

Multivariate analysis of predictors for mean blood pressure (MBP) by fitting a multiple linear regression model with the stepwise variable selection method

Covariate	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	114.9281	0.2331	493.0257	<0.0001
Age ≤ 57.981 years	-2.8962	0.1361	-21.2771	<0.0001
57.981 years < Age ≤ 73.824 years	0.8255	0.0993	8.3129	<0.0001
Male	0.4930	0.0941	5.2377	<0.0001
CAD without MI vs. No CAD	1.2647	0.0878	14.3996	<0.0001
CAD with MI vs. No CAD	-1.0178	0.1357	-7.4988	<0.0001
CHF	-3.0234	0.0960	-31.5033	<0.0001
CVA	1.9922	0.1060	18.7872	<0.0001
PAD	-1.8266	0.1511	-12.0916	<0.0001
Cancer	2.4246	0.1114	21.7619	<0.0001
Hourly averaged temperature ¹ (°C)	-0.5492	0.0090	-61.0805	<0.0001
Hypertension × Hourly averaged temperature ¹ (°C)	0.1286	0.0036	35.3920	<0.0001
Diabetes × Hourly averaged temperature ¹ (°C)	0.1452	0.0036	40.0787	<0.0001
Temperature difference between the maximum and minimum in the 12 hours prior to blood pressure measurement (°C)	0.0612	0.0182	3.3678	0.0008
Hourly averaged relative humidity ¹ ≤ 61.432% or Hourly averaged relative humidity ¹ > 81.51%	0.5791	0.0796	7.2714	<0.0001
2.046 m/s < Hourly averaged wind speed ¹ ≤ 7.313 m/s	0.4034	0.0761	5.2978	<0.0001
Number of categories of used antihypertensive drugs ²	0.2263	0.1014	2.2328	0.0256
ACEI ² × Hourly averaged temperature ¹ (°C)	0.0345	0.0124	2.7798	0.0054
ARB ² × Hourly averaged temperature ¹ (°C)	0.1404	0.0060	23.5586	<0.0001
ARB ² × AB ²	6.6573	0.3368	19.7689	<0.0001
ARB ² × BB ²	3.6949	0.1902	19.4305	<0.0001
ARB ² × CCB ²	-4.6539	0.1801	-25.8340	<0.0001
ARB ² × Diuretics ²	-1.7671	0.1688	-10.4674	<0.0001

CCB ² × Hourly averaged temperature ¹ (°C)	0.0432	0.0070	6.2002	<0.0001
CCB ² × AB ²	-5.8290	0.3102	-18.7928	<0.0001
CCB ² × ACEI ²	-6.7877	0.9862	-6.8827	<0.0001
CCB ² × BB ²	-2.1052	0.2351	-8.9546	<0.0001
CCB ² × Diuretics ²	1.5916	0.1784	8.9233	<0.0001
Diuretics ² × Hourly averaged temperature ¹ (°C)	-0.0433	0.0060	-7.2314	<0.0001
Diuretics ² × AB ²	2.2120	0.2514	8.7989	<0.0001
Diuretics ² × ACEI ²	1.4163	0.4620	3.0656	0.0022

¹ Hourly averaged temperature, hourly averaged relative humidity, and hourly averaged wind speed were the readings within the *hour* of blood pressure measurement so vary over time.

² Daily use of any of the following six categories of antihypertensive drugs, angiotensin converting enzyme inhibitors (ACEI), angiotensin receptor blockers (ARB), calcium-channel blockers (CCB), alpha-blockers (AB), beta-blockers (BB), and diuretics, were recorded and counted for all 253 patients. The listed antihypertensive drugs were those taken on the *day* of blood pressure measurement, so may vary over time.