

## PMS26

## COST OF DUPUYTREN CONTRACTURE IN THE CZECH REPUBLIC

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**OBJECTIVES:** To determine the cost of Dupuytren's contracture in the Czech Republic. **METHODS:** Survey among general surgery specialists and orthopedic surgeons (panel of total 9 surgeons) conducted. The assessment itself was done using a classical Delphi panel method, combined with data from medical charts and/or hospital information systems. Besides the surgeons, also rehabilitation specialists (to cover costs for rehabilitation) and internal medicine specialists (to cover complications) were included into the panel. **RESULTS:** If indirect costs (productivity loss) are included, they represent the major part of all costs (76 %). In case of direct cost inclusion, rehabilitation stands for more than 50% of costs, followed by surgery costs (almost 30 %). Mean direct costs (1 operation field) are estimated at about 12,000 CZK with a variation of 9 200 to 14,400 CZK. If indirect costs (productivity loss) are included, total costs increase dramatically, arriving at mean costs of almost 50 thousand CZK (21,800 to 90,200 CZK). **CONCLUSIONS:** Cost of Dupuytren's contracture range from 21,800 to 90 200 CZK if indirect cost included. Indirect cost represent 76% of all costs.

## PMS27

## RETROSPECTIVE CHART REVIEW TO ASSESS UTILIZATION OF RESOURCES AND COSTS RELATED TO POSTMENOPAUSAL OSTEOPOROSIS TREATMENT OF PATIENTS WITHOUT FRACTURES IN SLOVENIA, SERBIA, SLOVAKIA AND BULGARIA

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**OBJECTIVES:** To evaluate utilization of resources and direct medical costs of postmenopausal osteoporosis treatment in patients without fractures. **METHODS:** A medical chart review was performed to examine the medical resources used to treat osteoporosis during the year preceding the start of the study. Data were collected between July 2010 and April 2011 by local investigators from 5 centers in Slovenia (99 patients), 5 in Serbia (105), 10 in Slovakia (100) and 3 in Bulgaria (106). Data of patients above 50 years of age, diagnosed with osteoporosis without fractures and treated for osteoporosis was included in the study. Based on these data, costs of osteoporosis treatment from the public payer and patient's perspective in all countries except Bulgaria were estimated. Costs of ambulatory and outpatient visits, examinations and drugs were calculated. **RESULTS:** Patients with osteoporosis were monitored more frequently in Slovenia and Slovakia (on average 2.00 and 1.87 ambulatory visits per year, respectively). In Serbia and Bulgaria, ambulatory visits were less frequent (0.79 and 0.67 visits per year, respectively). Percentages of patients treated with bisphosphonates were 99%, 98%, 78% and 61% in Slovakia, Bulgaria, Slovenia and Serbia, respectively, while 83%, 85%, 81% and 57% was treated with calcium and vitamin D supplements, respectively. Average 1-year cost of osteoporosis treatment was highest in Slovakia and Slovenia, accounting for 491 € (CI95%: 444; 634) and 384 € (CI95%: 345; 435), respectively, while in Serbia these costs were 190 € (CI95%: 164; 231). **CONCLUSIONS:** The highest standard of treatment and monitoring osteoporosis was observed in Slovenia. On the other side treatment of osteoporotic patients generated the highest costs in Slovakia, however some of these costs could be related to comorbidities.

## PMS28

## RETROSPECTIVE CHART REVIEW TO ASSESS UTILIZATION OF RESOURCES AND COSTS RELATED TO POSTMENOPAUSAL OSTEOPOROTIC FRACTURES IN SLOVENIA, SERBIA AND BULGARIA

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**OBJECTIVES:** To evaluate utilization of resources and direct medical costs of postmenopausal osteoporotic fractures (proximal femur and vertebral) in the first and subsequent years after the event. **METHODS:** A medical chart review was performed to examine the medical resources used to treat the two most costly osteoporotic fractures in the first and second or subsequent year after the event. Data were collected between December 2009 and April 2011 by local investigators from 5 centers in Slovenia (159 patients), 5 in Serbia (199) and 3 in Bulgaria (186). Documentation of patients above 50 years of age with a low-energy fracture sustained no later than 5 years before the start of the study was included. Patients with multiple fractures were excluded. Cost of treatment from a public payer and patient perspective in all countries except Bulgaria was estimated. These costs were compared to GDP per capita in each country (International Monetary Fund data – year 2010: 15,953 € in Slovenia, 3,522 € in Serbia) to evaluate economic burden of fractures. **RESULTS:** All Slovenian patients were hospitalized after proximal femur and 53% after vertebral fracture, compared with 84% and 30% in Serbia and 69% and 5% in Bulgaria. However, in the following years after the fracture, hospitalization was most common in Serbia (49% of patients after proximal femur and 18% after vertebral fracture yearly). The 2-year treatment cost of proximal femur fracture was 4463 € (SD 1750) in Slovenia and 3277 € (SD 2409) in Serbia, while the 2-year cost of vertebral fracture during was estimated at 3902 € (SD 2714) in Slovenia and 491 € (SD 295) in Serbia. **CONCLUSIONS:** Osteoporotic fractures are responsible for high eco-

nomic burden. Mean cost of treatment of low-energy proximal femur fracture is equal 28% of GDP per capita in Slovenia and 93% in Serbia.

