

Table 8: Database parameters, filters and limits applied.

Database	Dates searched	Search filter used
Medline (OVID)	1946 – 26 September 2023	Systematic review studies Observational studies Diagnostic studies Exclusions (animal studies, letters, comments, editorials, case studies/reports) English language
Embase (OVID)	1974 – 26 September 2023	Systematic review studies Observational studies Diagnostic studies Exclusions (animal studies, letters, comments, editorials, case studies/reports, conference abstracts) English language
The Cochrane Library (Wiley)	Cochrane Database of Systematic Reviews to Issue 9 of 12, 26 September 2023	Exclusions (clinical trials, conference abstracts)
Epistemonikos (The Epistemonikos Foundation)	Inception to 26 September 2023	Systematic review Exclusions (Cochrane reviews)

Medline (Ovid) search terms

1.	exp Adrenal Insufficiency/
2.	Adrenal Hyperplasia, Congenital/
3.	(addison* disease or addisonian*).ti,ab,kf.
4.	((adrenal* or adrenocort* or adreno cort*) adj3 (insufficien* or inadequa* or deficien* or suppress* or hypofunction* or disorder* or underactiv* or dysfunction* or abnormal* or

	problem* or crisis or crises or dysgenesis or destruction or destroy* or hyperplasia or hypoplasia or failure* or fails or failed or fatigue or inhibit* or damage* or disruption*)),.ti,ab,kf.
5.	((cortisol or aldosterone or adrenocorticotrop* or adreno corticotrop* or ACTH or corticotropi* releas* or corticotrophi* releas* or corticoliberin or CRH) adj3 (insufficien* or inadequa* or deficien* or suppress* or reduc* or decreas* or descend* or diminish* or lack* or less or lessen* or low or lower* or limited)).ti,ab,kf.
6.	(hypoadrenal* or hypo adrenal* or hypoadrenocorticism or hypo adrenocorticism or adrenoleukodystrophy or adreno leukodystrophy or adrenomyeloneuropathy or adreno myeloneuropathy or hypoadosteronism or hypo aldosteronism).ti,ab,kf.
7.	((adrenogenital or adreno genital) adj (syndrome or disorder*)).ti,ab,kf.
8.	((haemorrhag* or hemorrhag* or bleed*) adj3 adrenal*).ti,ab,kf.
9.	(Bronze Schilder* Disease or Melanodermic Leukodystrophy or Schilder-Addison* Complex or Siemerling-Creutzfeldt* Disease).ti,ab,kf.
10.	((Allgrove or 3A or TripleA or AAA) adj syndrome).ti,ab,kf.
11.	(CAH or X-ALD).ti,ab.
12.	(Waterhouse-Friderichsen* syndrome or antiphospholipid syndrome).ti,ab,kf.
13.	Autoimmune polyendocrinopathy-candidiasis-ectodermal dystrophy.ti,ab,kf.
14.	or/1-13
15.	letter/
16.	editorial/
17.	news/
18.	exp historical article/
19.	Anecdotes as Topic/
20.	comment/
21.	case reports/
22.	(letter or comment*).ti.
23.	or/15-22
24.	randomized controlled trial/ or random*.ti,ab.
25.	23 not 24
26.	animals/ not humans/
27.	exp Animals, Laboratory/
28.	exp Animal Experimentation/
29.	exp Models, Animal/
30.	exp Rodentia/
31.	(rat or rats or mouse or mice or rodent*).ti.
32.	or/25-31
33.	14 not 32
34.	limit 33 to English language
35.	Hydrocortisone/
36.	((cortisol or cortisone) adj3 (assay* or test* or level* or measure* or serum or blood or plasma or saliva* or random or 8am or "8 am" or "8 a.m" or 9am or "9 am" or "9 a.m" or "8-9 am" or "8-9 a.m" or morning or awaken*)).ti,ab,kf.
37.	Electrolytes/
38.	electrolyte*.ti,ab,kf.
39.	Blood Glucose/
40.	((blood or serum or plasma) adj3 (sugar or glucose)).ti,ab,kf.
41.	(insulin adj4 test*).ti,ab,kf.
42.	(synacthen or tetracosactide).ti,ab,kf.
43.	exp Adrenocorticotropic Hormone/

