

The Conundrum of Differentiating Cushing's syndrome from Non-Neoplastic hypercortisolism: A Systematic Review and Meta-analysis

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Section 1.- Search strategy

pituitary ACTH hypersecretion [*MeSH Descriptor*]

Cushing syndrome [*MeSH Descriptor*]

Database	Before deduplication	After deduplication
MEDLINE	227	227
Embase	2563	2429
Web of Science	57	52
Scopus	1869	1712
CCRCT	7	7
CDSR	1	1

Total= 4428

All searches were run on August 24, 2020.

[EBM Reviews - Cochrane Central Register of Controlled Trials <August 2020>](#)

[EBM Reviews - Cochrane Database of Systematic Reviews <2005 to September 3, 2020>](#)

[Embase <1974 to 2020 Week 36>](#)

[Ovid MEDLINE\(R\) ALL <1946 to September 09, 2020>](#)

("Cushing Syndrome" or "Cushing's Syndrome" or "Hypocortisolism" or "Syndrome, Cushing" or "Syndrome, Cushing's " or "Pituitary ACTH Hypersecretion " or "ACTH Hypersecretion, Pituitary" or "Adrenocorticotrophic Hormone, Inappropriate Secretion" or "adrenocortical hyperplasia,acth induced" or "Cushing Disease" or "Cushing Disease, Pituitary" or "Cushing Diseases, Pituitary" or "Cushing Syndrome, Pituitary" or "Cushing Syndrome, Pituitary-Dependant" or "Disease, Cushing" or "cushing syndrome,acth induced" or "Cushing's disease" or "Cushings disease" or "itsenko cushing disease" or "Hypocortisolism Disorder, Pituitary-Dependant" or "Hypocortisolism Disorders, Pituitary-Dependant" or "Hypocortisolism, Pituitary-Dependant" or "Hypocortisolisms, Pituitary-Dependant" or "Hypersecretion, Pituitary ACTH" or "Inappropriate ACTH Secretion Syndrome" or "Inappropriate Adrenocorticotrophic Hormone Secretion" or "Pituitary Cushing Disease" or "Pituitary Cushing Diseases" or "Pituitary Cushing Syndrome" or "Pituitary Dependant Cushing Syndrome"

or "Pituitary Dependant Hypercortisolism" or "Pituitary Dependant Hypercortisolism Disorder" or "Pituitary-Dependant Cushing Syndrome" or "Pituitary-Dependant Hypercortisolism" or "Pituitary-Dependant Hypercortisolism Disorder" or "Pituitary-Dependant Hypercortisolism Disorders" or "Pituitary-Dependant Hypercortisolisms" or "Hypercortisolism" or "hyperadrenocorticism" or "hypercortisolemia" or "hyperhydrocortisonism" or "adrenocortical hyperplasia,acth induced" or "corticotropin induced adrenocortical hyperplasia").mp. [mp=ti, ot, ab, sh, hw, kw, tx, ct, tn, dm, mf, dv, fx, dq, nm, kf, ox, px, rx, ui, sy]

2 ("Deamino Arginine Vasopressin" or "1-Deamino-8-D-arginine Vasopressin" or "1-Desamino-8-arginine Vasopressin" or "Acetate, Desmopressin" or "Adiuretin" or "Adiuretin SD" or "Apo-Desmopressin" or "Arginine Vasopressin, Deamino" or "DDAVP" or "Desmogalen" or "Desmopressin" or "Desmopressin Acetate" or "Desmopressin Monoacetate" or "Desmopressin Monoacetate, Trihydrate" or "Desmopressine Ferring" or "Desmospray" or "Desmotabs" or "Ferring, Desmopressine" or "Minirin" or "Minurin" or "Monoacetate, Desmopressin" or "Monoacetate, Trihydrate Desmopressin" or "Nocutil" or "Octim" or "Octostim" or "Trihydrate Desmopressin Monoacetate" or "Vasopressin, 1-Deamino-8-D-arginine" or "Vasopressin, 1-Desamino-8-arginine" or "Vasopressin, Deamino Arginine" or ("1 deamino 8 dextro arginine)vasopressin" or " deamine 8 d arginine vasopressin" or " deamino 8 d arginine vasopressin" or " desamino 8 d arginine vasopressin" or " (1 desaminoarginine)vasopressin" or "[deamino 8 cysteine d arginine]vasopressin" or "[deamino 8 cysteine dextro arginine]vasopressin" or "[deamino 8 dextro arginine]vasopressin" or "adin" or "adiuretin" or "adiuretin sd" or "concentraid" or "d-void" or "dav ritter" or "DDAVP" or "DDAVP (needs no refrigeration)" or "DDAVP desmopressin" or "DDAVP melt" or "DDAVP nasal" or "DDAVP rhinal tube" or "DDAVP tablets" or "deamino 8d arginine vasopressin" or "deamino dextro arginine vasopressin" or "deaminovasopressin [8 d arginine]" or "defirin" or "defirin melt" or "desmirin" or "desmomelt" or "desmopresina" or "desmopressin acetate" or "desmopressin acetate (needs no refrigeration)" or "desmopressin acetate preservative free" or "desmopressin diacetate" or "desmopressin nasal solution" or "desmopressina" or "desmopressine" or "desmospray" or "desmotab" or "desmotabs" or "desmotabs melt" or "desurin" or "emosint" or "enupresol" or "minirin" or "minirin DDAVP" or "minirin melt" or "minirin nasal spray" or "minirin rhinetten" or "minirin rhinye" or "minirin spray" or "minirinette" or "minirinmelt" or "minrin" or "minurin" or "minurin flas" or "minurin gotas" or "miram" or "nictur" or "niwinas" or "nocdurna" or "noctisson" or "nocturin" or "nocutil" or "nokdirna" or "noqdirna" or "noqturina" or "nordurine" or "novidin" or "nucotil nasenspray" or "octim" or "octostim" or "octostim nasal spray" or "octostim spray" or "presinex" or "stimate" or "vasopressin 8 (1 desaminoarginine)" or "vasopressin,1 deamino 8 dextro arginine" or "vasopressin,deamino 8 dextro arginine" or "vasopressin[1 (3 mercaptopropionic acid) 8 dextro arginine]" or "vasopressin[deamino 8 cysteine dextro arginine]" or "vasopressin[deamino 8 d arginine]" or "vasopressin[deamino dextro arginine]" or "wetirin")).mp. [mp=ti, ot, ab, sh, hw, kw, tx, ct, tn, dm, mf, dv, fx, dq, nm, kf, ox, px, rx, ui, sy]

3 dexamethasone-suppressed corticotropin-releasing hormone stimulation test.mp. [mp=ti, ot, ab, sh, hw, kw, tx, ct, tn, dm, mf, dv, fx, dq, nm, kf, ox, px, rx, ui, sy]

4 Dex-CRH.mp. [mp=ti, ot, ab, sh, hw, kw, tx, ct, tn, dm, mf, dv, fx, dq, nm, kf, ox, px, rx, ui, sy]

5 exp *dexamethasone/ or *agents used in function tests/

6 3 or 4 or 5

7 exp dexamethasone/

8 exp diagnostic test/

9 7 and 8

10 ("hydrocortisone blood level" or "blood cortisol" or "cortisol blood level" or "cortisolemia" or "hypocortisolism" or "plasma cortisol" or "plasma hydrocortisone" or "serum cortisol" or "serum hydrocortisone").mp. [mp=ti, ot, ab, sh, hw, kw, tx, ct, tn, dm, mf, dv, fx, dq, nm, kf, ox, px, rx, ui, sy]

11 midnight.mp. [mp=ti, ot, ab, sh, hw, kw, tx, ct, tn, dm, mf, dv, fx, dq, nm, kf, ox, px, rx, ui, sy]

12 10 and 11

13 ("Inferior petrosal sinus sampling" or "inferior petrosal sinuses" or "petrosal sinus" or "petrosal sinuses" or "sinus petrosus inferior").mp. [mp=ti, ot, ab, sh, hw, kw, tx, ct, tn, dm, mf, dv, fx, dq, nm, kf, ox, px, rx, ui, sy]

14 ("biopsy" or "cytopathology" or "histopathology" or "histopathological study" or "neurohistopathology" or sample).mp. [mp=ti, ot, ab, sh, hw, kw, tx, ct, tn, dm, mf, dv, fx, dq, nm, kf, ox, px, rx, ui, sy]

15 13 and 14

16 2 or 6 or 9 or 12

17 1 and 16

18 remove duplicates from 17

19 ("Cushing Syndrome" or "Cushing's Syndrome" or "Hypocortisolism" or "Syndrome, Cushing" or "Syndrome, Cushing's " or "Pituitary ACTH Hypersecretion " or "ACTH Hypersecretion, Pituitary" or "Adrenocorticotrophic Hormone, Inappropriate Secretion" or "adrenocortical hyperplasia,acth induced" or "Cushing Disease" or "Cushing Disease, Pituitary" or "Cushing Diseases, Pituitary" or "Cushing Syndrome, Pituitary" or "Cushing Syndrome, Pituitary-Dependant" or "Disease, Cushing" or "cushing syndrome,acth induced" or "Cushing's disease" or "Cushings disease" or "itsenko cushing disease" or "Hypocortisolism Disorder, Pituitary-Dependant" or "Hypocortisolism Disorders, Pituitary-Dependant" or "Hypocortisolism, Pituitary-Dependant" or "Hypocortisolisms, Pituitary-Dependant" or "Hypersecretion, Pituitary ACTH" or "Inappropriate ACTH Secretion Syndrome" or "Inappropriate Adrenocorticotrophic Hormone Secretion" or "Pituitary Cushing Disease" or "Pituitary Cushing Diseases" or "Pituitary Cushing Syndrome" or "Pituitary Dependant Cushing Syndrome" or "Pituitary Dependant Hypocortisolism" or "Pituitary Dependant Hypocortisolism Disorder" or "Pituitary-Dependant Cushing Syndrome" or "Pituitary-Dependant Hypocortisolism" or "Pituitary-Dependant Hypocortisolism Disorder" or "Pituitary-Dependant Hypocortisolism Disorders" or "Pituitary-Dependant Hypocortisolisms" or "Hypocortisolism"

or "hyperadrenocorticism" or "hypercortisolemia" or "hyperhydrocortisonism" or "adrenocortical hyperplasia,acth induced" or "corticotropin induced adrenocortical hyperplasia").mp. [mp=ti, ot, ab, sh, hw, kw, tx, ct, tn, dm, mf, dv, fx, dq, nm, kf, ox, px, rx, ui, sy]

20 ("Deamino Arginine Vasopressin " or "1-Deamino-8-D-arginine Vasopressin" or "1-Desamino-8-arginine Vasopressin" or "Acetate, Desmopressin" or "Adiuretin" or "Adiuretin SD" or "Apo-Desmopressin" or "Arginine Vasopressin, Deamino" or "DDAVP" or "Desmogalen" or "Desmopressin" or "Desmopressin Acetate" or "Desmopressin Monoacetate" or "Desmopressin Monoacetate, Trihydrate" or "Desmopressine Ferring" or "Desmospray" or "Desmotabs" or "Ferring, Desmopressine" or "Minirin" or "Minurin" or "Monoacetate, Desmopressin" or "Monoacetate, Trihydrate Desmopressin" or "Nocutil" or "Octim" or "Octostim" or "Trihydrate Desmopressin Monoacetate" or "Vasopressin, 1-Deamino-8-D-arginine" or "Vasopressin, 1-Desamino-8-arginine" or "Vasopressin, Deamino Arginine" or ("(1 deamino 8 dextro arginine)vasopressin" or " deamine 8 d arginine vasopressin" or " deamino 8 d arginine vasopressin" or " desamino 8 d arginine vasopressin" or " (1 desaminoarginine)vasopressin" or "[deamino 8 cysteine d arginine]vasopressin" or "[deamino 8 cysteine dextro arginine]vasopressin" or "[deamino 8 dextro arginine]vasopressin" or "adin" or "adiuretin" or "adiuretin sd" or "concentraid" or "d-void" or "dav ritter" or "DDAVP" or "DDAVP (needs no refrigeration)" or "DDAVP desmopressin" or "DDAVP melt" or "DDAVP nasal" or "DDAVP rhinal tube" or "DDAVP tablets" or "deamino 8d arginine vasopressin" or "deamino dextro arginine vasopressin" or "deaminovasopressin [8 d arginine]" or "defirin" or "defirin melt" or "desmirin" or "desmomelt" or "desmopresina" or "desmopressin acetate" or "desmopressin acetate (needs no refrigeration)" or "desmopressin acetate preservative free" or "desmopressin diacetate" or "desmopressin nasal solution" or "desmopressina" or "desmopressine" or "desmospray" or "desmotab" or "desmotabs" or "desmotabs melt" or "desurin" or "emosint" or "enupresol" or "minirin" or "minirin DDAVP" or "minirin melt" or "minirin nasal spray" or "minirin rhinetten" or "minirin rhinyle" or "minirin spray" or "minirinette" or "minirinmelt" or "minrin" or "minurin" or "minurin flas" or "minurin gotas" or "miram" or "nictur" or "niwinas" or "nocdurna" or "noctisson" or "nocturin" or "nocutil" or "nokdirna" or "noqdirna" or "noqturina" or "nordurine" or "novidin" or "nucotil nasenspray" or "octim" or "octostim" or "octostim nasal spray" or "octostim spray" or "presinex" or "stimate" or "vasopressin 8 (1 desaminoarginine)" or "vasopressin,1 deamino 8 dextro arginine" or "vasopressin,deamino 8 dextro arginine" or "vasopressin[1 (3 mercaptopropionic acid) 8 dextro arginine]" or "vasopressin[deamino 8 cysteine dextro arginine]" or "vasopressin[deamino 8 d arginine]" or "vasopressin[deamino dextro arginine]" or "wetirin"))).mp. [mp=ti, ot, ab, sh, hw, kw, tx, ct, tn, dm, mf, dv, fx, dq, nm, kf, ox, px, rx, ui, sy]

