

Appendix 1. Comprehensive Search Strategy for MEDLINE

Mesh terms:

➤ **Population:**

- a) Chronic Renal or Kidney Failure
- b) End Stage Renal or Kidney Disease

➤ **Intervention**

- c) Renal Dialysis; renal, extracorporeal
- d) Hemodialysis
- e) Home Hemodialysis
- f) Hemodialysis Solutions, Dialysate

➤ **Comparator**

No restriction

➤ **Outcomes**

Metrics of arterial stiffness:

- g) Vascular stiffness, arterial stiffness, stiffness, aortic stiffness, carotid stiffness, central artery stiffness, large artery stiffness
- h) Stiffness, peripheral, small artery, brachial, femoral
- i) Carotid-femoral pulse wave velocity, carotid-radial pulse wave velocity, femoral-distal pulse wave velocity, pulse transit time,
- j) Brachial-ankle pulse wave velocity
- k) Augmentation index, Pulse wave analysis, central pulse pressure, pressure waveforms
- l) Distensibility, elasticity,
- m) β -stiffness, CAVI

Database: PubMed from inception to 2020 October 14.

Search Strategy (Intervention AND Outcomes)

- 1 Kidney Failure, Chronic/ (94 073)
- 2 Renal Failure ti.ab.(90 187)
- 3 Kidney Failure ti.ab. (8 750)

- 4 (#2 or #3) AND chronic ti.ab.(35 520)
- 5 Renal disease* ti.ab.(66 784)
- 6 Kidney disease* ti.ab (86 384)
- 7 (OR #2, #3, #5, #6) AND End-Stage ti.ab. (44 753)
- 8 ESKD ti.ab (1 262)
- 9 ESRD ti.ab (16 791)
- 10 (OR #1, #4, #7, #8, #9) (131 528)
- 11 Renal Dialysis/ (114 412)
- 12 Dialysis ti.ab.OR Dialyses ti.ab.(110 444)
- 13 Renal ti.ab. AND #12 (43 530)
- 14 Extracorporeal ti.ab. AND #12 (1 657)
- 15 Hemodialys* ti.ab.OR haemodialys* ti.ab. (78 417)
- 16 Hemodialysis Solutions/ (1 606)
- 17 Hemodialysis, Home/ (1 943)
- 18 Dialysate ti.ab. (10 831)
- 19 (OR #11, #13, #14, #15, #16, #17, #18) (154 493)
- 20 Vascular Stiffness/ (6 198)
- 21 Pulse Wave Analysis/ (4 305)
- 22 Carotid-Femoral Pulse Wave Velocity/ (27)
- 23 Elastic Modulus/ (10 317)
- 24 Vascular Capacitance/ (287)
- 25 Cardio Ankle Vascular Index/ (18)
- 26 Carotid Intima-Media Thickness/ (5 028)
- 27 Vascular ti.ab. AND Stiffness ti.ab. (6 881)
- 28 Arter* ti.ab. AND Stiffness ti.ab. (13 560)
- 29 Aort* ti.ab. AND Stiffness ti.ab. (5 547)
- 30 Pulse wave velocit* ti.ab (9 442)
- 31 Pulse wave analys* ti.ab (1 199)
- 32 Pulse wave transit time* ti.ab (98)
- 33 PWV ti.ab. (4 722)
- 34 Pulse transit time* ti.ab. (626)
- 35 Carotid femoral pulse wave velocit* ti.ab. (1 576)
- 36 Carotid femoral PWV ti.ab. (316)
- 37 CfPWV ti.ab. (254)
- 38 Carotid radial pulse wave velocit* ti.ab. (108)
- 39 Carotid radial PWV ti.ab. (78)
- 40 Cr PWV ti.ab. (27)
- 41 Carotid brachial pulse wave velocit* ti.ab. (5)
- 42 Carotid brachial PWV ti.ab. (5)
- 43 Cb PWV ti.ab. (1)
- 44 Brachial ankle pulse wave velocit* ti.ab. (1 439)
- 45 Brachial ankle PWV ti.ab. (200)
- 46 ba PWV ti.ab. (118)
- 47 (aorta ti.ab.OR aortic ti.ab.) AND pulse wave velocit* ti.ab. (3 481)
- 48 (aorta ti.ab.OR aortic ti.ab.) AND PWV ti.ab. (1 850)
- 49 Ao PWV ti.ab.(9)
- 50 Femoral ankle pulse wave velocit* ti.ab. (10)

- 51 Femoral ankle PWV ti.ab. (22)
- 52 Augmentation index ti.ab. (2 998)
- 53 AIx ti.ab. (1493)
- 54 Central pulse pressure ti.ab. OR central PP ti.ab. (489)
- 55 aortic pulse pressure ti.ab. OR aortic PP ti.ab. (301)
- 56 Elastic modulus ti.ab. (9 499)
- 57 (Young ti.ab. OR young's ti.ab.) AND modulus ti.ab. (8 810)
- 58 Vascular capacitance ti.ab. (186)
- 59 Cardio ankle vascular index ti.ab. (584)
- 60 CAVI ti.ab. (654)
- 61 distensibility ti.ab. (4 626)
- 62 arterial elasticity ti.ab.(519)
- 63 stiffness index ti.ab. OR β stiffness ti.ab. (1 597)
- 64 (OR #20-#64) (53 637)

- 64 (#19 AND #64) (1 081)

- 65 AND humans[filter] (987)