Preschool children with dental caries is associated with high treatment costs and the number of cavities plays an important role in determination of costs. Therefore, preschool children should pay attention to oral hygiene and form good habits to prevent dental caries.

**PSS4**

**BURDEN OF WET AGE-RELATED MACULAR DEGENERATION IN CHINA**

**Zhang Y.**, **Hu S.**, **Chang J.**

Shanghai Jiao Tong University, Shanghai, China; Shanghai Bureau of Health, Shanghai, China; *Beijing Novartis Pharma Co., Ltd, Beijing, China*

**OBJECTIVES:** To explore the burden of wet age-related macular degeneration (WAMD) in China. **METHODS:** Multi-center, retrospective and cross-sectional investigations were adopted. Beijing, Chengdu, Guangzhou and Shanghai were selected as sample cities, and several hospitals were involved in each city. Patients were selected according to inclusive and exclusive criteria, and they were divided into 5 groups according to treatment effectiveness of photodynamic therapy (PDT), support therapy, PDT plus joint therapy and support therapy groups. Direct cost, indirect cost and burden of disease (BOD) were studied. **RESULTS:** 417 eligible patients were acquired, males and females accounted for 51.32% and 48.68% respectively. Burden of WAMD for per eye was 4857 USD. Burden of WAMD of whole disease course for each eye was 33993 USD. The proportion of direct medical cost in BOD was only 26.35%, however, that of indirect cost reached 68.58%. **CONCLUSIONS:** The burden of WAMD is relatively high in China, it should be paid more attention by stakeholder. Although new diagnostic and therapeutic methods may raise direct medical cost, they may reduce total burden of WAMD more, which shows the advantage for new technologies. WAMD guideline will be beneficial to both patients and direct medical cost management. Targeting young patients as a priority of intervention will help to reduce total social burden of WAMD.

**PSS5**

**COST-EFFECTIVENESS ANALYSIS OF LATANOPROST COMPARED WITH DORZOLAMIDE/TIMOLOL FIXED COMBINATION FOR THE TREATMENT OF OPEN-ANGLE GLAUCOMA AND OCCULAR HYPERTENSION PATIENTS IN KOREA**

Lee Y., Park DJ, Ko SK

Fizer Pharmaceuticals Korea Ltd., Seoul, South Korea

**OBJECTIVES:** Glaucoma is a major cause of visual impairment and a chronic disease and patients require lifelong treatment. Management of intraocular pressure (IOP) is the main focus of treatment, and many pharmaceutical treatment agents are recommended and available in Korea. This study was conducted to facilitate efficient allocation of limited resources amongst various pharmaceutical agents. The objective of this study was to evaluate costs and effectiveness of two most commonly used drugs in Korea which are latanoprost and dorzolamide/timolol fixed combination. **METHODS:** A decision analytic model was developed from a payer perspective cost-effectiveness analysis was conducted to evaluate different clinical parameters. **RESULTS:** The final effectiveness values for latanoprost and dorzolamide/timolol fixed combination were 0.9098 and 0.9088 in quality-adjusted life year (QALY) in Korea. The final costs were $50,737,936 and $53,708,969 respectively. Latanoprost displayed an ICER of 21,500,246 KRW/QALY compared to dorzolamide/timolol fixed combination. **CONCLUSIONS:**: Under the currently applied ICER threshold in Korea, latanoprost can be interpreted as a cost-effective treatment compared to dorzolamide/timolol fixed combination on the treatment of glaucoma.