21 dexamethasone-suppressed corticotropin-releasing hormone stimulation test.mp. [mp=ti, ot, ab, sh, hw, kw, tx, ct, tn, dm, mf, dv, fx, dq, nm, kf, ox, px, rx, ui, sy]

22 Dex-CRH.mp. [mp=ti, ot, ab, sh, hw, kw, tx, ct, tn, dm, mf, dv, fx, dq, nm, kf, ox, px, rx, ui, sy]

23 exp *dexamethasone/ or *agents used in function tests/

24 21 or 22 or 23

25 exp dexamethasone/

26 exp diagnostic test/

27 25 and 26

28 ("hydrocortisone blood level" or "blood cortisol" or "cortisol blood level" or "cortisolemia" or "hypocortisolism" or "plasma cortisol" or "plasma hydrocortisone" or "serum cortisol" or "serum hydrocortisone").mp. [mp=ti, ot, ab, sh, hw, kw, tx, ct, tn, dm, mf, dv, fx, dq, nm, kf, ox, px, rx, ui, sy]

29 midnight.mp. [mp=ti, ot, ab, sh, hw, kw, tx, ct, tn, dm, mf, dv, fx, dq, nm, kf, ox, px, rx, ui, sy]

30 28 and 29

31 20 or 24 or 27 or 30

32 19 and 31

33 remove duplicates from 32

34 from 33 keep 1-7

35 from 33 keep 8

36 from 33 keep 9-2571

37 from 33 keep 2572-2798

Scopus

("Cushing Syndrome" OR "Cushing's Syndrome" OR "Hypercortisolism" OR "Syndrome, Cushing" OR "Syndrome, Cushing's " OR "Pituitary ACTH Hypersecretion " OR "ACTH Hypersecretion, Pituitary" OR "Adrenocorticotrophic Hormone, Inappropriate Secretion" OR "adrenocortical hyperplasia,acth induced" OR "Cushing Disease" OR "Cushing Disease, Pituitary" OR "Cushing Diseases, Pituitary" OR "Cushing Syndrome, Pituitary" OR "Cushing Syndrome, Pituitary-

Dependant" OR "Disease, Cushing" OR "cushing syndrome,acth induced" OR "Cushing's disease" OR "Cushings disease" OR "itsenko cushing disease" OR "Hypercortisolism Disorder, Pituitary-Dependant" OR "Hypercortisolism Disorders, Pituitary-Dependant" OR "Hypercortisolism, Pituitary-Dependant" OR "Hypercortisolisms, Pituitary-Dependant" OR "Hypersecretion, Pituitary ACTH" OR "Inappropriate ACTH Secretion Syndrome" OR "Inappropriate Adrenocorticotrophic Hormone Secretion" OR "Pituitary Cushing Disease" OR "Pituitary Cushing Diseases" OR "Pituitary Cushing Syndrome" OR "Pituitary Dependant Cushing Syndrome" OR "Pituitary Dependant Hypercortisolism" OR "Pituitary Dependant Hypercortisolism Disorder" OR "Pituitary-Dependant Cushing Syndrome" OR "Pituitary-Dependant Hypercortisolism" OR "Pituitary-Dependant Hypercortisolism Disorder" OR "Pituitary-Dependant Hypercortisolism Disorders" OR "Pituitary-Dependant Hypercortisolisms" OR "Hypercortisolism" OR "hyperadrenocorticism" OR "hypercortisolemia" OR "hyperhydrocortisonism" OR "adrenocortical hyperplasia,acth induced" OR "corticotropin induced adrenocortical hyperplasia")

AND (("Deamino Arginine Vasopressin " OR "1-Deamino-8-D-arginine Vasopressin" OR "1-Desamino-8-arginine Vasopressin" OR "Acetate, Desmopressin" OR "Adiuretin" OR "Adiuretin SD" OR "Apo-Desmopressin" OR "Arginine Vasopressin, Deamino" OR "DDAVP" OR "Desmogalen" OR "Desmopressin" OR "Desmopressin Acetate" OR "Desmopressin Monoacetate" OR "Desmopressin Monoacetate, Trihydrate" OR "Desmopressine Ferring" OR "Desmospray" OR "Desmotabs" OR "Ferring, Desmopressine" OR "Minirin" OR "Minurin" OR "Monoacetate, Desmopressin" OR "Monoacetate, Trihydrate Desmopressin" OR "Nocutil" OR "Octim" OR "Octostim" OR "Trihydrate Desmopressin Monoacetate" OR "Vasopressin, 1-Deamino-8-D-arginine" OR "Vasopressin, 1-Desamino-8-arginine" OR "Vasopressin, Deamino Arginine") OR ("(1 deamino 8 dextro arginine)vasopressin" OR "deamine 8 d arginine vasopressin" OR "deamino 8 d arginine vasopressin" OR "desamino 8 d arginine vasopressin" OR "(1 desaminoarginine)vasopressin" OR "[deamino 8 cysteine d arginine]vasopressin" OR "[deamino 8 cysteine dextro arginine]vasopressin" OR "[deamino 8 dextro arginine]vasopressin" OR "adin" OR "adiuretin" OR "adiuretin sd" OR "concentraid" OR "d-void" OR "dav ritter" OR "DDAVP" OR "DDAVP (needs no refrigeration)" OR "DDAVP desmopressin" OR "DDAVP melt" OR "DDAVP nasal" OR "DDAVP rhinal tube" OR "DDAVP tablets" OR "deamino 8d arginine vasopressin" OR "deamino dextro arginine vasopressin" OR "deaminovasopressin [8 d arginine]" OR "defirin" OR "defirin melt" OR "desmirin" OR "desmomelt" OR "desmopresina" OR "desmopressin acetate" OR "desmopressin acetate (needs no refrigeration)" OR "desmopressin acetate preservative free" OR "desmopressin diacetate" OR "desmopressin nasal solution" OR "desmopressina" OR "desmopressine" OR "desmospray" OR "desmotab" OR "desmotabs" OR "desmotabs melt" OR "desurin" OR "emosint" OR "enupresol" OR "minirin" OR "minirin DDAVP" OR "minirin melt" OR "minirin nasal spray" OR "minirin rhinetten" OR "minirin rhinyle" OR "minirin spray" OR "minirinette" OR "minirinmelt" OR "minrin" OR "minurin" OR "minurin flas" OR "minurin gotas" OR "miram" OR "nictur" OR "niwinas" OR "nocurna" OR "noctisson" OR "nocturin" OR "n

ocutil" OR "nokdirna" OR "noqdirna" OR "noqturina" OR "nordurine" OR "novidin" OR "nucotil nasenspray" OR "octim" OR "octostim" OR "octostim nasal spray" OR "octostim spray" OR "presinex" OR "stimate" OR "vasopressin 8 (1 desaminoarginine)" OR "vasopressin,1 deamino 8 dextro arginine" OR "vasopressin,deamino 8 dextro arginine" OR "vasopressin[1 (3 mercaptopropionic acid) 8 dextro arginine]" OR "vasopressin[deamino 8 cysteine dextro arginine]" OR "vasopressin[deamino 8 d arginine]" OR "vasopressin[deamino dextro arginine]" OR "wetirin")

OR ("dexamethasone-suppressed corticotropin-releasing hormone stimulation test") OR (dexamethasone OR "16alpha methyl 9alpha fluoroprednisolone" OR " alpha fluoro 16 alpha methyl delta corticosterone" OR "alpha fluoro 11beta,17alpha,21 trihydroxy 16alpha methyl 1,4 pregnadiene 3,20 dione" OR "alpha fluoro 11beta,17alpha,21 trihydroxy 16alpha methylpregna 1,4 diene 3,20 dione" OR "alpha fluoro 16alpha methyl delta corticosterone" OR "adrecort" OR "adrenocot" OR "aeroseb dex" OR "aflucoson" OR "aflucosone" OR "alfalyl" OR "anaflogistico" OR "anaflogistico novobios" OR "arcodexan" OR "arcodexane" OR "artosone" OR "azium" OR "bidexol" OR "calonat " OR "cebedex" OR "cetadexon" OR "colofoam" OR "corsona" OR "cortastat" OR "cortastat 10" OR "cortastat la" OR "cortidex" OR "cortidexason" OR "cortidrona" OR "cortidrone" OR "cortisumman" OR "daco rtina fuerte" OR "dacortine fuerte" OR "dalalone" OR "dalalone d.p." OR "dalalone l.a." OR "danasone" OR "de-sona la" OR "decacortin" OR "decadeltosona" OR "decadeltosone" OR "decaderm" OR "decadion" OR "d ecadran" OR "decadron" OR "decadron 5-12 pak" OR "decadron la" OR "decadronal" OR "decadrone" OR "decaesadril" OR "decaject" OR "decamethasone" OR "de casone" OR "decaspray" OR "decaesterolone" OR "decdan" OR "decilone" OR "decilone forte" OR "decofluor" OR "dectancyl" OR "dekacort" OR "delladec" OR "deltafluoren" OR "deltaflu orene" OR "dergramin" OR "deronil" OR "desacort" OR "desacortone" OR "desadrene" OR "desala rk" OR "desameton" OR "desametone" OR "desigdron" OR "dexa cortisyl" OR "dexa dabrosan" OR "dexa korti" OR "dexa scherosan" OR "dexa scherozon" OR "dexa scherozone" OR "dexa-p" OR "dexacen 4" OR "dexachel" OR "dexacort" OR "dexacortal" OR "dexacorten" OR "dexacortin" OR "dexacortis yl" OR "dexadabrosan" OR "dexadecadrol" OR "dexadrol" OR "dexage" OR "dexagen" OR "dexahe lvacort" OR "dexakorti" OR "dexalien" OR "dexalocal" OR "dexame" OR "dexamecortin" OR "dexa meson" OR "dexamesone" OR "dexametason" OR "dexametasone" OR "dexameth" OR "dexametha son" OR "dexamethasone alcohol" OR "dexamethasone intensol" OR "dexamethazon" OR "dexamethazone" OR "dexamethonium" OR "dexamonozon" OR " dexan" OR "dexane" OR "dexano" OR "dexapot" OR "dexascheroson" OR "dexascherozon" OR "de xascherozone" OR "dexason" OR "dexasone" OR "dexasone la" OR "dexasone s" OR "dixinoral" OR "dexionil" OR "dexmethsone" OR "dexona" OR "dexone" OR "dexone 0.5" OR "dexone 0.75" OR "dexone 1.5" OR "dexone 4" OR "dexpak taperpak" OR "dextelan" OR "dextenza" OR "dextrasone" OR "dexycu" OR "dezone" OR "dibasona " OR "doxamethasone" OR "esacortene" OR "ex s1" OR "exadion" OR "exadione" OR "firmalone" OR "fluormethyl

prednisolone OR *fluormethylprednisolon* OR *fluormethylprednisolone* OR *fluormone* OR *fluorocort* OR *fluorodelta* OR *fluoromethylprednisolone* OR *fortecortin* OR *gammacorten* OR *gammacortene* OR *grosodexon* OR *grosodexone* OR *hemady* OR *hexadecadiol* OR *hexadecadol* OR *hexadiol* OR *hexadol* OR *isnacort* OR *isopto dex* OR *isopto maxidex* OR *isoptodex* OR *isoptomaxidex* OR *lokalison* OR *loverine* OR *luxazone* OR *marvidione* OR *maxidex* OR *mediamethasone* OR *megacortin* OR *mephameson* OR *mephamesone* OR *metasolon* OR *metasolone* OR *methazonion* OR *methazone ion* OR *methazonion* OR *methazonione* OR *metisone* OR *mexasone* OR *millicorten* OR *millicortenol* OR *mk125* OR *mk125* OR *mymethasone* OR *neoforderx* OR *neofordex* OR *nisomethasone* OR *novocort* OR *nsc34521* OR *nsc34521* OR *oftan-dexa* OR *opticorten* OR *opticotinol* OR *oradexan* OR *oradexon* OR *oradexone* OR *orgadron* OR *ozurdex* OR *pidexon* OR *policort* OR *posurdex* OR *predni ftablinen* OR *predni-f* OR *prednisolone* OR *prodexona* OR *prodexone* OR *sanamethasone* OR *santenson* OR *santeson* OR *sawasone* OR *solurex* OR *solurex* OR *spoloven* OR *sterasone* OR *thilodexine* OR *triamcimetil* OR *vexamet* OR *visumethazone* OR *visumethazone*) AND (*function test* OR *stimulation test* OR *corticotropin*))

OR ((*hydrocortisone blood level* OR *blood cortisol* OR *cortisol blood level* OR *cortisolemia* OR *hypocortisolism* OR *plasma cortisol* OR *plasma hydrocortisone* OR *serum cortisol* OR *serum hydrocortisone*) AND (*midnight*))

OR ((*biopsy* OR *cytopathology* OR *histopathology* OR *histopathological study* OR *neurohistopathology* OR *sample*) OR ((*biopsy* OR *cytopathology* OR *histopathology* OR *histopathological study* OR *neurohistopathology* OR *sample*) AND (*Inferior petrosal sinus sampling* OR *inferior petrosal sinuses* OR *petrosal sinus* OR *petrosal sinuses* OR *sinus petrosus inferior*)))

