

Appendix: Supplementary material

1. PICOS

Population: Patients with elevated blood pressure and hypertension stage I and stage II (according to the American College of Cardiology/American Heart Association), with or without comorbidity, over 18 years old and below 65 years old, of both sexes

Intervention: Deep breathing techniques with or without antihypertensive therapy

Comparison: Sham procedures, lifestyle changes

Outcomes: Decrease in systolic blood pressure and diastolic blood pressure

Study designs: Randomized-controlled trials

2. Search strategy

1) PubMed search (71 filter terms)

(hypertens*[Title/Abstract] OR blood pressure[Title/Abstract] OR Stage 1[Title/Abstract] OR Stage I[Title/Abstract]) AND (deep breath*[Title/Abstract] OR breath* technique*[Title/Abstract] OR diaphragmatic breath*[Title/Abstract] OR slow breath*[Title/Abstract] OR breath* exercise*[Title/Abstract]) NOT (Yoga[Title/Abstract] OR Qigong[Title/Abstract] OR orthostat*[Title/Abstract] OR obstruct*[Title/Abstract] OR failure*[Title/Abstract] OR sever*[Title/Abstract] OR anesthesia*[Title/Abstract] OR traumatic*[Title/Abstract] OR stress*[Title/Abstract] OR drug*[Title/Abstract] OR vasoactive* drug*[Title/Abstract] OR drug therap*[Title/Abstract] OR drug treatment* [Title/Abstract] OR steroid*[Title/Abstract] OR sleep*[Title/Abstract] OR surger*[Title/Abstract] OR thromb*[Title/Abstract] OR Fracture*[Title/Abstract] OR stroke*[Title/Abstract] OR old[Title/Abstract] OR elder*[Title/Abstract] OR bee[Title/Abstract] OR hemodialys*[Title/Abstract] OR dyspnea[Title/Abstract] OR veteran*[Title/Abstract] OR menopau*[Title/Abstract] OR postmenopau*[Title/Abstract] OR stiffness*[Title/Abstract] OR transcriptom*[Title/Abstract] OR eclampsia[Title/Abstract] OR sacubitril[Title/Abstract] OR colchicine[Title/Abstract] OR methylation[Title/Abstract] OR polycystic[Title/Abstract] OR cancer[Title/Abstract] OR DNA[Title/Abstract] OR acupuncture[Title/Abstract] OR microvascular[Title/Abstract] OR nebivolol[Title/Abstract] OR Parkinson[Title/Abstract] OR COVID[Title/Abstract] OR diet[Title/Abstract] OR pain[Title/Abstract] OR angina[Title/Abstract] OR lipocalin[Title/Abstract] OR disabled[Title/Abstract] OR poisoning[Title/Abstract] OR dysfunction[Title/Abstract] OR acute[Title/Abstract] OR glucose[Title/Abstract] OR Neurocardiac[Title/Abstract] OR newborn*[Title/Abstract] OR neonat*[Title/Abstract] OR coronary heart disease[Title/Abstract] OR heart disease[Title/Abstract] OR uncontrol*[Title/Abstract] OR depression[Title/Abstract] OR child*[Title/Abstract] OR pediat*[Title/Abstract] OR smok*[Title/Abstract] OR hypercap*[Title/Abstract] OR microvess*[Title/Abstract] OR hypoxi*[Title/Abstract] OR *rehab*[Title/Abstract] OR

meditation*[Title/Abstract] OR ischem*[Title/Abstract] OR acetazola*[Title/Abstract] OR
CPAP[Title/Abstract] OR maneuver[Title/Abstract] OR donation[Title/Abstract] OR
intensive[Title/Abstract] OR aneur*[Title/Abstract] OR gigong[Title/Abstract] OR
operativ[Title/Abstract] OR *valve*[Title/Abstract] OR epinephrin*[Title/Abstract] OR
gadoli*[Title/Abstract])

2) Cochrane (71 filter terms)