**PSS6**

**A PROSPECTIVE PHARMACOECONOMIC STUDY OF BILATERAL PROSTAGLANDIN/PROSTAMIDE THERAPY FOR LOWERING INTRAOCULAR PRESSURE (IOP) IN THE PATIENTS IN SOUTH INDIA**

Addhikari D., Raghavendra Institute of Pharmaceutical Education and Research, Anantapur, India

**OBJECTIVES:** To determine monthly cost and cost effectiveness of bilateral prosta- glandin/prostaglandin therapy for lowering intraocular pressure (IOP) in patients taking bimatoprost (0.03%), latanoprost (0.005%), or travoprost (0.004%). **METHODS:** This prospective pharmacoeconomic study evaluated the direct cost and cost effec- tiveness of prostaglandin/prostaglandin therapy for reduction of IOP in patients with glaucoma or ocular hypertension. Drops in five new 2.5-ml bottles were counted and then averaged for each drug. Average retail price was determined by surveys of pharmacies. Drop count, average retail price, average wholesale price, and IOP reduction with a single dose of IOP lowering treatment was used to compute annual cost, and cost effectiveness (annual cost-per-mm Hg of IOP reduction) of the three drugs. **RESULTS:** Drops per 2.5-ml bottle averaged 113 for bimatoprost 0.03% (w/v), 84 for latanoprost 0.005% (w/v), and 83 for travoprost 0.004% (w/v). Average retail price of bimatoprost was 718 INR. Average retail price of latanoprost and travoprost averaged 1340 INR and 1380 INR, respectively. **CONCLUSIONS:**: Bimatoprost 0.03% (w/v) had the lowest monthly and annual costs and the greatest cost-effectiveness for lowering IOP compared with latanoprost 0.005% (w/v) and travoprost 0.004% (w/v).

**PSS7**

**A LITERATURE REVIEW ON COST-EFFECTIVENESS OF TREATMENTS FOR WET AGE-RELATED MACULAR DEGENERATION**

Yin X., Peng S., Liu Q., Fan F.

Fudan University, China, Shanghai, China

**OBJECTIVES:** To compare the cost-effectiveness for different therapies to Wet Age-Related Macular Degeneration (wAMD). **METHODS:** Literature Review: Several Database, such as Pubmed, Web of Science, Elsevier, Medline were searching using 16 codes. We applied inclusion criteria to screen the literature. Randomized controlled trials (RCTs), Controlled trials (CCTs), and Controlled before-and-after studies were selected. **RESULTS:** This study focus on three commonly interventions to wAMD: Best Supportive Care (BSC), Photodynamic Therapy (PDT), and Ranibizumab therapy (RAN). The cost-effectiveness analysis were conducted. **RESULTS:**: Compare with BSC and PDT, Ranibizumab therapy was more effective in wAMD treatment in different countries. From social perspective, Ranibizumab therapy was also more cost-effectiveness than BSC and PDT, but in lower 5% in 10 years, however, from third-party perspective, incremental cost-effectiveness ratio (ICER) between Ranibizumab therapy and PDT, and Ranibizumab therapy in different countries. Frequency and duration of Ranibizumab usage may be key determinants of ICER. **CONCLUSIONS:** Ranibizumab therapy have better clinical effect than BSC and PDT in wAMD treatment. Ranibizumab is also more cost-effectiveness than BSC and PDT from social perspective in long term. It may be related to the highly indirect cost of wAMD. However, from third-party perspective, incremental cost-effectiveness ratio (ICER) between Ranibizumab therapy and PDT, and Ranibizumab therapy in different countries. The result of this study was expressed in an ICER of $17,500,246 KRW/QALY. QALY and bevacizumab as needed was the most cost-effective alternative strategy having slightly lower QALYs (17.479 QALYs and 15.917 QALYs in Thailand). The result of this study was expressed in an ICER of $17,500,246 KRW/QALY. QALY.