Wos

TS=(("Cushing Syndrome" OR "Cushing's Syndrome" OR "Hypercortisolism" OR "Syndrome, Cushing" OR "Syndrome, Cushing's" OR "Pituitary ACTH Hypersecretion" OR "ACTH Hypersecretion, Pituitary" OR "Adrenocorticotrophic Hormone, Inappropriate Secretion" OR "adrenocortical hyperplasia,acth induced" OR "Cushing Disease" OR "Cushing Disease, Pituitary" OR "Cushing Diseases, Pituitary" OR "Cushing Syndrome, Pituitary" OR "Cushing Syndrome, Pituitary-Dependant" OR "Disease, Cushing" OR "cushing syndrome,acth induced" OR "Cushing's disease" OR "Cushings disease" OR "itsenko cushing disease" OR "Hypercortisolism Disorder, Pituitary-Dependant" OR "Hypercortisolism Disorders, Pituitary-Dependant"

or "Hypercortisolism, Pituitary-Dependant" or "Hypercortisolisms, Pituitary-Dependant" or "Hypersecretion, Pituitary ACTH" or "Inappropriate ACTH Secretion Syndrome" or "Inappropriate Adrenocorticotrophic Hormone Secretion" or "Pituitary Cushing Disease" or "Pituitary Cushing Diseases" or "Pituitary Cushing Syndrome" or "Pituitary Dependant Cushing Syndrome" or "Pituitary Dependant Hypercortisolism" or "Pituitary Dependant Hypercortisolism Disorder" or "Pituitary-Dependant Cushing Syndrome" or "Pituitary-Dependant Hypercortisolism" or "Pituitary-Dependant Hypercortisolism Disorder" or "Pituitary-Dependant Hypercortisolism Disorders" or "Pituitary-Dependant Hypercortisolisms" or "Hypercortisolism" or "hyperadrenocorticism" or "hypercortisolemia" or "hyperhydrocortisonism" or "adrenocortical hyperplasia,acth induced" or "corticotropin induced adrenocortical hyperplasia") AND (("Deamino Arginine Vasopressin " or "1-Deamino-8-D-arginine Vasopressin" or "1-Desamino-8-arginine Vasopressin" or "Acetate, Desmopressin" or "Adiuretin" or "Adiuretin SD" or "Apo-Desmopressin" or "Arginine Vasopressin, Deamino" or "DDAVP" or "Desmogalen" or "Desmopressin" or "Desmopressin Acetate" or "Desmopressin Monoacetate" or "Desmopressin Monoacetate, Trihydrate" or "Desmopressine Ferring" or "Desmospray" or "Desmotabs" or "Ferring, Desmopressine" or "Minirin" or "Minurin" or "Monoacetate, Desmopressin" or "Monoacetate, Trihydrate Desmopressin" or "Nocutil" or "Octim" or "Octostim" or "Trihydrate Desmopressin Monoacetate" or "Vasopressin, 1-Deamino-8-D-arginine" or "Vasopressin, 1-Desamino-8-arginine" or "Vasopressin, Deamino Arginine") OR ("(1 deamino 8 dextro arginine)vasopressin" or "deamine 8 d arginine vasopressin" or " deamino 8 d arginine vasopressin" or " desamino 8 d arginine vasopressin" or " (1 desaminoarginine)vasopressin" or "[deamino 8 cysteine d arginine]vasopressin" or "[deamino 8 cysteine dextro arginine]vasopressin" or "[deamino 8 dextro arginine]vasopressin" or "adin" or "adiuretin" or "adiuretin sd" or "concentraid" or "d-void" or "dav ritter" or "DDAVP" or "DDAVP (needs no refrigeration)" or "DDAVP desmopressin" or "DDAVP melt" or "DDAVP nasal" or "DDAVP rhinal tube" or "DDAVP tablets" or "deamino 8d arginine vasopressin" or "deamino dextro arginine vasopressin" or "deaminovasopressin [8 d arginine]" or "defirin" or "defirin melt" or "desmirin" or "desmomelt" or "desmopresina" or "desmopressin acetate" or "desmopressin acetate (needs no refrigeration)" or "desmopressin acetate preservative free" or "desmopressin diacetate" or "desmopressin nasal solution" or "desmopressina" or "desmopressine" or "desmospray" or "desmotab" or "desmotabs" or "desmotabs melt" or "desurin" or "emosint" or "enupresol" or "minirin" or "minirin DDAVP" or "minirin melt" or "minirin nasal spray" or "minirin rhinetten" or "minirin rhinyle" or "minirin spray" or "minirinette" or "minirinmelt" or "minrin" or "minurin" or "minurin flas" or "minurin gotas" or "miram" or "nictur" or "niwinas" or "nocdurna" or "noctisson" or "nocturin" or "nocutil" or "nokdirna" or "noqdirna" or "noqturina" or "nordurine" or "novidin" or "nucotil nasenspray" or "octim" or "octostim" or "octostim nasal spray" or "octostim spray" or "presinex" or "stimate" or "vasopressin 8 (1 desaminoarginine)" or "vasopressin,1 deamino 8 dextro arginine" or "vasopressin,deamino 8 dextro arginine" or "vasopressin[1 (3 mercaptopropionic acid) 8 dextro arginine]" or "vasopressin[deamino 8 cysteine dextro arginine]" or "vasopressin[deamino 8 d arginine]" or "vasopressin[deamino dextro arginine]" or "wetirin") OR (("dexamethasone-suppressed corticotropin-releasing hormone stimulation test" or ((dexamethasone or"16alpha methyl 9alpha fluoroprednisolone" or " alpha fluoro 16 alpha methyl delta corticosterone" or "alpha fluoro 11beta,17alpha,21 trihydroxy 16alpha methyl 1,4 pregnadiene 3,20 dione" or "alpha fluoro 11beta,17alpha,21 trihydroxy 16alpha methylpregna 1,4 diene 3,20 dione" or "alpha fluoro 16alpha methyl delta corticosterone" or "adrecort" or "adrenocot" or "aeroseb dex" or "aflucoson" or "aflucosone" or "alfalyl" or "anaflogistico" or "anaflogistico novobios" or "arcodexan" or "arcodexane" or "artosone" or "azium" or "bidexol" or "calonat" or "cebedex" or

"cetadexon" or "colofoam" or "corsona" or "cortastat" or "cortastat 10" or "cortastat la" or "cortidex" or "cortidexason" or "cortidrona" or "cortidrone" or "cortisumman" or "dacortina fuerte" or "dacortine fuerte" or "dalalone" or "dalalone d.p." or "dalalone l.a." or "danasone" or "de-sone la" or "decacortin" or "decadeltosona" or "decadeltosone" or "decaderm" or "decadion" or "decadran" or "decadron" or "decadron 5-12 pak" or "decadron la" or "decadronal" or "decadrone" or "decaesadril" or "decaject" or "decamethasone" or "decasone" or "decaspray" or "decaesterolone" or "decdan" or "decilone" or "decilone forte" or "decofluor" or "dectancyl" or "dekacort" or "delladec" or "deltafluoren" or "deltafluorene" or "dergramin" or "deronil" or "desacort" or "desacortone" or "desadrene" or "desalark" or "desameton" or "desametone" or "desigdron" or "dexa cortisyl" or "dexa dabrosan" or "dexa korti" or "dexa scherosan" or "dexa scherozon" or "dexa scherozone" or "dexa-p" or "dexacen 4" or "dexachel" or "dexacort" or "dexacortal" or "dexacorten" or "dexacortin" or "dexacortisyl" or "dexadabrosan" or "dexadecadrol" or "dexadrol" or "dexagel" or "dexagen" or "dexahelvacort" or "dexakorti" or "dexalien" or "dexalocal" or "dexame" or "dexamecortin" or "dexameson" or "dexamesone" or "dexametason" or "dexametasone" or "dexameth" or "dexamethason" or "dexamethasone alcohol" or "dexamethasone intensol" or "dexamethazon" or "dexamethazone" or "dexamethonium" or "dexamonozon" or "dexan" or "dexane" or "dexano" or "dexapot" or "dexascheroson" or "dexascherozon" or "dexascherozone" or "dexason" or "dexasone" or "dexasone la" or "dexasone s" or "dexinoral" or "dexionil" or "dexmethsone" or "dexona" or "dexone" or "dexone 0.5" or "dexone 0.75" or "dexone 1.5" or "dexone 4" or "dexpak taperpak" or "dextelan" or "dextenza" or "dextrasone" or "dexycu" or "dezone" or "dibasona" or "doxamethasone" or "esacortene" or "ex s1" or "exadion" or "exadione" or "firmalone" or "fluormethyl prednisolone" or "fluormethylprednisolon" or "fluormethylprednisolone" or "fluormone" or "fluorocort" or "fluorodelta" or "fluoromethylprednisolone" or "fortecortin" or "gammacorten" or "gammacortene" or "grosodexon" or "grosodexone" or "hemady" or "hexadecadiol" or "hexadecadrol" or "hexadiol" or "hexadrol" or "isnacort" or "isopto dex" or "isopto maxidex" or "isoptodex" or "isoptomaxidex" or "lokalison f" or "loverine" or "luxazone" or "marvidione" or "maxidex" or "mediamethasone" or "megacortin" or "mephameson" or "mephamesone" or "metasolon" or "metasolone" or "methazon ion" or "methazone ion" or "methazonion" or "methazonione" or "metisone lafi" or "mexasone" or "millicorten" or "millicortenol" or "mk 125" or "mk125" or "mymethasone" or "neoforderx" or "neofordex" or "nisomethasona" or "novocort" or "nsc 34521" or "nsc34521" or "oftan-dexa" or "optiocorten" or "optiocortinol" or "oradexan" or "oradexon" or "oradexone" or "orgadrone" or "ozurdex" or "pidexon" or "policort" or "posurdex" or "predni f tablinen" or "predni-f" or "prednisolone f" or "prodexona" or "prodexone" or "sanamethasone" or "santenson" or "santeson" or "sawasone" or "solurex" or "solurex la" or "spoloven" or "sterasone" or "thilodexine" or "triamcimetil" or "vexamet" or "visumetazone" or "visumethazone") and ("function test" or "stimulation test" or corticotropin))) OR (("hydrocortisone blood level" or "blood cortisol" or "cortisol blood level" or "cortisolemia" or "hypocortisolism" or "plasma cortisol" or "plasma hydrocortisone" or "serum cortisol" or "serum hydrocortisone") and (midnight))))AND ("biopsy" or "cytopathology" or "histopathology" or "histopathological study " or "neurohistopathology" or "sample") OR (("biopsy" or "cytopathology" or "histopathology" or "histopathological study " or "neurohistopathology" or "sample") and ("Inferior petrosal sinus sampling" or "inferior petrosal sinuses" or "petrosal sinus" or "petrosal sinuses" or "sinus petrosus inferior"))))

Timespan: All years. Indexes: SCI-EXPANDED, ESCI

1.1.- Search Strategy Update

pituitary ACTH hypersecretion [MeSH Descriptor]

Cushing syndrome [MeSH Descriptor]

Database	Before deduplication	After deduplication
MEDLINE	0	0
Embase	36	30
Web of Science	8	5
Scopus	179	179
CCRCT	0	0
CDSR	0	0

Total= 214

All searches were run on January 24, 2022.

EBM Reviews - Cochrane Central Register of Controlled Trials <December 2021>

EBM Reviews - Cochrane Database of Systematic Reviews <2005 to January 20, 2022>

Embase <1974 to 2022 January 21>

Ovid MEDLINE(R) ALL <1946 to January 21, 2022>

1 ("Cushing Syndrome" or "Cushing's Syndrome" or "Hypercortisolism" or "Syndrome, Cushing" or "Syndrome, Cushing's " or "Pituitary ACTH Hypersecretion " or "ACTH Hypersecretion, Pituitary" or "Adrenocorticotrophic Hormone, Inappropriate Secretion" or "adrenocortical hyperplasia,acth induced" or "Cushing Disease" or "Cushing Disease, Pituitary" or "Cushing Diseases, Pituitary" or "Cushing Syndrome, Pituitary" or "Cushing Syndrome, Pituitary-Dependant" or "Disease, Cushing" or "cushing syndrome,acth induced" or "Cushing's disease" or "Cushings disease" or "itsenko cushing disease" or "Hypercortisolism Disorder, Pituitary-Dependant" or "Hypercortisolism Disorders, Pituitary-Dependant" or "Hypercortisolism, Pituitary-Dependant" or "Hypercortisolisms, Pituitary-Dependant" or

"Hypersecretion, Pituitary ACTH" or "Inappropriate ACTH Secretion Syndrome" or "Inappropriate Adrenocorticotrophic Hormone Secretion" or "Pituitary Cushing Disease" or "Pituitary Cushing Diseases" or "Pituitary Cushing Syndrome" or "Pituitary Dependant Cushing Syndrome" or "Pituitary Dependant Hypercortisolism" or "Pituitary Dependant Hypercortisolism Disorder" or "Pituitary-Dependant Cushing Syndrome" or "Pituitary-Dependant Hypercortisolism" or "Pituitary-Dependant Hypercortisolism Disorder" or "Pituitary-Dependant Hypercortisolism Disorders" or "Pituitary-Dependant Hypercortisolisms" or "Hypercortisolism" or "hyperadrenocorticism" or "hypercortisolemia" or "hyperhydrocortisonism" or "adrenocortical hyperplasia,acth induced" or "corticotropin induced adrenocortical hyperplasia").mp. [mp=ti, ot, ab, sh, hw, kw, tx, ct, tn, dm, mf, dv, kf, fx, dq, nm, ox, px, rx, ui, sy] 47419

