".mp.
28. "H?emoglobin A, Glycosylated".mp.
29. "H?emoglobin, glycosylated".mp.
30. 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29
31. "H?emoglobin A1c Test Kit".mp.
32. "capillary blood sampling".mp.
33. "finger prick".mp.
34. fingerprick.mp.
35. "finger stick".mp.
36. fingerstick.mp.
37. "Heel prick".mp.
38. heelprick.mp.
39. Lancet.mp.
40. Lancing.mp.
41. Dried Blood Spot Testing/
42. "Dry blood spot".mp.
43. DBS.mp.
44. "capillary tube".mp.
45. microtube.mp.

46. "micro tube".mp.
47. "P?ediatric tube".mp.
48. "blood sampling device".mp.
49. "blood sampling needle".mp.
50. Point-of-Care Systems/
51. point-of-care systems/ or point-of-care testing/
52. "point of care".mp.
53. "blood collection paper".mp.
54. 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 or 53
55. 14 and 30 and 54
56. limit 55 to (english language and humans)

Embase Search Strategy:

1. exp diabetes mellitus/
2. diabet*.mp.
3. "Impaired fasting glucose".mp.
4. pre?diabetes.mp.
5. LADA.mp.
6. MODY.mp.
7. hyperglycemia/
8. 1 or 2 or 3 or 4 or 5 or 6 or 7
9. exp hemoglobin A1c/
10. A1c.mp.
11. HgbA1c.mp.
12. Hb1c.mp.
13. "Hb A1".mp.
14. "Hb A1a+b".mp.
15. "Hb A1b".mp.
16. HbA1.mp.
17. "Glycosylated Hemoglobin".mp.
18. "Hemoglobin A(1)".mp.
19. "Haemoglobin A(1)".mp.
20. "HbA(1c)".mp.
21. 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20
22. dried blood spot testing/
23. exp hemoglobin A1c test kit/
24. capillary blood/
25. "capillary blood sampling".mp.
26. "Finger prick".mp.
27. Fingerprick.mp.
28. "Finger stick".mp.
29. Fingerstick.mp.
30. DBS.mp.
31. "Heel prick".mp.
32. Heelprick.mp.
33. Lancet.mp.
34. capillary tube/
35. microtube.mp.
36. "micro tube".mp.

37. "P?ediatric tube".mp.
38. "Lancing device".mp.
39. blood sampling device/
40. blood collection needle/
41. "blood collection paper".mp.
42. "point of care system"/ or "point of care testing"/
43. 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42
44. 8 and 21 and 43
45. limit 44 to (human and english language)

CINAHL search strategy

- S62 S15 AND S39 AND S61 Limiters - English Language
- S61 S40 OR S41 OR S42 OR S43 OR S44 OR S45 OR S46 OR S47 OR S48 OR S49 OR S50 OR S51 OR S52 OR S53 OR S54 OR S55 OR S56 OR S57 OR S58 OR S59 OR S60
- S60 poc
- S59 poct
- S58 "point of care"
- S57 "blood sampling device"
- S56 "P#ediatric tube"
- S55 "micro tube"
- S54 Microtube
- S53 "capillary tube"
- S52 DBS
- S51 "dry blood spot"
- S50 "dried blood spot"
- S49 "Lancing"
- S48 Lancet
- S47 heel prick
- S46 "Heel prick"
- S45 fingerstick
- S44 "finger stick"
- S43 fingerprick
- S42 "finger prick"
- S41 "capillary blood sampling"
- S40 "Hemoglobin A1c test kit"
- S39 S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31 OR S32 OR S33 OR S34 OR S35 OR S36 OR S37 OR S38
- S38 HbA(1c)
- S37 "H#emoglobin, glycosylated"
- S36 "Hemoglobin, glycosylated"
- S35 "H#emoglobin A, Glycosylated"
- S34 "H#emoglobin A(1)"
- S33 "Hemoglobin A(1)"
- S32 "Glycoh#emoglobin"
- S31 Glycohemoglobin
- S30 "glycosylated h#emoglobin"
- S29 "glycosylated hemoglobin"
- S28 "glycated hemoglobin"
- S27 "Glycated h#emoglobin"

S26 "HbA1"
 S25 "HbA1b"
 S24 "Hb A1b"
 S23 "Hb A1a+b"
 S22 "Hb A1"
 S21 "Hb1c"
 S20 "hgba1c"
 S19 A1c
 S18 HbA1c
 S17 "Glycated h#emoglobin A"
 S16 (MH "Hemoglobin A, Glycosylated")
 S15 S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14
 S14 Hyperglyc*
 S13 (MH "Hyperglycemia+")
 S12 "Impaired fasting glucose"
 S11 "Impaired glucose tolerance"
 S10 T2DM
 S9 T1DM
 S8 NIDDM
 S7 IDDM
 S6 prediabet*
 S5 pre-diabet*
 S4 diabet*
 S3 MODY
 S2 LADA
 S1 (MH "Diabetes Mellitus+")

