**Chapter 9**

**Supplemental Data 1: Search strategy**

**PubMed (<http://www.ncbi.nlm.nih.gov/pubmed?otool=leiden>)  
(("Cushing Syndrome/surgery"[Mesh] OR "Cushing Syndrome/therapy"[Mesh] OR "Pituitary ACTH Hypersecretion/surgery"[Mesh] OR "Pituitary ACTH Hypersecretion/therapy"[Mesh] OR (("Cushing Syndrome"[Mesh] OR "Cushings Disease"[tw] OR "Cushings Syndrome"[tw] OR "Cushing's Disease"[tw] OR "Cushing's Syndrome"[tw] OR "Cushing Disease"[tw] OR "Cushing Syndrome"[tw] OR Cushing\*[tw] OR "Hypercortisolism"[tw] OR Hypercortisol\*[tw] OR "Pituitary ACTH Hypersecretion"[Mesh] OR "Pituitary ACTH Hypersecretion"[tw] OR "Inappropriate ACTH Secretion"[tw]) AND (transsphenoid\*[tw] OR trans-sphenoid\*[tw] OR "Endoscopy"[Mesh:NoExp] OR "Neuroendoscopy"[Mesh] OR Endoscop\*[tw] OR Neuroendoscop\*[tw] OR "Microsurgery"[Mesh:NoExp] OR Microsurg\*[tw] OR micro-surg\*[tw] OR "microscopic surgery"[tw] OR microscopic surg\*[tw] OR "Surgical Procedures, Operative"[Mesh] OR "surgery"[Subheading] OR "surgery"[tw] OR surgical\*[tw] OR "operation"[tw] OR "treated"[tw] OR "treating"[tw] OR "treatment"[tw] OR "Therapeutics"[Mesh]))) AND ("well being"[tw] OR "wellbeing"[tw] OR "Quality of Life"[Mesh] OR "Quality of Life"[tw] OR "QOL"[tw] OR "neuropsychological performances"[tw] OR "neuropsychological performance"[tw] OR "neuropsychologic performances"[tw] OR "neuropsychologic performance"[tw] OR "cognitive performances"[tw] OR "cognitive performance"[tw] OR "cognition performance"[tw] OR neuro-psychol\*[tw] OR neuropsychol\*[tw] OR " Cognition Disorders"[mesh] OR "Adaptation, Psychological"[mesh] OR "Mental Disorders"[mesh] OR "Personality Disorders"[mesh] OR "Psychopathology"[mesh] OR Mental Disorder\*[tw] OR Personality Disorder\*[tw] OR Psychopathol\*[tw])) NOT ("Animals"[mesh] NOT "Humans"[mesh]) NOT (("case reports"[ptyp] OR "case report"[ti]) NOT ("Clinical Study"[ptyp] OR "series"[ti] OR "review"[ptyp] OR "review"[ti]))**

**Embase (<http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=main&MODE=ovid&D=oemezd>)  
((\*"Cushing disease"/su OR \*"Cushing syndrome"/su OR ((\*"Cushing disease"/ OR \*"Cushing syndrome"/ OR "Cushings Disease".ti,ab OR "Cushings Syndrome".ti,ab OR "Cushing's Disease".ti,ab OR "Cushing's Syndrome".ti,ab OR "Cushing Disease".ti,ab OR "Cushing Syndrome".ti,ab OR Cushing\*.ti,ab OR "Hypercortisolism".ti,ab OR Hypercortisol\*.ti,ab OR "Pituitary ACTH Hypersecretion".ti,ab OR "Inappropriate ACTH Secretion".ti,ab) AND (transsphenoid\*.ti,ab OR trans-sphenoid\*.ti,ab OR "Endoscopy"/ OR "Neuroendoscopy"/ OR Endoscop\*.ti,ab OR Neuroendoscop\*.ti,ab OR "Microsurgery"/ OR Microsurg\*.ti,ab OR micro-surg\*.ti,ab OR "microscopic surgery".ti,ab OR microscopic surg\*.ti,ab OR exp \*"Surgery"/ OR "surgery".ti,ab OR surgical\*.ti,ab OR "operation".ti,ab OR "treated".ti,ab OR "treating".ti,ab OR "treatment".ti,ab OR exp \*"Therapy"/))) AND ("well being".ti,ab OR "wellbeing".ti,ab OR exp "Quality of Life"/ OR "Quality of Life".ti,ab OR "QOL".ti,ab OR "neuropsychological performances".ti,ab OR "neuropsychological performance".ti,ab OR "neuropsychologic performances".ti,ab OR "neuropsychologic performance".ti,ab OR "cognitive performances".ti,ab OR "cognitive performance".ti,ab OR "cognition performance".ti,ab OR neuro-psychol\*.ti,ab OR neuropsychol\*.ti,ab OR exp \*"neuropsychological test"/ OR exp \*"neuropsychology"/ OR exp \*"cognitive defect"/ OR exp \*"cognition"/ OR exp \*"adaptive behavior"/ OR exp \*"Mental Disease"/ OR exp \*"Personality Disorder"/ OR Mental Disorder\*.ti,ab OR Personality Disorder\*.ti,ab OR Psychopathol\*.ti,ab)) AND exp "Humans"/ NOT ((exp "case report"/ OR "case report".ti) NOT (exp "Clinical Trial"/ OR "series".ti OR "case study"/ OR exp "review"/ OR "review".ti))**

