genes (MYL3, TPM1, ACTC1), in addition to the desmosomal genes DSG2, DSC2 and JUP.

Conclusion Predictive testing has potentially allowed up to 789 genotype-negative individuals (and their offspring) to be reassured and discharged from long term cardiac follow-up. Our data suggests adult females are more forthcoming for predictive testing than their male counterparts. The absence of testing for several cardiomyopathy genes suggests low frequency or low penetrance of these variants in the Irish population. The large size of families in our cohort represents an opportunity to develop gene penetrance and genotype-phenotype correlation data to assist in clinical management of genotype-positive individuals.

Abstract 5 Figure 1 Cumulative incidence of all-cause mortality over 1 year showing (A) adjusted rates in all ACS patients treated with either clopidogrel, ticagrelor or prasugrel (B) adjusted rates in all NSTEMI patients treated with either clopidogrel, prasugrel or ticagrelor. (C) adjusted rates in STEMI patients treated with clopidogrel, prasugrel, or ticagrelor. HR: hazard ratio; CI: confidence intervals

were 34.7, 31.6 and 30.9 deaths per 1000-person-years for patients receiving clopidogrel, prasugrel, and ticagrelor, respectively. In age-sex unadjusted multinomial logistic regression analysis, use of ticagrelor or prasugrel rather than clopidogrel led to respective reductions in 1-year mortality of 64% [OR 0.34, 95% CI (0.32–0.36)], and 27% [OR 0.73 (0.69–0.77), p<0.0001]. Using clopidogrel as the reference, the age-sex adjusted 1-year mortality rate was 63% [OR 0.37 (0.34–0.40)] and 57% [OR 0.43 (0.40–0.45), p<0.0001] lower with ticagrelor and prasugrel, respectively in ST-elevation myocardial infarction (STEMI) patients and 80% [OR 0.20 (0.18–0.23), p<0.0001] and 36% [OR 0.43 (0.40–0.45), p<0.0001] lower in non-STEMI patients. Furthermore, using marginal effects, we demonstrate that while the probability of mortality increases with increasing age and BMI, it is lower across all ages and BMIs for patients on ticagrelor compared to patients on prasugrel. Figure 1 demonstrates the cumulative incidence for all-cause mortality stratified by antiplatelets.

Conclusions This very large, real-world dataset of patients presenting with ACS demonstrates a significant net clinical benefit favouring the use of ticagrelor and prasugrel over clopidogrel in ACS patients for DAPT. This analysis concurs with the data from the landmark TRITON and PLATO RCTs, suggesting these agents should be considered as the standard of care in the management of ACS.