

SUPPLEMENTARY DATA

Supplementary Table 1. Adjusted odds ratios (OR) and 95% confidence intervals (CI) for the presence of adverse left ventricular structural outcomes and subclinical systolic and diastolic dysfunction according to the duration of diabetes during follow-up, The CARDIA Study.

| | Duration of diabetes (years) | | | | | <i>p</i> -trend | Per each additional 5 years |
|---|------------------------------|-------------------|-------------------|--------------------|-------------------|-----------------|-----------------------------|
| | 0 | 1-5 | 6-10 | 11-15 | >15 | | |
| Structural outcomes | | | | | | | |
| Left ventricular hypertrophy* | | | | | | | |
| No. of cases | 595 | 51 | 56 | 17 | 27 | | |
| Prevalence (%) | 24.1 | 44.4 | 41.8 | 36.2 | 48.2 | | |
| OR (95% CI) [†] | 1 [Ref] | 1.22 (0.78, 1.90) | 0.93 (0.60, 1.43) | 0.55 (0.28, 1.07) | 1.27 (0.69, 2.33) | .86 | 0.99 (0.88, 1.11) |
| Concentric remodeling [‡] | | | | | | | |
| No. of cases | 343 | 25 | 33 | 10 | 9 | | |
| Prevalence (%) | 13.9 | 21.7 | 24.6 | 21.7 | 16.1 | | |
| OR (95% CI) [†] | 1 [Ref] | 1.12 (0.69, 1.82) | 1.36 (0.87, 2.12) | 1.01 (0.48, 2.12) | 0.77 (0.36, 1.63) | .82 | 1.01 (0.90, 1.12) |
| Systolic dysfunction | | | | | | | |
| Ejection fraction <55% | | | | | | | |
| No. of cases | 69 | 4 | 9 | 5 | 4 | | |
| Prevalence (%) | 2.8 | 3.5 | 6.7 | 10.6 | 7.1 | | |
| OR (95% CI) [†] | 1 [Ref] | 1.25 (0.43, 3.66) | 2.64 (1.20, 5.78) | 3.92 (1.39, 11.08) | 2.23 (0.74, 6.78) | .01 | 1.30 (1.07, 1.59) |
| Longitudinal strain >90 th percentile (-12.3%) | | | | | | | |
| No. of cases | 240 | 23 | 34 | 11 | 11 | | |
| Prevalence (%) | 9.9 | 20.2 | 26.4 | 24.4 | 22.5 | | |
| OR (95% CI) [†] | 1 [Ref] | 1.32 (0.79, 2.20) | 1.90 (1.19, 3.03) | 1.47 (0.70, 3.10) | 1.70 (0.83, 3.50) | .005 | 1.20 (1.06, 1.36) |
| Diastolic dysfunction | | | | | | | |
| Impaired relaxation [§] | | | | | | | |
| No. of cases | 586 | 62 | 55 | 17 | 23 | | |
| Prevalence (%) | 21.8 | 46.3 | 36.0 | 31.5 | 38.3 | | |
| OR (95% CI) [†] | 1 [Ref] | 1.87 (1.28, 2.73) | 1.30 (0.88, 1.91) | 1.01 (0.55, 1.88) | 1.58 (0.89, 2.81) | .02 | 1.13 (1.02, 1.26) |
| Increased filling pressure [¶] | | | | | | | |
| No. of cases | 226 | 34 | 37 | 7 | 14 | | |
| Prevalence (%) | 8.5 | 26.0 | 24.2 | 13.2 | 23.7 | | |
| OR (95% CI) [†] | 1 [Ref] | 2.10 (1.32, 3.35) | 1.90 (1.20, 3.01) | 0.62 (0.26, 1.49) | 1.66 (0.83, 3.33) | .02 | 1.16 (1.02, 1.31) |

*Left ventricular mass >224 g for men and >162 g for women. [†]Adjusts for model 2 variables listed in the footnote of Table 3. [‡]Relative wall thickness >0.42. [§]e' <10 cm/s. [¶]E/e' ≥12 alone or E/e' 8-12 and left atrial volume index ≥ 34 ml/m

