AβYSS

Assessment of βeta blocker interruption one Year after an uncomplicated myocardial infarction on Safety and Symptomatic cardiac events requiring hospitalization

Beta-Blocker Interruption or Continuation after Myocardial Infarction

Sources of funding : PHRC 2015 – French Ministry of Health & ACTION Group

Declaration of Interest : No financial disclosure in relation with this study

Pr Johanne SILVAIN – Sorbonne Université - Pitié-Salpêtrière Hospital , Paris, France

August 29th, 2024 – HOTLINE 1 August 30th

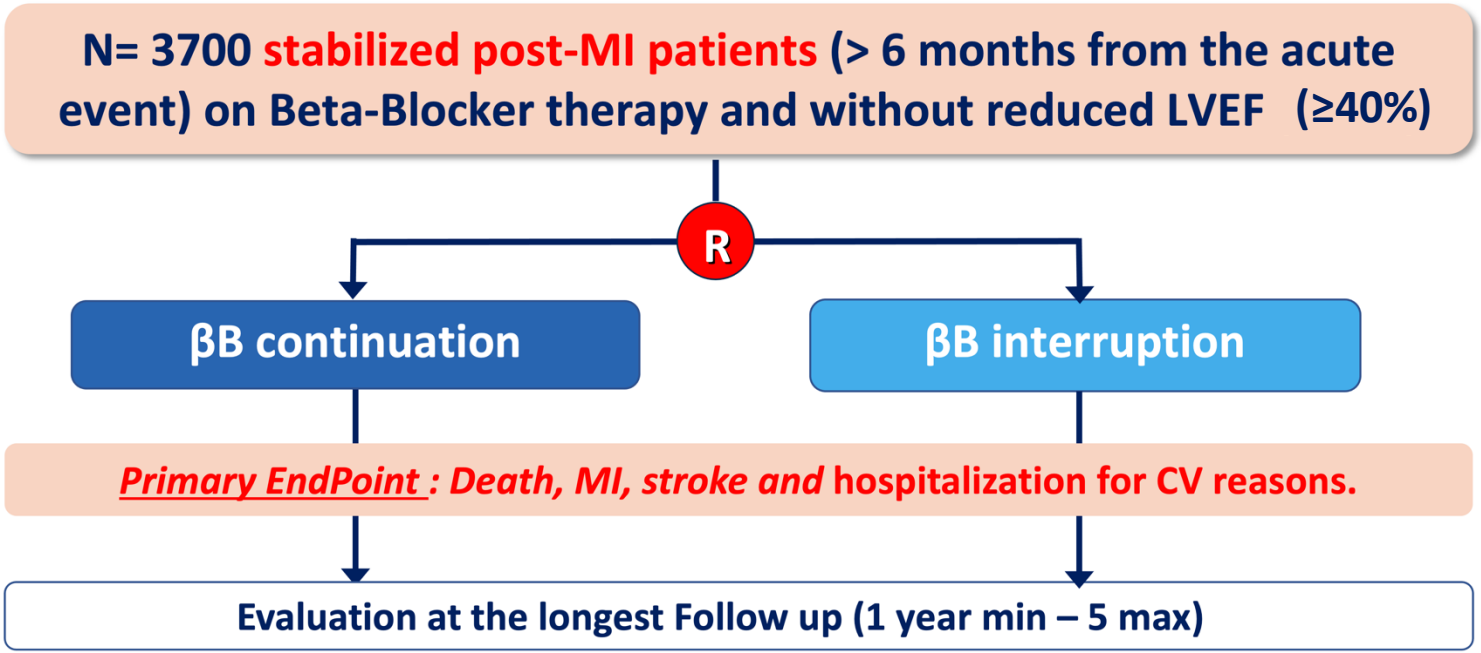
ESC Congress 2024
London & Online

A study of the ACTION Group
www.action-groupe.org

Declaration of interest

- I have nothing to declare

Study Design



NCT03498066 - EUDRACT No: 2017-003903-23

Summary

- In patients with a prior myocardial infarction (MI) , **interruption of long-term β-blocker** (βB) treatment **was NOT non-inferior to a strategy of βB continuation** with respect to a composite primary outcome of death, MI, stroke, or hospitalization for CV reasons.

