

Online-Only Supplemental Material

Glucose-dependent insulinotropic peptide in the high normal range is associated with increased carotid intima-media thickness

Amra Jujić, Peter M Nilsson, Naeimeh Atabaki-Pasdar, Anna Dieden, Tiinamaija Tuomi, MD, Paul W Franks, Jens Juul Holst, Signe Sørensen Torekov, Susana Ravassa, Javier Díez, Margaretha Persson, Emma Ahlqvist, Olle Melander, Maria F Gomez, Leif Groop, Martin Magnusson

Contents

| | |
|---|---|
| Supplemental Table S1. Associations of fasting and post-challenge GIP and $IMT_{meanCCA}/IMT_{maxBulb}$ | 2 |
| Supplemental Table S2. Associations of fasting and post-challenge GLP-1 and $IMT_{meanCCA}/IMT_{maxBulb}$ | 3 |
| Supplemental Table S3. Associations between GIP and $IMT_{meanCCA}/IMT_{maxBulb}$ in subjects free from diabetes | 4 |
| Supplemental Table S4. Associations between GLP-1 and $IMT_{meanCCA}/IMT_{maxBulb}$ in subjects free from diabetes | 5 |
| Supplemental Table S5. Associations of fasting GIP and GLP-1 with $IMT_{meanCCA}/IMT_{maxBulb}$ in subjects with diabetes | 6 |
| Supplemental Table S6. Standardized associations of fasting and post-challenge GIP/GLP-1 and $IMT_{meanCCA}/IMT_{maxBulb}$ | 7 |

Supplemental Table S1. Associations of fasting and post-challenge GIP and $IMT_{meanCCA}/IMT_{maxBulb}$

| | $IMT_{meanCCA}$ | | | | $IMT_{maxBulb}$ | | | |
|--------------------------|----------------------------|-----------------------------|-----------------------------|-----------------------------|----------------------------|-----------------------------|-----------------------------|-----------------------------|
| | GIP ^f n=3342 | | GIP ^{2h} n=2948 | | GIP ^f n=3229 | | GIP ^{2h} n=2856 | |
| | β | p | β | p | β | p | β | p |
| | Unadjusted | | | | | | | |
| GIP | 0.016 | 3.0x10⁻⁵ | 0.010 | 0.012 | 0.031 | 7.0x10⁻⁵ | 0.011 | 0.140 |
| | Model 1 | | | | | | | |
| GIP | 0.012 | 0.002 | 0.005 | 0.171 | 0.024 | 2.8x10⁻⁴ | 0.010 | 0.162 |
| Sex | -0.039 | 3.8x10⁻⁷ | -0.037 | 3.2x10⁻⁶ | -0.105 | 4.0x10⁻¹⁵ | -0.119 | 4.6x10⁻¹⁶ |
| Age | 0.009 | 3.9x10⁻³⁹ | 0.008 | 5.5x10⁻³⁴ | 0.013 | 3.9x10⁻²⁶ | 0.013 | 7.5x10⁻²³ |
| | Model 2a | | Model 2b | | Model 2a | | Model 2b | |
| GIP | 0.010 | 0.010 | 0.005 | 0.188 | 0.014 | 0.040 | 0.003 | 0.668 |
| Sex | -0.022 | 0.008 | -0.013 | 0.140 | -0.077 | 7.8x10⁻⁸ | -0.086 | 4.3x10⁻⁸ |
| Age | 0.008 | 8.3x10⁻³⁰ | 0.007 | 9.7x10⁻²⁶ | 0.010 | 6.2x10⁻¹⁸ | 0.010 | 5.1x10⁻¹⁵ |
| BMI | 0.001 | 0.203 | 0.002 | 0.013 | -0.001 | 0.583 | 0.000 | 0.812 |
| AHT | -0.026 | 0.004 | -0.018 | 0.044 | 0.022 | 0.160 | 0.032 | 0.048 |
| Lipid-lowering treatment | 0.016 | 0.073 | 0.013 | 0.140 | 0.056 | 3.4x10⁻⁴ | 0.053 | 0.002 |
| Triglycerides | -0.004 | 0.682 | -0.009 | 0.366 | 0.013 | 0.471 | 0.001 | 0.955 |
| Current smoking | 0.043 | 0.003 | 0.035 | 0.016 | 0.111 | 1.2x10⁻⁵ | 0.114 | 1.9x10⁻⁵ |
| Systolic blood pressure | 0.002 | 7.3x10⁻²⁰ | 0.002 | 1.9x10⁻¹⁶ | 0.003 | 3.6x10⁻¹⁴ | 0.003 | 9.8x10⁻¹⁴ |
| Diabetes status | -0.013 | 0.401 | -0.018 | 0.826 | -0.014 | 0.597 | 0.170 | 0.253 |
| HDL | -0.055 | 3.6x10⁻⁴ | -0.072 | 4.4x10⁻⁶ | -0.057 | 0.035 | -0.064 | 0.026 |
| Glucose | -0.026 | 0.323 | 0.014 | 0.316 | 0.046 | 0.327 | 0.008 | 0.749 |
| Insulin | -0.010 | 0.236 | -0.015 | 0.026 | -0.007 | 0.642 | -0.008 | 0.520 |

