Acne vulgaris is described as a common skin disease involving blockage of the pilosebaceous unit such as hair follicles and sebaceous glands. As many factors may contribute to the formation of acne, this study attempts to examine the knowledge and practice of skin whitening products by Pharmacy students in Malaysia. The aim of this study was to assess the knowledge and practice of skin whitening products among Pharmacy students.

**OBJECTIVES:** To undertake a network meta-analysis (NMA) to assess the effectiveness of licensed interventions (afibercept 2qg, 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 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. Afibercept and ranibizumab were numerically favoured by 0.05 [-1.33 to 1.52] and at 24 months by 0.02 [-2.87 to 3.09] respectively compared with PDT and pegaptanib. There were only minimal (non-significant) differences at 12 months. CONCLUSIONS: Afibercept and ranibizumab were found to be statistically superior to PDT and pegaptanib at 12 and 24 months. The mean change in baseline BVCA estimated between ranibizumab and PDT at 12 months was 3857.8, 3286.9, and 2621.8 (PASI-75); 3017.7, 2211.2, 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 vs 150 mg were 1.17 (PASI-75), 1.56 (PASI-90), and 1.71 (PASI-100). Combined 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.

**PPS2**

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

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1Nourris UK, Primley, UK, 2York Health Economics Consortium, York, UK, 3Quantics Consulting Ltd, Edinburgh, UK

**OBJECTIVES:** To undertake a network meta-analysis (NMA) to assess the effectiveness of licensed interventions (afibercept 2qg, 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 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. Afibercept and ranibizumab were numerically favoured by 0.05 [-1.33 to 1.52] and at 24 months by 0.02 [-2.87 to 3.09] respectively compared with PDT and pegaptanib. There were only minimal (non-significant) differences at 12 months. CONCLUSIONS: Afibercept and ranibizumab were found to be statistically superior to PDT and pegaptanib at 12 and 24 months. The mean change in baseline BVCA estimated between ranibizumab and PDT at 12 months was 3857.8, 3286.9, and 2621.8 (PASI-75); 3017.7, 2211.2, 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 vs 150 mg were 1.17 (PASI-75), 1.56 (PASI-90), and 1.71 (PASI-100). Combined 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.

**PS1**

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

Ab Hamid H, Awadh A

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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 to the survey. The highest percentage (44.0%) of respondents chose to use skin whitening products at once 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 was 6.75 over 14. Among the user and non-user of skin whitening products, user shows higher mean knowledge score which is 7.041 as non-user which is 6.257. 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 important 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.

**PS5**

**ANTI-DERESSANT 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:** To explore the utility of baseline measures 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 academic hospital. Of the 127 patients, 18 were excluded due to unmet eligibility criteria for the Low Vision Depression Prevention Trial. A total of 109 patients were randomized. Results: Of the 109 patients, 46 (42%) used antidepressant and/or psychotropic medications. Of these medications, 47 (25%) reported 1 medication, 12 (6%) reported 2 medications, 4 (2%) reported 3 medications, 3 participants (1%) reported 4 medications, 2 participants (1%) reported 5 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 = 0.033). Significant associations were found between use of these medications and demographic or clinical 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 mediation. While this study has been primarily exploratory in nature, future studies, findings suggest an opportunity to increase the number treated with medications and/or behavioral approaches.

**PS7**

**STUDY OF PSYCHOLOGICAL STRESS AND ACNE VULGARIS AMONG PHARMACY STUDENTS**

Ab Hamid H, Awadh A

International Islamic University Malaysia, Kuantan, Malaysia

**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 to examine the knowledge and practice of skin whitening products by Pharmacy students in Malaysia. The aim of this study was to assess the knowledge and practice of skin whitening products among Pharmacy students.