pared health outcomes (quality of life, productivity, resource use) across adherent vs. nonadherent respondents. RESULTS: 369 respondents with valid adherence data were included in the analyses. Mean age was 62.5 years (SD = 10.5) and most respondents were insured (97.6%), nonsmokers (85.9%), and unemployed or disabled (65.0%). 23% were non-adherent at ≥ 2 scores (≥ 3 corresponding to MMAS-4 > 5 and MMAS-8 > 8), and this did not differ significantly across the treatment groups. Across treatments, non-adherent vs. adherent behavior was associated with significantly poorer health utilities (0.684 vs. 0.734, respectively), worse mental health status (46.0 vs. 51.9), and overall work impairment (24.9% vs. 13.7%), all p < 0.05. Non-adherence was associated with non-significantly higher likelihood of hospitalization in the prior 6 months (24.4% vs. 18.0%, p = 0.19).

CONCLUSIONS: Self-reported non-adherence to oral ET in women with BC was common and associated with statistically significant decrements in health-related quality of life, as well as work productivity impairments. Given the increasing use of oral ET in BC and detrimental effects of non-adherence, interventions to improve adherence in those at highest risk should be developed and tested.

MA2 NON-ADHERENCE TO ANTIPLATELET THERAPY AFTER HOSPITALIZATION FOR ACUTE CORONARY SYNDROME (ACS) INCREASES READMISSIONS, MORTALITY, HEALTH CARE USE AND COSTS

Hill J1, Pokras SM3*, Makin C1, Schabert V7, Nelson M, Foody J

1IMS Health, Plymouth Meeting, PA, USA, 2Brigham and Women’s Hospital, Boston, MA, USA

OBJECTIVES: Current practice guidelines recommend antiplatelet therapy (AT) for ACS patients during and after hospital discharge. Nonadherence has been associated with higher risks of thrombosis, MI and mortality. Real-world studies of AT adherence have been limited by lack of access to inpatient data. This study examines ACS mortality, hospital readmission, and health care costs by AT adherence post-discharge.

METHODS: Patients hospitalized for ACS between 10/1/13 and 9/30/15 were identified from IMS ThruMarket® Records, which link patient-level information from IMS PharMetrics Plus™ health care claims data, IMS hospital charge data master, IMS ambulatory electronic medical record and mortality data derived from the Social Security Death Index. Patients were divided into groups with no diagnosis of ACS 180 days before hospital admission, and with confirmed inpatient AT therapy, were followed until the earlier of 360 days post-discharge or date of death. Adherence was measured by receipt of AT within 30 days post-discharge and by proportion of days supplied (PDS) for the 360 day post-discharge period or up to the dates of death and readmission. Adjusted estimates controlled for patient demographics and CV risk measures pre-index, using logistic regression. Cox regression, and GLM.

RESULTS: Of 2,994 patients selected for analysis, the 4,150 (49%) filling a script for AT within 30 days post-discharge had lower mortality (1.6% vs. 6.4%, p < 0.0001), readmission rates at 30 days (7.8% vs. 14.6%, p < 0.0001), and costs ($24,772 vs. $31,691, p = 0.0001) compared to patients not filling. After adjusting for patient characteristics (e.g., known prior non-adherence to AT), the pooled odds of being adherent (MPR ≥ 80%) was higher for patients with MI (OR = 1.90; 95% CI 1.81-2.00; fixed effects OR = 1.92 [95% CI 1.84-1.99]). CONCLUSIONS: In our meta-analysis, QW dosing was associated with higher MPR values and greater odds of adherence compared to QD dosing in patients with osteoporosis.

MA3 ADHERENCE AND PATIENT REPORTED OUTCOMES IN RHEUMATOID ARTHRITIS PATIENTS RECEIVING BIOLOGIC MEDICATIONS: ANALYSIS OF SPECIALTY PHARMACY PROGRAM DATA

Olive EL1, Crowe MF, Chandanais R2, Nolan R7, Rice G

1NucleusX Market Access, Atlanta, GA, USA, 2Diaphram Pharmacy, Flint, MI, USA

OBJECTIVES: To analyze adherence and patient reported outcomes (PROs) of rheumatoid arthritis (RA) patients taking biologic drugs enrolled in a specialty pharmacy (SP) program.

METHODS: A retrospective analysis of pharmacy claims and PRO data for RA patients enrolled in a SP program and receiving biologic drugs from 10/1/13 to 9/30/15 was conducted. Patients with a primary diagnosis of RA (ICD-9-CM: 714.xx) were included. Only those with at least two pharmacy claims and those with a baseline and at least one follow-up of PRO measures were analyzed. Adherence was measured with the Medication Appropriation Score (MAS) for adherence and realized decreases in pain, fatigue and improvement in functional status.

RESULTS: A total of 2,385 patients were included. The mean age of patients was 54.80 years (± 12.88) and 70.48% were female. The average MAS for all patients was 86.47 (±15.15) over an average of 403.89 days (±167.20). Overall, 36.27% and 38.87% of patients had at least 1-point decrease in the pain NRS and fatigue NRS, respectively. Any reduction in the MAS II score was observed in 46.79% of patients at follow-up, which was statistically significant (p = 0.001). CONCLUSIONS: RA patients treated with biologic drugs had high adherence and realized decreases in pain, fatigue and improvement in functional status.

MA4 SYSTEMATIC LITERATURE REVIEW AND META-ANALYSIS OF MEDICATION ADHERENCE WITH ONCE WEEKLY VS ONCE DAILY THERAPY IN PATIENTS WITH OSTEOARTHRITIS

Iglik Y, Jishi O, Cao X, Mayorga P, Tunzel K

Merci Sharp & Dolme Corp., Whitehouse Station, NJ, USA

OBJECTIVES: To compare medication adherence rates for once weekly (QW) versus once daily (QD) dosing regimens in patients with osteoarthritis. METHODS: A systematic literature review was conducted to identify articles published in English journals focusing on the rate of adherence to medications in patients with chronic disease. Relevant studies were identified using PubMed, EMBASE, and the Cochrane Library databases with a search window from January 2002 through August 2013. Twenty-two observational studies reporting adherence were identified by the PubMed and EMBASE literature review. Twenty-two additional studies published in conference proceedings were identified using a snowball search. Overall, 70 studies were selected for quantitative analysis. The primary outcomes were levels of adherence measured by a medication possession ratio (MPR) (defined as the sum of dispensed days divided by days at risk) and health-related quality of life (HRQoL) including the health utilities (HUI) and the short form-12 (SF-12) health surveys.

RESULTS: The data was compared across treatment groups represented by categorical analysis of 12 studies and meta-analyses of 10 studies. The meta-analyses showed a significant improvement in adherence measured using both categorical and HRQoL measures. However, the meta-analyses showed no significant improvement in adherence measured using the MPR. This is consistent with the findings of our study which showed a significant improvement in adherence measured using the MPR (p < 0.0001).

CONCLUSIONS: The findings of our study are consistent with the findings of previous studies which have shown that once weekly dosing regimens are associated with significantly increased rates of adherence (risk ratio [RR]: 2.04; 95% confidence interval [CI]: 1.47-2.84) and TIA (HR: 1.36; 95% CI: 1.04-1.78). The findings of our study are consistent with the findings of previous studies which have shown that once weekly dosing regimens are associated with significantly increased rates of adherence (risk ratio [RR]: 2.04; 95% confidence interval [CI]: 1.47-2.84) and TIA (HR: 1.36; 95% CI: 1.04-1.78).