- In addition, βB interruption **did not result in an improvement in patient quality of life**, and **resulted in increased Blood Pressure, resting Heart Rate and a higher rate of hospitalization for CV reasons.**

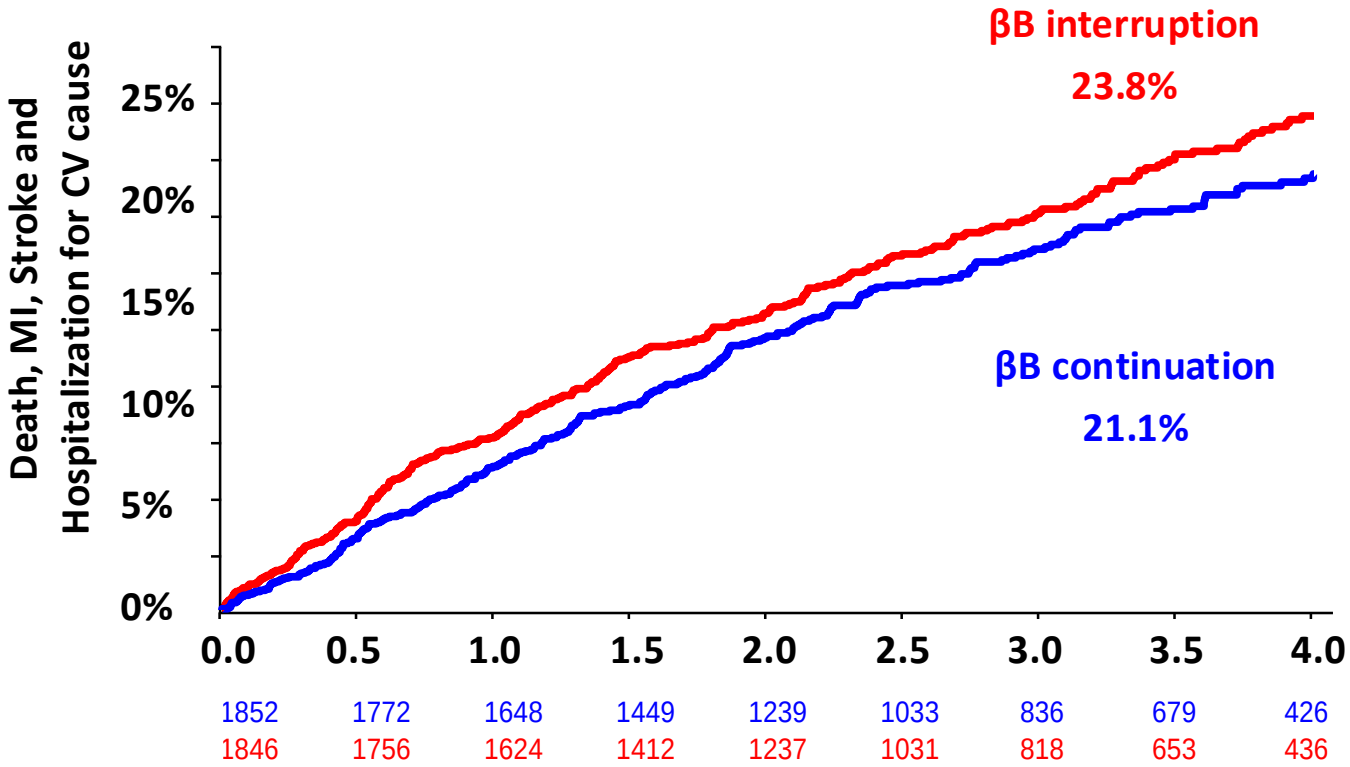
Hypothesis tested

- βB interruption among patients with a history of MI , preserved LVEF (>40%), **is clinically safe and improve patients' quality of life.**