2 ("Deamino Arginine Vasopressin " or "1-Deamino-8-D-arginine Vasopressin" or "1-Desamino-8-arginine Vasopressin" or "Acetate, Desmopressin" or "Adiuretin" or "Adiuretin SD" or "Apo-Desmopressin" or "Arginine Vasopressin, Deamino" or "DDAVP" or "Desmogalen" or "Desmopressin" or "Desmopressin Acetate" or "Desmopressin Monoacetate" or "Desmopressin Monoacetate, Trihydrate" or "Desmopressine Ferring" or "Desmospray" or "Desmotabs" or "Ferring, Desmopressine" or "Minirin" or "Minurin" or "Monoacetate, Desmopressin" or "Monoacetate, Trihydrate Desmopressin" or "Nocutil" or "Octim" or "Octostim" or "Trihydrate Desmopressin Monoacetate" or "Vasopressin, 1-Deamino-8-D-arginine" or "Vasopressin, 1-Desamino-8-arginine" or "Vasopressin, Deamino Arginine" or "(1 deamino 8 dextro arginine)vasopressin" or " deamine 8 d arginine vasopressin" or " deamino 8 d arginine vasopressin" or " desamino 8 d arginine vasopressin" or " (1 desaminoarginine)vasopressin" or "[deamino 8 cysteine d arginine]vasopressin" or "[deamino 8 cysteine dextro arginine]vasopressin" or "[deamino 8 dextro arginine]vasopressin" or "adin" or "adiuretin" or "adiuretin sd" or "concentraid" or "d-void" or "dav ritter" or "DDAVP" or "DDAVP (needs no refrigeration)" or "DDAVP desmopressin" or "DDAVP melt" or "DDAVP nasal" or "DDAVP rhinal tube" or "DDAVP tablets" or "deamino 8d arginine vasopressin" or "deamino dextro arginine vasopressin" or "deaminovasopressin [8 d arginine]" or "defirin" or "defirin melt" or "desmirin" or "desmomelt" or "desmopresina" or "desmopressin acetate" or "desmopressin acetate (needs no refrigeration)" or "desmopressin acetate preservative free" or "desmopressin diacetate" or "desmopressin nasal solution" or "desmopressina" or "desmopressine" or "desmospray" or "desmotab" or "desmotabs" or "desmotabs melt" or "desurin" or "emosint" or "enupresol" or "minirin" or "minirin DDAVP" or "minirin melt" or "minirin nasal spray" or "minirin rhinetten" or "minirin rhinyle" or "minirin spray" or "minirinette" or "minirinmelt" or "minrin" or "minurin" or "minurin flas" or "minurin gotas" or "miram" or "nictur" or "niwinas" or "nocdurna" or "noctisson" or "nocturin" or "nocutil" or "nokdirna" or "noqdirna" or "noqturina" or "nordurine" or "novidin" or "nucotil nasenspray" or "octim" or "octostim" or "octostim nasal spray" or "octostim spray" or "presinex" or "stimate" or "vasopressin 8 (1 desaminoarginine)" or "vasopressin,1 deamino 8 dextro arginine" or "vasopressin,deamino 8 dextro arginine" or "vasopressin[1 (3 mercaptopropionic acid) 8 dextro arginine]" or "vasopressin[deamino 8 cysteine dextro arginine]" or "vasopressin[deamino 8 d arginine]" or "vasopressin[deamino dextro arginine]" or "wetirin").mp. [mp=ti, ot, ab, sh, hw, kw, tx, ct, tn, dm, mf, dv, kf, fx, dq, nm, ox, px, rx, ui, sy] 22605

3 dexamethasone-suppressed corticotropin-releasing hormone stimulation test.mp. [mp=ti, ot, ab, sh, hw, kw, tx, ct, tn, dm, mf, dv, kf, fx, dq, nm, ox, px, rx, ui, sy] 11

4 Dex-CRH.mp. [mp=ti, ot, ab, sh, hw, kw, tx, ct, tn, dm, mf, dv, kf, fx, dq, nm, ox, px, rx, ui, sy] 529

5 exp *dexamethasone/ or *agents used in function tests/ 73453

6 3 or 4 or 5 73843

7 exp dexamethasone/ 224959

8 exp diagnostic test/ 1041910

9 7 and 8 10931

10 ("hydrocortisone blood level" or "blood cortisol" or "cortisol blood level" or "cortisolemia" or "hypocortisolism" or "plasma cortisol" or "plasma hydrocortisone" or "serum cortisol" or "serum hydrocortisone").mp. [mp=ti, ot, ab, sh, hw, kw, tx, ct, tn, dm, mf, dv, kf, fx, dq, nm, ox, px, rx, ui, sy] 51302

11 midnight.mp. [mp=ti, ot, ab, sh, hw, kw, tx, ct, tn, dm, mf, dv, kf, fx, dq, nm, ox, px, rx, ui, sy] 8438

12 10 and 11 613

13 ("Inferior petrosal sinus sampling" or "inferior petrosal sinuses" or "petrosal sinus" or "petrosal sinuses" or "sinus petrosus inferior").mp. [mp=ti, ot, ab, sh, hw, kw, tx, ct, tn, dm, mf, dv, kf, fx, dq, nm, ox, px, rx, ui, sy] 2949

14 ("biopsy" or "cytopathology" or "histopathology" or "histopathological study " or "neurohistopathology" or sample).mp. [mp=ti, ot, ab, sh, hw, kw, tx, ct, tn, dm, mf, dv, kf, fx, dq, nm, ox, px, rx, ui, sy] 4359020

15 13 and 14 232

16 2 or 6 or 9 or 12 105807

17 14 or 15 4359020

18 16 and 17 7107

19 1 and 18 383

20 limit 19 to yr="2021 -Current" 36(embase)

Scopus

(("Cushing Syndrome" OR "Cushing's Syndrome" OR "Hypercortisolism" OR "Syndrome, Cushing" OR "Syndrome, Cushing's " OR "Pituitary ACTH Hypersecretion " OR "ACTH Hypersecretion, Pituitary" OR "Adrenocorticotrophic Hormone, Inappropriate Secretion" OR "adrenocortical hyperplasia,acth induced" OR "Cushing Disease" OR "Cushing Disease, Pituitary" OR "Cushing Diseases, Pituitary" OR "Cushing Syndrome, Pituitary" OR "Cushing Syndrome, Pituitary-Dependant" OR "Disease, Cushing" OR "cushing syndrome,acth induced" OR "Cushing's disease" OR "Cushings disease" OR "itsenko cushing disease" OR "Hypercortisolism Disorder, Pituitary-Dependant" OR "Hypercortisolism Disorders, Pituitary-Dependant" OR "Hypercortisolism, Pituitary-Dependant" OR "Hypercortisolisms, Pituitary-Dependant" OR "Hypersecretion, Pituitary ACTH" OR "Inappropriate ACTH Secretion Syndrome" OR "Inappropriate Adrenocorticotrophic Hormone Secretion" OR "Pituitary Cushing Disease" OR "Pituitary Cushing Diseases" OR "Pituitary Cushing Syndrome" OR "Pituitary Dependant Cushing Syndrome" OR "Pituitary Dependant Hypercortisolism" OR "Pituitary Dependant Hypercortisolism Disorder" OR "Pituitary-Dependant Cushing Syndrome" OR "Pituitary-Dependant Hypercortisolism" OR "Pituitary-Dependant Hypercortisolism Disorder" OR "Pituitary-Dependant Hypercortisolism Disorders" OR "Pituitary-Dependant Hypercortisolisms" OR "Hypercortisolism" OR "hyperadrenocorticism" OR "hypercortisolemia" OR "hyperhydrocortisonism" OR "adrenocortical hyperplasia,acth induced" OR "corticotropin induced adrenocortical hyperplasia"))

AND (("Deamino Arginine Vasopressin " OR "1-Deamino-8-D-arginine Vasopressin" OR "1-Desamino-8-arginine Vasopressin" OR "Acetate, Desmopressin" OR "Aduiretin" OR "Aduiretin SD" OR "Apo-Desmopressin" OR "Arginine Vasopressin, Deamino" OR "DDAVP" OR "Desmogalen" OR "Desmopressin" OR "Desmopressin Acetate" OR "Desmopressin Monoacetate" OR "Desmopressin Monoacetate, Trihydrate" OR "Desmopressine Ferring" OR "Desmospray" OR "Desmotabs" OR "Ferring, Desmopressine" OR "Minirin" OR "Minurin" OR "Monoacetate, Desmopressin" OR "Monoacetate, Trihydrate Desmopressin" OR "Nocutil" OR "Octim" OR "Octostim" OR "Trihydrate Desmopressin Monoacetate" OR "Vasopressin, 1-Deamino-8-D-arginine" OR "Vasopressin, 1-Desamino-8-arginine" OR "Vasopressin, Deamino Arginine") OR ("(1 deamino 8 dextro arginine)vasopressin" OR "deamine 8 d arginine vasopressin" OR "deamino 8 d arginine vasopressin" OR "desamino 8 d arginine vasopressin" OR "(1 desaminoarginine)vasopressin" OR "[deamino 8 cysteine d arginine]vasopressin" OR "[deamino 8 cysteine dextro arginine]vasopressin" OR "[deamino 8 dextro arginine]vasopressin" OR "adin" OR "adiuretin" OR "adiuretin sd" OR "concentraid" OR "d-void" OR "dav ritter" OR "DDAVP" OR "DDAVP (needs no refrigeration)" OR "DDAVP desmopressin" OR "DDAVP melt" OR "DDAVP nasal" OR "DDAVP rhinal tube" OR "DDAVP tablets" OR "deamino 8d arginine vasopressin" OR "deamino dextro arginine vasopressin" OR "deaminovasopressin [8 d arginine]" OR "defirin" OR "defirin

melt" OR "desmirin" OR "desmomelt" OR "desmopresina" OR "desmopressin acetate" OR "desmopressin acetate (needs no refrigeration)" OR "desmopressin acetate preservative free" OR "desmopressin diacetate" OR "desmopressin nasal solution" OR "desmopresina" OR "desmopressine" OR "desmospray" OR "desmotab" OR "desmotabs" OR "desmotabs melt" OR "desurin" OR "emosint" OR "enupresol" OR "minirin" OR "minirin DDAVP" OR "minirin melt" OR "minirin nasal spray" OR "minirin rhinetten" OR "minirin rhinyle" OR "minirin spray" OR "minirinet" OR "minirinmelt" OR "minrin" OR "minurin" OR "minurin flas" OR "minurin gotas" OR "miram" OR "nictur" OR "niwinas" OR "nocdurna" OR "noctisson" OR "nocturin" OR "nocutil" OR "nokdirna" OR "noqdirna" OR "noqturina" OR "nordurine" OR "novidin" OR "nucotil nasenspray" OR "octim" OR "octostim" OR "octostim nasal spray" OR "octostim spray" OR "presinex" OR "stimate" OR "vasopressin 8 (1 desaminoarginine)" OR "vasopressin,1 deamino 8 dextro arginine" OR "vasopressin,deamino 8 dextro arginine" OR "vasopressin[1 (3 mercaptopropionic acid) 8 dextro arginine]" OR "vasopressin[deamino 8 cysteine dextro arginine]" OR "vasopressin[deamino 8 d arginine]" OR "vasopressin[deamino dextro arginine]" OR "wetirin")