## PMS29

## ABATACEPT OR INFILIXIMAB FOR PATIENTS WITH RHEUMATOID ARTHRITIS AND INADEQUATE RESPONSE TO METHOTREXATE: A TRIAL-BASED AND REAL-LIFE COST-CONSEQUENCE ANALYSIS

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**OBJECTIVES:** In the 1-year, double-blind, placebo-controlled ATTEST trial, efficacy of abatacept or infliximab vs. placebo was reported in patients with rheumatoid arthritis (RA) and inadequate response to methotrexate. We estimated trial-based and real life costs of abatacept and infliximab for achieving pre-defined remission or low disease activity state (LDAS) as recommended by the European League Against Rheumatism (EULAR). **METHODS:** Quantity of drug, serious adverse event (SAE) rates and time (months) in remission or LDAS were taken from ATTEST for the trial-based calculation to derive a cost per remitting/LDAS patient and cost per patient-month in remission/LDAS. We used list prices for drugs and public tariffs for infusion and hospitalization due to SAEs. Trial-based analyses were made for the full year, and the first and subsequent 6 months (initiation & maintenance). Maintenance costs were extrapolated to real life, taking into account dose escalation and shortening of infusion intervals with infliximab. SAE rates from a Cochrane network meta-analysis were considered in the real-life analyses. All analyses were conducted from a health care system perspective for Italy. **RESULTS:** In Italy, the annual trial-based costs per remitting/LDAS patient were €70,259/€37,219 for abatacept vs. €85,547/€46,592 for infliximab. In the initiation phase, costs per patient-month in remission/LDAS were €11,028/€6,020 for abatacept vs. €8,347/€4,173 for infliximab. Abatacept showed lower costs per patient-month in remission/LDAS in the maintenance phase €5,046/€2,673 vs. €5,500/€2,996 for infliximab. Real-life maintenance costs per month in remission/LDAS were: €5,347/€2,832 for abatacept vs. €7,210/€3,927 for infliximab. Higher initiation cost for abatacept to achieve remission/LDAS would be offset at 14.6/16.1 months during real life. **CONCLUSIONS:** Our findings suggest a lower cost-consequence for abatacept during the maintenance phase and its real-life extrapolation. Abatacept is a sustainable, safe, and economically attractive biologic for the long-term treatment of RA when compared to infliximab.

## PMS30

## COST-EFFECTIVENESS OF TOCILIZUMAB COMPARED TO STANDARD THERAPEUTIC SEQUENCES FOR THE TREATMENT OF MODERATE/SEVERE RHEUMATOID ARTHRITIS (RA) PATIENTS IN PORTUGAL

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**OBJECTIVES:** To evaluate the cost-effectiveness of treatment sequences initialized with tocilizumab 8mg/kg compared to similar treatment sequences initialized with a TNF-inhibitor for the treatment of moderate to severe RA patients with inadequate response to previous DMARD therapy (DMARD-IR) in Portugal. **METHODS:** A cost-utility analysis was conducted from a societal perspective. The analysis compares DMARD-IR patient outcomes, in three different scenarios, in a treatment sequence initialized with tocilizumab followed by a TNF inhibitor (adalimumab, etanercept, or infliximab, for scenarios 1, 2 and 3, respectively), rituximab, abatacept and palliation versus the same sequence initialized with a TNF inhibitor (etanercept, adalimumab and etanercept, respectively, for scenarios 1, 2 and 3). Patients characteristics (age, starting HAQ-DI score, sex and weight) were based on tocilizumab clinical trial data. ACR response for biologic treatments was obtained by a mixed treatment comparison. Clinical trial data was used to model the relationship between HAQ-DI scores and utility as described by EQ-5D. Resource utilization was obtained from an expert panel of Portuguese rheumatologists. Unit costs were obtained from Portuguese official sources. Analysis of clinical trial data or secondary sources provided evidence for appropriate distributions to perform probabilistic sensitivity analysis (PSA). Costs and QALYs were discounted annually at 5%. **RESULTS:** The model estimated that the treatment sequence initialized with tocilizumab resulted in higher QALYs and lower costs versus comparator sequences in all three scenarios (0.22 QALYs and –1.881€, 0.27 QALYs and –4.449€, 0.22 QALYs and –1.851€ for scenarios 1, 2 and 3 respectively). Several sensitivity and scenarios analyses showed that the model is robust to changes in parameter values. In PSA (2000 samples) the tocilizumab sequence produces always additional QALYs at lower costs. **CONCLUSIONS:** In DMARD-IR patients, the model consistently predicts that starting treatment with tocilizumab is a dominant alternative compared to similar treatment sequences initialized with a TNF-inhibitor in Portugal.

## PMS31

## COST-EFFECTIVENESS OF ABATACEPT FOR THE TREATMENT OF RHEUMATOID ARTHRITIS (RA) AFTER THE FAILURE OF A FIRST TNF INHIBITOR IN THE UNITED KINGDOM

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