taking ratios of predicted prevalence rates for obese versus non-obese individuals. Bootstrapped 95% confidence intervals were generated for prevalence ratios. RESULTS: Among obese adults the unadjusted prevalence of hypertension was (34.40%), followed by dyslipidemia (21.87%), diabetes (16.34%) and asthma (6.92%). Adjusted prevalence of chronic diseases was always higher among obese compared to non-obese and the entire population. The prevalence ratio for diabetes was 3.06 (95% C.I. 2.82 – 3.30) at the age of 20 and was 2.20 (95% C.I. 2.09 – 2.31) at 70 years. At any age, obesity increases the likelihood of these conditions by at least 50% and 70% compared to non-obese individuals. CONCLUSIONS: Prevalence ratios indicate that obesity has highest impact on prevalence of diabetes, followed by hypertension, osteoarthritis, dyslipidemia. Study findings suggest that obesity is not only a disease, but may also be a cause for other chronic disorders. There is a need to develop effective management to combat obesity and thus minimize its impact on other diseases in the United States.

PSY65 ECONOMIC CONSEQUENCES OF UNDER-UTILIZATION WITH TUMOR NECROSIS FACTOR INHIBITORS IN RHEUMATOID ARTHRITIS PATIENTS Carter C1, Gunnarsson C2, Rizzo J3, Bolge S4, Ingham M1
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OBJECTIVES: To identify perceived benefits and disadvantages of intravenous (IV) biologic therapy among patients with immunology conditions currently treated with IV biologic medication. METHODS: Semi-structured telephone interviews were conducted with patients self-reporting a diagnosis of ankylosing spondylitis, Crohn’s disease, psoriasis, psoriatic arthritis, rheumatoid arthritis, or ulcerative colitis and currently receiving IV biologic therapy. Study protocol and questionnaire were approved by an independent institutional review board. Patients were interviewed within 90 days of their last infusion or discontinuation or loss of enrollment. RESULTS: 405 interviews were conducted. Mean satisfaction was 6.1, 77% rated satisfaction as 6 or 7. The most frequently described benefits of IV therapy related to healthcare professional monitoring and oversight at time of infusion. More than half of patients also experience a social benefit of IV administration, including talking to other patients about experiences (56%) and trying in other activities with infusion facility visits (55%). Most commonly described disadvantages of infusion were duration of infusion (41%) and scheduling issues (23%). Of current IV users, most (82%, n=332) prefer an IV medication to a subcutaneous injection. The most common reasons for IV preference were: not wanting to self-inject (43%), less frequent dosing (34%), and preference for healthcare professional administration (24%). Satisfaction with medication and perceived benefits varied somewhat by demographics, immunologic condition, and factors related to treatment. CONCLUSIONS: Current IV biologic users are highly satisfied with their medications. Patients perceive the additional opportunity for improved patient-physician interaction at infusion facilities as a benefit of this mode of administration. These results support the need for continued patient access to IV therapeutic options and shared decision-making between patients and physicians when selecting biologic treatment.