OR ("dexamethasone-suppressed corticotropin-releasing hormone stimulation test") OR (dexamethasone OR "16alpha methyl 9alpha fluoroprednisolone" OR "alpha fluoro 16 alpha methyl delta corticosterone" OR "alpha fluoro 11beta,17alpha,21 trihydroxy 16alpha methyl 1,4 pregnadiene 3,20 dione" OR "alpha fluoro 11beta,17alpha,21 trihydroxy 16alpha methylpregna 1,4 diene 3,20 dione" OR "alpha fluoro 16alpha methyl delta corticosterone" OR "adrecort" OR "adrenocot" OR "aeroseb dex" OR "aflucoson" OR "aflucosone" OR "alfalyl" OR "anaflogistico" OR "anaflogistico novobios" OR "arcodexan" OR "arcodexane" OR "artrosone" OR "azium" OR "bidexol" OR "calonat" OR "cebedex" OR "cetadexon" OR "colofoam" OR "corsona" OR "cortastat" OR "cortastat 10" OR "cortastat la" OR "cortidex" OR "cortidexason" OR "cortidrona" OR "cortidrone" OR "cortisumman" OR "daco rtina fuerte" OR "dacortine fuerte" OR "dalalone" OR "dalalone d.p." OR "dalalone l.a." OR "danasone" OR "de-sona la" OR "decacortin" OR "decadeltosona" OR "decadeltosone" OR "decaderm" OR "decadion" OR "decadran" OR "decadron" OR "decadron 5-12 pak" OR "decadron la" OR "decadronal" OR "decadrone" OR "decaesadriil" OR "decaject" OR "decamethasone" OR "decasone" OR "decaspray" OR "decasterolone" OR "decdan" OR "decilone" OR "decilone forte" OR "decofluor" OR "dectancyl" OR "dekacort" OR "delladec" OR "deltafluoren" OR "deltafluorene" OR "dergramin" OR "deronil" OR "desacort" OR "desacortone" OR "desadrene" OR "desalark" OR "desameton" OR "desametone" OR "desigdron" OR "dexa cortisyl" OR "dexa dabrosan" OR "dexa korti" OR "dexa scherosan" OR "dexa scherozon" OR "dexa scherozone" OR "dexa-p" OR "dexacen 4" OR "dexachel" OR "dexacort" OR "dexacortal" OR "dexacorten" OR "dexacortin" OR "dexacortisyl" OR "dexadabrosan" OR "dexadecadrol" OR "dexadrol" OR "dexagel" OR "dexagen" OR "dexahelvacort" OR "dexakorti" OR "dexalien" OR "dexalocal" OR "dexame" OR "dexamecortin" OR "dexameson" OR "dexamesone" OR "dexametason" OR "dexametasona" OR "dexameth" OR "dexametha

son" OR "dexamethasone alcohol" OR "dexamethasone
intensol" OR "dexamethazon" OR "dexamethazone" OR "dexamethonium" OR "dexamonozon" OR "
dexan" OR "dexane" OR "dexano" OR "dexapot" OR "dexascheroson" OR "dexascherozon" OR "de
xascherozone" OR "dexason" OR "dexasone" OR "dexasone la" OR "dexasone
s" OR "dexinoral" OR "dexionil" OR "dexmethsone" OR "dexona" OR "dexone" OR "dexone
0.5" OR "dexone 0.75" OR "dexone 1.5" OR "dexone 4" OR "dexpak
taperpak" OR "dextelan" OR "dextenza" OR "dextrasone" OR "dexycu" OR "dezone" OR "dibasona
" OR "doxamethasone" OR "esacortene" OR "ex
s1" OR "exadion" OR "exadione" OR "firmalone" OR "fluormethyl
prednisolone" OR "fluormethylprednisolon" OR "fluormethylprednisolone" OR "fluormone" OR "fluor
ocort" OR "fluorodelta" OR "fluoromethylprednisolone" OR "fortecortin" OR "gammacorten" OR "g
ammacortene" OR "grosodexon" OR "grosodexone" OR "hemady" OR "hexadecadiol" OR "hexadec
adrol" OR "hexadiol" OR "hexadrol" OR "isnacort" OR "isopto dex" OR "isopto
maxidex" OR "isoptodex" OR "isoptomaxidex" OR "lokalison
f" OR "loverine" OR "luxazone" OR "marvidione" OR "maxidex" OR "mediamethasone" OR "megac
ortin" OR "mephameson" OR "mephamesone" OR "metasolon" OR "metasolone" OR "methazon
ion" OR "methazone ion" OR "methazonion" OR "methazonione" OR "metisone
lafi" OR "mexasone" OR "millicorten" OR "millicortenol" OR "mk
125" OR "mk125" OR "mymethasone" OR "neoforderx" OR "neofordex" OR "nisomethasone" OR "
novocort" OR "nsc 34521" OR "nsc34521" OR "oftan-dexa" OR "optiocorten" OR "optiocortinol" OR "
oradexan" OR "oradexon" OR "oradexone" OR "
orgadrone" OR "ozurdex" OR "pidexon" OR "policort" OR "posurdex" OR "predni f
tablinen" OR "predni-f" OR "prednisolone
f" OR "prodexona" OR "prodexone" OR "sanamethasone" OR "santenson" OR "santeson" OR "saw
asone" OR "solurex" OR "solurex
la" OR "spoloven" OR "sterasone" OR "thilodexine" OR "triamcimetil" OR "vexamet" OR "visumeta
zone" OR "visumethazone") AND ("function test" OR "stimulation test" OR corticotropin))

OR (("hydrocortisone blood level" OR "blood cortisol" OR "cortisol blood
level" OR "cortisolemia" OR "hypocortisolism" OR "plasma cortisol" OR "plasma
hydrocortisone" OR "serum cortisol" OR "serum hydrocortisone") AND (midnight)))

OR (("biopsy" OR "cytopathology" OR "histopathology" OR "histopathological study
" OR "neurohistopathology" OR "sample") OR (("biopsy" OR "cytopathology" OR "histopathology"
OR "histopathological study " OR "neurohistopathology" OR "sample") AND ("Inferior petrosal
sinus sampling" OR "inferior petrosal sinuses" OR "petrosal sinus" OR "petrosal sinuses" OR "sinus
petrosus inferior")))

| Timespan: 2020-08-01 to current (Publication Date)

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TS=(("Cushing Syndrome" or "Cushing's Syndrome" or "Hypercortisolism" or "Syndrome, Cushing" or "Syndrome, Cushing's " or "Pituitary ACTH Hypersecretion " or "ACTH Hypersecretion, Pituitary" or "Adrenocorticotrophic Hormone, Inappropriate Secretion" or "adrenocortical hyperplasia,acth induced" or "Cushing Disease" or "Cushing Disease, Pituitary" or "Cushing Diseases, Pituitary" or "Cushing Syndrome, Pituitary" or "Cushing Syndrome, Pituitary-Dependant" or "Disease, Cushing" or "cushing syndrome,acth induced" or "Cushing's disease" or "Cushings disease" or "itsenko cushing disease" or "Hypercortisolism Disorder, Pituitary-Dependant" or "Hypercortisolism Disorders, Pituitary-Dependant" or "Hypercortisolism, Pituitary-Dependant" or "Hypercortisolisms, Pituitary-Dependant" or "Hypersecretion, Pituitary ACTH" or "Inappropriate ACTH Secretion Syndrome" or "Inappropriate Adrenocorticotrophic Hormone Secretion" or "Pituitary Cushing Disease" or "Pituitary Cushing Diseases" or "Pituitary Cushing Syndrome" or "Pituitary Dependant Cushing Syndrome" or "Pituitary Dependant Hypercortisolism" or "Pituitary Dependant Hypercortisolism Disorder" or "Pituitary-Dependant Cushing Syndrome" or "Pituitary-Dependant Hypercortisolism" or "Pituitary-Dependant Hypercortisolism Disorder" or "Pituitary-Dependant Hypercortisolism Disorders" or "Pituitary-Dependant Hypercortisolisms" or "Hypercortisolism" or "hyperadrenocorticism" or "hypercortisolemia" or "hyperhydrocortisonism" or "adrenocortical hyperplasia,acth induced" or "corticotropin induced adrenocortical hyperplasia") AND ("Deamino Arginine Vasopressin " or "1-Deamino-8-D-arginine Vasopressin" or "1-Desamino-8-arginine Vasopressin" or "Acetate, Desmopressin" or "Adiuretin" or "Adiuretin SD" or "Apo-Desmopressin" or "Arginine Vasopressin, Deamino" or "DDAVP" or "Desmogalen" or "Desmopressin" or "Desmopressin Acetate" or "Desmopressin Monoacetate" or "Desmopressin Monoacetate, Trihydrate" or "Desmopressine Ferring" or "Desmospray" or "Desmotabs" or "Ferring, Desmopressine" or "Minirin" or "Minurin" or "Monoacetate, Desmopressin" or "Monoacetate, Trihydrate Desmopressin" or "Nocutil" or "Octim" or "Octostim" or "Trihydrate Desmopressin Monoacetate" or "Vasopressin, 1-Deamino-8-D-arginine" or "Vasopressin, 1-Desamino-8-arginine" or "Vasopressin, Deamino Arginine") OR ("(1 deamino 8 dextro arginine)vasopressin" or "deamine 8 d arginine vasopressin" or " deamino 8 d arginine vasopressin" or " desamino 8 d arginine vasopressin" or " (1 desaminoarginine)vasopressin" or "[deamino 8 cysteine d arginine]vasopressin" or "[deamino 8 cysteine dextro arginine]vasopressin" or "[deamino 8 dextro arginine]vasopressin" or "adin" or "adiuretin" or "adiuretin sd" or "concentraid" or "d-void" or "dav ritter" or "DDAVP" or "DDAVP (needs no refrigeration)" or "DDAVP desmopressin" or "DDAVP melt" or "DDAVP nasal" or "DDAVP rhinal tube" or "DDAVP tablets" or "deamino 8d arginine vasopressin" or "deamino dextro arginine vasopressin" or "deaminovasopressin [8 d arginine]" or "defirin" or "defirin melt" or "desmirin" or "desmomelt" or "desmopresina" or "desmopressin acetate" or "desmopressin acetate (needs no refrigeration)" or "desmopressin acetate preservative free" or "desmopressin diacetate" or "desmopressin nasal solution" or "desmopressina" or "desmopressine" or "desmospray" or "desmotab" or "desmotabs" or "desmotabs melt" or "desurin" or "emosint" or "enupresol" or "minirin" or "minirin DDAVP" or "minirin melt" or "minirin nasal spray" or "minirin rhinetten" or "minirin rhinyle" or "minirin spray" or "minirinetette" or "minirinmelt" or "minirin" or "minurin" or "minurin flas" or "minurin gotas" or "miram" or "nictur" or "niwinas" or "nocdurna" or "noctisson" or "nocturin" or "nocutil" or "nokdirna" or "noqdirna" or "noqturina" or "nordurine" or "novidin" or "nucotil nasenspray" or "octim" or "octostim" or "octostim nasal spray" or "octostim spray" or "presinex" or "stimate" or "vasopressin 8 (1

desaminoarginine)" or "vasopressin,1 deamino 8 dextro arginine" or "vasopressin,deamino 8 dextro arginine" or "vasopressin[1 (3 mercaptopropionic acid) 8 dextro arginine]" or "vasopressin[deamino 8 cysteine dextro arginine]" or "vasopressin[deamino 8 d arginine]" or "vasopressin[deamino dextro arginine]" or "wetirin") OR ((("dexamethasone-suppressed corticotropin-releasing hormone stimulation test" or ((dexamethasone or"16alpha methyl 9alpha fluoroprednisolone" or " alpha fluoro 16 alpha methyl delta corticosterone" or "alpha fluoro 11beta,17alpha,21 trihydroxy 16alpha methyl 1,4 pregnadiene 3,20 dione" or "alpha fluoro 11beta,17alpha,21 trihydroxy 16alpha methylpregna 1,4 diene 3,20 dione" or "alpha fluoro 16alpha methyl delta corticosterone" or "adrecort" or "adrenocot" or "aeroseb dex" or "aflucoson" or "aflucosone" or "alfalyl" or "anaflogistico" or "anaflogistico novobios" or "arcodexan" or "arcodexane" or "artosone" or "azium" or "bidexol" or "calonat" or "cebedex" or "cetadexon" or "colofoam" or "corsona" or "cortastat" or "cortastat 10" or "cortastat la" or "cortidex" or "cortidexason" or "cortidrona" or "cortidrone" or "cortisumman" or "dacortina fuerte" or "dacortine fuerte" or "dalalone" or "dalalone d.p." or "dalalone l.a." or "danasone" or "de-sone la" or "decacortin" or "decadeltosona" or "decadeltosone" or "decaderm" or "decadion" or "decadran" or "decadron" or "decadron 5-12 pak" or "decadron la" or "decadronal" or "decadrone" or "decaesadril" or "decaject" or "decamethasone" or "decasone" or "decaspray" or "decaesterolone" or "decdan" or "decilone" or "decilone forte" or "decofluor" or "dectancyl" or "dekacort" or "delladec" or "deltafluoren" or "deltafluorene" or "dergramin" or "deronil" or "desacort" or "desacortone" or "desadrene" or "desalark" or "desameton" or "desametone" or "desigdron" or "dexa cortisyl" or "dexa dabrosan" or "dexa korti" or "dexa scherosan" or "dexa scherozon" or "dexa scherozone" or "dexa-p" or "dexacen 4" or "dexachel" or "dexacort" or "dexacortal" or "dexacorten" or "dexacortin" or "dexacortisyl" or "dexadabrosan" or "dexadecadrol" or "dexadrol" or "dexagel" or "dexagen" or "dexahelvacort" or "dexakorti" or "dexalien" or "dexalocal" or "dexame" or "dexamecortin" or "dexameson" or "dexamesone" or "dexametason" or "dexametasone" or "dexameth" or "dexamethason" or "dexamethasone alcohol" or "dexamethasone intensol" or "dexamethazon" or "dexamethazone" or "dexamethonium" or "dexamonozon" or "dexan" or "dexane" or "dexano" or "dexapot" or "dexascheroson" or "dexascherozon" or "dexascherozone" or "dexason" or "dexasone" or "dexasone la" or "dexasone s" or "dexinoral" or "dexionil" or "dexmethsone" or "dexona" or "dexone" or "dexone 0.5" or "dexone 0.75" or "dexone 1.5" or "dexone 4" or "dexpak taperpak" or "dextelan" or "dextenza" or "dextrasone" or "dexycu" or "dezone" or "dibasona" or "doxamethasone" or "esacortene" or "ex s1" or "exadion" or "exadione" or "firmalone" or "fluormethyl prednisolone" or "fluormethylprednisolon" or "fluormethylprednisolone" or "fluormone" or "fluorocort" or "fluorodelta" or "fluoromethylprednisolone" or "fortecortin" or "gammacorten" or "gammacortene" or "grosodexon" or "grosodexone" or "hemady" or "hexadecadiol" or "hexadecadrol" or "hexadiol" or "hexadrol" or "isnacort" or "isopto dex" or "isopto maxidex" or "isoptodex" or "isoptomaxidex" or "lokalison f" or "loverine" or "luxazone" or "marvidione" or "maxidex" or "mediamethasone" or "megacortin" or "mephameson" or "mephamesone" or "metasolon" or "metasolone" or "methazon ion" or "methazone ion" or "methazonion" or "methazonione" or "metisone lafi" or "mexasone" or "millicorten" or "millicortenol" or "mk 125" or "mk125" or "mymethasone" or "neoforderx" or "neofordex" or "nisomethasona" or "novocort" or "nsc 34521" or "nsc34521" or "oftan-dexa" or "optiocorten" or "optiocortinol" or " oradexan" or " oradexon" or " oradexone" or " orgadrone" or "ozurdex" or "pidexon" or "policort" or "posurdex" or "predni f tablinen" or "predni-f" or "prednisolone f" or "prodexona" or "prodexone" or "sanamethasone" or "santenson" or "santeson" or "sawasone" or "solurex" or "solurex la" or "spoloven" or "sterasone" or "thilodexine" or "triamcimetil" or "vexamet" or "visumetazone" or "visumethazone") and ("function test" or "stimulation

test" or corticotropin))) OR (("hydrocortisone blood level" or "blood cortisol" or "cortisol blood level" or "cortisolemia" or "hypocortisolism" or "plasma cortisol" or "plasma hydrocortisone" or "serum cortisol" or "serum hydrocortisone") and (midnight))))AND ("biopsy" or "cytopathology" or "histopathology" or "histopathological study " or "neurohistopathology" or "sample") OR (("biopsy" or "cytopathology" or "histopathology" or "histopathological study " or "neurohistopathology" or "sample") and ("Inferior petrosal sinus sampling" or "inferior petrosal sinuses" or "petrosal sinus" or "petrosal sinuses" or "sinus petrosus inferior")))