**Web of Science (**[**http://isiknowledge.com/wos**](http://isiknowledge.com/wos)**)  
(ti=("Cushing disease" OR "Cushing syndrome" OR "Cushings Disease" OR "Cushings Syndrome" OR "Cushing's Disease" OR "Cushing's Syndrome" OR "Cushing Disease" OR "Cushing Syndrome" OR Cushing\* OR "Hypercortisolism" OR Hypercortisol\* OR "Pituitary ACTH Hypersecretion" OR "Inappropriate ACTH Secretion") AND ts=(transsphenoid\* OR trans-sphenoid\* OR "Endoscopy" OR "Neuroendoscopy" OR Endoscop\* OR Neuroendoscop\* OR "Microsurgery" OR Microsurg\* OR "micro-surg\*" OR "microscopic surgery" OR "microscopic surg\*" OR "Surgery" OR "surgery" OR surgical\* OR "operation" OR "treated" OR "treating" OR "treatment" OR "Therapy") AND ts=("well being" OR "wellbeing" OR "Quality of Life" OR "Quality of Life" OR "QOL" OR "neuropsychological performances" OR "neuropsychological performance" OR "neuropsychologic performances" OR "neuropsychologic performance" OR "cognitive performances" OR "cognitive performance" OR "cognition performance" OR neuro-psychol\* OR neuropsychol\* OR "neuropsychological test" OR "neuropsychology" OR "cognitive defect" OR "cognition" OR "adaptive behavior" OR "Mental Disease" OR "Personality Disorder" OR Mental Disorder\* OR Personality Disorder\* OR Psychopathol\*) NOT TI=("case report" NOT ("Trial" OR "series" OR "review")) NOT ti=(veterinary OR rabbit OR rabbits OR animal OR animals OR mouse OR mice OR rodent OR rodents OR rat OR rats OR pig OR pigs OR porcine OR horse\* OR equine OR cow OR cows OR bovine OR goat OR goats OR sheep OR ovine OR canine OR dog OR dogs OR feline OR cat OR cats)) OR (TS=("Cushing disease" OR "Cushing syndrome" OR "Cushings Disease" OR "Cushings Syndrome" OR "Cushing's Disease" OR "Cushing's Syndrome" OR "Cushing Disease" OR "Cushing Syndrome" OR Cushing\* OR "Hypercortisolism" OR Hypercortisol\* OR "Pituitary ACTH Hypersecretion" OR "Inappropriate ACTH Secretion") AND TI=(transsphenoid\* OR trans-sphenoid\* OR "Endoscopy" OR "Neuroendoscopy" OR Endoscop\* OR Neuroendoscop\* OR "Microsurgery" OR Microsurg\* OR "micro-surg\*" OR "microscopic surgery" OR "microscopic surg\*" OR "Surgery" OR "surgery" OR surgical\* OR "operation" OR "treated" OR "treating" OR "treatment" OR "Therapy") AND TS=("well being" OR "wellbeing" OR "Quality of Life" OR "Quality of Life" OR "QOL" OR "neuropsychological performances" OR "neuropsychological performance" OR "neuropsychologic performances" OR "neuropsychologic performance" OR "cognitive performances" OR "cognitive performance" OR "cognition performance" OR neuro-psychol\* OR neuropsychol\* OR "neuropsychological test" OR "neuropsychology" OR "cognitive defect" OR "cognition" OR "adaptive behavior" OR "Mental Disease" OR "Personality Disorder" OR Mental Disorder\* OR Personality Disorder\* OR Psychopathol\*) NOT TI=("case report" NOT ("Trial" OR "series" OR "review")) NOT ti=(veterinary OR rabbit OR rabbits OR animal OR animals OR mouse OR mice OR rodent OR rodents OR rat OR rats OR pig OR pigs OR porcine OR horse\* OR equine OR cow OR cows OR bovine OR goat OR goats OR sheep OR ovine OR canine OR dog OR dogs OR feline OR cat OR cats))**