Web of Science: Core Collection search strategy

50 ((#13) AND #27) AND #48 and English (Languages)
 49 ((#13) AND #27) AND #48
 48 ((((((((((((((((((#28) OR #29) OR #30) OR #31) OR #32) OR #33) OR #34) OR #35) OR #36) OR #37)
 OR #38) OR #39) OR #40) OR #41) OR #42) OR #43) OR #44) OR #45) OR #46) OR #47
 47 ALL=(POCT)
 46 ALL=(POC)
 45 ALL=("Point of care")
 44 ALL=("Blood sampling")
 43 ALL=("P*ediatric tube")
 42 ALL=("micro tube")
 41 ALL=(Microtube)
 40 ALL=(DBS)
 39 ALL=("Dry Blood Spot")
 38 ALL=("Dried Blood Spot")
 37 ALL=("Capillary tube")
 36 ALL=(Lancing)
 35 ALL=(Lancet)
 34 ALL=("Heel prick")
 33 ALL=(Heelprick)
 32 ALL=("Finger stick")
 31 ALL=(Fingerstick)

30 ALL=("finger prick")
29 ALL=(Fingerprick)
28 ALL=("Capillary blood")
27 ((((((((((#14) OR #15) OR #16) OR #17) OR #18) OR #19) OR #20) OR #21) OR #22) OR #23) OR #24) OR #25) OR #26
26 ALL=(HbA(1c))
25 ALL=("H*emoglobin, glycosylated")
24 ALL=("H*emoglobin A, Glycosylated")
23 ALL=("H*emoglobin A(1)")
22 ALL=(glycoh*emoglobin)
21 ALL=("glycosylated h*emoglobin")
20 ALL=("Glycated h*emoglobin")
19 ALL=(HbA1)
18 ALL=("Hb A1")
17 ALL=(Hb1c)
16 ALL=(HgbA1c)
15 ALL=(A1c)
14 ALL=(HbA1c)
13 ((((((((((#1) OR #2) OR #3) OR #4) OR #5) OR #6) OR #7) OR #8) OR #9) OR #10) OR #11) OR #12
12 ALL=(Hyperglyc*)
11 ALL=(NIDDM)
10 ALL=(IDDM)
9 ALL=(MODY)
8 ALL=(LADA)
7 ALL=("Impaired fasting glucose")
6 ALL=("Impaired glucose tolerance")
5 ALL=(T2DM)
4 ALL=(T1DM)
3 ALL=(pre-diabet*)
2 ALL=(prediabet*)
1 ALL=(Diabet*)

Google Scholar search strategy

Diabetes|Diabetic|T1DM|T2DM|MODY|IDDM|NIDDM|Hyperglycaemia HbA1c|A1c|"Glycated haemoglobin"|"Glycated haemoglobin"|"Glycosylated haemoglobin"|"Glycosylated haemoglobin" "Finger prick"|"Hemoglobin A1c test kit"|DBS|"Dried blood spot"|Capillary|Lancet

Table S1

Data Extraction Tool and Risk of Bias Tool

General Information					
Date form completed	Name of person completing	Name of paper, year and journal.	Study author and contact details	Publication type (e.g. full report, abstract, letter)	Notes

Study Eligibility		
Inclusion criteria met? (see sheet 2)	Exclusion criteria met? (see sheet 2)	Reason for exclusion (if applicable)

Characteristics of the trial											
Country	Year	Study design	Setting	Single or Multi-centre study	Aim of study	Inclusion criteria of the study	Exclusion criteria of the study	Method of recruitment	Informed consent obtained?	Start Date	End Date

Characteristics of the participants															
Population description	Age range	Median age	Sex	Total number of participants	Diabetics only?	Number without diabetes	Number type 1 diabetics	Number type 2 diabetics	Number other type diabetics	Duration of diabetes	Participant sub-groups	Number participants who discontinued	Reasons for drop-out	Duration of participation	Other

Information about reference standard												
Total number of measurements	Total number of uninterpretable measurements	Were measurements paired	Total number of participants for this group with a full set of interpretable results	Number of participants with uninterpretable results/no results.	Special circumstances	Method and Manufacturer	Location of collection	Storage temperature	Storage time	Shipping conditions	Lab blinded?	Unit of measurement (% or mmol/mol)

Primary outcome												
Primary outcomes	Statistical methods used	True positive	False positive	True negative	False negative	Sensitivity	Specificity	PPV	NPV	Diagnostic thresholds	Correlation co-efficient	Co-efficient of determination

Primary Outcome (continued)											
Regression slope gradient	Intercept	Linear correlation calculation (i.e. $y=\alpha X+\beta$)	Standard error of the estimate	Bland Altman mean bias and confidence interval	Bland Altman plot 1.96 standard deviation	Bland Altman upper and lower levels of agreement	Bland Altman - evidence of proportional bias?	Imprecision	Absolute error	Relative error	Any other results reported

Additional outcomes		
Cost	Patient acceptability	Other

COSMIN Risk of Bias tool								
Were patients stable in the time between the repeated measurements on the construct to be measured?	Was the time interval between the repeated measurements appropriate	Were the measurement conditions similar for the repeated measurements – except for the condition being evaluated as a source of variation	Did the professional(s) administer the measurement without knowledge of scores or values of other repeated measurement(s) in the same patients	Did the professional(s) assign scores or determine values without knowledge of the scores or values of other repeated measurement(s) in the same patients?	Were there any other important flaws in the design or statistical methods of the study?	For continuous scores: was the Standard Error of Measurement (SEM), Smallest Detectable Change (SDC), Limits of Agreement (LoA) or Coefficient of Variation (CV) calculated?	For dichotomous/nominal/ordinal scores: Was the percentage specific (e.g. positive and negative) agreement calculated?	Overall outcome