(70.4%). Approximately 6,270 (12.7%) had a coded AE. Of the AE patients, 3.2% were persistent with treatment despite the AE, 7.4% switched to another treatment within 8.8 days, and 89.4% discontinued therapy within 31.1 days. AE patients incurred $325 (medical: $143, pharmacy: $182) in rosacea-related costs, while patients without AEs incurred $172 (medical: $14, pharmacy: $157). **CONCLUSIONS:** The majority of AEs associated with current rosacea drugs/formulations resulted in treatment switch/discontinuation. New drug/formulation may provide additional treatment options for patients with AEs and lead to improved persistence and better symptom control.

PSS2

INDIRECT TREATMENT COMPARISON OF INTERVENTIONS FOR NEOVASCULAR (WET) AGE-RELATED MACULAR DEGENERATION (WET AMD)

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OBJECTIVES: To undertake a network meta-analysis (NMA) to assess the effectiveness of licensed interventions (aflibercept 2q8, ranibizumab PRN, pegaptanib and photodynamic therapy (PDT)) in the treatment of neovascular (wet) age-related macular degeneration (wet AMD). **METHODS:** A systematic review was undertaken to identify trials comparing any of the interventions to treat neovascular AMD reporting change in best corrected visual acuity (BCVA). A NMA of the studies was carried out using WinBugs. Identified studies often reported results at multiple time points. Hence, a number of models were applied accounting for the time structure in the data. The deviance information criterion (DIC) was used to select the most appropriate model. Multiple separate networks were applied to the data to account for the fact that posologies were equivalent at some time points. **RESULTS:** 21 trials were included in the network. Aflibercept and ranibizumab were found to be statistically superior to PDT and pegaptanib at 12 and 24 months. The mean change from baseline BVCA estimated between ranibizumab and PDT at 12 months was 18.85 [15.42 to 22.26] and at 24 months was 20.62 [17.25 to 23.96]. The mean change from baseline BVCA estimated between ranibizumab and pegaptanib at 12 months was 11.16 [2.93, 20.63] and at 24 months was 11.71 [3.31, 25.06]. Results for aflibercept were quantitatively similar. There was minimal difference in the effectiveness of ranibizumab and aflibercept at any time point: mean difference at 12 months numerically favoured ranibizumab by 0.05 [-1.33 to 1.52] and at 24 months by 0.02 [-1.36 to 1.44]. **CONCLUSIONS:** Aflibercept and ranibizumab are effective treatments for neovascular AMD demonstrating a clinically and statistically significant difference in BVCA compared with PDT and Pegaptanib. There were only minimal (non-statistically significant) differences in the relative effectiveness of aflibercept and ranibizumab at any time point.

PSS3

COMPARATIVE EFFECTIVENESS OF BIMATOPROST 0.03%/TIMOLOL 0.5% PRESERVATIVE-FREE FIXED COMBINATION FOR THE TREATMENT OF OPEN-ANGLE GLAUCOMA AND OHT; INTERPRETING RESULTS FROM A LARGE TREATMENT NETWORK

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OBJECTIVES: A network meta-analysis (NMA) evaluating the effectiveness of bimatoprost 0.03%/timolol 0.5% preservative-free (PF) fixed combination (PF BTFC) solution in single-dose vials for the treatment of glaucoma/ocular hypertension (OHT) compared to alternative therapies has been updated (Harvey et al 2013). The outcome of interest was change from baseline (CFB) in intraocular pressure (IOP). **METHODS:** Systematic searches originally conducted in October 2012 were updated to identify additional randomized controlled trials investigating the efficacy of glaucoma/OHT therapies, where efficacy is defined as IOP CFB. A Bayesian model with random effects for trial, week and time of day was fitted to synthesize the resulting evidence base. **RESULTS:** In total, 170 studies met the pre-determined mixed treatment comparison inclusion criteria, representing 34 unique treatment arms. PF BTFC was numerically superior to all treatments (monotherapies and combination therapies; preserved and PF therapies) in lowering IOP and statistically significant ($p<0.05$) for all but seven of the 33 comparisons. Furthermore, despite some trials being adequately sized and the treatment effect showing similar levels of uncertainty to others in the network, the credible intervals (CI) for these treatments were among the widest in the network. **CONCLUSIONS:** PF BTFC was numerically but not statistically superior to all treatments in lowering IOP. The sample size required to show statistically significant results in NMAs is larger than for head-to-head randomized trials because the precision of comparisons made across a network is proportional not only to the size and uncertainty of individual trials but also to the number of nodes separating treatments (Thorlund 2012). This is thought to be a key driver of the width of CIs for some treatments within this network. Results from the updated NMA will be presented along with a discussion of the interpretation of results for large and complex networks.

