INDEX, FOLLOW-UP AND TOTAL HOSPITALIZATION COSTS IN PATIENTS WITH ACUTE CORONARY SYNDROMES UNDERGOING PLANNED PERCUTANEOUS CORONARY INTERVENTION TREATED WITH PRASUGREL VS. CLOPIDOGREL IN THE TRITON-TIMI 38 TRIAL

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OBJECTIVES: The TRITON-TIMI 38 Trial demonstrated that in patients with acute coronary syndromes (ACS) undergoing planned percutaneous coronary intervention (PCI), prasugrel compared to clopidogrel significantly reduced the rate of ischemic events over up to 15 months of follow-up, but increased the risk of major bleeding. We used patient-level resource use data to estimate and compare index, follow-up and total hospitalization costs, exclusive of study drug, for patients treated with prasugrel vs. clopidogrel in TRITON-TIMI 38, both in the overall trial population and among selected subgroups.

METHODS: For the economic study for TRITON, details regarding hospitalizations for all patients from 8 high enrolling countries (U.S., Australia, Canada, Germany, Italy, Spain, U.K., France; n = 3373 prasugrel, 3332 clopidogrel) were collected prospectively. These data were used to assign DRGs to all index and subsequent hospitalizations, to which average LOS and resource use data to estimate and compare index, follow-up and total hospitalization costs were added separately based on published data from similar patient populations.

RESULTS: For the entire 8 country population, treatment with prasugrel was associated with a $613 per patient mean reduction in overall hospitalization costs, reflecting a $637/patient lower with prasugrel for this subgroup. Among the subgroup with 1 or more risk factors for increased bleeding, initial hospitalization costs were lower by $130 with prasugrel (despite an average $20 increase in costs due to periprocedural bleeds), and overall follow-up costs were $395 lower, resulting in aggregate savings of $525/patient. CONCLUSIONS: For ACS patients undergoing planned PCI, the lower ischemic event rate with prasugrel compared to clopidogrel yields a reduction in overall hospitalization costs, despite increased costs associated with bleeding. These findings were accentuated among the large subgroup of patients with no risk factors for increased bleeding. These results will have implications for the cost-effectiveness of alternative antiplatelet strategies for ACS patients undergoing PCI.