**PSS8**

**ECONOMIC EVALUATION OF BEVACIZUMAB VERSUS RANIBIZUMAB IN NEOVASCULAR AGE-RELATED MACULAR DEGENERATION IN CHINA**

Li H.1, Li X.1, Xie H.2

1China Pharmaceutical University, Nanjing, China, 2People’s Hospital, Peking University, Beijing, China

**OBJECTIVES:** To evaluate the cost-effectiveness of the off-label used bevacizumab versus ranibizumab for patients with neovascular age-related macular degenera- tion (AMD) in China. **METHODS:** Two different Markov model were used separately to compare cost per quality-adjusted life year (QALY) of four strategies defined by drug (bevacizumab or ranibizumab) and dosing regimen (monthly or as needed) in patients with neovascular AMD in China’s health care system. The VA Range model defines the visual acuity (VA) range as the health states and the VA ranges from 1-500 corresponds to the degree of VA changes from the time when entering the model. Both models used a life time horizon with a cycle length of 3 months. Clinical data used in the models primarily came from the Comparison of AMD Treatment Model (CATT), while the costs came from the financial department of a tertiary hospital in Beijing. **RESULTS:** In the base-case analyses, bevacizumab needed strategy was slightly lower QALYs (17.47 QALYs and 15.917 QALYs in the VA Change model and the VA Change Model, respectively) but at much lower costs (CN¥88,341 and CN¥79,967 in the VA Range model and the VA Change model, respectively) compared with the other three strategies. In probabilistic sensitivity analysis in both models, the probabilities of bevacizumab strategies being more cost-effective than ranibizumab strategies exceeded 99% if the willingness-to-pay (WTP) threshold for a QALY was less than CN¥120,000. When the threshold was less than CN¥90,000 per QALY, bevacizumab as needed was the most cost-effective alternative strategy. **CONCLUSIONS:** Bevacizumab was needed strategy was the most cost-effective strategy compared with the ranibizumab strategies in treating patients with neovascular AMD, if the WTP threshold is below CN¥90,000 per QALY in China. This novel cheaper treatment can substantially reduce the burden to the Chinese aging society.

**PSS9**

**COST UTILITY ANALYSIS OF USTEKINUMAB FOR THE TREATMENT OF MODERATE TO SEVERE CHRONIC PLAQUE PSORIASIS IN THAILAND**

Tanapongpun P1, Leartsukalpanitch T.

1Thaigerd (Thailand) Limited, Bangkok, Thailand, 2Ansam Asia Pacific, Singapore

**OBJECTIVES:** To evaluate the cost-utility of ustekinumab versus infliximab and etanercept, the only biologic agents available for psoriasis in Thailand, among adults with moderate-to-severe plaque psoriasis who fail to respond to systemic therapies and meet criteria based on the biologic guideline for psoriasis in Thailand. **METHODS:** The published ‘York psoriasis model’ was modified based on the current treatment algorithm and criteria of biologics use in Thai psoriasis guideline. Short-term trial efficacy data (PASI response) from a published network meta-analysis of RCT was used to model the response of patients to initial treatment. Beyond the initial period, the model extrapolated results up to 10 years with annualized data. Over the whole model, both bevacizumab and ranibizumab were compared with the following treatment arms: (1) tumour necrosis factor alpha (TNF-α) inhibitors (infliximab and etanercept), (2) targeted therapies (ustekinumab, adalimumab, golimumab, certolizumab pegol, and abatacept), and (3) a combination of targeted therapies and biologics. **RESULTS:** Both bevacizumab and ranibizumab were more cost-effective than BAC and PDT from social perspective in long term. The result of this study was expressed in an ICER of $17,500,246 KRW/QALY. QALY.

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cect and infliximab showed the ICR of 6.719,775 balt/hQALY compared to ustekinumab. The probability of cost-effectiveness at 2% of 120,000 balt/hQALY remained in favor of ustekinumab at 72.60% and presented at 13.60% for both etanercept and infliximab. **CONCLUSIONS:** Ustekinumab seems to be more cost-effective than etanercept and infliximab for patients with moderate-to-severe plaque psoriasis following biologic treatment guideline for psoriasis in Thailand.