PSY66 PERCEIVED BENEFITS AND DISADVANTAGES OF INTRAVENOUS (IV) BIOLOGIC THERAPY AMONG PATIENTS WITH IMMUNOLOGY CONDITIONS Bolge S, Vanderpoel J, Eldridge H, Mody S, Leifald J, Ingham M
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OBJECTIVES: To identify perceived benefits and disadvantages of intravenous (IV) biologic therapy among patients with immunology conditions currently treated with IV biologic medication. METHODS: Semi-structured telephone interviews were conducted with patients self-reporting a diagnosis of ankylosing spondylitis, Crohn’s disease, psoriasis, psoriatic arthritis, rheumatoid arthritis, or ulcerative colitis and currently receiving IV biologic therapy. Study protocol and questionnaire were approved by an independent institutional review board. Patients were interviewed within 90 days of their last infusion or discontinuation or loss of enrollment. RESULTS: 405 interviews were conducted. Mean satisfaction was 6.1, 77% rated satisfaction as 6 or 7. The most frequently described benefits of IV therapy related to healthcare professional monitoring and oversight at time of infusion. More than half of patients also experience a social benefit of IV administration, including talking to other patients about experiences (56%) and trying in other activities with infusion facility visits (55%). Most commonly described disadvantages of infusion were duration of infusion (41%) and scheduling issues (23%). Of current IV users, most (82%, n=332) prefer an IV medication to a subcutaneous injection. The most common reasons for IV preference were: not wanting to self-inject (43%), less frequent dosing (34%), and preference for healthcare professional administration (24%). Satisfaction with medication and perceived benefits varied somewhat by demographics, immunologic condition, and factors related to treatment. CONCLUSIONS: Current IV biologic users are highly satisfied with their medications. Patients perceive the additional opportunity for improved patient-physician interaction at infusion facilities as a benefit of this mode of administration. These results support the need for continued patient access to IV therapeutic options and shared decision-making between patients and physicians when selecting biologic treatment.

PSY67 LONGITUDINAL ANALYSIS OF INFILUXIMAB DOSING AND INFUSION INTERVALS ACROSS 30 INFUSIONS Carter C1, Haas S2, Gunnarsson C3, Rizzo J4, Ingham M1
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OBJECTIVES: Infliximab (IFA) is an infusable anti-tumor necrosis factor (anti-TNF) drug used in the treatment of rheumatoid arthritis (RA), with Food and Drug Administration (FDA) recommended administrations of 3 mg/kg at weeks 0, 2, 6, and every 8 weeks thereafter. Dosing increases up to 10 mg/kg up to 12 months, and infusion intervals to every 4 weeks may be appropriate based on individual response. Limited data are available presenting weight-based dosing, total quantity administered, and infusion intervals simultaneously over the course of 30 infusions. The objective of this study was to calculate weight-based dosing, total quantity infused, and infusion intervals for RA patients receiving IFA. METHODS: An event-level analysis was conducted using medical/pharmacy claims from the IMS LifeLink™ Health Plan database. Inclusion criteria included: IFX initiation January 1, 2004–December 31, 2007 (i.e., index date); patient age ≥18 years old; 2 RA diagnosis codes (ICD-9 714.xx); and 365 days of IFX persistence (i.e., number of days between first and last IFX treatment). Patients were excluded if they had: psoriatic arthritis (ICD-9 709.60), psoriasis (ICD-9 696.1), ulcerative colitis (ICD-9 556.xx), Crohn’s disease (ICD-9 555.xx), or ankylosing spondylitis (ICD-9 720.0); evidence of any anti-TNF agent 6 months prior to index date, or ever been treated with etanercept or infliximab while on IFX. RESULTS: There were 19,656 IFX infusion events (N=1,189) identified. The median weight-based doses spanned 3.0-4.2 mg/kg. Overall median quantity infused at each infusion spanned 350-477 mg. Median infusion intervals spanned 50-56 days for infusions 4-20. The median infusion intervals spanned 44-50 days for infusions 21-30. CONCLUSIONS: The observed IFX administration schedule was consistent with FDA-approved prescribing of weight-based dosing and infusion intervals over the course of 30 infusions. These data contribute to the published literature by describing a consistent real-world administration schedule over a longer period of time compared to other published studies.
patients were biologic-experienced, and 52 (34%) were biologic-naïve before initiating golimumab. A higher percentage of female patients were in the bio-experienced category (70% vs. 55%). Osteoarthritis (27%), hypertension (24%), dyslipidemia (17%), and depressive disorders (14%) were the most common comorbidities prior to initiating golimumab. A higher rate of depressive disorder was observed in the biologic-experienced group. Baseline mean C-reactive protein test values were also higher in the biologic-experienced group (3.69 vs. 0.97). Biologic-experienced patients on golimumab were switched mostly from adalimumab (n=42) and etanercept (n=45). **CONCLUSIONS:** In this longitudinal EMR, patients receiving golimumab were more likely to have prior biologic experience. Biologic-experienced patients appeared to have higher C-reactive protein test values and greater rates of depressive disorders than their biologic-naïve counterparts.