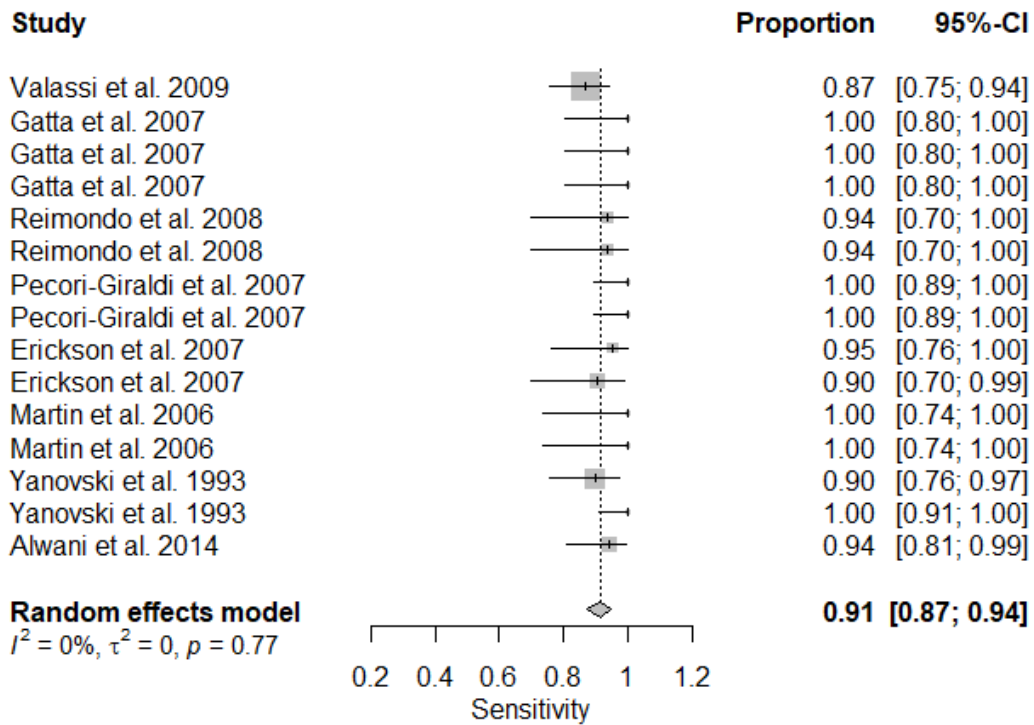
Timespan: All years. Indexes: SCI-EXPANDED, ESCI

| Timespan: 2020-08-01 to 2022-01-24 (Publication Date)

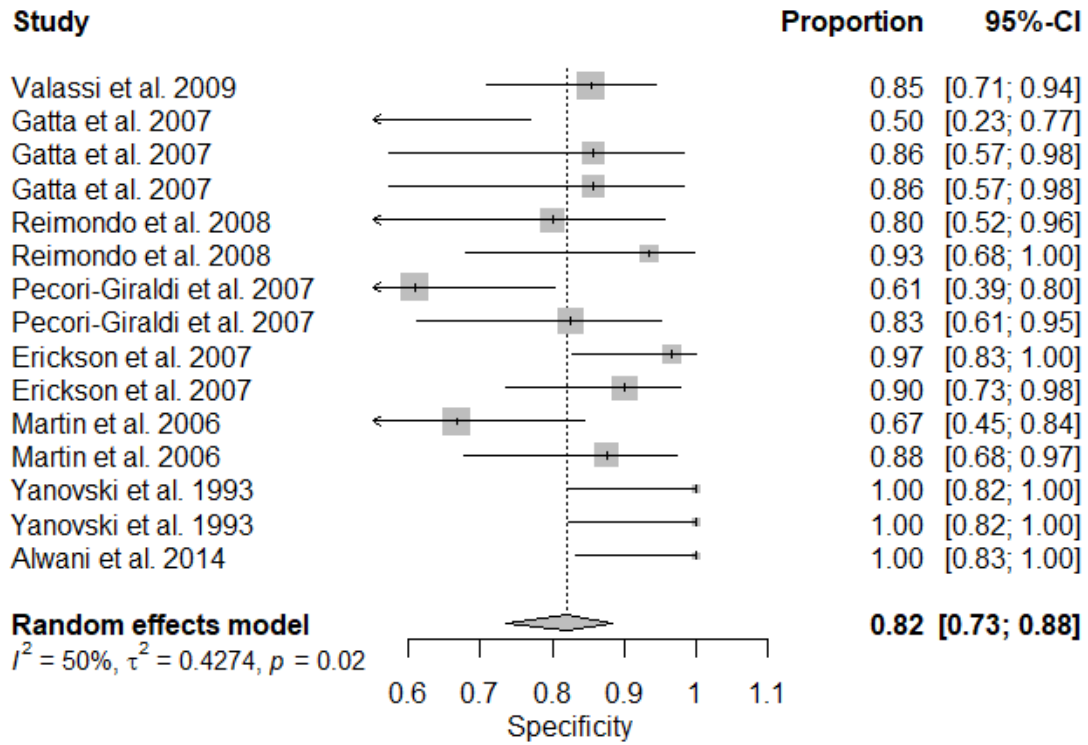
Section 2.- Forrest plots for individual tests

2.1 Dex-CRH

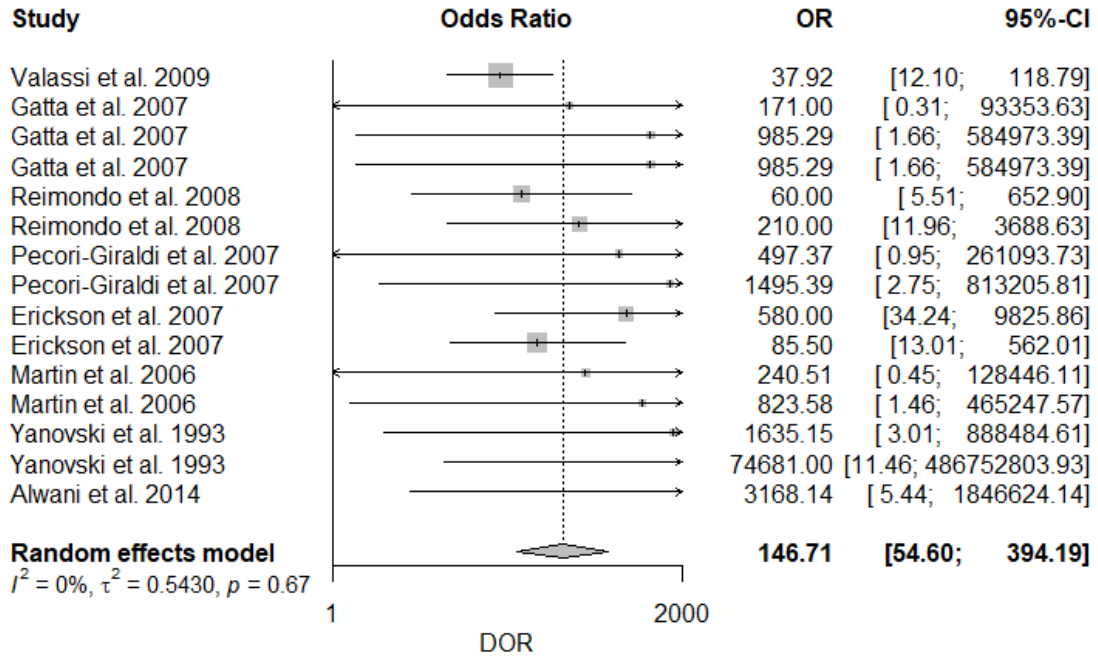
Supplementary figure 1.- Dex-CRH sensitivity