**Cochrane (**[**http://www.cochranelibrary.com/**](http://www.cochranelibrary.com/)**)  
(("Cushing disease" OR "Cushing syndrome" OR "Cushings Disease" OR "Cushings Syndrome" OR "Cushing's Disease" OR "Cushing's Syndrome" OR "Cushing Disease" OR "Cushing Syndrome" OR Cushing\* OR "Hypercortisolism" OR Hypercortisol\* OR "Pituitary ACTH Hypersecretion" OR "Inappropriate ACTH Secretion") AND (transsphenoid\* OR trans-sphenoid\* OR "Endoscopy" OR "Neuroendoscopy" OR Endoscop\* OR Neuroendoscop\* OR "Microsurgery" OR Microsurg\* OR "micro-surg\*" OR "microscopic surgery" OR "microscopic surg\*" OR "Surgery" OR "surgery" OR surgical\* OR "operation" OR "treated" OR "treating" OR "treatment" OR "Therapy") AND ("well being" OR "wellbeing" OR "Quality of Life" OR "Quality of Life" OR "QOL" OR "neuropsychological performances" OR "neuropsychological performance" OR "neuropsychologic performances" OR "neuropsychologic performance" OR "cognitive performances" OR "cognitive performance" OR "cognition performance" OR neuro-psychol\* OR neuropsychol\* OR "neuropsychological test" OR "neuropsychology" OR "cognitive defect" OR "cognition" OR "adaptive behavior" OR "Mental Disease" OR "Personality Disorder" OR Mental Disorder\* OR Personality Disorder\* OR Psychopathol\*)):ti,ab,kw**

**CENTRAL (**[**http://archie.cochrane.org/?conference abstractredirectTo=http://crso.cochrane.org/login.php&key=4c7b65632dcd2**](http://archie.cochrane.org/?conference%20abstractredirectTo=http://crso.cochrane.org/login.php&key=4c7b65632dcd2)**)  
(("Cushing disease" OR "Cushing syndrome" OR "Cushings Disease" OR "Cushings Syndrome" OR "Cushing's Disease" OR "Cushing's Syndrome" OR "Cushing Disease" OR "Cushing Syndrome" OR Cushing\* OR "Hypercortisolism" OR Hypercortisol\* OR "Pituitary ACTH Hypersecretion" OR "Inappropriate ACTH Secretion") AND (transsphenoid\* OR trans-sphenoid\* OR "Endoscopy" OR "Neuroendoscopy" OR Endoscop\* OR Neuroendoscop\* OR "Microsurgery" OR Microsurg\* OR "micro-surg\*" OR "microscopic surgery" OR "microscopic surg\*" OR "Surgery" OR "surgery" OR surgical\* OR "operation" OR "treated" OR "treating" OR "treatment" OR "Therapy") AND ("well being" OR "wellbeing" OR "Quality of Life" OR "Quality of Life" OR "QOL" OR "neuropsychological performances" OR "neuropsychological performance" OR "neuropsychologic performances" OR "neuropsychologic performance" OR "cognitive performances" OR "cognitive performance" OR "cognition performance" OR neuro-psychol\* OR neuropsychol\* OR "neuropsychological test" OR "neuropsychology" OR "cognitive defect" OR "cognition" OR "adaptive behavior" OR "Mental Disease" OR "Personality Disorder" OR Mental Disorder\* OR Personality Disorder\* OR Psychopathol\*))**

**Emcare (**[**http://ovidsp.ovid.com/ovidweb.cgi?T=JS&NEWS=n&CSC=Y&PAGE=main&D=emcr**](http://ovidsp.ovid.com/ovidweb.cgi?T=JS&NEWS=n&CSC=Y&PAGE=main&D=emcr)**)  
((\*"Cushing disease"/su OR \*"Cushing syndrome"/su OR ((\*"Cushing disease"/ OR \*"Cushing syndrome"/ OR "Cushings Disease".ti,ab OR "Cushings Syndrome".ti,ab OR "Cushing's Disease".ti,ab OR "Cushing's Syndrome".ti,ab OR "Cushing Disease".ti,ab OR "Cushing Syndrome".ti,ab OR Cushing\*.ti,ab OR "Hypercortisolism".ti,ab OR Hypercortisol\*.ti,ab OR "Pituitary ACTH Hypersecretion".ti,ab OR "Inappropriate ACTH Secretion".ti,ab) AND (transsphenoid\*.ti,ab OR trans-sphenoid\*.ti,ab OR "Endoscopy"/ OR "Neuroendoscopy"/ OR Endoscop\*.ti,ab OR Neuroendoscop\*.ti,ab OR "Microsurgery"/ OR Microsurg\*.ti,ab OR micro-surg\*.ti,ab OR "microscopic surgery".ti,ab OR microscopic surg\*.ti,ab OR exp \*"Surgery"/ OR "surgery".ti,ab OR surgical\*.ti,ab OR "operation".ti,ab OR "treated".ti,ab OR "treating".ti,ab OR "treatment".ti,ab OR exp \*"Therapy"/))) AND ("well being".ti,ab OR "wellbeing".ti,ab OR exp "Quality of Life"/ OR "Quality of Life".ti,ab OR "QOL".ti,ab OR "neuropsychological performances".ti,ab OR "neuropsychological performance".ti,ab OR "neuropsychologic performances".ti,ab OR "neuropsychologic performance".ti,ab OR "cognitive performances".ti,ab OR "cognitive performance".ti,ab OR "cognition performance".ti,ab OR neuro-psychol\*.ti,ab OR neuropsychol\*.ti,ab OR exp \*"neuropsychological test"/ OR exp \*"neuropsychology"/ OR exp \*"cognitive defect"/ OR exp \*"cognition"/ OR exp \*"adaptive behavior"/ OR exp \*"Mental Disease"/ OR exp \*"Personality Disorder"/ OR Mental Disorder\*.ti,ab OR Personality Disorder\*.ti,ab OR Psychopathol\*.ti,ab)) AND exp "Humans"/ NOT ((exp "case report"/ OR "case report".ti) NOT (exp "Clinical Trial"/ OR "series".ti OR "case study"/ OR exp "review"/ OR "review".ti))**

