The GWAS data about associations of the studied candidate genes polymorphisms with blood pressure/hypertension, some cardiovascular diseases and anthropometric characteristics

SNP of gene (position (hg38))	Phenotype	Association (significance) (affected allele)	Reference
rs1173771 *AC026703.1* (5: 32814922)	SBP	$\beta = 0.50$ (p $= 1.8 \times 10^{-16}$) (G)	International Consortium et al., 2011
	DBP	$\beta = 0.26$ (p $= 9.1 \times 10^{-12}$) (G)	
	Hypertension	$\beta = 0.06$ (p $= 3.2 \times 10^{-10}$) (G)	
	MAP	$\beta = 0.28$ (p $= 3.51 \times 10^{-9}$) (G)	Wain L. V., et al., 2011
	PP	$\beta = 0.28$ (p $= 4.56 \times 10^{-9}$) (G)	
	MAP	$\beta = -0.35$ (p $= 3.19 \times 10^{-8}$) (A)	Kato N., et al., 2015
	Hip circumference (sex-combined)	$\beta = 0.03$ (p $= 6.13 \times 10^{-13}$) (A)	Shungin D., et al., 2015
	Hip circumference (men)	$\beta = 0.03$ (p $= 6.19 \times 10^{-8}$) (A)	
	SBP	$\beta = -0.43$ (p $= 2.0 \times 10^{-28}$) (A)	Hoffmann T. J. et al., 2017
	PP	$\beta = -0.25$ (p $= 1.0 \times 10^{-21}$) (A)	
	DBP	$\beta = -0.19$ (p $= 8.0 \times 10^{-16}$) (A)	
	Height	$\beta = 0.04$ (p $= 9.0 \times 10^{-8}$) (A)	Tachmazidou I., et al., 2017
	SBP	$\beta = 0.51$ (p $= 3.20 \times 10^{-12}$) (G)	Wain L. V., et al., 2017
	PP	$\beta = 0.28$ (p $= 2.36 \times 10^{-9}$) (G)	
	SBP (smoking interaction) (European)	p $= 1.74 \times 10^{-38}$	Sung Y. J., et al., 2018
	DBP (smoking interaction) (European)	p $= 3.62 \times 10^{-22}$	
	SBP (smoking interaction) (trans-ethnic data)	p $= 8.25 \times 10^{-44}$	
	DBP (smoking interaction) (trans-ethnic data)	p $= 2.75 \times 10^{-28}$	
	SBP	$\beta = -0.42$ (p $= 4.19 \times 10^{-8}$) (A)	Takeuchi F., et al., 2018
	MAP	$\beta = -0.29$ (p $= 5.39 \times 10^{-8}$) (A)	
rs1799945 *HFE* (6: 26090951)	DBP	$\beta = 0.46$ (p $= 1.5 \times 10^{-15}$) (G)	International Consortium et al., 2011
	SBP	$\beta = 0.62$ (p $= 7.7 \times 10^{-12}$) (G)	
	Hypertension	$\beta = 0.10$ (p $= 1.8 \times 10^{-10}$) (G)	
	DBP	$\beta = -0.43$ (p $= 3.1 \times 10^{-16}$) (C)	Ehret G. B. et al., 2016
	SBP	$\beta = -0.60$ (p $= 3.28 \times 10^{-12}$) (C)	
	DBP	$\beta = -0.29$ (p $= 1.0 \times 10^{-18}$) (C)	Hoffmann T. J. et al., 2017

