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on behalf of the FIRE trial investigators

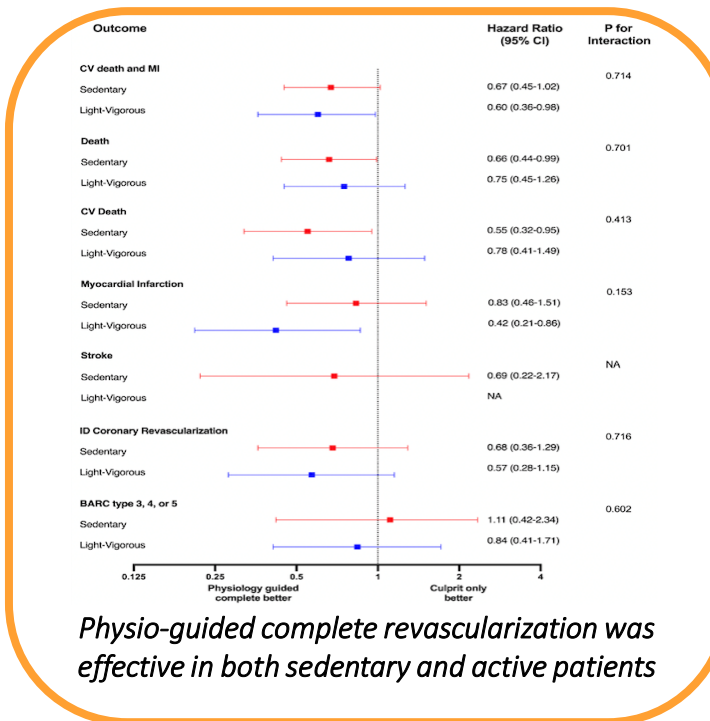
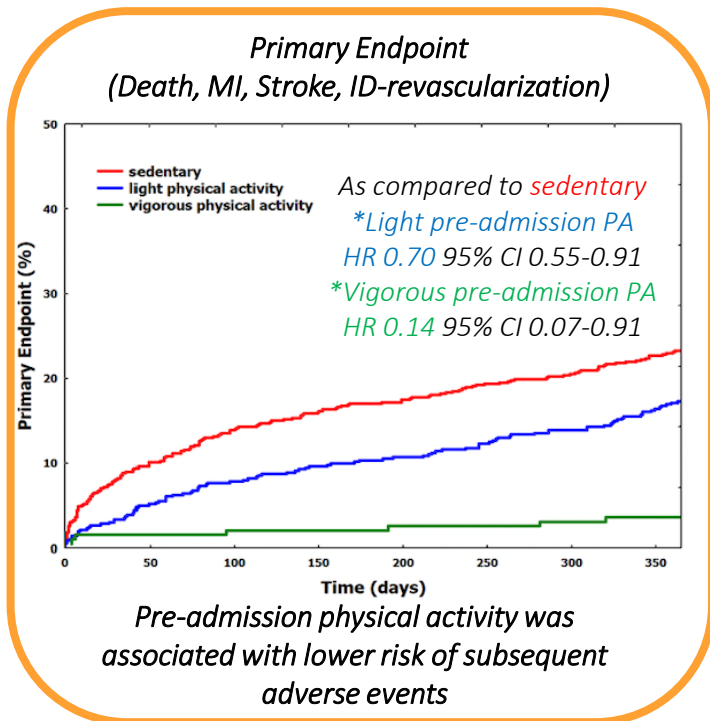
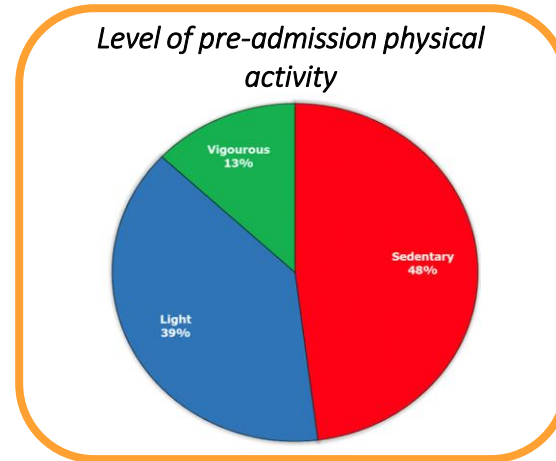
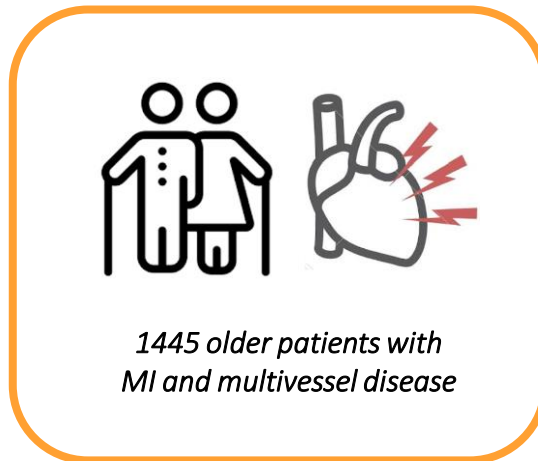
## AIM

The present analysis from the Functional Assessment in Elderly MI Patients with Multivessel Disease (FIRE) trial aims to explore the significance of pre-admission physical activity and assess whether the benefits of physiology-guided complete revascularization apply consistently to sedentary and active older patients.



## METHODS

Patients aged 75 years or more with myocardial infarction (MI) and multivessel disease were randomized to receive physiology-guided complete revascularization or culprit-only strategy. The primary outcome was a composite of death, MI, stroke, or any revascularization within one year. Secondary endpoints included the composite of cardiovascular death or MI, as well as single components of the primary endpoint. Pre-admission physical activity was categorized into three groups: i) absent (sedentary), ii) light and iii) vigorous.



## RESULTS

Among 1445 patients, 692 (48%) were sedentary, whereas 560 (39%) and 193 (13%) performed light and vigorous physical activity, respectively. Patients engaging in light or vigorous pre-admission physical activity exhibited a reduced risk of the primary outcome compared to sedentary individuals (light HR 0.70, 95%CI 0.55-0.91 and vigorous HR 0.14, 95%CI 0.07-0.91, respectively). These trends were also observed for death, cardiovascular death, or MI. When comparing physiology-guided complete revascularization versus culprit-only strategy, no significant interaction was observed for primary and secondary endpoints when stratified by sedentary or active status.



## CONCLUSIONS

In older MI patients, pre-admission physical activity emerges as a robust and independent prognostic determinant. Physiology-guided complete revascularization stands out an effective strategy in reducing ischemic adverse events, irrespective of pre-admission physical activity status.