PSS4

EFFICACY OF SECUKINUMAB IN PATIENTS WITH PLAQUE PSORIASIS: AREA UNDER THE CURVE OF TREATMENT RESPONSE RATES

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OBJECTIVES: Assessment of how therapies achieve cumulative disease control over time is critical. In two phase III, 52-week trials (ERASURE and FIXTURE), secukinumab—a human, anti–interleukin-17A, monoclonal antibody—was an effective treatment for moderate-severe chronic plaque psoriasis. Pooled analysis of these trials was performed to explore the cumulative efficacy of secukinumab by assessing area-under-the-curve (AUC) of percentage of treatment responders according to Psoriasis Area and Severity Index (PASI) and Dermatology Life Quality Index (DLQI) scores. **METHODS:** All patients who stayed on the same active treatment for 52 weeks were included. Active treatments were subcutaneous secukinumab 300 mg (n=568) or 150 mg (n=570) at weeks 0, 1, 2, 3, and 4, followed by dosing every 4 weeks, and subcutaneous etanercept 50 mg twice weekly for 12 weeks and then once weekly (n=323). Total AUCs over the 52-week period by percentage of PASI-75/90/100 and DLQI-0/1 (no impact on patient quality of life) responders—measuring overall controlled disease time—were determined using all responder numbers at all scheduled visits. **RESULTS:** Total AUCs for patients who received secukinumab 300 and 150 mg, and etanercept, respectively, were: 3857.8, 3286.9, and 2628.1 (PASI-75); 3017.7, 2212.2, and 1531.8 (PASI-90); 1677.0, 978.9, and 452.5 (PASI-100); and 3029.8, 2492.2, and 1991.4 (DLQI-0/1). Total AUC ratios for secukinumab 300 and 150 mg, respectively, vs etanercept were 1.47 and 1.25 (PASI-75); 1.97 and 1.44 (PASI-90); 3.71 and 2.16 (PASI-100); and 1.52 and 1.25 (DLQI-0/1). Total AUC ratios for secukinumab 300 vs 150 mg were 1.17 (PASI-75), 1.36 (PASI-90), 1.71 (PASI-100), and 1.22 (DLQI-0/1). **CONCLUSIONS:** In patients with moderate-severe plaque psoriasis, greater AUCs by PASI-75/90/100 and DLQI-0/1 responders were achieved with secukinumab 300 mg, followed by secukinumab 150 mg and etanercept. This analysis suggests that secukinumab 300 mg resulted in the best overall disease control over time.

PSS5

KNOWLEDGE AND PRACTICE OF PHARMACY STUDENTS REGARDING THE USE OF SKIN WHITENING PRODUCT

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OBJECTIVES: The aim of this study was to assess the knowledge and practice of International Islamic University Malaysia (IIUM) Kuantan Undergraduate Pharmacy students on the use of skin whitening product. **METHODS:** A self-administered questionnaire on the use of skin whitening product was distributed to IIUM Kuantan Undergraduate Pharmacy students at IIUM Kuantan Malaysia. **RESULTS:** Three hundred and nine (309) of four hundred (400) students responded (77% response rate). The highest percentage of participants is from year three students which is 33.3% while year four students are the least which is 18.8%. The mean of knowledge score, regardless of their year of study is 6.75 over 14. Among the user and non-user of skin whitening products, user shows higher mean knowledge score which is 7.5041 than non-user which is 6.2527.Of the participants, 39.8% (123/309) are using the skin whitening products. 90.8% (108/119) of the respondent read the instruction of the products before using them. **CONCLUSIONS:** It is proven that the user of skin whitening products has better knowledge about the product than the non-user. Half of the participants are still practicing poor practice in using the skin whitening products. There is a need to educate the students about the proper usage of skin whitening products to avoid any misuse of these products.

PSS6

ANTIDEPRESSANT USE IN PATIENTS WITH AGE-RELATED MACULAR DEGENERATION AND DEPRESSIVE SYMPTOMS: BASELINE RESULTS FROM THE LOW VISION DEPRESSION PREVENTION TRIAL

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OBJECTIVES: Characterize baseline utilization of antidepressant and psychotropic medications in older adults with age-related macular degeneration (AMD) and depressive symptoms. **METHODS:** Patients ≥65 years with bilateral AMD and subthreshold depressive symptoms were recruited from a large private retina practice affiliated with a tertiary eye care institution to participate in the Low Vision Depression Prevention Trial testing a multi-component intervention that combined low vision rehabilitation (LVR), home-based occupational therapy, and behavioral activation versus supportive therapy with LVR. Variables considered were age, sex, race, education, marital status, living situation, medical comorbidity, depressive symptoms, and medication use. Medications of interest included prescription antidepressants and psychotropics. Depressive symptoms were measured using the Patient Health Questionnaire-9 (PHQ-9). Scores range from 1 to 27, with higher scores indicating greater severity. Scores ≥5 indicate at least mild depression. **RESULTS:** Of the 188 participants, 70% were female, 98% Caucasian, and the mean age was 84. The mean PHQ-9 score was 5.5 (SD 2.3), and 32% were taking at least one depression and/or psychotropic medication. For those reporting these medications, 47 (25%) reported 1 medication, 12 (6%) reported 2 medications, and one (0.05%) reported 3 medications. Participants with higher PHQ-9 scores were more likely to report ≥1 depression and/or psychotropic medication ($p = 0.001$). No significant associations were found between use of these medications and demographic or medical variables with the exception of cardiovascular disease ($p = 0.033$). **CONCLUSIONS:** Individuals with AMD are at risk for depressive disorders due to the substantial impact vision loss has on quality of life. In this study, about one third of patients reported depression and/or psychotropic medication treatment. While this rate is higher than prior studies, findings suggest an opportunity to increase the number treated with medications and/or behavioral approaches.

PSS7

STUDY OF PSYCHOLOGICAL STRESS AND ACNE VULGARIS AMONG PHARMACY STUDENTS

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OBJECTIVES: Acne vulgaris is described as a common skin disease involving blockage and inflammation of pilosebaceous unit such as hair follicles and sebaceous gland. As many factors may contribute to the formation of acne, this study attempt