Physicians to provide: CAD patients scheduled to undergo elective PCI who are potential candidate for the study

Study Staff to perform assessment/contact participants before intervention (i.e., pre-admission visit, 2-3 days prior intervention)

Day 0

Hospital pre-admission/admission:
- Informed consent taken, interview & data from MR/blood samples collected

At lab:
- PRU test and GNTyping completed (turnaround time: 3-5 days)
- Propensity risk scores calculated
- Actionable recommendations to physicians through CDS app.

Follow up within 2 weeks of hospital discharge

GNT-guided cohort
- High-risk patients to switch/escalate to ticagrelor
- Low-risk patients to maintain/de-escalate to clopidogrel

Non-concurrent cohort
- Maintain therapy based on current guidelines/medical judgment [standard-of-care]

At lab/ Hospitals:
- Follow-up MACEs; adherence at 1, 3 & 6 months
- Patients matched by propensity scores
- Statistical analyses
- Discuss findings with physicians

Time elapsed: 2-3 days

Time elapsed: 2 weeks

Time elapsed: 6 months
Suppl. S2A-B. Flowcharts of clinical protocol in CAD/ACS patients.

CAD: coronary artery disease; ACS: acute coronary syndrome; STEMI: ST-elevation myocardial infarction; NSTEMI: non-STEMI; PCI: percutaneous coronary intervention; MR: medical records; PRU: P2RY12 reaction units; GNT: genotypes; CDS: clinical decision-support tool; MACE: major adverse cardiovascular events.