^f Fasting

^{2h} Post-challenge (at 120 minutes)

Values are unstandardized β coefficients (1 SD increase of incretins per mm $IMT_{meanCCA}$ or $IMT_{maxBulb}$).

Model 2a: adjusted for age, sex, BMI, systolic blood pressure (SBP), smoking status, diabetes status, FPG, fasting insulin, HDL, triglycerides, AHT and lipid-lowering treatment.

Model 2b: adjusted for age, sex, BMI, SBP, smoking status, diabetes status, post-challenge plasma glucose, post-challenge insulin, HDL, triglycerides, AHT and lipid-lowering treatment.

AHT=antihypertensive treatment; BMI=body mass index; GIP= glucose-dependent insulinotropic peptide; HDL=high density lipoprotein cholesterol; HOMA-IR= Homeostatic Model Assessment of Insulin Resistance, $IMT_{meanCCA}$ =intima-media thickness in the common carotid artery; $IMT_{maxBulb}$ =intima-media thickness in the carotid bifurcation; SBP=systolic blood pressure

Supplemental Table S2. Associations of fasting and post-challenge GLP-1 and $IMT_{meanCCA}/IMT_{maxBulb}$

| | $IMT_{meanCCA}$ | | | | $IMT_{maxBulb}$ | | | |
|--------------------------|------------------------------|-----------------------------|-------------------------------|-----------------------------|------------------------------|-----------------------------|-------------------------------|-----------------------------|
| | GLP-1 ^f n=3299 | | GLP-1 ^{2h} n=2893 | | GLP-1 ^f n=3187 | | GLP-1 ^{2h} n=2828 | |
| | β | p | β | p | β | p | β | p |
| | Unadjusted | | | | | | | |
| GLP-1 | -0.005 | 0.244 | -0.007 | 0.097 | -0.015 | 0.033 | -0.019 | 0.009 |
| | Model 1 | | | | | | | |
| GLP-1 | -0.005 | 0.174 | -0.010 | 0.008 | -0.016 | 0.016 | -0.017 | 0.018 |
| Sex | -0.042 | 7.2x10⁻⁸ | -0.032 | 6.1x10⁻⁵ | -0.109 | 9.0x10⁻¹⁶ | -0.108 | 4.4x10⁻¹³ |
| Age | 0.009 | 2.4x10⁻⁴⁰ | 0.009 | 8.4x10⁻³⁷ | 0.013 | 9.7x10⁻²⁷ | 0.013 | 3.1x10⁻²⁴ |
| | Model 2a | | Model 2b | | Model 2a | | Model 2b | |
| GLP-1 | -0.003 | 0.426 | -0.006 | 0.142 | -0.016 | 0.014 | -0.013 | 0.069 |
| Sex | -0.025 | 0.003 | -0.011 | 0.200 | -0.081 | 2.2x10⁻⁸ | -0.080 | 3.6x10⁻⁷ |
| Age | 0.008 | 1.2x10⁻³⁰ | 0.008 | 4.2x10⁻²⁷ | 0.010 | 5.3x10⁻¹⁸ | 0.010 | 4.1x10⁻¹⁵ |
| BMI | 0.001 | 0.196 | 0.002 | 0.020 | -0.001 | 0.419 | -0.001 | 0.581 |
| AHT | -0.023 | 0.009 | -0.015 | 0.094 | 0.020 | 0.207 | 0.033 | 0.044 |
| Lipid-lowering treatment | 0.017 | 0.063 | 0.013 | 0.140 | 0.062 | 7.6x10⁻⁵ | 0.055 | 0.001 |
| Triglycerides | -0.002 | 0.803 | -0.008 | 0.441 | 0.015 | 0.401 | 0.001 | 0.940 |
| Current smoking | 0.046 | 0.002 | 0.038 | 0.010 | 0.113 | 10.0x10⁻⁶ | 0.111 | 3.3x10⁻⁵ |
| Systolic blood pressure | 0.002 | 6.7x10⁻¹⁹ | 0.002 | 9.6x10⁻¹⁶ | 0.003 | 2.6x10⁻¹³ | 0.003 | 1.6x10⁻¹³ |
| Diabetes status | -0.008 | 0.612 | -0.017 | 0.834 | -0.003 | 0.920 | 0.173 | 0.247 |
| HDL | -0.048 | 0.002 | -0.068 | 1.6x10⁻⁵ | -0.046 | 0.090 | -0.059 | 0.040 |
| Glucose | -0.024 | 0.375 | 0.012 | 0.375 | 0.053 | 0.257 | 0.002 | 0.924 |
| Insulin | -0.007 | 0.451 | -0.016 | 0.024 | 0.003 | 0.836 | -0.008 | 0.548 |

^fFasting

^{2h} Post-challenge (at 120 minutes)

Values are unstandardized β coefficients (1 SD increase of incretins per mm $IMT_{meanCCA}$ or $IMT_{maxBulb}$).

Model 2a: adjusted for age, sex, BMI, systolic blood pressure (SBP), smoking status, diabetes status, FPG, fasting insulin, HDL, triglycerides, AHT and lipid-lowering treatment.

Model 2b: adjusted for age, sex, BMI, SBP, smoking status, diabetes status, post-challenge plasma glucose, post-challenge insulin, HDL, triglycerides, AHT and lipid-lowering treatment.

AHT=antihypertensive treatment; BMI=body mass index; GLP-1=glucagon-like peptide 1; HDL=high density lipoprotein cholesterol; HOMA-IR=Homeostatic Model Assessment of Insulin Resistance, $IMT_{meanCCA}$ =intima-media thickness in the common carotid artery; $IMT_{maxBulb}$ =intima-media thickness in the carotid bifurcation; SBP=systolic blood pressure

Supplemental Table S3. Associations between GIP and IMT_{mean}CCA/IMT_{max}Bulb in subjects free from diabetes