	SBP	$\beta = -0.36$ (p = 4.0×10^{-11}) (C)	
	DBP	$\beta = 0.52$ (p = 9.2×10^{-18}) (G)	
	MAP	$\beta = 0.58$ (p = 1.0×10^{-17}) (G)	Liu C. et al., 2016
	SBP	$\beta = 0.70$ (p = 6.2×10^{-13}) (G)	
	Hypertension	Z score = 0.039 (p = 3.7×10^{-9}) (G)	
	DBP (trans-ethnic data)	$\beta = -0.03$ (p = 1.26×10^{-19}) (C)	Surendran P. et al., 2016
	DBP (European)	$\beta = -0.03$ (p = 9.82×10^{-10}) (C)	
	DBP	$\beta = 0.47$ (p = 8.87×10^{-14}) (G)	Wain L. V. et al., 2017
	SBP	$\beta = 0.63$ (p = 7.63×10^{-10}) (G)	
	DBP (smoking interaction) (European)	p = 1.51×10^{-31}	
	SBP (smoking interaction) (European)	p = 8.46×10^{-17}	
	DBP (smoking interaction) (trans-ethnic data)	p = 3.77×10^{-33}	Sung Y. J. et al., 2018
	SBP (smoking interaction) (trans-ethnic data)	p = 7.43×10^{-19}	
rs805303 *BAG6/ BAT2-BAT5* (6: 31648589)	SBP	$\beta = 0.37$ (p = 1.5×10^{-11}) (G)	International Consortium et al., 2011
	DBP	$\beta = 0.23$ (p = 3.0×10^{-11}) (G)	
	Hypertension	$\beta = 0.05$ (p = 1.1×10^{-10}) (G)	
	SBP (European)	$\beta = -0.02$ (p = 3.02×10^{-6}) (A)	Surendran P. et al., 2016
rs932764 *PLCE1* (10: 94136183)	SBP	$\beta = 0.48$ (p = 7.1×10^{-16}) (G)	International Consortium et al., 2011
	Hypertension	$\beta = 0.06$ (p = 9.4×10^{-9}) (G)	
	SBP	$\beta = -0.50$ (p = 6.88×10^{-17}) (A)	Ehret G. B., et al., 2016
	DBP	$\beta = -0.22$ (p = 6.28×10^{-10}) (A)	
	SBP	$\beta = -0.30$ (p = 1.0×10^{-14}) (A)	Hoffmann T. J. et al., 2016
	PP	$\beta = -0.16$ (p = 3.0×10^{-10}) (A)	
	PP	$\beta = 0.26$ (p = 5.67×10^{-8}) (G)	Wain L. V., et al., 2017
rs4387287 *OBFC1* (10:103918139)	DBP (European)	$\beta = 0.22$ (p=5.55×10^{-8}) (A)	Surendran P. et al., 2016
	SBP (European)	$\beta = 0.34$ (p=2.21×10^{-7}) (A)	
	DBP (trans-ethnic data)	$\beta = 0.22$ (p=4.21×10^{-10}) (A)	
	SBP (trans-ethnic data)	$\beta = 0.36$ (p=9.12×10^{-10}) (A)	
	Hypertension (trans-ethnic data)	Z score = 5.58 (p = 2.37×10^{-8}) (A)	
rs633185 *ARHGAP42*	SBP	$\beta = -0.57$(p = 1.2×10^{-17}) (G)	International Consortium et al., 2011
	DBP	$\beta = -0.33$(p = 2.0×10^{-15}) (G)	