Supplementary figure 2.- Dex-CRH specificity

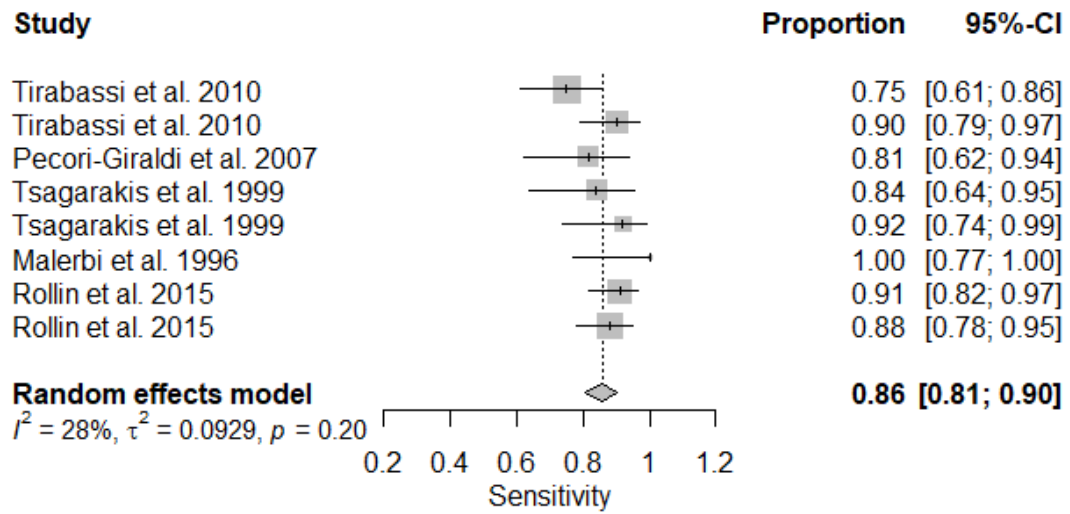


Supplementary figure 3.- Dex-CRH DOR

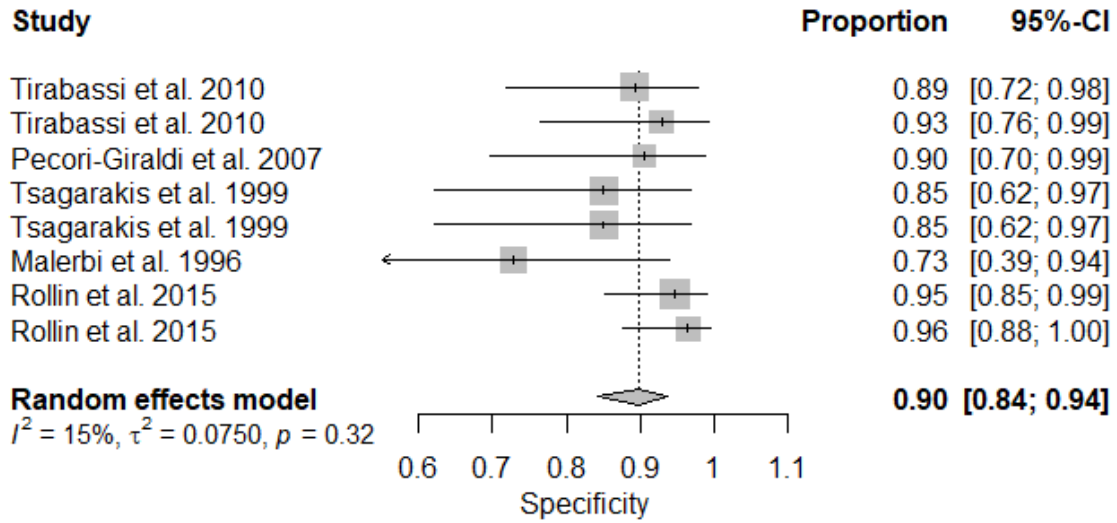


2.2.- DDAVP

Supplementary figure 4.- DDAVP sensitivity

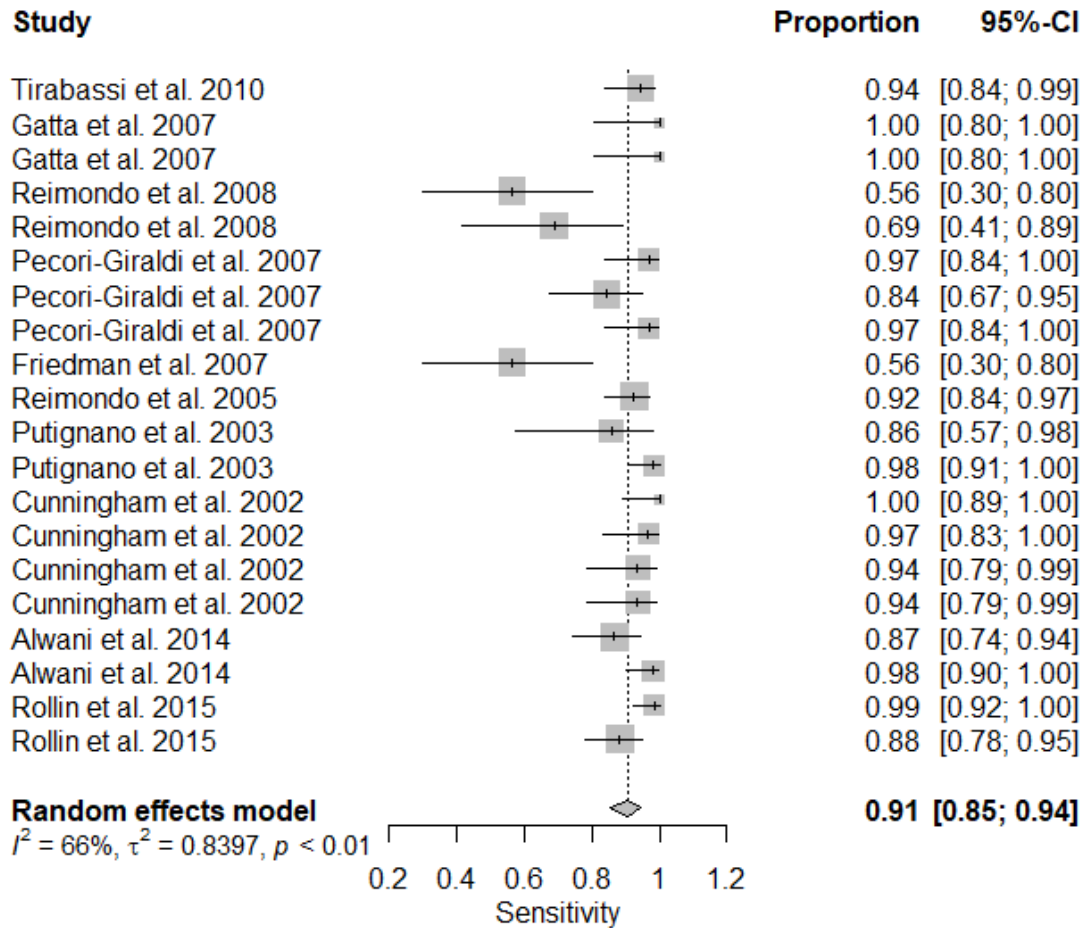


Supplementary figure 5.- DDAVP specificity

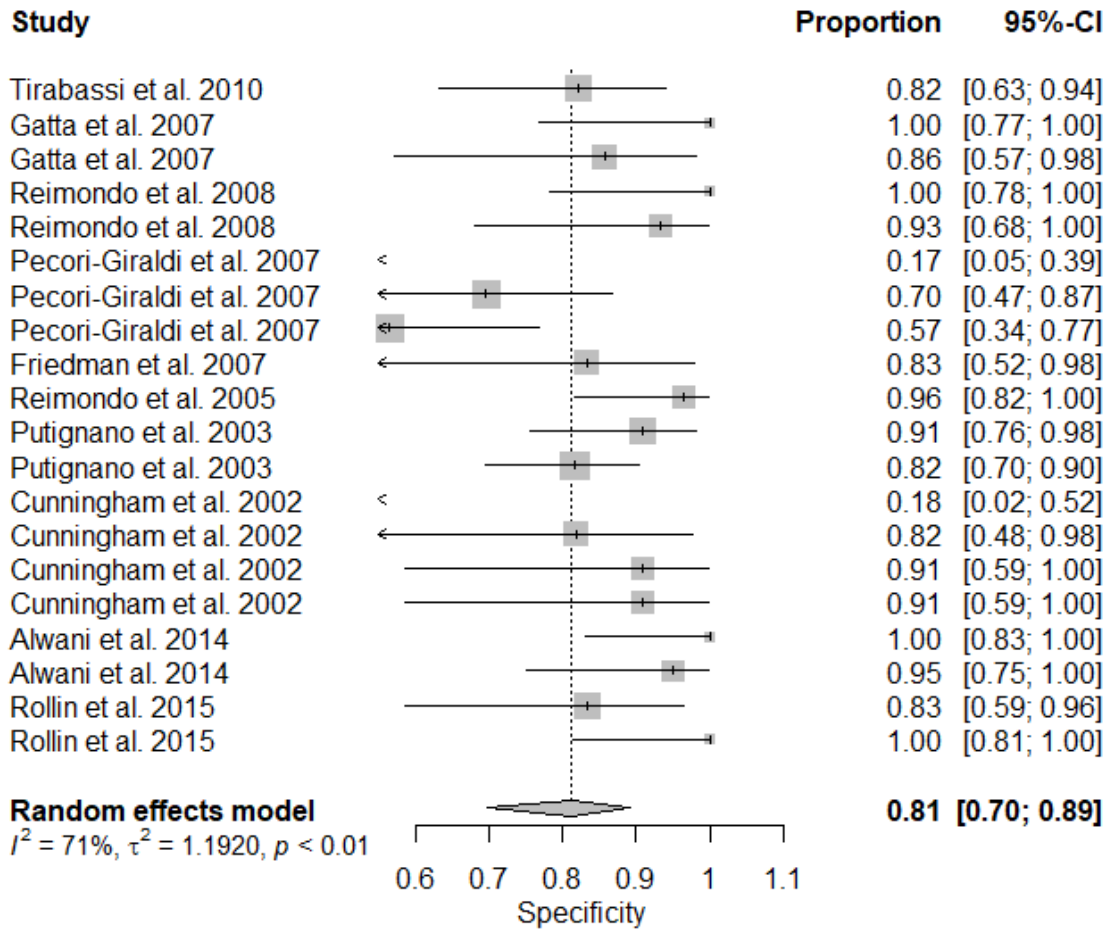


2.3.- MSC

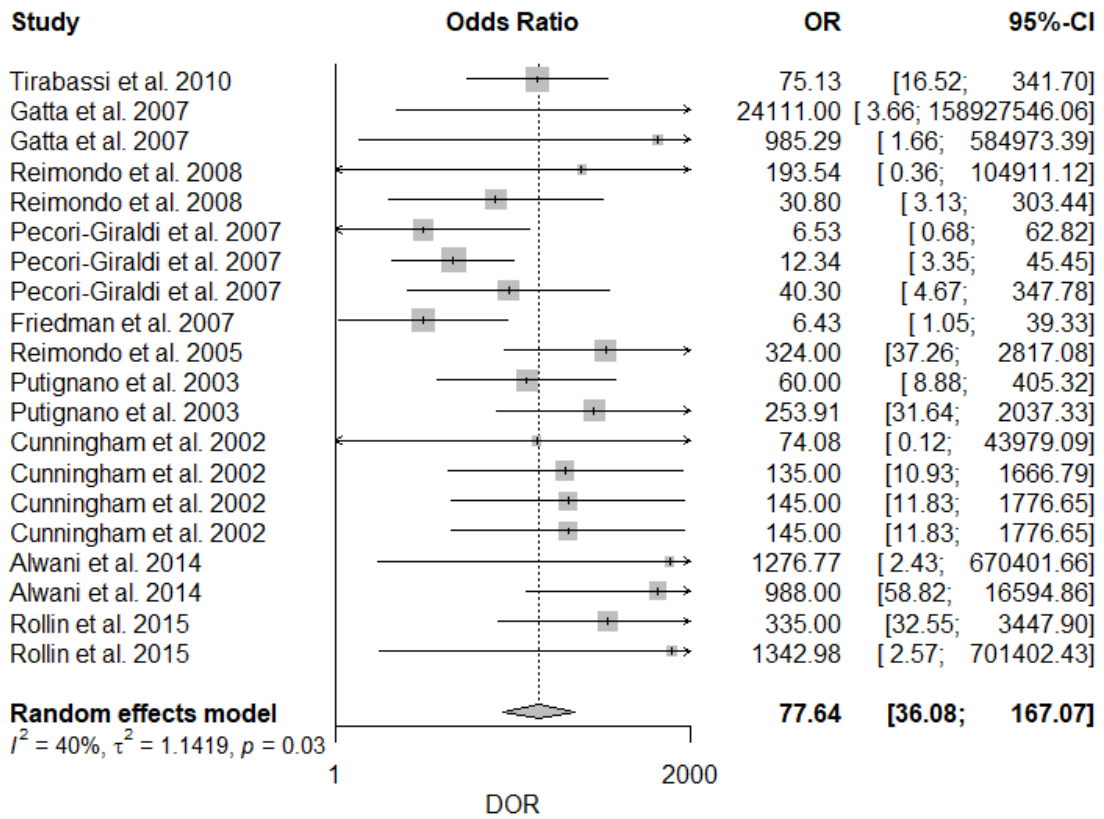
Supplementary figure 7.- MSC sensitivity



