OBJECTIVES: To estimate the incremental cost-utility ratio (ICUR) for ingenol mebutate versus diclofenac 3% for acinetic keratosis (AK) patient’s treatment on the face, scalp, and trunk and extremities, in Spain. METHODS: A hypothetical cohort of 73 aged AK patients was simulated for a 5-year time horizon with a Markov model. Duration of treatments was 3 days (face-scalp) and 2 days (trunk-extremities) for ingenol mebutate versus diclofenac 3% for face-scalp and trunk-extremities for diclofenac. Total clearance rates (42.4% and 24.0% for ingenol mebutate and 24.6% and 25.0% for diclofenac on face-scalp and on trunk-extremities, respectively) obtained from indirect mixed comparisons and adjusted according to clinical experience were used as effectiveness measure. Annual recurrence rate (20%) derived from literature. The perspective of the Spanish National Health System (NHS) was chosen. Total cost estimation ($17,600) included: pharmaceutical cost (retail price VAT included with 10% mandatory reduction), and dermatology visits cost (for AK treatments for 10 years) and disease management. A 3% annual discount rate was applied for costs and outcomes. Utilities values (0.986 for AK and 1 for clearances) were derived from the CLEAR study, a head-to-head 52-week superiority trial (SEC vs. UST). Several sensitivity analyses were performed to test model robustness. RESULTS: Ingenol mebutate showed higher effectiveness, with 0.192 incremental clearances and 0.011 incremental QALYs (face-scalp), and 0.129 incremental clearances and 0.007 incremental QALYs (trunk-extremities) compared to diclofenac. Total costs accounted were $551.50 and $622.27 (46% drug cost) for ingenol mebutate, compared to $494.11 and $844.93 (54% drug cost) for diclofenac (for face-scalp and trunk-extremities, respectively). Ingenol mebutate versus diclofenac 3% was dominant on face-scalp and trunk-extremities AK treatment. Further, ingenol mebutate remained a dominant option in 96% (face-scalp) and 91% (trunk-extremities) of the 1,000 MonteCarlo simulations of probabilistic sensitivity analysis. CONCLUSIONS: Ingenol mebutate was a dominant strategy for Spain and Italy, cost-saving diclofenac 3%, for treatment of patients with AK both face-scalp and trunk-extremities.

PSS5 A COST-EFFECTIVENESS ANALYSIS OF SECUKINUMAB 300 MG VS CURRENT THERAPIES FOR THE TREATMENT OF MODERATE TO SEVERE PLAQUE PSORIASIS IN ITALY

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OBJECTIVES: Several recent clinical trials have proven that secukinumab (SEC), an IL-17A antibody, was recently approved as a highly effective therapy for moderate-to-severe plaque psoriasis (PsO). We examined the cost-effectiveness of SEC compared against other systemic biologic drugs: adalimumab (ADA), etanercept (ETA), infliximab (INF), ustekinumab (UST) and standard of care (SOC - cyclosporine and methotrexate) for plaque psoriasis, in the Italian National Health System (NHS) setting. METHODS: A previous cost-effectiveness model was adapted to the Italian healthcare setting. The model was based on two arms to the cost and costs related to SEC to SOC. A decision tree reflecting response to treatment (PASI change <50, 50-75, 75-90, 90-99, 100) led into a long-term Markov model with health states related to treatment continuation, dropout, and death. Clinical data (PASI change scores, percentage of adverse events, discontinuation rate) and utility scores were derived from clinical trials as well as from published evidence on Italian patients. The perspective of the model is the Italian NHS, therefore only direct medical costs (drug prices, hospital visits, outpatient hospital, absences, etc.) were taken into account. Both costs and benefits were discounted at 3% according to Italian National Guidelines for Health Economics Evaluations. Incremental cost-effectiveness ratios (ICERs) were calculated for utility effectiveness results in all analyses. RESULTS: At 10 years, SEC was found to be a cost-effective option compared with UST. SEC is a cost-effective option compared with UST, with a threshold <50,000/QALY gained as per National Health Economic Evaluation Guidelines. ETA and SOC were dominated, due to inferiority in the cost-utility plane. Sensitivity analyses showed that SEC was cost-effective compared with UST. CONCLUSIONS: The model shows that SEC is a cost-effective option when compared to other biologic agents and SOC currently funded by NHS in Italy for the treatment of moderate-to-severe plaque psoriasis.