(device guide* OR device-guide*):ti,ab,kw

(hypertens* OR "blood pressure" OR "Stage 1" OR "Stage I"):ti,ab,kw

(deep breath* OR breath* technique* OR diaphragmatic breath* OR slow breath* OR breath*
exercise*):ti,ab,kw

(NOT Yoga):ti,ab,kw

(NOT Qigong):ti,ab,kw

(NOT orthostat*):ti,ab,kw

(NOT obstruct*):ti,ab,kw

(NOT failure*):ti,ab,kw

(NOT sever*):ti,ab,kw

(NOT anesthesia*):ti,ab,kw

(NOT (traumatic* OR stress*)):ti,ab,kw

(NOT (drug* OR vasoactive* drug* OR drug therap* OR drug treatment*)):ti,ab,kw

(NOT steroid*):ti,ab,kw

(NOT sleep*):ti,ab,kw

(NOT surger*):ti,ab,kw

(NOT thromb*):ti,ab,kw

(NOT Fracture*):ti,ab,kw

(NOT stroke*):ti,ab,kw
(NOT (old* OR elder*)):ti,ab,kw
(NOT bee):ti,ab,kw
(NOT hemodialys*):ti,ab,kw
(NOT dyspnea):ti,ab,kw
(NOT veteran*):ti,ab,kw
(NOT (menopau* OR postmenopau*)):ti,ab,kw
(NOT stiffness*):ti,ab,kw
(NOT transcriptom*):ti,ab,kw
(NOT eclampsia):ti,ab,kw
(NOT sacubitril):ti,ab,kw
(NOT colchicine):ti,ab,kw
(NOT methylation):ti,ab,kw
(NOT polycystic):ti,ab,kw
(NOT cancer):ti,ab,kw
(NOT DNA):ti,ab,kw
(NOT acupuncture):ti,ab,kw
(NOT microvascular):ti,ab,kw
(NOT nebivolol):ti,ab,kw
(NOT Parkinson):ti,ab,kw
(NOT COVID):ti,ab,kw
(NOT diet):ti,ab,kw
(NOT pain):ti,ab,kw

(NOT angina):ti,ab,kw
(NOT lipocalin):ti,ab,kw
(NOT disabled):ti,ab,kw
(NOT poisoning):ti,ab,kw
(NOT dysfunction):ti,ab,kw
(NOT acute):ti,ab,kw
(NOT glucose):ti,ab,kw
(NOT Neurocardiac):ti,ab,kw
(NOT (newborn* OR neonat*)):ti,ab,kw
(NOT (coronary heart disease OR heart disease)):ti,ab,kw
(NOT uncontrol*):ti,ab,kw
(NOT depression):ti,ab,kw
(NOT (child* OR pediat*)):ti,ab,kw
(NOT smok*):ti,ab,kw
(NOT hypercap*):ti,ab,kw
(NOT microvess*):ti,ab,kw
(NOT hypoxi*):ti,ab,kw
(NOT *rehab*):ti,ab,kw
(NOT meditation*):ti,ab,kw
(NOT ischem*):ti,ab,kw
(NOT acetazola*):ti,ab,kw
(NOT CPAP):ti,ab,kw
(NOT maneuver):ti,ab,kw

(NOT donation):ti,ab,kw

(NOT intensive):ti,ab,kw

(NOT aneur*):ti,ab,kw

(NOT gigong):ti,ab,kw

(NOT *operativ*):ti,ab,kw

(NOT *valve*):ti,ab,kw

(NOT epinephrin*):ti,ab,kw

(NOT gadoli*):ti,ab,kw

#72 = #2 #3 #4 #5 #6 #7 #8 #9 #10 #11 #12 #13 #14 #15 #16 #17 #18 #19 #20 #21 #22 #23 #24 #25
#26 #27 #28 #29 #30 #31 #32 #33 #34 #35 #36 #37 #38 #39 #40 #41 #42 #43 #44 #45 #46 #47 #48
#49 #50 #51 #52 #53 #54 #55 #56 #57 #58 #59 #61 #62 #63 #64 #65 #66 #67 #68 #69 #70 #71
limit: trials