**PSY65**

**CHARACTERISTICS OF GOLIMUMAB UTILIZATION IN A LARGE NATIONAL PAYER DATABASE**

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**OBJECTIVES:** Golimumab (GLM) is a monthly self-injected anti-tumor necrosis factor alpha therapy providing once-monthly dosing for patients with rheumatoid arthritis (RA), ankylosing spondylitis (AS), and psoriatic arthritis (PsA). This study assesses the baseline characteristics and utilization patterns of patients who received GLM. **METHODS:** We performed a retrospective database analysis of The MarketScan® Research Database from Thomson Reuters. This database contains individual-level, de-identified, healthcare claims information from employers, health plans, hospitals, Medicare, and Medicaid. A total of 29,774 patients in this database had a diagnosis of either RA, PsA or AS and at least one biologic on record, and met the following inclusion criteria: ≥18 years of age at the time of the first diagnosis. From this sample, a total of 174 patients had at least one prescription record for GLM. **RESULTS:** A total of 174 patients receiving GLM were identified as meeting inclusion criteria. 128 of the 174 patients (74%) were biologic naïve. Of these 128 patients, the median and mean time to first GLM dose was 29.5 days and 33.65 ± 15.56 days. When looking at biologic naïve patients the median and mean ± SD dosing interval was 30 days and 35.37 ± 17.63 days versus biologic experienced patients with a dosing interval of 29 days and 33.15 ± 15.00 days. **CONCLUSIONS:** In the MarketScan database, the majority of patients with a prescription for GLM was female and had prior biologic experience. GLM median and mean doses were 29.5 and 33.37 days respectively. Previous biologic experience did not significantly change the GLM dosing patterns.

**PSY66**

**BIOLGIC EXPERIENCE AND DOSING OF GOLIMUMAB PATIENTS IN MANAGED CARE**

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**OBJECTIVES:** Golimumab, a newer anti-tumor necrosis factor agent used in patients with rheumatoid arthritis, psoriatic arthritis, and ankylosing spondylitis, has recommended dosing of 50 mg once monthly. The objective of this study was to describe the biologic experience and dosing for patients using golimumab in the managed care setting. **METHODS:** The IMS LifeLink™ Health Plan database (~100 managed care plans) was utilized to identify patients aged ≥18 years at index and having an index golimumab pharmacy claim started between 4/24/2009 (product approval) and 10/31/2009. Patients were required to have 24 months pre- and post-index continuous enrollment with ≥1 RA, PsA, or AS ICD-9 diagnosis code. Biologic experience was assessed for the pre-index period. Dosing was assessed through end of data or loss of enrollment. **RESULTS:** A total of 282 patients receiving golimumab were identified; 72% were female; mean age was 52 years. The majority (73%) of patients had pre-index biologic experience. Among the biologic-experienced, 42% received 1 unique biologic, 33% received 2 unique biologics, and 7% received 3+ unique biologics before golimumab. Golimumab patients had experience with various combinations of abatacept, adalimumab, certolizumab, etanercept, and infliximab. Adalimumab alone and etanercept alone were the most frequently used biologics prior to golimumab. The median and mean ± SD dosing interval at each of the first six prescriptionfills was 50 mg for over 97% of patients. The mean (median) days between fills spanned 29-33 (29-30) days. **CONCLUSIONS:** The majority of patients receiving golimumab were biologic-experienced. Observed dosing was consistent with prescribing recommendations. Consistency in dosing was observed for the first six prescriptions. The history of biologic use, including pre-index biologic, patients did not have an apparent increased dose requirement upon initiation. Future research is necessary to confirm these findings in a larger sample size over a longer duration of follow-up.