| | IMT _{mean} CCA | | | | IMT _{max} Bulb | | | |
|--------------------------|----------------------------|-----------------------------|-----------------------------|-----------------------------|----------------------------|-----------------------------|-----------------------------|-----------------------------|
| | GIP ^f n=2986 | | GIP ^{2h} n=2806 | | GIP ^f n=2897 | | GIP ^{2h} n=2708 | |
| | β | p | β | p | β | p | β | p |
| | Unadjusted | | | | | | | |
| GIP | 0.014 | 3.7x10⁻⁴ | 0.010 | 0.013 | 0.026 | 4.5x10⁻⁴ | 0.011 | 0.150 |
| | Model 1 | | | | | | | |
| GIP | 0.010 | 0.012 | 0.005 | 0.184 | 0.019 | 0.007 | 0.010 | 0.195 |
| Sex | -0.034 | 1.1x10⁻⁵ | -0.038 | 2.2x10⁻⁶ | -0.113 | 1.7x10⁻¹⁵ | -0.118 | 2.8x10⁻¹⁵ |
| Age | 0.009 | 4.4x10⁻³⁷ | 0.009 | 1.6x10⁻³³ | 0.013 | 2.3x10⁻²⁵ | 0.013 | 7.6x10⁻²³ |
| | Model 3a | | Model 3b | | Model 3a | | Model 3b | |
| GIP | 0.008 | 0.033 | 0.003 | 0.401 | 0.012 | 0.096 | 0.001 | 0.872 |
| Sex | -0.016 | 0.053 | -0.018 | 0.041 | -0.087 | 8.4x10⁻⁹ | -0.087 | 3.1x10⁻⁸ |
| Age | 0.008 | 1.5x10⁻²⁸ | 0.008 | 8.7x10⁻²⁶ | 0.011 | 3.2x10⁻¹⁷ | 0.010 | 2.4x10⁻¹⁵ |
| BMI | 0.002 | 0.018 | 0.002 | 0.029 | -0.001 | 0.567 | -0.003 | 0.128 |
| AHT | -0.020 | 0.024 | -0.018 | 0.049 | 0.029 | 0.070 | 0.035 | 0.032 |
| Lipid-lowering treatment | 0.009 | 0.309 | 0.009 | 0.327 | 0.051 | 0.002 | 0.045 | 0.009 |
| Triglycerides | -0.010 | 0.319 | -0.011 | 0.289 | 0.008 | 0.662 | 0.002 | 0.935 |
| Current smoking | 0.044 | 0.003 | 0.042 | 0.006 | 0.115 | 1.2x10⁻⁵ | 0.124 | 6.1x10⁻⁶ |
| Systolic blood pressure | 0.002 | 1.1x10⁻¹⁷ | 0.002 | 5.0x10⁻¹⁷ | 0.003 | 1.3x10⁻¹² | 0.003 | 6.7x10⁻¹³ |
| HDL | -0.060 | 1.3x10⁻⁴ | -0.066 | 3.3x10⁻⁵ | -0.057 | 0.045 | -0.054 | 0.067 |
| HOMA-IR | -0.015 | 0.082 | -0.012 | 0.172 | 0.000 | 0.978 | 0.018 | 0.256 |

^f Fasting

^{2h} Post-challenge (at 120 minutes)

Values are unstandardized β coefficients.

Model 3a: adjusted for age, sex, BMI, SBP, smoking status, HOMA-IR, fasting plasma glucose, fasting insulin, HDL, triglycerides, AHT and lipid-lowering treatment.

Model 3b: adjusted for age, sex, BMI, SBP, smoking status, HOMA-IR, post-challenge plasma glucose, post-challenge insulin, HDL, triglycerides, AHT and lipid-lowering treatment.

AHT=antihypertensive treatment; BMI=body mass index; GIP=glucose-dependent insulinotropic peptide; HDL=high density lipoprotein cholesterol; HOMA-IR= Homeostatic Model Assessment of Insulin Resistance, IMT_{mean}CCA=intima-media thickness in the common carotid artery; IMT_{max}Bulb=intima-media thickness in the carotid bifurcation; SBP=systolic blood pressure