44.	((adrenocorticotrop* or "adreno corticotrop*" or corticotrop* or ACTH or cosyntrop*) adj3 (assay* or test* or level* or measure* or stimulation)).ti,ab,kf.
45.	Dehydroepiandrosterone Sulfate/
46.	((DHEA* or "dehydroepiandrosterone sulfate" or "dehydroepiandrosterone sulphate" or "prasterone sulfate" or "prasterone sulphate") adj3 (assay* or test* or level* or measure*)).ti,ab,kf.
47.	or/35-46
48.	34 and 47
49.	exp "sensitivity and specificity"/
50.	(sensitivity or specificity).ti,ab.
51.	((pre test or pretest or post test) adj probability).ti,ab.
52.	(predictive value* or PPV or NPV).ti,ab.
53.	likelihood ratio*.ti,ab.
54.	likelihood function/
55.	((area under adj4 curve) or AUC).ti,ab.
56.	(receive* operat* characteristic* or receive* operat* curve* or ROC curve*).ti,ab.
57.	gold standard.ab.
58.	exp Diagnostic errors/
59.	(false positiv* or false negativ*).ti,ab.
60.	Diagnosis, Differential/
61.	(diagnos* adj3 (performance* or accurac* or utilit* or value* or efficien* or effectiveness or precision or validat* or validity or differential or error*)).ti,ab.
62.	or/49-61
63.	Epidemiologic studies/
64.	Observational study/
65.	exp Cohort studies/
66.	(cohort adj (study or studies or analys* or data)).ti,ab.
67.	((follow up or observational or uncontrolled or non randomi#ed or epidemiologic*) adj (study or studies or data)).ti,ab.
68.	((longitudinal or retrospective or prospective) and (study or studies or review or analys* or cohort* or data)).ti,ab.
69.	Controlled Before-After Studies/
70.	Historically Controlled Study/
71.	Interrupted Time Series Analysis/
72.	(before adj2 after adj2 (study or studies or data)).ti,ab.
73.	exp case control study/
74.	case control*.ti,ab.
75.	Cross-sectional studies/
76.	(cross sectional and (study or studies or review or analys* or cohort* or data)).ti,ab.
77.	or/63-76
78.	Meta-Analysis/
79.	Meta-Analysis as Topic/
80.	(meta analy* or metanaly* or metaanaly* or meta regression).ti,ab.
81.	((systematic* or evidence*) adj3 (review* or overview*)).ti,ab.
82.	(reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
83.	(search strategy or search criteria or systematic search or study selection or data extraction).ab.
84.	(search* adj4 literature).ab.

85.	(medline or pubmed or cochrane or embase or psychlit or psyclit or psychinfo or psycinfo or cinahl or science citation index or bids or cancerlit).ab.
86.	cochrane.jw.
87.	((multiple treatment* or indirect or mixed) adj2 comparison*).ti,ab.
88.	or/78-87
89.	48 and (62 or 77 or 88)