**ScienceDirect (**[**http://www.sciencedirect.com/science?\_ob=MiamiSearchURL&\_method=requestForm&\_temp=all\_boolSearch.tmpl&\_acct=C000026638&\_version=1&\_urlVersion=1&\_userid=530453&md5=d44bd9fa9076bb9b258a588b309be1e3**](http://www.sciencedirect.com/science?_ob=MiamiSearchURL&_method=requestForm&_temp=all_boolSearch.tmpl&_acct=C000026638&_version=1&_urlVersion=1&_userid=530453&md5=d44bd9fa9076bb9b258a588b309be1e3)**)  
TITLE("Cushing" OR Cushing\* OR "Hypercortisolism" OR Hypercortisol\* OR "Pituitary ACTH Hypersecretion" OR "Inappropriate ACTH Secretion") AND TITLE(transsphenoid\* OR trans-sphenoid\* OR "Endoscopy" OR "Neuroendoscopy" OR Endoscop\* OR Neuroendoscop\* OR "Microsurgery" OR Microsurg\* OR "micro-surg\*" OR "microscopic surgery" OR "microscopic surg\*" OR "Surgery" OR "surgery" OR surgical\* OR "operation" OR "treated" OR "treating" OR "treatment" OR "Therapy") AND ("well being" OR "wellbeing" OR "Quality of Life" OR "Quality of Life" OR "QOL" OR "neuropsychological performances" OR "neuropsychological performance" OR "neuropsychologic performances" OR "neuropsychologic performance" OR "cognitive performances" OR "cognitive performance" OR "cognition performance" OR neuro-psychol\* OR neuropsychol\* OR "neuropsychological test" OR "neuropsychology" OR "cognitive defect" OR "cognition" OR "adaptive behavior" OR "Mental Disease" OR "Personality Disorder" OR "Mental Disorder\*" OR "Personality Disorder\*" OR Psychopathol\*) NOT (("case report" OR "case").af NOT ("Trial" OR "series" OR "review").ti)**

**LWW (<http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=main&MODE=ovidclassic&D=ovft>)  
(("Cushing disease" OR "Cushing syndrome" OR "Cushings Disease" OR "Cushings Syndrome" OR "Cushing's Disease" OR "Cushing's Syndrome" OR "Cushing Disease" OR "Cushing Syndrome" OR Cushing\* OR "Hypercortisolism" OR Hypercortisol\* OR "Pituitary ACTH Hypersecretion" OR "Inappropriate ACTH Secretion").ti AND (transsphenoid\* OR trans-sphenoid\* OR "Endoscopy" OR "Neuroendoscopy" OR Endoscop\* OR Neuroendoscop\* OR "Microsurgery" OR Microsurg\* OR "micro-surg\*" OR "microscopic surgery" OR "microscopic surg\*" OR "Surgery" OR "surgery" OR surgical\* OR "operation" OR "treated" OR "treating" OR "treatment" OR "Therapy").ti AND ("well being" OR "wellbeing" OR "Quality of Life" OR "Quality of Life" OR "QOL" OR "neuropsychological performances" OR "neuropsychological performance" OR "neuropsychologic performances" OR "neuropsychologic performance" OR "cognitive performances" OR "cognitive performance" OR "cognition performance" OR neuro-psychol\* OR neuropsychol\* OR "neuropsychological test" OR "neuropsychology" OR "cognitive defect" OR "cognition" OR "adaptive behavior" OR "Mental Disease" OR "Personality Disorder" OR "Mental Disorder\*" OR "Personality Disorder\*" OR Psychopathol\*).mp) NOT (("case report" OR "case").af NOT ("Trial" OR "series" OR "review").ti)**