Supplemental Table S4. Associations between GLP-1 and $IMT_{meanCCA}/IMT_{maxBulb}$ in subjects free from diabetes

| | $IMT_{meanCCA}$ | | | | $IMT_{maxBulb}$ | | | |
|--------------------------|------------------------------|---|-------------------------------|--|------------------------------|--|-------------------------------|---|
| | GLP-1 ^f n=2949 | | GLP-1 ^{2h} n=2908 | | GLP-1 ^f n=2859 | | GLP-1 ^{2h} n=2808 | |
| | β | p | β | p | β | p | β | p |
| | Unadjusted | | | | | | | |
| GLP-1 | -0.007 | 0.071 | -0.008 | 0.031 | -0.019 | 0.008 | -0.016 | 0.026 |
| | Model 1 | | | | | | | |
| GLP-1 | -0.007 | 0.062 | -0.013 | 0.002 | -0.020 | 0.006 | -0.014 | 0.055 |
| Sex | -0.036 | 2.8×10^{-6} | -0.030 | 2.2×10^{-4} | -0.115 | 6.5×10^{-16} | -0.106 | 9.6×10^{-13} |
| Age | 0.009 | 4.2×10^{-38} | 0.009 | 2.2×10^{-39} | 0.013 | 1.2×10^{-25} | 0.013 | 7.8×10^{-26} |
| | Model 3a | | Model 3b | | Model 3a | | Model 3b | |
| GLP-1 | -0.004 | 0.265 | -0.009 | 0.020 | -0.017 | 0.016 | -0.010 | 0.176 |
| Sex | -0.019 | 0.018 | -0.015 | 0.082 | -0.090 | 2.5×10^{-9} | -0.082 | 1.4×10^{-7} |
| Age | 0.008 | 3.0×10^{-29} | 0.008 | 1.0×10^{-29} | 0.011 | 3.8×10^{-17} | 0.011 | 5.0×10^{-17} |
| BMI | 0.002 | 0.019 | 0.002 | 0.024 | -0.002 | 0.438 | -0.002 | 0.280 |
| AHT | -0.017 | 0.053 | -0.015 | 0.098 | 0.028 | 0.081 | 0.031 | 0.059 |
| Lipid-lowering treatment | 0.010 | 0.288 | 0.008 | 0.360 | 0.056 | 0.001 | 0.052 | 0.002 |
| Triglycerides | -0.008 | 0.423 | -0.008 | 0.399 | 0.009 | 0.609 | 0.007 | 0.716 |
| Current smoking | 0.048 | 0.001 | 0.049 | 0.001 | 0.115 | 1.3×10^{-5} | 0.116 | 1.5×10^{-5} |
| Systolic blood pressure | 0.002 | 6.3×10^{-17} | 0.002 | 4.14×10^{-17} | 0.003 | 6.94×10^{-12} | 0.003 | 3.4×10^{-12} |
| HDL | -0.052 | 0.001 | -0.053 | 0.001 | -0.048 | 0.097 | -0.058 | 0.046 |
| HOMA-IR | -0.011 | 0.168 | -0.013 | 0.116 | 0.007 | 0.637 | 0.006 | 0.677 |

^f Fasting

^{2h} Post-challenge (at 120 minutes)

Values are unstandardized β coefficients (1 SD increase of incretins per mm $IMT_{meanCCA}$ or $IMT_{maxBulb}$).

Model 3a: adjusted for age, sex, BMI, SBP, smoking status, HOMA-IR, fasting plasma glucose, fasting insulin, HDL, triglycerides, AHT and lipid-lowering treatment.

Model 3b: adjusted for age, sex, BMI, SBP, smoking status, HOMA-IR, post-challenge plasma glucose, post-challenge insulin, HDL, triglycerides, AHT and lipid-lowering treatment.

