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QUALITY OF LIFE (QOL) AND OTHER ENDPOINTS COMPARISON IN THE TREATMENT OF FACIAL LIPOATROPHY WITH INJECTION OF POLY-L-LACTIC ACID

Duracinsky M[1], Dolivo M[2], Beaulieu P[3], Timsit J[2], Secchi T[4], Mouly F[5], Lalanne B[6], Leclerc P[7], Chassany O[8]

[1]Centre Hospitalier Universitaire de Bicetre, Le Kremlin-Bicetre, France, [2]Hop St Louis, paris, France, [3]Dermatologue, Pontoise , France, [4]Dermatologue, Lyon, France, [5]Dermatologue, paris, France, [6]Chirurgien Plasticien, paris, France, [7]CHU Grenoble, Grenoble, France, [8]Assistance Publique—Hopitaux de Paris, Paris, France

OBJECTIVES: Lipodystrophy (LD) impacts QoL of HIV patients. Facial lipoatrophy (FL) is particularly stigmatizing. Patient Reported Outcomes measures (PROs) are not often used as a *primary* endpoint to measure interventions specific to LD. The aim of this study was to evaluate the QoL (primary endpoint) and other endpoints of HIV patients treated for FL by poly-L-lactic acid (PLLA) injection. **METHODS:** 245 patients with FL were included in an open label prospective study and treated with 1 to 5 treatment sessions at monthly intervals. Specific PROs were evaluated by the Assessment of Body Change and Distress (ABCD), including: QoL (21 items with 4 domains, 0–100 scale), signs of LD (6 items, 0–6 point scale), and global satisfaction (1 item, 1–5 point scale) at baseline and 2 months after the last injection. The Overall Treatment Effect (OTE) (scale from −7 to + 7) was also assessed at this date. Photographs were evaluated, blind by experts using James' grading (1–4, 4 being severe FL). **RESULTS:** 191 patients completed the questionnaires. Mean age was 48 ± 8 years, 87% men, with FL since 5 ± 3 years. The mean number of treatment sessions was 4 ± 1.3. The QoL global score improved significantly by +13,5 points (+24 %, $p < 0{,}001$) and each of 4 domains improved: Satisfaction with the appearance +14,7 points; Psychosocial impact +15,4; Fear of Future +10,5 and Relation with HAART +4,1. Global satisfaction improved from 2,6 to 3,3. Score of LD signs improved from 3,3 to 2,2. The OTE improved by 5,3 ± 1.5 points. Photographs' grading improved by 1.2 ± 0.7 points. All results were significant ($p < 0{,}001$). QoL score and Photo's grading were not significantly associated. **CONCLUSIONS:** QoL for people with FL improved significantly after PLLA injection. However, a modest correlation between PRO's and photographs suggest that PRO's are important endpoints in LD management interventions.

PIN72

TRANSLATION OF THE HIV PATIENT SYMPTOMS PROFILE INTO 5 LANGUAGES SPOKEN IN ISRAEL

Brunel V, Salmassi L

MAPI Institute, Lyon, France

OBJECTIVES: Prior to use in an international clinical trial in 15 countries involving individuals suffering from HIV, the 87-item HIV PATIENT SYMPTOMS PROFILE (HPSP), underwent linguistic validation in 21 languages to ensure conceptual equivalence, cultural relevance and harmonisation across languages. Special care had to be taken when producing the 5 translations for Israel (**Arabic, Amharic, English, Hebrew** and Russian) **to adequately address the nuances associated with the diverging cultural** heritage of these languages. **METHODS: The following standardized methodology** was employed: after a definition of the original concepts by the developer, the translation process was coordinated by a specialist for each target language involving the following steps: 1) two forward translations by professional translators, native speakers of the target language and fluent in English; 2) comparison and reconciliation of the translations; 3) backward translation by a native English speaker; 4) comparison of source and backward version; and (5) comprehension test on 6 HIV patients for each language. **RESULTS: Linguistic and conceptual issues emerged during the translation** process in Israel, when addressing the issues outlined above. **The most recurrent** challenge was the absence of words in the target languages for specific concepts described in the English original. The translations had to resort to paraphrases and descriptions to provide the most appropriate approximation of the original notion in the target languages. Examples and their solutions will be described in the presentation. **CONCLUSIONS: The 5 languages for Israel were produced according to** a rigorous methodology to ensure conceptual equivalence, cultural relevance and harmonisation across countries whilst addressing the specific challenges of multiple languages spoken in one country. The rigorous methodology used to translate the HPSP will be necessary for the future psychometric analyses once international data are obtained for this instrument.

