higher IMT values (1.20 [0.95–1.30] mm vs. 0.90 [0.80–1.10] mm, p<0.0001). FMD progressively decreased, whereas IMT progressively increased with the number of diseased vessels and SYNTAX score groups (p<0.0001 for all comparisons). At ROC curve analysis, the addition of FMD and IMT, alone or in combination, to a model of traditional risk factors (age, gender, hypertension, dyslipidaemia, diabetes mellitus, body mass index, smoking, family history) improved the predictive power for the presence of CAD (area under the curve [AUC] of risk factors model 0.715, 95% confidence interval [CI] 0.670–0.760; AUC of risk factors + FMD 0.745, 95% CI 0.702–0.789, p=0.020 vs. risk factors model; AUC of risk factors + IMT 0.749, 95% CI 0.706–0.792, p=0.020 vs. risk factors model; AUC of risk factors + FMD + IMT 0.780, 95% CI 0.739–0.821, p<0.001 vs. risk factors model, p=0.009 vs. risk factors + FMD, p=0.008 vs. risk factors + IMT). The addition of FMD and IMT to the model of risk factors correctly reclassified 26.5% of patients.

Conclusions: A combined evaluation of endothelial function and carotid wall thickness in addition to traditional cardiovascular risk factors significantly improves prediction of CAD in patients undergoing coronary angiography. This inexpensive and simple approach might help to better risk stratify patients with suspected CAD, and guide their diagnostic and therapeutic workup.

P1528
Higher rates of aortic fibrotic remodeling are linked to specific clinical factors

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Background: Fibrosis of the left atrium has been demonstrated to be linked to atrial fibrillation (AF) and other significant outcomes in cardiovascular disease. However, it is not clear whether the process of fibrotic remodeling is isolated to the atria or involves other structures of the cardiovascular system, such as the aorta. This study proposes a method for measuring aortic fibrosis, and studies to what degree risk factors for cardiovascular disease affect aortic fibrosis.
Methods: We identified 382 patients (aged 70.5±13.0 years) enrolled in our AF database to be included in this study. These patients underwent delayed-enhancement MRI (DE-MRI) and aortic fibrosis was quantified using 3-D segmentation software. Aortic fibrosis was compared to a number of cardiovascular disease risk factors.
Results: The included table shows the results of this study. Male patients (11.2± 13.0% vs. 8.2±8.9%, p=0.0048), obese (BMI over 30) patients (11.5±11.6% vs. 8.1±10.1%, p=0.005), persistent (versus paroxysmal) AF patients (12.5±13.6% vs. 8.2±9.4%, p=0.0004), and sleep apnea patients (12.5±13.6% vs. 9.0±10.5%, p=0.0095) all had significantly higher degrees of aortic fibrosis.

Aortic Fibrosis vs. Patient Demographics

Demographics	R^2 values	Regression coefficients	P values
Obesity	N/A	3.41	0.005*
Persistent AF	N/A	4.33	0.0004*
Sleep apnea	N/A	3.56	0.0095*
Age	0.0007	-0.02	0.62
Coronary artery disease	N/A	-0.12	0.92
Gender	N/A	3.0	0.0048*

*Statistically significant values.

Conclusion: Obesity, persistent AF, sleep apnea, and the male gender are significantly linked to the development of aortic fibrosis and fibrotic remodeling. Fibrosis of the aorta may be a clinically useful marker of cardiovascular disease.

P1529
Comparison of the predictive value of testosterone levels and carotid femoral pulse wave velocity for major adverse cardiovascular events in patients with erectile dysfunction

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Objective: The presence of erectile dysfunction (ED) portends a higher risk of future cardiovascular (CV) events, particularly in intermediate risk men, and may serve as an opportunity for intensification of cardiovascular risk prevention strategies. Low androgen levels and increased aortic stiffness are independent predictors of CV events in patients with ED. Aim of this study is to compare the ability of these biomarkers to predict CV events in a population of ED patients.
Methods: Major adverse cardiovascular events (MACEs) in relation to carotid-femoral pulse wave velocity (PWV) and total testosterone (TT) levels were measured in 426 ED patients without known cardiovascular disease.
Results: A total of 29 MACEs (6.8%) were identified, including 7 cases of death (1.6%). The average follow-up time was 6.7 years. The adjusted odds ratio (OR) of PWV and low TT for MACEs was 1.55 (95% Confidence Interval [CI] 1.22–2.15) and 0.69 (95% CI 0.50–0.95) respectively. The receiver operating characteristic (ROC) curves of PWV and TT in predicting CV events are presented in figure and pairwise comparison between areas under ROC curves (AUCs) were performed. The difference between ROC curves for PWV and TT did not achieve statistical significance (P=0.54).
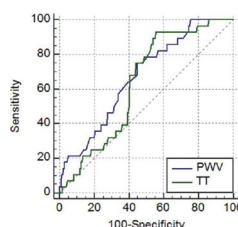

Figure 1

Conclusions: Circulating TT is non-inferior to PWV in predicting 7-year adverse cardiac events in patients with ED. These findings bring new insights into the pathophysiological roles of androgen levels, which might be a premising therapeutic target of both metabolic and cardiovascular diseases.

P1530
Can restless legs syndrome be one of the first sign for acute coronary syndrome expression?

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People with restless legs syndrome (RLS) have uncomfortable sensations in their legs and an irresistible urge to move their legs to relieve the sensations. Because it usually interferes with sleep, it also is considered a sleep disorder. It is well known, too, that sleep disorders influenced acute coronary syndrome (ACS) expression. The aim of this study was to analyze can RLS be first prognostic sign of ACS expression in patients with first episode of ACS.
Methods: From January 2013, we analyzed 480 consecutive patients (pts) with first episode of ACS. All pts were divided in two groups: Group RLS - 192 pts with RLS with first episode of ACS and Group non-RLS - 288 pts without RLS and with first episode of ACS (control group of pts).
Results: At baseline Group RLS was slightly younger (p=0.0566), with more men (p=0.5822). Control group of pts had slightly more hyperlipidemia (p=0.0532). Other baselines characteristics were similar in both groups of patients. There was no differences between groups in anxiety score (r=0.10, p=0.14). After adjustment for cardiovascular risk factors by logistic regression, RLS displayed as one of the significantly important prognostic sign of ACS expression in patients with first episode of ACS (p=0.0324).
Conclusion: This study provides support for use of RLS as one of the most important prognostic sign of ACS expression in patients with first episode of ACS.

P1531
Baseline findings of the population-based, randomized danish cardiovascular screening trial (DANCAVAS)

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Background: The societal challenge of age-related diseases, including cardiovascular, increases. Attempts to reduce cardiovascular mortality via routine checks by general practitioner has failed, however, new imaging modalities more closely related to cardiovascular disease (CVD) improves the discriminant accuracy and risk classification significantly, and might be useful in a population screening. In the autumn 2015, we initiated the Danish Cardiovascular Screening Trial (DANCAVAS), which is a randomized, clinically controlled, multicenter screening and intervention trial. Recently, recruitment ended.
Purpose: This cross-sectional baseline study reports final organization, acceptability, and relevance of the intervention arm of the DANCAVAS trial.
Methods: In all, 16 768 of 46 611 men aged 65–74 years were randomly selected and invited to a cardiovascular screening using low dose non-contrast CT scan, brachial and ankle blood pressure measurements, and blood tests.
A secured web based booking and answering system was developed. Specially trained screening staff performed the screening. Positives were recommended general cardiovascular prevention including medication and surgery if needed.