Supplementary figure 8.- MSC specificity

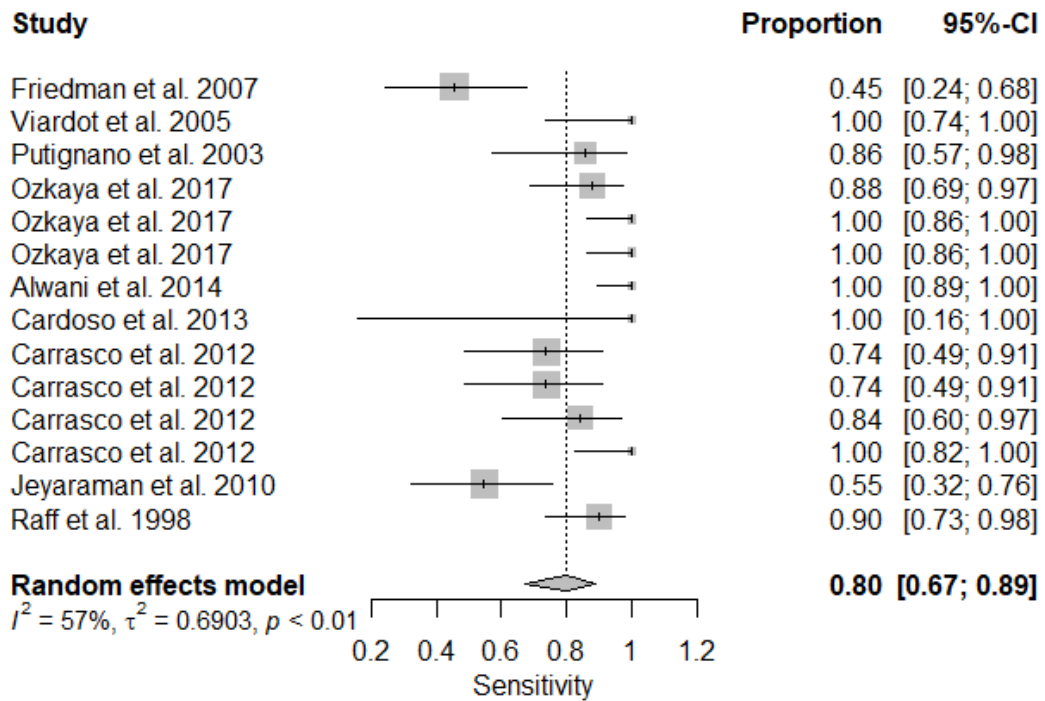


Supplementary figure 9.- MSC DOR

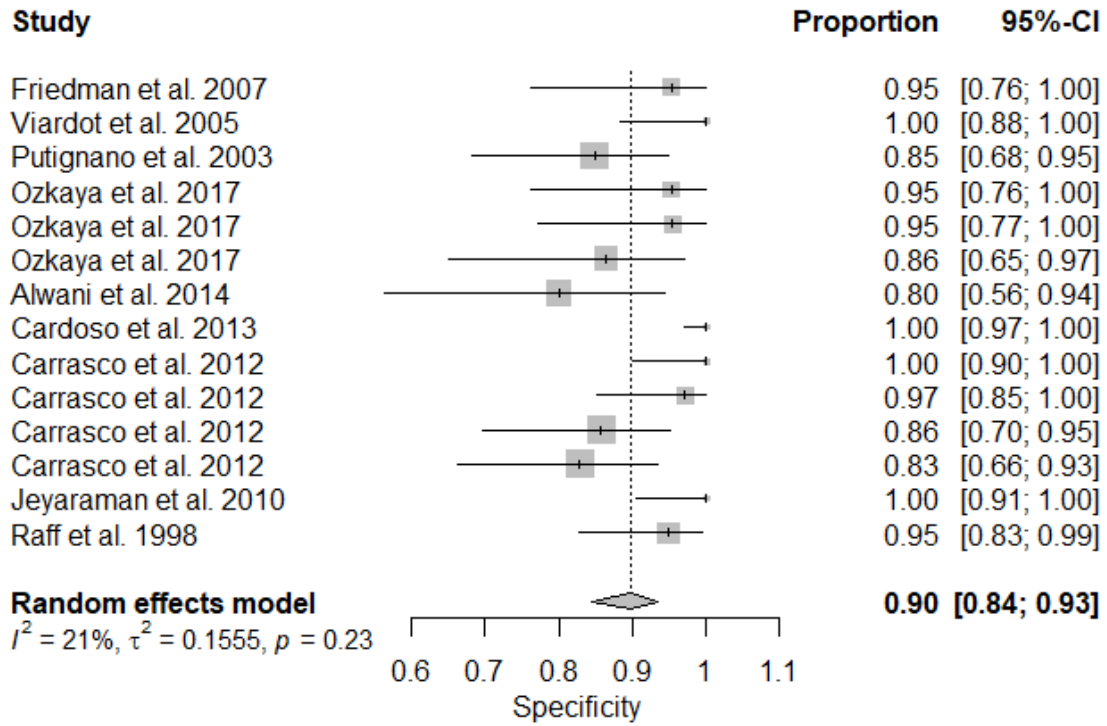


2.4.- LNSC

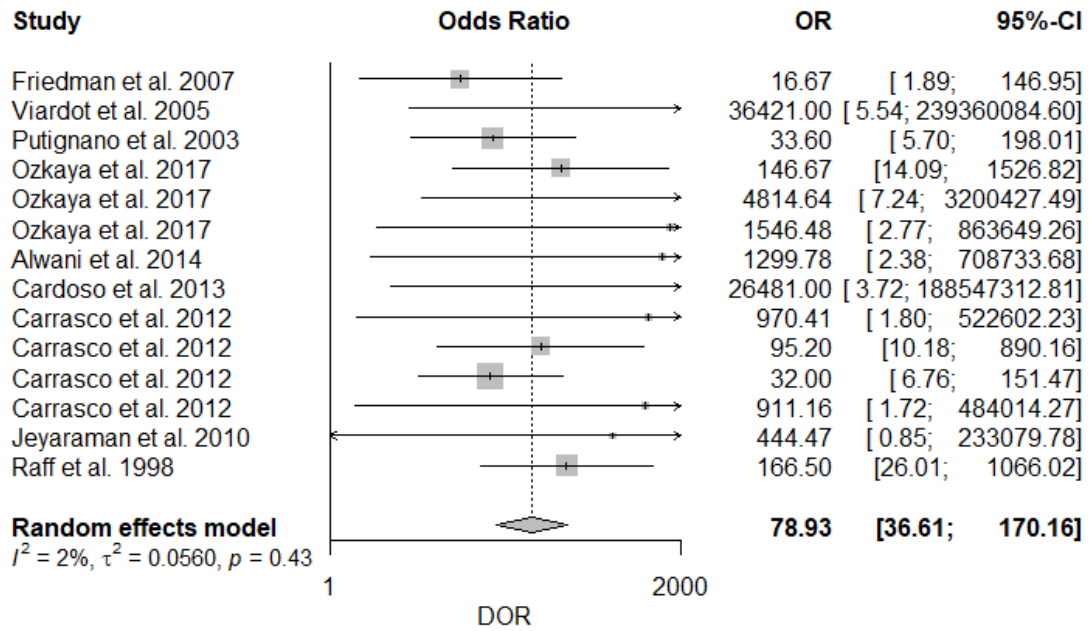
Supplementary figure 10.- LNSC sensitivity



Supplementary figure 11.- LNSC specificity



Supplementary figure 12.- LNSC DOR



Section 3.- Non-neoplastic hypercortisolism characteristics

Supplementary Table 1.- Characteristics of patients with non-neoplastic hypercortisolism.

Author	Reason for evaluation	CS ruling-out	Test	Total NNH	Non-neoplastic cause	N
Alwani et al. 2014	Clinical CS suspicion.	Normalized tests after Tx. No clinical progression.	DDAVP Dex-CRH LNSC MSC	20	Obesity Depression Alcoholism Cirrhosis Severe illness	7 6 5 1 1
Cardoso et al. 2013	Uncontrolled DM1 and DM2. Central obesity and hypertension Premenopausal osteoporosis	Normal DST, LDDST, UFC	LNSC	126	Uncontrolled DM1 Uncontrolled DM2 Obesity + HT Unspecified	10 56 39 21
Carrasco et al. 2012	Clinical CD suspicion.	Normal DST and UFC	LNSC	35	Obesity PCOS Depression Panic disorder	30 11 3 1
Cunningham et al. 2002	Clinical CS suspicion Clinical index.	Normal LDDST. No clinical progression.	MSC	11	Obesity	11
Erickson et al. 2007	Clinical CS suspicion.	Normal LDDST. Reversal of symptoms. No clinical progression.	Dex-CRH	30	Depression OSA Chronic pain	22 5 3
Friedman et al. 2007	Clinical CS suspicion.	Determined not to have CS. No clinical progression.	LNSC MSC	22	Obesity Dysthymia Anxiety disorders	NR NR NR
Gatta et al. 2007	Clinical CS suspicion.	Normalized tests after Tx. Normal MRI. No clinical progression.	Dex-CRH MSC	14	Depression Eating disorder Alcoholism	8 5 1
Jerayaman et al. 2010	Clinical CS suspicion.	Normal DST and LDDST.	LNSC	37	Obesity Metabolic sd. PCOS DM Depression	20 7 4 3 3

Malerbi et al. 1996	Depressive illness.	Normalized tests after Tx. ODST	DDAVP	11	Major depression Bipolar disorder	8 3
Martin et al. 2006	Clinical CS suspicion.	Normal biochemical testing. No clinical progression.	Dex-CRH	24	Obesity Alcoholism Morbid obesity OSA	21 2 1 1
Ozkaya et al. 2017	Obesity. Diagnosis of PCOS.	Normal DST and UFC No clinical progression.	LNSC	65	PCOS (obese) PCOS Obesity	22 22 21
Papanicolaou et al. 2002	Clinical CS suspicion.	Negative Dex-CRH, loperamide suppression test or DST. Resolution of hypercortisolism by UFC or other tests.	LNSC	21	Obesity Depression Anxiety disorder Bipolar disorder OCD Alcoholism Uncontrolled DM2 Chronic pain PCOS Morbid obesity	18 5 4 2 1 1 2 2 1 2
Pecori-Giraldi et al. 2007	Clinical CS suspicion.	Resolution of symptoms with Tx. No clinical progression.	DDAVP Dex-CRH MSC	23	Obesity PCOS Depression Alcoholism	17 8 10 2
Putignano et al. 2003 (1)	PCOS with or without obesity.	Negative Dex-CRH or DDAVP. No clinical progression.	MSC	60	PCOS	60
Putignano et al. 2003	Clinical CS suspicion.	Negative Dex-CRH or DDAVP. No clinical or biochemical progression.	LNSC MSC	232	Alcoholism Uncontrolled DM2 Depression Obesity PCOS	2 3 11 206 10
Raff H et al. 1998	Clinical CS suspicion.	Subsequent normal UFC or DST.	LNSC	39	Unspecified Alcoholism PCOS (obese)	36 1 2
Reimondo et al. 2005	Clinical CS suspicion.	Normal DST and UFC. Improvement or symptoms with Tx. No clinical progression.	MSC	28	Metabolic sd. PCOS	17 11

Reimondo et al. 2008	Clinical CS suspicion.	Normal DST, LDDST and UFC. Improvement or symptoms with Tx. No clinical progression.	Dex-CRH MSC	15	Metabolic sd. PCOS	9 6
Rollin et al. 2014	Clinical CS suspicion.	No clinical or biochemical progression. ODST, UFC, LDDST and circadian rhythm.	DDAVP MSC	56	Obesity PCOS Psych. Disorders	56 41 23
Tirabassi et al. 2010	Clinical CS suspicion.	No clinical or biochemical progression. Normalized tests after Tx.	DDAVP MSC	28	Depression Alcoholism PCOS Panic disorder Bulimia nervosa	16 2 9 9 1
Tsagarakis et al. 1999	Obesity (BMI mean 44.1, range 34-5 – 66.7)	ODST, LDDST, UFC. No clinical or biochemical progression.	DDAVP	20	Obesity	20
Valassi et al. 2009	Clinical CS suspicion.	Improvement of symptoms with Tx. No clinical or biochemical progression.	Dex-CRH	41	Obesity Depression	20 22
Viardot et al. 2005	Hipercortisolism (and Cushingoid) Severe obesity	Normalized biochemical testing. No clinical progression.	LNSC	30	Unspecified Severe obesity	14 16
Yanovski et al. 1993	Hipercortisolism	Resolution of hypercortisolism. No clinical progression. Normal MRI.	Dex-CRH	19	Obesity Psych. disorder	19 17

Section 4- Risk of bias assessment (QUADAS-2)

Supplementary Table 2. Risk of bias assessment of individual studies using QUADAS-2

Study	Patient selection	Index test	Reference standard	Flow & timing	Overall
Tirabassi et al. 2010	Low	Some concerns	Low	Some concerns	Some concerns
Valassi et al. 2009	High	Some concerns	Low	High	High
Gatta et al. 2007	High	Low	Low	Low	Some concerns
Reimondo et al. 2008	Low	Low	Low	Some concerns	Some concerns
Pecori-Giraldi et al. 2007	Some concerns	Low	Low	Some concerns	Some concerns
Erickson et al. 2007	High	Some concerns	Low	Low	Low
Friedman et al. 2007	Some concerns	Some concerns	Low	Some concerns	Some concerns
Martin et al. 2006	Some concerns	Low	Low	Some concerns	Some concerns
Viardot et al. 2005	Low	Low	Low	High	High
Reimondo et al. 2005	Low	Low	Low	Low	Low
Putignano et al. 2003	Low	Low	Low	Low	Low
Putignano et al. 2003	Low	Low	Low	Low	Low
Cunningham et al. 2002	Low	Low	Low	Low	Low
Papanicolaou et al. 2002	Low	Low	Low	Low	Low
Tsagarakis et al. 1999	High	Low	Low	Low	Some concerns
Malerbi et al. 1996	High	Low	Low	Low	Some concerns
Yanovski et al. 1993	Low	Low	Low	Low	Low
Ozkaya et al. 2017	High	Some concerns	Low	Low	High
Alwani et al. 2014	Low	Low	Low	Low	Low
Cardoso et al. 2013	High	High	Low	High	High
Carrasco et al. 2012	High	High	Low	High	High
Jeyaraman et al. 2010	High	High	Low	High	High
Raff et al. 1998	High	High	Low	High	High
Rollin et al. 2015	Low	Low	Some concerns	Low	Low

Section 5.- Screening tests' diagnostic accuracy.

Supplementary Table 3. Screening test diagnostic accuracy.

Study	24h UFC		ODST		LDDST	
	Sensitivity	Specificity	Sensitivity	Specificity	Sensitivity	Specificity
Tirabassi 2010	78.8 (65.3 – 88.9)	52.5 (39.1 – 65.7)	90.3 (78.9 – 96.8)	66.1 (52.6 – 77.9)	NR	NR
Valassi 2009	94.5 (91.5 – 97.6)	40 (30.2 – 49.8)	NR	NR	91.0 (84.7 – 97.1)	66.0 (45.8 – 87.5)
Gatta 2007	NR	NR	NR	NR	94.0 (71.2 – 99)	79.0 (49.2 – 95.1)
Reimondo 2008	75.0 (47.4 – 91.6)	100 (74.6 – 100)	87.5 (60.4 – 97.8)	93.3 (66.0 – 99.6)	81.2 (53.6 – 95.0)	93.3 (66 – 99.6)
Pecori-Giraldi 2007	97.0	44.0	98.0	58.0	94.0	74.0
Erickson 2007	78.0	79.0	NR	NR	85.0*	83.0*
Friedman 2007	38.0 (21.0- 57.0)	95.0 (77.0- 99.0)	NR	NR	NR	NR
Martin 2006	NR	NR	NR	NR	100	88.0
Viardot 2005	NR	NR	NR	NR	NR	NR
Reimondo 2005	73.2 (61.4 – 83.1)	96.3 (81.0 – 99.4)	100 ⁺	68.2 (45.1 – 86.1) ⁺	NR	NR
Putignano 2003	97.6 (92.9 – 102.3)	85.3 (81.0 – 89.6)	NR	NR	NR	NR
Putignano 2003 (1)	98.3	73.3	98.3	86.7	NR	NR
Cunningham 2002	NR	NR	NR	NR	NR	NR
Papanicolaou 2002	56.0 (47.0 – 65.0)	100	NR	NR	NR	NR
Tsagarakis 1999	NR	NR	NR	NR	NR	NR
Malerbi 1996	NR	NR	NR	NR	NR	NR
Yanovski 1993	NR	NR	NR	NR	56.0 [#]	100 [#]
Ozkaya 2017	NR	NR	NR	NR	NR	NR
Alwani 2014	NR	NR	NR	NR	94.0	84.0
Cardoso 2013	NR	NR	100	97.3	NR	NR
Carrasco 2012	NR	NR	NR	NR	NR	NR
Jeyaraman 2010	NR	NR	NR	NR	NR	NR
Raff 1998	NR	NR	NR	NR	NR	NR

Rollin 2015	90.3	79.0	100	51.0	95.0	61.0
<p>24h UFC: 24 hour urinary free cortisol; LDDST: Low-dose dexamethasone suppression test; NR: Not reported; ODST: Overnight dexamethasone suppression test; ODST and LDDST threshold is post-dexamethasone serum cortisol (1.8 ug/dl) except for: *Post-dexamethasone UFC (6.2 ug/24h); + Post-dexamethasone serum cortisol (1.5 ug/dl); # Post-dexamethasone UFC (36 ug/24h)</p>						