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

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Objective: To explore the burden of wet age-related macular degeneration (WAMD) in China.

Methods: Multi-center, retrospective and cross-sectional investigations were conducted. 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: Normal vision (NV), early stage of visual effectiveness (EVT), poor visual effectiveness (PVT), poor visual loss (PVL) and no treatment group (JTC). Cost-utility analysis was conducted. 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 per year was 4857 USD. Burden of WAMD of whole disease course for each eye was 33999 USD. The proportion of direct medical cost in BOD was only 26.35%, however, that of indirect cost reached 68.58.

Conclusion: 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/TIMOLOLID FIXED COMBINATION FOR THE TREATMENT OF OPEN-ANGLE GLAUCOMA AND OCULAR HYPERTENSION PATIENTS IN KOREA

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Objective: Glaucoma is a major cause of visual impairment and a chronic disease that cannot be treated for lifetime. Management of intraocular pressure (IOP) is the main focus of treatment, and many pharmacological treatment agents are recommended and available in Korea. This study was conducted to facilitate efficient allocation of limited resources amongst various pharmacological 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/timololid fixed combination.

Methods: A decision analytic model was developed from a payer perspective to compare cost-utility effectiveness. Cost-utility effectiveness was measured in quality adjusted life year (QALY) and the incremental cost-utility ratio (ICER). One-way sensitivity analysis was conducted on the current treatment algorithm and criteria of biologics use in Thai psoriasis adults with moderate-to-severe plaque psoriasis who fail to respond systemic therapies and meet criteria based on the biologic guideline for psoriasis in Thailand.

Results: Considering the cost-utility ratio, ustekinumab was dominant compared to etanercept, biologics acquisition, monitoring lab tests, outpatient visit, and traveling expense were transposed into utility gain (EQ5D) and applied to PASI response level regardless of the treatment. After studies were selected. One study focus on three commonly interventions to WAMD: Best Supportive Case (BSC), Photodynamic Therapy (PDT), and Ranibizumab therapy. Ranibizumab therapy was more effective in WAMD treatment in different countries. From social perspective, Ranibizumab therapy was also more cost-effectiveness than BAC and PDT either in 5 years or in 10 years. However, from third-party perspective, cost-effectiveness ratio between Ranibizumab and BAC, Ranibizumab and PDT, varied in different countries. Frequency and duration of Ranibizumab usage may be key determinants of ICER. Ranibizumab therapy has better clinical effect than BAC and PDT in wAMD treatment. Ranibizumab is also more cost-effectiveness than BAC and PDT from social perspective in long term. It may be related to the highly indirect cost of wAMD. However, from third-party perspective, cost-effectiveness ratio between Ranibizumab and BAC, Ranibizumab and PDT is much cheaper treatment can substantially reduce the burden to the Chinese aging society.

PSS7

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

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Objective: To evaluate the cost-effectiveness of the off-label used bevacizumab versus ranibizumab for patients with neovascular age-related macular degeneration (AMD) in China. Methods: Two different Markov models 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 provided cost-utility effectiveness ratio (CER) which defines the health states according to the degree of VA changes from the time when entering the model. Both models used a lifetime horizon with a cycle length of 3 months. Clinical data used in the models primarily came from the Compare, Incremental cost-effectiveness ratio (ICER) between Ranibizumab and BAC, Ranibizumab and PDT, varied in different countries. Frequency and duration of Ranibizumab usage may be key determinants of ICER. Ranibizumab therapy has better clinical effect than BAC and PDT in wAMD treatment. Ranibizumab is also more cost-effectiveness than BAC and PDT from social perspective in long term. It may be related to the highly indirect cost of wAMD. However, from third-party perspective, cost-effectiveness ratio between Ranibizumab and BAC, Ranibizumab and PDT is much 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

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Objective: 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 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 ofRCT was used to model the response of patients to initial treatment. Beyond the initial period, the model extrapolated results up to 10 years with assumptions of treatment adherence, monthly treatment withdrawal. The DLQI scores from ustekinumab were transposed into utility gain (EQSD) and applied to PASI response level regardless of the treatment received. Both direct medical cost and non-medical cost including biologic cost, monitoring, hospital stay was also included in the current analysis. The amount of resource consumption was estimated by experts' opinions and literatures. Cost and outcomes were discounted at 3%. One-way and probabilistic sensitivity analysis was conducted to assess the model robustness.

Results: Cost-utility effectiveness ratio (CER) between Ranibizumab and BAC, Ranibizumab and PDT, varied in different countries. Frequency and duration of Ranibizumab usage may be key determinants of ICER. Ranibizumab therapy has better clinical effect than BAC and PDT in wAMD treatment. Ranibizumab is also more cost-effectiveness than BAC and PDT from social perspective in long term. It may be related to the highly indirect cost of wAMD. However, from third-party perspective, cost-effectiveness ratio between Ranibizumab and BAC, Ranibizumab and PDT is much cheaper treatment can substantially reduce the burden to the Chinese aging society.