Embase (Ovid) search terms

1.	exp Adrenal cortex insufficiency/
2.	Congenital adrenal hyperplasia/
3.	(addison* disease or addisonian*).ti,ab,kf.
4.	((adrenal* or adrenocort* or adreno cort*) adj3 (insufficien* or inadequa* or deficien* or suppress* or hypofunction* or disorder* or underactiv* or dysfunction* or abnormal* or problem* or crisis or crises or dysgenesis or destruction or destroy* or hyperplasia or hypoplasia or failure* or fails or failed or fatigue or inhibit* or damage* or disruption*).ti,ab,kf.
5.	((cortisol or aldosterone or adrenocorticotrop* or adreno corticotrop* or ACTH or corticotropi* releas* or corticotropi* releas* or corticoliberin or CRH) adj3 (insufficien* or inadequa* or deficien* or suppress* or reduc* or decreas* or descend* or diminish* or lack* or less or lessen* or low or lower* or limited)).ti,ab,kf.
6.	(hypoadrenal* or hypo adrenal* or hypoadrenocorticism or hypo adrenocorticism or adrenoleukodystrophy or adreno leukodystrophy or adrenomyeloneuropathy or adreno myeloneuropathy or hypoadosteronism or hypo aldosteronism).ti,ab,kf.
7.	((adrenogenital or adreno genital) adj (syndrome or disorder*).ti,ab,kf.
8.	((haemorrhag* or hemorrhag* or bleed*) adj3 adrenal*).ti,ab,kf.
9.	(Bronze Schilder* Disease or Melanodermic Leukodystrophy or Schilder-Addison* Complex or Siemerling-Creutzfeldt* Disease).ti,ab,kf.
10.	((Allgrove or 3A or TripleA or AAA) adj syndrome).ti,ab,kf.
11.	(CAH or X-ALD).ti,ab.
12.	(Waterhouse-Friderichsen* syndrome or antiphospholipid syndrome).ti,ab,kf.
13.	Autoimmune polyendocrinopathy-candidiasis-ectodermal dystrophy.ti,ab,kf.
14.	or/1-13
15.	letter.pt. or letter/
16.	note.pt.
17.	editorial.pt.
18.	case report/ or case study/
19.	(letter or comment*).ti.
20.	(conference abstract* or conference review or conference paper or conference proceeding).db,pt,su.
21.	or/15-20
22.	randomized controlled trial/ or random*.ti,ab.
23.	21 not 22
24.	animal/ not human/
25.	nonhuman/
26.	exp Animal Experiment/
27.	exp Experimental Animal/
28.	animal model/
29.	exp Rodent/
30.	(rat or rats or mouse or mice or rodent*).ti.
31.	or/23-30

32.	14 not 31
33.	limit 32 to English language
34.	hydrocortisone/
35.	((cortisol or cortisone) adj3 (assay* or test* or level* or measure* or serum or blood or plasma or saliva* or random or 8am or "8 am" or "8 a.m" or 9am or "9 am" or "9 a.m" or "8-9 am" or "8-9 a.m" or morning or awaken*)).ti,ab,kf.
36.	electrolyte/
37.	electrolyte*.ti,ab,kf.
38.	glucose blood level/
39.	((blood or serum or plasma) adj3 (sugar or glucose)).ti,ab,kf.
40.	(insulin adj4 test*).ti,ab,kf.
41.	tetracosactide/
42.	(synacthen or tetracosactide).ti,ab,kf.
43.	corticotropin/
44.	((adrenocorticotrop* or "adreno corticotrop*" or corticotrop* or ACTH or cosyntrop*) adj3 (assay* or test* or level* or measure* or stimulation)).ti,ab,kf.
45.	prasterone sulfate/
46.	((DHEA* or "dehydroepiandrosterone sulfate" or "dehydroepiandrosterone sulphate" or "prasterone sulfate" or "prasterone sulphate") adj3 (assay* or test* or level* or measure*)).ti,ab,kf.
47.	or/34-46
48.	33 and 47
49.	exp "sensitivity and specificity"/
50.	(sensitivity or specificity).ti,ab.
51.	((pre test or pretest or post test) adj probability).ti,ab.
52.	(predictive value* or PPV or NPV).ti,ab.
53.	likelihood ratio*.ti,ab.
54.	((area under adj4 curve) or AUC).ti,ab.
55.	(receive* operat* characteristic* or receive* operat* curve* or ROC curve*).ti,ab.
56.	diagnostic accuracy/
57.	diagnostic test accuracy study/
58.	gold standard.ab.
59.	exp diagnostic error/
60.	(false positiv* or false negativ*).ti,ab.
61.	differential diagnosis/
62.	(diagnos* adj3 (performance* or accurac* or utilit* or value* or efficien* or effectiveness or precision or validat* or validity or differential or error*)).ti,ab.
63.	or/49-62
64.	Clinical study/
65.	Observational study/
66.	Family study/
67.	Longitudinal study/
68.	Retrospective study/
69.	Prospective study/
70.	Cohort analysis/
71.	Follow-up/
72.	cohort*.ti,ab.
73.	71 and 72

