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death or CV events were 4.03 (95%CI: 3.04-5.34), 5.87 (4.32-7.99) and 9.04 (5.81-14.06) respectively for CACS > 0 vs. CACS = 0, CACS ≥ 100 and CACS ≥ 400 vs. CACS < 10. In addition, we found that for similar CACS, these OR were greater in women than men.

**Conclusion** This meta-analysis shows that the increase in CACS is strongly associated with an increased risk for all-cause mortality and/or fatal and non-fatal CV events in asymptomatic patients with diabetes. While men are at greater risk to develop high CACS, the prognostic value of the latter is stronger in women to predict CV events and death.

**Disclosure of interest** The authors declare that they have no competing interest.

<https://doi.org/10.1016/j.acvdsp.2021.09.006>

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### One year of Covid-19: French nationwide study of hospitalisation, 90-day readmission and mortality rates from myocardial infarction



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**Background** Studies reported a decrease in hospital admissions for myocardial infarction (MI) in early 2020 due to Covid19 crisis, but these were restricted to the early weeks of the pandemic.

**Purpose** To describe patient characteristics, in-hospital management and 90-day mortality of MI patients throughout the year 2020, in particular during periods of lockdowns.

**Methods** All patients hospitalised for MI in France from 2017 to 2020 were selected from the national hospital discharge database. Incidence rate ratios were computed to analyze time trends in MI admissions and mortality rates and stratified by type of MI, sex, age, and period of admission. Characteristics and management of patients in 2020 were described and compared to 2017-19 (OR adjusted on temporality, sex, age)

**Results** In 2020, 94,747 patients were hospitalized for MI corresponding to a 6% decrease in MI admissions compared to 2017-19. This decrease was more significant during the first lockdown (-24%,  $P < 0.0001$ ), in particular in week 13 (-40%) than during the second lockdown (-8%). Decreases in MI admissions were more pronounced and longer for NSTEMI, older people and for women. An increase in the rate of STEMI admissions was observed between the two 2020 lockdowns (+4%,  $P = 0.0005$ ). Admission to a resuscitation unit and complications rates did not differ between 2017-19 and 2020. In early 2020, there was also a decrease in 90-days readmission. In 2020, the in-hospital and 90-days-out-of hospital mortality rates were 5.5% and 3.8%, compared to 5.7% and 3.6% in reference years. Globally and after adjustment, mortality rates did not differ in 2020 vs. 2017-19 ( $IRR_{in-hosp} = 1.03[0.98;1.08]$ ,  $P = 0.19$  -  $IRR_{out-hosp} = 1.04[0.97;1.27]$ ,  $P = 0.21$ ).

**Conclusions** This nationwide study showed significant decrease in MI hospitalization during 2020, in particular during the first lockdown, with a slight STEMI increase during the summer. However, these trends were not associated with more cardiac complications or mortality.

**Disclosure of interest** The authors declare that they have no competing interest.

<https://doi.org/10.1016/j.acvdsp.2021.09.007>

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### New-onset atrial fibrillation in chronic coronary syndrome outpatients: Insights from the international CLARIFY registry



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**Aims** Although the association of atrial fibrillation (AF) and coronary artery disease is a growing public health concern, data in patients with chronic coronary syndrome (CCS) is scarce. We aimed to describe the incidence rate and predictors of new-onset AF in CCS outpatients as well as its association with major adverse cardiovascular events (MACE) using a large-scale registry.

**Method and results** The international Prospective observational Longitudinal Registry of patients with stable coronary artery disease (CLARIFY), provides real-world data from 32,703 outpatients with CCS from 45 countries. Our analysis included 29,001 patients without prior AF at baseline. Over the median 5-year follow-up, 1453 (5%) had a new-onset AF diagnosed with an annual incidence rate of around 1%. Independent predictors of AF were increased age, treated hypertension, history of peripheral artery disease and an alcohol intake  $\geq 1$  drink per week. Left ventricular ejection fraction value and a high triglyceride level were independent predictors of lower new-onset AF rate. As rhythmic status was a variable that changed during follow-up, incident AF was included as a time-varying covariate in the Cox regression model. Compared to CCS patients without AF, those with new-onset AF had a higher rate of MACE, including the composite endpoint of cardiovascular death, non-fatal myocardial infarction or non-fatal stroke, hazard

**Table 1** Adjusted risks of MACE estimated by the Kaplan-Meier method for CCS outpatients with new-onset AF compared to patients without AF.

	HR (95%CI)	P-value
CV death, myocardial infarction or stroke	2.52 (2.11-3.01)	< 0.001
CV death	3.22 (2.63-3.94)	< 0.001
Myocardial infarction	1.55 (1.08-2.22)	0.016
Stroke	2.80 (2.01-3.91)	< 0.001
All cause death	2.64 (2.23-3.11)	< 0.001
Hospitalization for heart failure	9.38 (8.02-10.97)	< 0.001
Major bleeding	4.33 (2.94-6.39)	< 0.001

New-onset of AF has been introduced as time varying covariate in the Cox models. Risks were estimated by Kaplan-Meier method with 95% confidence interval. Adjustment variables were: age, sex, geographic origin, diabetes, hypertension, smoking (current), peripheral artery disease, prior myocardial infarction and prior stroke. AF, atrial fibrillation; CCS, chronic coronary syndrome; CI, confidence interval; CV, cardiovascular, HR, hazard ratio; MACE, major adverse cardiovascular event.