**SENSORY SYSTEMS DISORDERS – Patient-Reported Outcomes & Patient Preference Studies**

**PSS10**

**ADHERENCE, PREDICTING FACTORS AND SATISFACTION OF PATIENTS ON GLAUCOMA THERAPY: FINDINGS FROM A CROSS-SECTIONAL STUDY IN KOREA**

Park EJ¹, Cha JH²

1Seoul National University College of Medicine, Seoul, South Korea, 2Pfizer Pharmaceuticals Korea Ltd., Seoul, South Korea

**OBJECTIVES:** The aim of the study was to identify adherence and predicting factors for non-adherence and to assess the association of adherence with patient satisfaction of glaucoma therapy. **METHODS:** The study population included 1,046 glaucoma outpatients with less than two years of drug use recruited at 15 eye clinics from March to November 2013. All patients completed a self-administered questionnaire asking about their daily use of glaucoma medications to estimate adherence and patients’ baseline characteristics to examine predicting factors for non-adherence. Adherence was defined as patients administering the drug for ≥90% of prescribed days. Patient satisfaction was also measured using the 14-item Treatment Satisfaction Questionnaire for Medication (TSQM) questionnaire which provided scores on four sub-scales: medication effectiveness, side effects, convenience and global satisfaction. The scores on TSQM are ranged to 100 where higher scores indicate better satisfaction. **RESULTS:** Of 1,046 patients, 71.5%showed to be adherent to their glaucoma therapy while 28.9% accounting for 298 of patients remained non-adherent. The predicting factors for non-adherence were found to be patients age (<30 years old, p=0.005). Non-adherent patients showed less satisfactory to treatment than adherent patients as displayed by relatively lower scores in all sub-scales on TSQM. In the scores on the TSQM, the largest difference between non-adherent and adherent patients was observed on medication effectiveness (26.07±12.21 vs. 59.21±14.27, p<0.01). **CONCLUSIONS:** One third of the study population were non-adherent, and age and employment status were included. The majority were boys (52.1%), younger than 3 years old (55.0%), and employed (p<0.01). However, the total outpatient prescription cost was highest for cefdinir ($1,736,640), followed by amoxicillin-clavulanate ($2,798,234), amoxicillin-clavulanate and cephalosporins were significant predictors (p<0.001). **CONCLUSIONS:** Predicting evidence including predefinitions for selected OM-related antibiotics declined between 2008 and 2011 in the Texas Medicaid pediatric population.

**SYSTEMIC DISORDERS/CONDITIONS – Clinical Outcomes Studies**

**PSY1**

**SECOND GENERATION AZOLES FOR PROPHYLAXIS AGAINST INFECTIVE FUNGAL INFECTION: IS VORICONAZOLE EQUIVALENT TO POSACONAZOLE IN HAIDMATOLOGY PATIENTS?**

Zhan FL, Wong AM, Ryan S, Struwig VA

Pfizer Australia, West Ryde, Australia

**OBJECTIVES:** No randomised controlled trial has compared voriconazole and posaconazole for prophylaxis against invasive fungal infections (IFI) in high risk haematology patients. We performed a systematic review and indirect comparison of voriconazole versus posaconazole using itraconazole/fluconazole as the common comparator. **METHODS:** An updated search was performed on all randomised controlled trials and non-randomised studies. **RESULTS:** A total of 4 RCTs and 4 non-randomised studies that evaluated voriconazole or posaconazole were included. In these studies, two risk groups were identified on the basis of disease type – the haemopoetic stem cell transplant (HSCT) at risk of GVHD population, and acute myeloid leukaemia or myelodysplastic syndrome (AML/MDS) population. The indirect estimates of risk differences (RD) were not statistically significantly different from 0.0, therefore indicating that voriconazole is not worse than posaconazole in terms of the incidence of proven or probable IFI [RD (95% CI): -0.00 (-0.07, 0.06) in HSCT/GVHD; 0.03 (-0.09, 0.16) in AML/MDS]. **CONCLUSION:** Results should be interpreted with caution due to heterogeneity between the risk level of patient populations. However, the robustness of the indirect comparisons can be supported by the four direct non-randomised studies which consistently demonstrated similar efficacy of voriconazole and posaconazole and superior efficacy of voriconazole over itraconazole and fluconazole based on the incidence of breakthrough IFI. **CONCLUSIONS:** The clinical evidence presented in the direct and indirect comparisons consistently demonstrate that there are no statistically significant differences between voriconazole and posaconazole in terms of efficiency of outcomes. Voriconazole offers an alternative treatment option for patients with IFI, only reimbursed and claimed under the Australian Pharmaceutical Benefits Schedule for prophylaxis of IFI.

