Psoriasis was associated with a substantial comorbidity burden, including a significantly higher prevalence of autoimmune diseases and other physical and mental comorbidities.

**CONCLUSIONS:** Psoriasis is associated with substantial comorbidity burden, including a significantly higher prevalence of autoimmune diseases and other physical and mental comorbidities.

**PSY5**

**COMPARISON OF USTEKINUMAB WITH OTHER BIOLOGIC AGENTS FOR TREATMENT OF MODERATE-TO-SEVERE PSORIASIS: A BAYESIAN MIXED TREATMENT COMPARISON APPROACH**

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**OBJECTIVES:** To compare efficacy of ustekinumab with other biologics using the Psoriasis Area and Severity Index (PASI) in adult patients with moderate-to-severe psoriasis in the induction phase.**METHODS:** A meta-analysis was conducted for randomized controlled trials (RCTs) of biologics for moderate-to-severe psoriasis. PASI 75 was used as the primary outcome. Bayesian mixed treatment comparison (MTC) was employed by comparing model treatments with age- and gender-matched U.S. general population at trial baseline and DB endpoint.

**RESULTS:** Seventeen studies were selected. The random-effects model was the best fit for the data. For PASI 75, all biologics were significantly more efficacious than placebo, with rank order: ustekinumab (OR = 5.63), adalimumab (OR = 3.56), etanercept (OR = 2.07), but a lower odds compared to infliximab (OR = 2.05). As shown in other studies, ustekinumab also had higher prevalence of comorbidities, including hypertension (41.8% vs. 34.5%), chronic pulmonary diseases (17.7% vs. 12.6%), diabetes (16.4% vs. 12.6%), hyperlipidemia (12.0% vs. 9.3%), and musculoskeletal diseases (7.6% vs. 5.6%). Usteukinumab tumor without metastases (7.2% vs. 5.8%), psychoses (6.5% vs. 4.2%), and peripheral vascular disease (6.4% vs. 4.3%) when compared to Pso-free patients (all p < 0.05).

**CONCLUSIONS:** Usteukinumab is an effective treatment for adult patients with moderate-to-severe psoriasis.

**PSY6**

**THE IMPACT ON SLEEP QUALITY OF BUTRANSSE (BUPRENORPHINE) TRANSDERMAL SYSTEM 5 MCG/HOUR (BTDS 5) AND 20 MCG/HOUR (BTDS 20) DOSAGES IN PATIENTS WITH MODERATE-TO-SEVERE CHRONIC LOW BACK PAIN**

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**OBJECTIVES:** To compare the impact of 12 weeks’ BTDS 20 and BTDS 5 treatment on sleep among patients with moderate-to-severe chronic low back pain (CLBP), to examine changes in the burden of CLBP on sleep with 12 weeks of BTDS use, and to describe sleep outcomes over 12 months of continued BTDS treatment. **METHODS:** This post-hoc analysis used data from a double-blind (DB) randomized trial evaluating BTDS 20 against BTDS 5 for treatment of opioid-experienced patients with moderate-to-severe CLBP and its 12 month open-label treatment extension. During the course of BTDS treatment, patients completed the 12-item Medical Outcomes Study Sleep Scale, which measures several sleep domains, including Disturbance and overall Quality. ANCOVA models compared scores between treatment arms during the 12-week DB phase, and repeated measures mixed models analysis compared scores across treatment and time during the 12-month treatment. Burden was examined by comparing trial patients with an age- and gender-matched U.S. general population sample (GPS) at trial baseline and DB endpoint. **RESULTS:** BTDS 20 patients showed significantly less Disturbance and better overall Quality than BTDS 5 patients (P < 0.05). Baseline matched analyses during the 12-month treatment showed similar results. Baseline Disturbance and Quality scores across DB indicated statistically significant effects for treatment (P < 0.05), but not for visit or their interaction (P > 0.05). No reduction from the DB Disturbance and Quality scores were observed following 12 months of BTDS treatment. Baseline patients’ Disturbance and Quality scores were significantly worse than those of the GPS, by week 12 of the DB phase. BTDS 20 patients’ average scores improved over the GPS, while BTDS 5 patients’ did not. **CONCLUSIONS:** Moderate-to-severe CLBP patients receiving BTDS 20 exhibit larger improvements in sleep Disturbance and Quality than those receiving BTDS 5. Importantly, improvements in sleep were sustained during 12 months of continued BTDS treatment.