SUPPLEMENTARY DATA

Supplementary Table 2. Adjusted odds ratios (OR) and 95% confidence intervals (CI) for the presence of adverse left ventricular structural outcomes and subclinical systolic and diastolic dysfunction according to the duration of prediabetes during follow-up, The CARDIA Study.

| | Duration of prediabetes (years) | | | | | <i>p</i> -trend | Per each additional 5 years |
|---|---------------------------------|-------------------|-------------------|-------------------|-------------------|-----------------|-----------------------------|
| | 0 | 1-5 | 6-10 | 11-15 | >15 | | |
| Structural outcomes | | | | | | | |
| Left ventricular hypertrophy* | | | | | | | |
| No. of cases | 297 | 148 | 181 | 69 | 51 | | |
| Prevalence (%) | 23.3 | 23.9 | 34.4 | 30.9 | 29.1 | | |
| OR (95% CI) [†] | 1 [Ref] | 0.83 (0.64, 1.08) | 1.30 (1.01, 1.69) | 1.07 (0.74, 1.53) | 1.07 (0.71, 1.60) | .15 | 1.06 (0.98, 1.15) |
| Concentric remodeling [‡] | | | | | | | |
| No. of cases | 164 | 98 | 91 | 41 | 26 | | |
| Prevalence (%) | 12.9 | 15.8 | 17.3 | 18.5 | 14.9 | | |
| OR (95% CI) [†] | 1 [Ref] | 1.07 (0.80, 1.43) | 1.10 (0.82, 1.49) | 1.12 (0.75, 1.68) | 0.93 (0.58, 1.49) | .62 | 1.02 (0.93, 1.12) |
| Systolic dysfunction | | | | | | | |
| Ejection fraction <55% | | | | | | | |
| No. of cases | 42 | 15 | 15 | 9 | 10 | | |
| Prevalence (%) | 3.3 | 2.4 | 2.9 | 4.0 | 5.7 | | |
| OR (95% CI) [†] | 1 [Ref] | 0.64 (0.34, 1.20) | 0.75 (0.40, 1.40) | 1.01 (0.46, 2.21) | 1.56 (0.73, 3.34) | .71 | 1.03 (0.87, 1.24) |
| Longitudinal strain >90 th percentile (-12.3%) | | | | | | | |
| No. of cases | 107 | 74 | 78 | 32 | 28 | | |
| Prevalence (%) | 8.7 | 12.1 | 15.0 | 14.0 | 16.2 | | |
| OR (95% CI) [†] | 1 [Ref] | 1.28 (0.92, 1.80) | 1.47 (1.05, 2.06) | 1.19 (0.75, 1.87) | 1.57 (0.97, 2.54) | .02 | 1.12 (1.02, 1.24) |
| Diastolic dysfunction | | | | | | | |
| Impaired relaxation [§] | | | | | | | |
| No. of cases | 257 | 190 | 172 | 64 | 60 | | |
| Prevalence (%) | 18.9 | 27.7 | 29.4 | 25.0 | 29.6 | | |
| OR (95% CI) [†] | 1 [Ref] | 1.38 (1.09, 1.74) | 1.34 (1.05, 1.72) | 1.12 (0.80, 1.58) | 1.46 (1.02, 2.10) | .006 | 1.11 (1.03, 1.19) |
| Increased filling pressure [¶] | | | | | | | |
| No. of cases | 104 | 75 | 85 | 26 | 28 | | |
| Prevalence (%) | 7.7 | 11.0 | 14.6 | 10.3 | 13.9 | | |
| OR (95% CI) [†] | 1 [Ref] | 1.17 (1.82, 1.65) | 1.31 (0.93, 1.85) | 0.89 (0.54, 1.48) | 1.33 (0.81, 2.20) | .13 | 1.08 (0.98, 1.20) |

*Left ventricular mass >224 g for men and >162 g for women. [†]Adjusts for model 2 variables listed in the footnote of Table 4. [‡]Relative wall thickness >0.42. [§]e' $\text{e}'<10 \text{ cm/s}$. [¶]E/e' ≥ 12 alone or E/e' $\geq 8-12$ and left atrial volume index $\geq 34 \text{ ml/m}^2$.