INFECTION – Health Care Use & Policy Studies

PIN73

CRITICAL CARE ADMISSIONS FOR PNEUMONIA IN ENGLAND

Das R

AstraZeneca UK Ltd, Luton, UK

OBJECTIVES: Assessment of length of stay and patient flow pathway of patients after admitted to Critical Care (Intensive Care Units [ICUs] or High-Dependency Units [HDUs]) with Pneumonia. **METHODS:** The analysis is based on inpatient hospital admission data from the National Health Service (NHS)'s Hospital Episode Statistics (HES) Database for England in 2005–2006. The study analysed patients admitted to an ICU with a primary or secondary diagnosis of Pneumonia. The bed days of and the destination of patients after the first ICU stay (i.e. where the patients had not previously been admitted to Critical Care with Pneumonia in the same inpatient spell, based on the period from date of admission to date of discharge from hospital or death) formed the primary analysis. The same analysis for those patients moving to an HDU after their first ICU stay was conducted. **RESULTS:** In 2005–2006, 838 ICU stays that met the criteria were identified. The average bed days for the first ICU stay for patients with Pneumonia was 11.0 days (standard deviation [SD] 11.7 days). Of the patients in ICU with Pneumonia, 19.2% died. Of the remaining patients (where the destination data was recorded), 31.1% were moved to an HDU unit (same hospital), 67.7% moved to a non-critical ward (same hospital) and 1.2% were directly discharged from hospital. Of those patients that were moved into an HDU unit, the average bed days was 5.0 days (SD 5.7 days). At the end of their HDU stays, based on the destination data recorded, 75.9% were moved to a non-critical ward (same hospital), 21.7% were back to an ICU unit and 2.4% were discharged. Overall, the length of stay in hospital for patients with Pneumonia treated in critical care was, on average, 24.8 days (SD 23.2 days). **CONCLUSIONS:** At the end of the first ICU stay with Pneumonia, 19.2% died.

PIN74

LEAST COSTLY VACCINATION STRATEGY (WITH OR WITHOUT SCREENING FOR ANTOBODIES) FOR HEPATITIS A, HEPATITIS B, VARICELLA, MEASLES AND TETANUS IN CATALONIA, SPAIN

Plans–Rubió P[1], Huang H[2]

[1]General Directorate of Public Health, Barcelona, Spain, [2]Boston Health Economics, Waltham, MA, USA

OBJECTIVES: To determine the least costly immunization strategy, with or without screening for antibodies, against hepatitis A, hepatitis B, varicella, measles and tetanus in Catalonia, Spain. **METHODS:** The least costly immunization strategy for each vaccine in different age groups was determined using: 1) the prevalence of protected individuals (positive results), called p, observed in serological surveys in Catalonia and 2) the critical prevalence of antibodies, called p*, that makes cost-effectiveness of vaccinating all individuals equal to screening and vaccination of susceptibles. Vaccinating all individuals was less costly than screening and vaccination when the prevalence of protected individuals was lower than p*. A formula to estimate p* was derived from the cost-effectiveness equations. **RESULTS:** The value of p* depended on screening and vaccination costs, programme compliance, screening test performance, vaccine efficacy and disease costs. The following values of p* were obtained: 22.5 % for hepatitis A, 26.7 % for hepatitis B, 12.0 % for varicella, 100 % for measles and tetanus in adults, and 32.7 % for hepatitis A, 43.9 % for hepatitis B, 22.8 % for varicella, 100 % for measles and tetanus in individuals aged 5–14 years. Based on these results and the prevalence of protected individuals observed in the population (p) in serological surveys, the least costly immunization strategy was vaccination without screening for hepatitis B, measles and tetanus at all ages and for hepatitis A in adolescents, since $p < p^*$, and screening and vaccination of susceptibles for varicella at all ages and for hepatitis A in adults, since $p > p^*$. **CONCLUSIONS:** Immunization programmes should be developed taking into account the prevalence of protected individuals and the critical prevalence of antibodies to reduce costs.

PIN75

ECONOMIC IMPACT OF NEW MALARIA DIAGNOSTIC DEVICES ON THE MALARIA CONTROL PROGRAM IN BRAZIL

Quinn BP[1], Hummel JM[1], Laubscher M[2], IJzerman MJ[1]

[1]University of Twente, Enschede, The Netherlands, [2]Philips Research, Eindhoven, The Netherlands

OBJECTIVES: This study focuses on the health economical impact of new malaria diagnostic devices on the Malaria control processes in Brazil. Current diagnostic tools have disadvantages which prevent the total coverage of malaria risk regions. As a consequence, there is a high demand for diagnostic devices that can be used in remote settings. The objective of this research is to study the cost-effectiveness of new diagnostic devices. **METHODS:** Markov modeling and Monte Carlo simulation are used to compare the expected cost-effectiveness of the new devices Magneto-Optic Technology (MOT), Rapid Diagnostic Tests (RDT), and Software Aided Microscopy (SAM), with the golden standard of microscopy. Outcome measures are the diagnostic and treatment costs as well as deaths avoided. Scenario analysis is used to compare different implementation strategies of the devices that are expected to be or become most cost-effective. **RESULTS:** Microscopy has the highest cost-effectiveness ratio (1.78), followed by SAM (4.02). The access of Microscopy to remote risk regions is however limited. The implementation scenario with the highest health economic impact is to apply microscopy and to use in addition SAM in remote risk regions. At a total of 80 per cent access to diagnosis, microscopy combined with SAM saves in Brazil up to 36.000 lives (30 % improvement) with a cost-saving of 6 M (26 per cent savings). **CONCLUSIONS:** The outcomes provide clear guidelines for the investment in new devices. Accordingly, Markov modeling is a valuable tool for medical industry facing decisions concerning technology development and implementation.

PIN76

THE PREVALENCE, MORTALITY, AND COST OF CENTRAL LINE BLOOD STREAM INFECTIONS (CLABSI) IN US COMMUNITY HOSPITALS: 2002 TO 2006

Dickson M, Stafkey-Mailey DR

University of South Carolina, Columbia, SC, USA

OBJECTIVES: The objective of this study was to estimate the national prevalence, mortality, and cost of CLABSIs. CLABSI prevalence in ICUs has been studied in a few hospitals, and some states mandate reporting selected blood stream infections (BSI),