AHT=antihypertensive treatment; BMI=body mass index; GLP-1=glucagon-like peptide 1; HDL=high density lipoprotein cholesterol; HOMA-IR= Homeostatic Model Assessment of Insulin Resistance, $IMT_{meanCCA}$ =intima-media thickness in the common carotid artery; $IMT_{maxBulb}$ =intima-media thickness in the carotid bifurcation; SBP=systolic blood pressure

Supplemental Table S5. Associations of fasting GIP and GLP-1 with $IMT_{meanCCA}/IMT_{maxBulb}$ in subjects **with** diabetes

| | Fasting GIP | | | | Fasting GLP-1 | | | |
|-------------------|--------------------|-------|-----------------|-------|----------------------|-------|-----------------|-------|
| | $IMT_{meanCCA}$ | | $IMT_{maxbulb}$ | | $IMT_{meanCCA}$ | | $IMT_{maxbulb}$ | |
| | n=356 | | n=332 | | n=350 | | n=328 | |
| | β | p | β | p | β | p | β | p |
| Unadjusted | 0.028 | 0.071 | 0.036 | 0.083 | 0.010 | 0.521 | -0.005 | 0.819 |
| Model 1 | 0.026 | 0.078 | 0.033 | 0.110 | 0.006 | 0.682 | -0.007 | 0.750 |
| Model 2 | 0.026 | 0.101 | 0.027 | 0.207 | -0.003 | 0.863 | -0.015 | 0.493 |

Model 1 is adjusted for age and sex. Model 2 is adjusted for adjusted for age, sex, BMI, systolic blood pressure (SBP), smoking status, diabetes status, fasting plasma glucose, fasting insulin, HDL, triglycerides, AHT and lipid-lowering treatment.

Supplemental Table S6. Standardized associations of fasting and post-challenge GIP/GLP-1 and $IMT_{meanCCA}/IMT_{maxBulb}$

| $IMT_{meanCCA}$ | | | | | |
|-----------------------------------|---------------------------|-----------------------|--------------------------|---------------------------|-----------------------|
| | β | p | | β | p |
| Fasting GIP | 0.044 | 0.010 | Post-challenge GIP | 0.024 | 0.211 |
| Sex | -0.048 | 0.008 | Sex | -0.035 | 0.078 |
| Age | 0.197 | 8.3×10^{-30} | Age | 0.198 | 1.8×10^{-25} |
| BMI | 0.025 | 0.203 | BMI | 0.052 | 0.009 |
| AHT | -0.057 | 0.004 | AHT | -0.038 | 0.072 |
| Lipid-lowering treatment | 0.033 | 0.073 | Lipid-lowering treatment | 0.029 | 0.134 |
| Triglycerides | -0.008 | 0.682 | Triglycerides | -0.016 | 0.444 |
| Smoking | 0.049 | 0.003 | Smoking | 0.046 | 0.011 |