74.	(cohort adj (study or studies or analys* or data)).ti,ab.
75.	((follow up or observational or uncontrolled or non randomi#ed or epidemiologic*) adj (study or studies or data)).ti,ab.
76.	((longitudinal or retrospective or prospective) and (study or studies or review or analys* or cohort* or data)).ti,ab.
77.	(before adj2 after adj2 (study or studies or data)).ti,ab.
78.	exp case control study/
79.	case control*.ti,ab.
80.	cross-sectional study/
81.	(cross sectional and (study or studies or review or analys* or cohort* or data)).ti,ab.
82.	or/64-70,73-81
83.	Systematic Review/
84.	Meta-Analysis/
85.	(meta analy* or metanaly* or metaanaly* or meta regression).ti,ab.
86.	((systematic* or evidence*) adj3 (review* or overview*)).ti,ab.
87.	(reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
88.	(search strategy or search criteria or systematic search or study selection or data extraction).ab.
89.	(search* adj4 literature).ab.
90.	(medline or pubmed or cochrane or embase or psychlit or psychlit or psychinfo or psycinfo or cinahl or science citation index or bids or cancerlit).ab.
91.	cochrane.jw.
92.	((multiple treatment* or indirect or mixed) adj2 comparison*).ti,ab.
93.	or/83-92
94.	48 and (63 or 82 or 93)

Cochrane Library (Wiley) search terms

#1.	MeSH descriptor: [Adrenal Insufficiency] explode all trees
#2.	MeSH descriptor: [Adrenal Hyperplasia, Congenital] this term only
#3.	((addison* NEXT disease) or addisonian*):ti,ab,kw
#4.	((adrenal* or adrenocort* or adreno-cort*) near/3 (insufficien* or inadequa* or deficient* or suppress* or hypofunction* or disorder* or underactiv* or dysfunction* or abnormal* or problem* or crisis or crises or dysgenesis or destruction or destroy* or hyperplasia or hypoplasia or failure* or fails or failed or fatigue or inhibit* or damage* or disruption*):ti,ab,kw
#5.	((cortisol or aldosterone or adrenocorticotrop* or adreno-corticotrop* or ACTH or (corticotropi* NEXT releas*) or (corticotrophi* NEXT releas*) or corticoliberin or CRH) near/3 (insufficien* or inadequa* or deficient* or suppress* or reduc* or decreas* or descend* or diminish* or lack* or less or lessen* or low or lower* or limited)):ti,ab,kw
#6.	(hypoadrenal* or hypo-adrenal* or hypoadrenocorticism or "hypo adrenocorticism" or adrenoleukodystrophy or "adreno leukodystrophy" or adrenomyeloneuropathy or "adreno myeloneuropathy" or hypoaldosteronism or "hypo aldosteronism"):ti,ab,kw
#7.	((adrenogenital or "adreno genital") near/1 (syndrome or disorder*)):ti,ab,kw
#8.	((haemorrhag* or hemorrhag* or bleed*) near/3 adrenal*):ti,ab,kw
#9.	((Bronze NEXT Schilder*) or "Melanodermic Leukodystrophy" or (Schilder NEXT Addison*) or (Siemerling NEXT Creutzfeldt*)):ti,ab,kw
#10.	((Allgrove or 3A or TripleA or AAA) near/1 syndrome):ti,ab,kw
#11.	(CAH or "X-ALD"):ti,ab
#12.	((Waterhouse NEXT Friderichsen*) or "antiphospholipid syndrome"):ti,ab,kw
#13.	"Autoimmune polyendocrinopathy candidiasis ectodermal dystrophy":ti,ab,kw

#14.	(#1-#13)
#15.	MeSH descriptor: [Hydrocortisone] this term only
#16.	((cortisol or cortisone) near/3 (assay* or test* or level* or measure* or serum or blood or plasma or saliva* or random or 8am or "8 am" or "8 a.m" or 9am or "9 am" or "9 a.m" or "8-9 am" or "8-9 a.m" or morning or awaken*)):ti,ab,kw
#17.	MeSH descriptor: [Electrolytes] this term only
#18.	electrolyte*:ti,ab,kw
#19.	MeSH descriptor: [Blood Glucose] this term only
#20.	((blood or serum or plasma) near/3 (sugar or glucose)):ti,ab,kw
#21.	(insulin near/4 test*):ti,ab,kw
#22.	(synacthen or tetracosactide):ti,ab,kw
#23.	MeSH descriptor: [Adrenocorticotrophic Hormone] explode all trees
#24.	((adrenocorticotrop* or adreno-corticotrop* or corticotrop* or ACTH or cosyntrop*) near/3 (assay* or test* or level* or measure* or stimulation)):ti,ab,kw
#25.	MeSH descriptor: [Dehydroepiandrosterone Sulfate] this term only
#26.	((DHEA* or "dehydroepiandrosterone sulfate" or "dehydroepiandrosterone sulphate" or "prasterone sulfate" or "prasterone sulphate") near/3 (assay* or test* or level* or measure*)):ti,ab,kw
#27.	(or #15-#26)
#28.	#14 and #27
#29.	conference:pt or (clinicaltrials or trialsearch):so
#30.	#28 not #29