(11:100722807)	Hypertension	$\beta = -0.07 (p = 6.4 \times 10^{-11})$ (G)	
	SBP	$\beta = 0.52\ (p = 6.97 \times 10^{-15})$ (C)	Ehret G. B., et al., 2016
	DBP	$\beta = 0.29\ (p = 2.38 \times 10^{-12})$ (C)	
	SBP	$\beta = -0.49\ (p = 1.0 \times 10^{-31})$ (G)	
	DBP	$\beta = -0.27\ (p = 1.0 \times 10^{-26})$ (G)	Hoffmann T. J. et al., 2016
	PP	$\beta = -0.22\ (p = 1.0 \times 10^{-15})$ (G)	
	SBP	$\beta = 0.52\ (p = 8.43 \times 10^{-11})$ (C)	Wain L. V., et al., 2017
	DBP	$\beta = 0.27\ (p = 2.33 \times 10^{-8})$ (C)	
	SBP x alcohol consumption interaction	$\beta = 0.54\ (p = 2.24 \times 10^{-29})$ (C)	Feitosa M. F. et al., 2018
	MAP x alcohol consumption interaction	$\beta = 0.22\ (p = 2 \times 10^{-12})$ (C)	
	MAP	$\beta = 0.39\ (p = 2.56 \times 10^{-13})$ (C)	
	SBP	$\beta = 0.51\ (p = 7.16 \times 10^{-12})$ (C)	Takeuchi F., et al., 2018
	DBP	$\beta = 0.33\ (p = 8.93 \times 10^{-12})$ (C)	
	Hypertension	$\beta = 0.08\ (p = 5.13 \times 10^{-10})$ (C)	
	Coronary artery disease	$(p = 8.81 \times 10^{-9})$ (C)	Zhou W., et al., 2018
	High blood pressure and chronic obstructive pulmonary disease	$(p = 1.18 \times 10^{-47})$	Zhu Z., et al., 2019
	SBP (smoking interaction) (European)	$p = 8.44 \times 10^{-30}$	
	DBP (smoking interaction) (European)	$p = 2.68 \times 10^{-30}$	
	SBP (smoking interaction) (trans-ethnic data)	$p = 1.80 \times 10^{-40}$	Sung Y. J., et al., 2018
	DBP (smoking interaction) (trans-ethnic data)	$p = 1.18 \times 10^{-40}$	
	MAP	$\beta = 0.03\ (p = 3.05 \times 10^{-50})$ (C)	Sakaue S. et al., 2021
rs7302981 *CERS5/AC074032.1* (12:50144032)	Hypertension	Z score = 6.23 (p= 4.8×10^{-10}) (A)	
	SBP	$\beta = 0.37$ (p=9.4×10^{-15}) (A)	Liu C. et al., 2016
	DBP	$\beta = 0.25$ (p = 9.4×10^{-19}) (A)	
	DBP (European)	$\beta = 0.25$ (p = 1.38×10^{-17}) (A)	
	SBP (European)	$\beta = 0.34$ (p = 6.06×10^{-13}) (A)	
	Hypertension (European)	Z score = 6.07 (p = 1.28×10^{-9}) (A)	Surendran P. et al., 2016
	DBP (trans-ethnic data)	$\beta = 0.25$ (p = 2.60×10^{-19}) (A)	
	SBP (trans-ethnic data)	$\beta = 0.35$ (p = 9.94×10^{-19}) (A)	
	Hypertension (trans-ethnic data)	Z score = 6.17 (p = 6.82×10^{-10}) (A)	
rs2681472 *ATP2B1*	DBP	$\beta = 0.50\ (p = 1.47 \times 10^{-9})$ (A)	Levy D. et al., 2009
	Hypertension	$\beta = 0.15\ (p = 1.75 \times 10^{-11})$ (A)	