| Systolic blood pressure | 0.175 | 7.3×10^{-20} | Systolic blood pressure | 0.164 | 1.2×10^{-15} |
| Diabetes status | -0.018 | 0.401 | Diabetes status | -0.004 | 0.815 |
| HDL | -0.073 | 3.6×10^{-4} | HDL | -0.098 | 6.9×10^{-6} |
| Fasting glucose | -0.021 | 0.323 | Post-challenge glucose | 0.024 | 0.259 |
| Fasting insulin | -0.025 | 0.236 | Post-challenge insulin | -0.060 | 0.012 |
| $IMT_{maxBulb}$ | | | | | |
| | β | p | | β | p |
| Fasting GLP-1 | -0.014 | 0.426 | Post-challenge GLP-1 | -0.028 | 0.142 |
| Sex | -0.055 | 0.003 | Sex | -0.025 | 0.200 |
| Age | 0.201 | 1.2×10^{-30} | Age | 0.206 | 4.2×10^{-27} |
| BMI | 0.026 | 0.196 | BMI | 0.046 | 0.020 |
| AHT | -0.052 | 0.009 | AHT | -0.035 | 0.094 |
| Lipid-lowering treatment | 0.034 | 0.063 | Lipid-lowering treatment | 0.028 | 0.140 |
| Triglycerides | -0.005 | 0.803 | Triglycerides | -0.016 | 0.441 |
| Smoking | 0.053 | 0.002 | Smoking | 0.047 | 0.010 |
| Systolic blood pressure | 0.172 | 6.7×10^{-19} | Systolic blood pressure | 0.165 | 9.6×10^{-16} |
| Diabetes status | -0.011 | 0.612 | Diabetes status | -0.004 | 0.834 |
| HDL | -0.065 | 0.002 | HDL | -0.095 | 1.6×10^{-5} |
| Fasting glucose | -0.019 | 0.375 | Post-challenge glucose | 0.019 | 0.375 |
| Fasting insulin | -0.016 | 0.451 | Post-challenge insulin | -0.053 | 0.024 |
| $IMT_{maxBulb}$ | | | | | |
| | β | p | | β | p |
| Fasting GIP | 0.036 | 0.040 | Post-challenge GIP | 0.008 | 0.663 |
| Sex | -0.098 | 7.8×10^{-8} | Sex | -0.111 | 3.7×10^{-8} |
| Age | 0.152 | 6.2×10^{-18} | Age | 0.144 | 5.8×10^{-14} |
| BMI | -0.011 | 0.583 | BMI | -0.008 | 0.679 |
| AHT | 0.028 | 0.160 | AHT | 0.042 | 0.048 |
| Lipid-lowering treatment | 0.066 | 3.4×10^{-4} | Lipid-lowering treatment | 0.061 | 0.002 |
| Triglycerides | 0.015 | 0.471 | Triglycerides | 0.002 | 0.912 |
| Smoking | 0.075 | 1.2×10^{-5} | Smoking | 0.078 | 2.5×10^{-5} |
| Systolic blood pressure | 0.147 | 3.6×10^{-14} | Systolic blood pressure | 0.154 | 1.5×10^{-13} |
| Diabetes status | -0.011 | 0.597 | Diabetes status | 0.021 | 0.257 |
| HDL | -0.044 | 0.035 | HDL | -0.048 | 0.033 |
| Fasting glucose | 0.021 | 0.327 | Post-challenge glucose | 0.009 | 0.693 |