**PSY7**

**BLOOD TRANSFUSION MANAGEMENT IN ELECTIVE MAJOR ORTHOPAEDIC SURGERY (MOS) IN FRANCE**

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**OBJECTIVE:** To assess appropriateness of anemia management in order to optimize BT during MOS. **METHODS:** IP (HA) and knee arthropathy (KA) are frequently associated with high volumes of blood loss. When those surgeries are elective, it is possible, with adequate pre-operative management, to decrease blood transfusion (BT). A retrospective study was conducted in a single French centre on consecutive cases of elective surgery undergoing MOS: BTs were: transfusion rate, BT or no BT, according to international guidelines, optimal BT rate according to potential adequate anemia treatment (ESA, oral or IV iron) and administration of tranexamic acid. **RESULTS:** Sixty cases of MOS patients were included with 38 females and 22 males. 40 and 19 patients had undergone HA and KA respectively. 55 patient charts were sufficiently documented to be evaluated. The mean delay for pre-operative consult was 32 days with a minimum of 5 days. According to hemoglobin value recorded and potential blood loss estimated during this visit, it was possible to predict that (in the absence of pharmacological treatment) 18 patients over 55 would be transfused during surgery. Among the 37 patients with no predictable BT, 3 were nevertheless transfused. Among the 18 patients with predictable BT, 14 were not transfused (10 were treated with ESA and 14 with IV iron) and 4 patients (not treated with ESA or iron) transfused. **CONCLUSIONS:** Anemia management in elective MOS could decrease BT during hospitalisation. Current medical practice assessment in a single French centre showed that in 32% of the patients anemia should be treated prior to hospitalisation. Among these patients, one out of 5 was not adequately treated with ESA and/or IV iron and was finally transfused. Approximately half of the BT could be avoided in this centre, which has already a low blood transfusion rate (13%).

**PSY8**

**APPLICATION OF DATA VISUALIZATION TOOL: TREATMENT PATTERNS OF MEDICARE PATIENTS WITH ANKYLOSING SPONDYLITIS WHO INITIATED TUMOR NECROSIS FACTOR THERAPY**

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**OBJECTIVES:** In recent years, methodologies used in outcomes research have advanced. In a field where many disciplines, such as clinicians, epidemiologists, economists and statisticians interact frequently, a tool to communicate information clearly and effectively through graphical means has become a necessity. To present treatment patterns among patients diagnosed with ankylosing spondylitis as using data visualization techniques. **METHODS:** Using 100% national Medicare data with Part D information, we selected patients over the age of 65 with at least one aligned diagnosis (ICD-9-CM codes: 720.00, 720.01, 720.02) at any time between 2006 and 2012. Using a processing language, we created a data visualization tool to demonstrate changes in treatment patterns after the first and second switches. **RESULTS:** A total of 1,159 AS patients (1,159) initiated therapy with TNF. 5.69% of these patients changed in treatment patterns after the first and second switches. **CONCLUSIONS:** Treatment patterns can be difficult to present, especially when analyzing several years of data and various drug switches. Data visualization tools can help present these complicated flows effectively to researchers.

**PSY9**

**PREVALENCE OF OPIOID ABUSE AND ASSOCIATED HEALTH CARE RESOURCE UTILIZATION AND COSTS IN A MANAGED CARE POPULATION**

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**OBJECTIVE:** To determine if opioid misuse and the associated costs of care among patients with opioid misuse (OpA) are high in cost and difficult to present, especially when analyzing several years of data and various drug switches. Data visualization tools can help present these complicated flows effectively to researchers.