Key points about methods

- Academic, multicenter, open label, randomized, non-inferiority trial conducted at 49 sites in France between August 28, 2018, and September 12, 2022, with i**ndependent adjudication of all events** (Death, MI, Stroke and hospitalization for cardiovascular reason).
- **3700 randomized patients** followed for a **median of 3.0 years** (interquartile range, 2.0 to 4.0) **up to 5 years.**

Primary Outcome

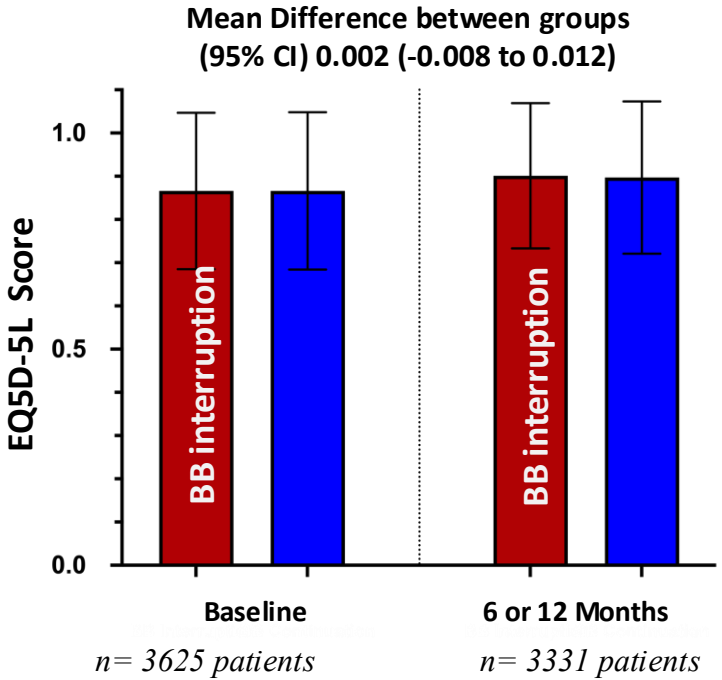


ITT
HR 1.16
(95% CI) 1.01 to 1.33
p = 0.44 for non-inferiority

Per Protocol
HR 1.06
(95% CI) 0.92 to 1.22
p = 0.09 for non-inferiority

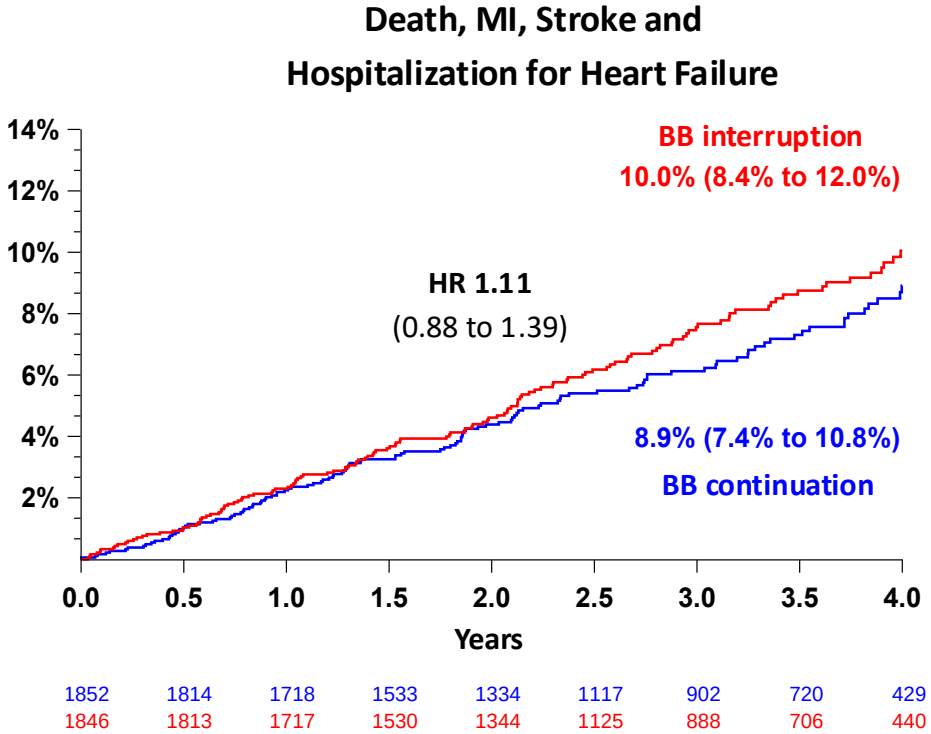
Secondary Results

Quality of Life



No improvement of Quality of Life

Secondary Outcome



Secondary Results

Blood Pressure and Heart Rate

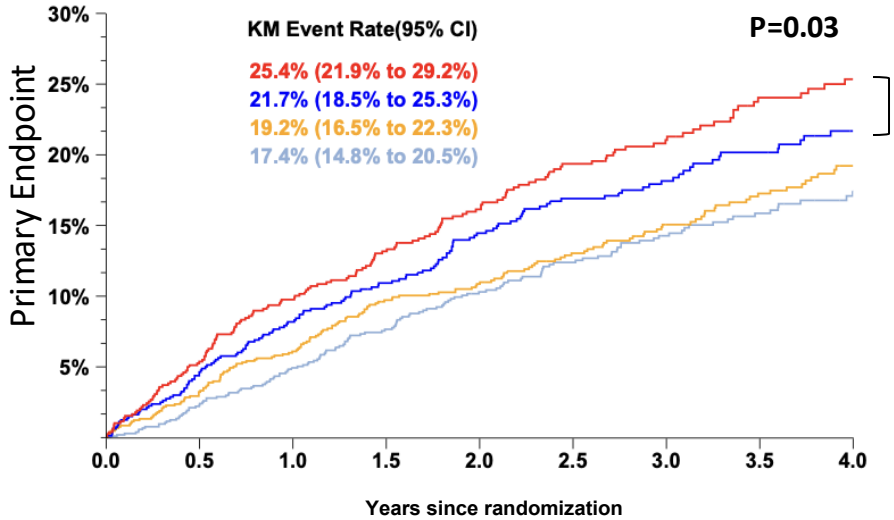
At 6 months post randomization

βB interruption group vs continuation

+ 3.7 mmHg Systolic Blood Pressure
[2.6, 4.8 mmHg]; p<.001
+ 3.9 mmHg Diastolic Blood Pressure
[3.0, 4.0 mmHg]; p<.001
+ 9.8 bpm Resting Heart Rate
[9.1, 10.6 bpm] , P<.001)
+1616 Double Product (SBP x HR)
[1484, 1749], P<.001

Hypertension Subgroup (43%)

adjHR 1.18
95%CI 1.01 to 1.36
P=0.03



No. at Risk

No HBP β-blocker continuation	1047	1013	947	837	711	591	482	388	235
No HBP β-blocker interruption	1060	1019	948	831	725	604	491	392	243
HBP β-blocker continuation	805	759	701	612	528	442	354	291	191
HBP β-blocker interruption	786	737	676	581	512	427	327	261	193

Key Messages

- ABYSS did not demonstrate the safety of **βB interruption in MI patients with preserved LVEF ,** a strategy that led to a higher rate of hospitalizations especially in hypertensive patients.

- **βB interruption** did not improve patient's quality of life and **increases Blood Pressure, resting Heart Rate**

The NEW ENGLAND JOURNAL of MEDICINE