PSS51 COST-EFFECTIVENESS ANALYSIS OF SECUKINUMAB COMPARED TO USTEKINUMAB IN THE TREATMENT OF MODERATE TO SEVERE PLAQUE PSORIASIS IN THE CZECH REPUBLIC

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OBJECTIVES: Secukinumab (SEC), an IL-17A antibody, is a new highly effective therapy for moderate-to-severe plaque psoriasis (PsO). Ustekinumab (UST) is reimbursed in the Czech Republic under the condition of ≥PASI50 response at week 16. We estimated the cost-effectiveness of SEC vs. UST based on different post-treatment (dis)/continuation criteria, PASI75 for SEC and PASI50 for UST. METHODS: A decision tree reflecting response to treatment (PASI change <50, 50-75, 75-90, 90-99, 100) led into a long-term Markov model with health states related to treatment continuation, dropout, and death. Responders at week 16 (≥PASI75) were assigned to treatment continuation, while non-responders and dropout were switched to standard-of-care (MTX, CyA, emollients). A health-care system perspective with 3% discount rate was adopted. Baseline patient characteristics and efficacy data from the CLEAR study, a head-to-head 52-week superiority trial (SEC 300 mg vs. UST 45/90 mg). Long-term persistence and response were modeled to assess the clinical and cost-effectiveness of SEC and UST. RESULTS: With a 10-year time horizon, SEC treatment gains 0.05 QALYs and 0.80 years in PASI90 vs. UST, reflecting dominance of SEC vs. UST. CONCLUSIONS: SEC and UST were 6.84, 2.87, €54,628 and 6.79, 2.08, €54,572, respectively. Probabilistic sensitivity analysis indicated robustness of the model. The conclusions of dominance/highly cost-effective approach for SEC vs. UST can be supported considering stricter criteria for response (≥PASI75 instead of ≥PASI50) for treatment discontinuation for highly efficacious PsO therapy (SEC). Result in overall greater QALYs and cost savings for the health-care system.

PSS52 HEALTHCARE RESOURCE UTILIZATION AMONG CHRONIC SPONTANEOUS/IODOPHIC URTICARIA PATIENTS—FINDINGS FROM THE FIRST INTERNATIONAL BURDEN OF ILLNESS STUDY (ASSURE-CSIU)

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OBJECTIVES: There are limited data on healthcare resource utilisation associated with chronic spontaneous (iodopic) urticaria (CSIU/CIU) patients. ASSURE-CSIU is an observational, multinational study conducted to identify and quantify burden of illness in these patients. Data on resource utilisation were collected in Canada, Czech Republic, Italy, Germany, UK, and USA. METHODS: A cross-sectional patient-reported outcomes survey. Adult CSU/CIU patients with disease persistency for ≥12 months were assessed. Data on resource utilisation were extracted from patient medical records, and reported descriptively. RESULTS: Medical records were abstracted for 99 patients each in Canada and the Netherlands, 100 in Germany and 83 in the UK. In Canada, 83% patients had ≥10 visits to a healthcare provider. In the Netherlands, 3% (±1.7) visits annual in the prior 12 months, visits to allergists and dermatologists were reported by 72% and 11% patients, in Germany, 52% patients visited HCPs [annual visits: 3.8 (±1.1)]. Hospitalisations and emergency room (ER) visits were reported by 18% and 15% patients. Allergists and dermatologists were visited by 33% and 31% patients. In UK, 86% patients visited HCPs [annual visits: 3.7 (±2.8)]. Dermatologists were seen by 54% patients, allergists by 30% and hospital nurses by 15% patients in the Netherlands [annual visits: 4.1 (±3.8)]. Visits to dermatologists, allergists and other consultants were reported by 51%, 42% and 13% patients. ER visits and hospitalisations were less frequent in Canada, the UK and the Netherlands compared with Germany. CONCLUSIONS: This is the first study to quantify resource utilisation associated with inadequately controlled CSU/CIU. The types of medical resources differ among the countries depending on the local healthcare specificities. Resource utilisation pattern was primarily outpatient driven but varied across countries.