(12: 89615182)	Coronary artery disease	OR = 1.08 (p = 6.17×10^{-11}) (G)	Nikpay M., et al., 2015
	Myocardial infarction	OR = 1.08 (p = 6.03×10^{-9}) (G)	
	MAP	$\beta = -0.59$ (p = 1.1×10^{-21}) (G)	Liu C. et al., 2016
	SBP	$\beta = -0.85$ (p = 1.3×10^{-21}) (G)	
	DBP	$\beta = -0.47$ (p = 3.7×10^{-17}) (G)	
	Hypertension	$\beta = -0.033$ (p = 3.5×10^{-8}) (G)	
	Coronary artery disease	OR = 1.07 (p = 1×10^{-21}) (G)	Nelson C. P., et al., 2017
	SBP	$\beta = 0.72$ (p = 1.06×10^{-20}) (A)	Takeuchi F., et al., 2018
	DBP	$\beta = 0.33$ (p = 3.77×10^{-11}) (A)	
	MAP	$\beta = 0.46$ (p = 5.05×10^{-17}) (A)	
	PP	$\beta = 0.40$ (p = 5.49×10^{-14}) (A)	
	Hypertension	$\beta = 0.07$ (p = 1.41×10^{-6}) (A)	
	Coronary artery disease (trans-ethnic data)	$\beta = 0.060$ (p= 6.8×10^{-25}) (G)	Koyama S., et al., 2020
	Coronary artery disease (Japanese)	$\beta = 0.068$ (p= 2.6×10^{-11}) (G)	
	Myocardial infarction	OR = 1.07 (p = 1.3×10^{-12}) (G)	Hartiala J. A., et al., 2020
	Myocardial infarction	$\beta = 0.071$ (p= 1.17×10^{-11}) (G)	Sakaue S. et al., 2021
rs8068318 *TBX2/* *TBX2-AS1* (17:61406405)	MAP	$\beta = -0.28$ (p = 2.0×10^{-8}) (C)	Liu C. et al., 2016
	SBP	$\beta = -0.42$ (p = 3.9×10^{-17}) (C)	
	Hypertension	Z score = -6.96 (p = 3.0×10^{-12}) (C)	
	DBP	$\beta = -0.26$ (p = 3.0×10^{-18}) (C)	
	SBP (European)	$\beta = 0.42$ (p= 1.3×10^{-15}) (T)	Surendran P. et al., 2016
	DBP (European)	$\beta = 0.26$ (p= 1.95×10^{-16}) (T)	
	Hypertension (European)	Z score = 6.97 (p = 3.21×10^{-12}) (T)	
	DBP (trans-ethnic data)	$\beta = 0.25$ (p= 2.75×10^{-18}) (T)	
	SBP (trans-ethnic data)	$\beta = 0.41$ (p= 2.3×10^{-17}) (T)	
	Hypertension (trans-ethnic data)	Z score = 6.96 (p = 3.43×10^{-12}) (T)	
rs167479 *RGL3* (19:11416089)	SBP	$\beta = 0.41$ (p = 1.6×10^{-21}) (G)	Hoffmann T. J. et al., 2017
	DBP	$\beta = 0.25$ (p = 4.3×10^{-22}) (G)	
	PP	$\beta = 0.18$ (p = 3.2×10^{-8}) (G)	
	MAP	$\beta = -0.30$ (p = 7.3×10^{-11}) (T)	Liu C. et al., 2016
	Hypertension	Z score = -7.72 (p = 1.2×10^{-14}) (T)	
	SBP	$\beta = -0.45$ (p = 1.0×10^{-23}) (T)	
	DBP	$\beta = -0.30$ (p = 4.2×10^{-28}) (T)	
	DBP (European)	$\beta= -0.33$ (p = 1.99×10^{-31}) (T)	Surendran P. et al., 2016
	SBP (European)	$\beta= -0.50$ (p =1.49×10^{-26}) (T)	

Hypertension (European)	Z score = −7.86 (p = 4.01 x 10^{-15}) (T)	
DBP (trans-ethnic data)	β= −0.31 (p = 2.76 x 10^{-32}) (T)	
SBP (trans-ethnic data)	β= −0.47 (p = 8.64 x 10^{-27}) (T)	
Hypertension (trans-ethnic data)	Z score = −7.88 (p = 3.37 x 10^{-15}) (T)	
SBP	β = −0.41 (p = 4.32 x 10^{-36}) (T)	Giri A. et el. 2018
Hypertension	β = 0.05 (p = 8.0 x 10^{-16}) (G)	German C. A., 2019
Hypertension	OR = 0.84 – 0.92 (p = 2.37 x 10^{-8}) (T)	Jeong H. et al., 2020
SBP	β = −0.027 (p = 3.24 x 10^{-46}) (T)	
DBP	β = −0.026 (p = 2.24 x 10^{-48}) (T)	Sakaue S. et al., 2021
PP	β = −0.016 (p = 7.72 x 10^{-18}) (T)	
MAP	β = −0.028 (p = 3.64 x 10^{-48}) (T)	

Notes: SBP - systolic blood pressure; DBP - diastolic blood pressure; MAP - mean arterial pressure; PP - pulse blood pressure; z-score - standard scores, β – effect, OR – odds ratio, p – significance level.

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