**PSY2**

**INTERCHANGEABILITY STUDY OF MULTISOURCE PARACETAMOL 500MG TABLETS, PRODUCED IN MONGOLIA**

M.K. Khulan, O. Lkhagvasuren, A. Battulgamar

Fourth Health Sector Development Project, Ulaanbaatar, Mongolia

**OBJECTIVES:** To define interchangeability of locally produced Paracetamol (Acetaminophen INN) 500mg tablets. **METHODS:** For this purpose Paracetamol 500mg tablets produced by 7 local manufacturers were tested. As a comparator product was used Panadol 500mg, produced by GlaxoSmithKline. Bioequivalence testing was done according to the WHO guideline, Multisource (generic) pharmaceutical products: guidelines on registration requirements to establish interchangeability, WHO Technical Report Series, No.937, 2006. Based on Biopharmaceutics Classification System Paracetamol tablets bioequivalency testing was done in vitro through determination of dissolution. **RESULTS:** In each media of pH 1.2, 4.5 and 6.8 were tested 12 unit samples. All samples were dissolved in three media in not less than 85% of the labelled amount of the paracetamol in 15 minutes. According to the questionnaire, all manufacturers producing Paracetamol tablets answered that the formulation of dosage form was considered the attribute of active pharmaceutical ingredient and excipients and used machinery’s specification. As criteria for choosing the formulation, manufacturers used pharmacopoeial monograph, stability study data and dissolution results. Mongolian manufacturer’s Paracetamol formulations not contain excipients such as sodium bicarbonate, which is fastening the drug absorption. Three manufacturers use Povidone as a binder, same like comparator product. Most formulations contain Talc and Magnesium stearate as a lubricant, which contains Stearic acid and magnesium stearate. And these excipients contain starch and cellulose, their derivate. **CONCLUSIONS:** Paracetamol 500mg tablets produced by all 7 local manufacturers: LM1, LM2, LM3, LM4, LM5, LM6 and LM7 were the same and dissolution more than 95% in 15 minutes in each of three media. Therefore the dissolution profile comparison with an f2 test is unnecessary [4]. Samples: LM1, LM2, LM3, LM4, LM5, LM6 and LM7 are bioequivalent and could be interchangeable with comparator pharmaceutical product.

**PSY3**

**CLINICAL EFFICACY OF THE POLYHERALDARY MEDICINE IN THE MOUNTAIN AREA IN OVERALL HEALTH IMPROVEMENT**

Sasikumar UH1, Acharya S2, Reddy K2, Nagappa AN2

1Acharya Institute of Medical Sciences, Bellary, Karnataka, India, 2Aditya Institute of Medical Sciences, Bangalore, India

**OBJECTIVES:** The study was undertaken to evaluate the efficacy of herbal medicine in the overall health improvement of patients suffering from chronic fatigue, dyslipidemia, and other chronic diseases. **RESULTS:** 201 patients were selected for the study, out of which 11 persons were found to be having chronic fatigue, 75 persons had dyslipidemia, and 115 persons had other chronic diseases. **CONCLUSIONS:** The study did not show any significant difference in the overall health improvement of patients suffering from chronic fatigue, dyslipidemia, and other chronic diseases.