**PSY67**

**REASONS FOR INITIATING INTRAVENTRINE BIOLOGIC THERAPY AMONG PATIENTS WITH IMMUNOLOGY CONDITIONS: SUBSET ANALYSIS OF PRIOR SUBCUTANEOUS INJECTION (SQ) USERS AND IMPLICATIONS FOR SHARED DECISION MAKING**

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**OBJECTIVES:** To understand the reasons for initiating an intravenous (IV) biologic therapy among prior subcutaneous injection (SQ) users, and patient satisfaction before and after switching. **METHODS:** Semi-structured telephone interviews were conducted with 405 immunology patients currently receiving IV biologic therapy. Patients rated their level of satisfaction with current or prior medication on a 7-point Likert scale (7 = Very satisfied, 1 = not at all satisfied) and reported reasons for switching from SQ therapy. **RESULTS:** More than a third (37%) of surveyed IV biologic patients did not administer their medications. Of patients who were not satisfied with their IV medications, 54% (188/341) reported no evidence of pre-index biologic use in the six months prior. Patients were followed for 24 months. Discontinuation was defined as a gap in therapy ≥60 or ≥365 days following the last days supply. **RESULTS:** Total of 1,780 patients were analyzed: ADA = 601 (35.6%); ETA = 785 (44.1%); IFX = 394 (22.1%). If discontinuation was defined as a gap in therapy of ≥60 days, 57.2% of patients treated with ADA discontinued, 57.5% of patients treated with ETA and 37.6% of IFX patients discontinued. If discontinuation was defined as a gap in therapy of ≥365 days, 22.5% of ADA patients, 17.3% of ETA patients and 18% of IFX patients discontinued. Of those defined as ‘discontinuers’ after a gap of therapy of ≥60 days, 49.7% of ADA patients, 62.1% of ETA patients and 12.8% of IFX patients restarted their index therapy on average 146.3, 146.5, and 302.4 days from the time defined ‘discontinuation’. Significantly fewer IFX patients restarted their index therapy (p < 0.0001) and the time from defined discontinuation to restart was longer (p < 0.0001). **CONCLUSIONS:** This analysis demonstrates that different discontinuation rates are observed when different definitions of discontinuation are employed. This may impact the understanding of real-world prescribing patterns. The data also suggests that patients treated with ADA and ETA experience lengthy gaps in therapy. Future research is needed to examine gaps in therapy on clinical and health economic outcomes.

**PSY69**

**MODELING THE IMPACT OF REFILL OR ADMINISTRATION GAPS ON PATIENT OUTCOMES: A COMPARISON OF INHIBITORS ETANERCEPT AND INFliximab**

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**OBJECTIVES:** Prior etanercept drug utilization studies have reported, that among patients with a gap in observed refill time exceeding the recommended refill time, 31-44% of patients experienced gaps greater than 2 weeks. Mean gaps (assessed at each individual refill period) ranged from 19 to 37 days. Limited comparative data exist for infliximab. The objective of this modeling analysis was to assess the impact on drug levels from gaps in prescription refill behavior that may result in under-dosing. **METHODS:** Steady state concentration models for etanercept and infliximab were developed to simulate the effect of missed dosing (i.e., gap in etanercept prescription refill or infliximab administration interval). Results were used to identify percent of patients with trough levels below 1% and 5% of SSTL. Patients were presented to simulate gaps that varied from 1-5 weeks. Population pharmacokinetic models for etanercept and infliximab were used to simulate outcome steady state concentration profiles. The parameters used in these models were extracted from recent publications. **RESULTS:** After a refil or administration gap of one week, etanercept and infliximab concentrations were at 13% and 73% of SSTL respectively. At two weeks, SSTL were 4% and 55% respectively. Etanercept levels were effectively non-existent after three weeks, whereas infliximab was at 40% of SSTL. Clinical implications were not simulated.

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