| | | | | | |
|--------------------------|----------|-----------------------|--------------------------|----------|-----------------------|
| Fasting insulin | -0.010 | 0.642 | Post-challenge insulin | -0.017 | 0.485 |
| | β | p | | β | p |
| Fasting GLP-1 | -0,042 | 0,014 | Post-challenge GLP-1 | -0.035 | 0.071 |
| Sex | -0,103 | 2,2x10 ⁻⁸ | Sex | -0.103 | 3.4x10 ⁻⁷ |
| Age | 0,153 | 5,3x10 ⁻¹⁸ | Age | 0.151 | 4.4x10 ⁻¹⁵ |
| BMI | -0,016 | 0,419 | BMI | -0.013 | 0.517 |
| AHT | 0,026 | 0,207 | AHT | 0.044 | 0.037 |
| Lipid-lowering treatment | 0,074 | 7,6x10 ⁻⁵ | Lipid-lowering treatment | 0.060 | 0.002 |
| Triglycerides | 0,017 | 0,401 | Triglycerides | 0.003 | 0.900 |
| Smoking | 0,076 | 9,9x10 ⁻⁶ | Smoking | 0.077 | 2.7x10 ⁻⁵ |
| Systolic blood pressure | 0,143 | 2,6x10 ⁻¹³ | Systolic blood pressure | 0.154 | 1.5x10 ⁻¹³ |
| Diabetes status | -0,002 | 0,920 | Diabetes status | 0.021 | 0.248 |
| HDL | -0,036 | 0,090 | HDL | -0.043 | 0.053 |
| Fasting glucose | 0,025 | 0,257 | Post-challenge glucose | 0.003 | 0.891 |
| Fasting insulin | 0,004 | 0,836 | Post-challenge insulin | -0.013 | 0.582 |

Values are standardized β coefficients.