Epistemonikos search terms

1.	(title:(("adrenal insufficiency" OR "adrenal inadequacy" OR "adrenal deficiency" OR "adrenal suppression" OR "adrenal hypofunction" OR "adrenal disorder" OR "adrenal underactivity" OR "adrenal dysfunction" OR "adrenal crisis" OR "adrenal crises" OR "adrenal hypoplasia" OR "adrenal congenital hyperplasia" OR "addison disease" OR "addisons disease" OR "addison's disease" OR addisonian* OR hypoadrenal* OR "hypo adrenalism" OR hypoadrenocorticism OR "hypo adrenocorticism" OR adrenoleukodystrophy OR "adreno leukodystrophy" OR adrenomyeloneuropathy OR "adreno myeloneuropathy" OR hypoaldosteronism OR "hypo aldosteronism")) OR abstract:(("adrenal insufficiency" OR "adrenal inadequacy" OR "adrenal deficiency" OR "adrenal suppression" OR "adrenal hypofunction" OR "adrenal disorder" OR "adrenal underactivity" OR "adrenal dysfunction" OR "adrenal crisis" OR "adrenal crises" OR "adrenal hypoplasia" OR "adrenal congenital hyperplasia" OR "addison disease" OR "addisons disease" OR "addison's disease" OR addisonian* OR hypoadrenal* OR "hypo adrenalism" OR hypoadrenocorticism OR "hypo adrenocorticism" OR adrenoleukodystrophy OR "adreno leukodystrophy" OR adrenomyeloneuropathy OR "adreno myeloneuropathy" OR hypoaldosteronism OR "hypo aldosteronism")) AND (title:(("cortisol test" OR "serum cortisol" OR "salivary cortisol" OR "salivary cortisone" OR "random cortisol" OR "8am cortisol" OR "8 am cortisol" OR "8 a.m cortisol" OR "9am cortisol" OR "9 am cortisol" OR "9 a.m cortisol" OR "8-9 am cortisol" OR "8-9 a.m cortisol" OR "morning cortisol" OR "awakening cortisol" OR electrolyte* OR "blood sugar" OR "blood glucose" OR "insulin tolerance test" OR "insulin-induced hypoglycemia test" OR synacthen OR tetracosactide OR "adrenocorticotrophic hormone test" OR "adrenocorticotrophic hormone stimulation" OR "ACTH test" OR "ACTH stimulation" OR "cosyntropin test" OR "cosyntropin stimulation" OR DHEA* OR "dehydroepiandrosterone sulfate" OR "dehydroepiandrosterone sulphate" OR "prasterone sulfate" OR "prasterone sulphate") OR abstract:(("cortisol test" OR "serum cortisol" OR "salivary cortisol" OR "salivary cortisone" OR "random cortisol" OR "8am cortisol" OR "8 am cortisol" OR "8 a.m cortisol" OR "9am cortisol" OR "9 am cortisol" OR "9 a.m cortisol" OR "8-9 am cortisol" OR "8-9 a.m cortisol" OR "morning cortisol" OR "awakening cortisol" OR electrolyte* OR "blood sugar" OR "blood glucose" OR "insulin tolerance test" OR "insulin-induced hypoglycemia test" OR synacthen OR tetracosactide OR "adrenocorticotrophic hormone test" OR "adrenocorticotrophic
----	--

	hormone stimulation" OR "ACTH test" OR "ACTH stimulation" OR "cosyntropin test" OR "cosyntropin stimulation" OR DHEA* OR "dehydroepiandrosterone sulfate" OR "dehydroepiandrosterone sulphate" OR "prasterone sulfate" OR "prasterone sulphate"))
--	---