Use of risk score to identify lower and higher risk subsets among COMPASS-Eligible patients with stable CAD. Insights from the CLARIFY Registry

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On behalf: The CLARIFY Investigators

Topic(s):
Coronary Artery Disease – Epidemiology, Prognosis, Outcome

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Background: The COMPASS trial showed that a combination of rivaroxaban and aspirin improved cardiovascular (CV) outcomes in patients with stable coronary artery disease (CAD) compared with aspirin alone, at the expense of increased bleeding. An important issue is to identify in this broad population, patients who are likely to derive the greatest benefit without too great a bleeding risk.

Purpose: To evaluate the performance of the CHA2DS2VaSc (range from 0 to 9), the REACH Recurrent Ischemic Score (RIS) (range from 0 to ≥29) and the REACH Bleeding Risk Score (BRS) (range from 0 to 22) to identify patients with the most favourable trade-off between ischemic and bleeding events, among CAD patients eligible to COMPASS

Methods: We used the CLARIFY Registry, an international registry of >30,000 patients with stable CAD. COMPASS inclusion and exclusion criteria were applied to the CLARIFY population with complete data (n=15,185) to define the “COMPASS eligible population”. Patients at high bleeding risk (REACH BRS >10), were excluded in accordance to COMPASS exclusion criteria. Patients were categorized as low-intermediate (0–1) or high (≥2) CHA2DS2VaSc; low (0–12) or intermediate (13–19) REACH RIS, and low (0–6) or intermediate (7–10) REACH BRS. The ischemic outcome was a composite of CV death, MI or stroke, and the bleeding outcome was a composite of bleeding leading to either admission or transfusion, or haemorrhagic stroke.

Results: The COMPASS-eligible population comprised 5,142 patients (33.9%). Ischemic and bleeding outcome for this group were 2.3 [2.1–2.5] and 0.5 [0.4–0.6] events/100 patient-years, respectively. Patients with high CHA2DS2VaSc score, intermediate REACH BRS and RIS represented 95.5% (n=4,913), 83.8% (n=4,309) and 37.6% (n=1,934) of the population.

Regarding ischemic risk, patients with intermediate REACH RIS had the higher ischemic risk (3.0 [2.6–3.4] vs 1.5 [1.2–2.0]) for patients with low REACH RIS, p<0.001, followed by intermediate REACH BRS (2.5 [2.2–2.7] vs 1.5 [1.2–2.0]) for patients with low REACH BRS, p=0.0003 and high CHA2DS2VaSc score (2.4 [2.2–2.6]) compared to the overall population. Patients with low CHA2DS2VaSc had the lowest ischemic risk (0.6 [0.3–1.3]) compared to the overall population.

Regarding bleeding risk, there were no differences between patients categorized according to CHA2DS2VaSc (0.5 [0.2–1.15] vs 0.5 [0.4–0.6], p=0.95), REACH BRS (0.4 [0.3–0.7] vs 0.5 [0.4–0.6], p=0.80) or REACH RIS (0.4 [0.3–0.5] vs 0.5 [0.4–0.7], p=0.26).

Conclusions: Among a broad population of CAD patients eligible to COMPASS, low CHA2DS2VaSc score identify a small subset of patients with very low ischemic risk which is unlikely to benefit from the adjunction of low dose rivaroxaban to standard therapy. Patients with intermediate REACH Recurrent Ischemic Score had higher ischemic risk, without increased bleeding risk and may be optimal candidates from adjunction of low dose rivaroxaban.
Abstract: P5010
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Insights from the CLARIFY Registry

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Ischemic (blue) and bleeding (red) event