PSY103
HEALTH TECHNOLOGY ASSESSMENT, PRICE AND REIMBURSEMENT REVIEW FOR ORPHAN DRUGS IN ITALY
Tavella F., Kurchagina D., Rodrigues J., Rémusat C.

OBJECTIVES: In France, the Health Technology Assessment (HTA) is conducted by the Scientific Technical Commission of Italian Medicines Agency (AIFA) with further negotiation between the manufacturers and the AIFA’s Pricing & Reimbursement Committee on price and reimbursement. After the decision is taken it is published in the journal “Gazzetta officiale”, the assessed drug is formally available for Italian patients next day. There does not exist a specific procedure for orphan drugs (OD), they are evaluated under the same conditions as drugs for common diseases. Pharmacoeconomic studies are recommended for innovation drugs. The objective of the study is to review HTA decisions, prices and reimbursement of OD in Italy.

METHODS: All OD assessed in Italy since 2000 were identified. Prices, reimbursement rates and decision details were extracted for each drug using Farmadati database. RESULTS: Among 74 OD approved in Europe 66 molecules are officially available in Italy. It took 5-10 months from granting market authorization to reimbursement decision: drug’s medical benefit (SMR) and improvement in quality of life (QoL). OD are evaluated under the same conditions as drugs for common diseases (OD), they are evaluated under the same conditions as drugs for common diseases. Post-marketing surveillance studies were requested for a half of indications, AIFA registries were reported in 25% of cases. Annual treatment ex-factory price of OD varies from €2 500 to almost €1 000 000. CONCLUSIONS: Almost 90% of approved OD are available in Italy. However, only the actual situation of data as some drugs are unavailable from retail or hospital pharmacies. In addition, international authorities contribute to inequity in access especially for “expensive drugs”.

PSY104
HEALTH TECHNOLOGY ASSESSMENT, PRICE AND REIMBURSEMENT REVIEW FOR ORPHAN DRUGS IN FRANCE
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OBJECTIVES: In France Orphan Drugs (OD) undergo the same Health Technology Assessment (HTA) procedure as other drugs. The evaluation is performed by the Transparency Committee (TC). Two scores are assigned and further used for pricing & reimbursement decision: drug’s medical benefit (SMR) and improvement in medical benefit (ASMR). OD can be eligible to an accelerated procedure established for innovative products. The study aims to analyse HTA decisions, prices and reimbursement of OD in France.

METHODS: Exhaustive prices, reimbursement and HTA opinions were extracted from the French transparency register, AMELI’s national health insurance and Thériaque database. RESULTS: Among 74 OD approved in Europe, 21 drugs are not available in France. 6 were recently assessed by TC but are not reimbursed while 14 were not assessed and 4 were not a negative opinion. Reimbursement process took between 2 and 5 months after TC publication. 12 drugs were considered as bringing a substantial medical benefit. At the same time, more than a half of medicines were graded as providing a major (9%), significant (27%) or moderate (45%) improvement in actual health. According to opportuneness of the price, 30% were rated moderate improvement, and about 14% improvement according to TC opinion. Annual treatment price of OD varie from €1 500 to almost €1,000 000. CONCLUSIONS: About a third of approved ODs are not available in France. Most of them were authorized recently and might become available in France. The coverage for these drugs, is frequently done through judicial processes; and (2) quantitative identification of agency-specific risk preferences and agreement levels across countries. RESULTS: Differences at each step of the decision-making process were identified. In some pivotal trials were appraised but with varying levels of detail in reporting the clinical outcomes, explaining some of the reasons for differing HTA recommendations. Agency-specific risk preferences were identified through correspondence analysis as drivers of these decisions, further explaining some of these differences. Poor to moderate agreement in the interpretation of the evidence was measured using Cohen’s kappa scores. This reflected situations where the countries interpreted the same evidence differently and situations where differences in the handling of the same uncertainties were seen, including differences in the extent to which stakeholder input influenced a decision. CONCLUSIONS: This research systematically compared HTA processes in different countries, facilitating the understanding of these complex processes including how different HTA bodies conduct value assessments. It enabled to raise awareness around the reasons for differences across countries, and highlight areas for potential methodological improvements in HTA. Further application of this framework to other disease areas and countries is a way forward to improving the drivers of coverage decisions while better understanding the settings and limitations of HTA.

PSY110
TO WHAT EXTENT DO DISEASE AND TREATMENT CHARACTERISTICS INFLUENCE HTA-BASED RECOMMENDATIONS FOR A SAMPLE OF ORPHAN DRUGS IN THREE COUNTRIES, AND COULD THESE INDICATE WHETHER ORPHAN DRUGS HAVE A “SPECIAL STATUS”? 
Nicod F.

Routine HTA methods may not adequately capture all the important considerations of a treatment’s value and the impact of the condition on the patient given that evidence, orphan drugs represent a challenge for researchers and decision makers. Clinical benefit, disease severity, availability of therapeutic alternatives, ethical, political and societal aspects should be considered. In this manuscript, we conduct disciplinary reflection on the development of HTA models and policies regarding rare diseases and innovative treatments in the SUS, as well as fostering the primary researches in this field.

PSY105
HTA STUDIES ON ORPHAN DRUGS BY REBRATS MEMBERS
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OBJECTIVES: In Brazil the production of studies by members of the Brazilian Network for Health Technology Assessment (REBRATS) have contributed in a significant way to the understanding of HTA for rare diseases and the evidence for orphan drugs are limited and lower. The coverage for these drugs, is frequently done through judicial orders, political and social pressure, with no support of evidence-based medicine.

METHODS: Query to the REBRATS database and the internal database. RESULTS: Among 74 OD approved in Europe 66 molecules are officially available in Brazil. Prices, reimbursement and literature sources to provide insight into pricing, reimbursement and situations where differences in the handling of the same uncertainties were identified through correspondence analysis as drivers of these decisions: drug’s medical benefit (SMR) and improvement in quality of life (QoL). OD are evaluated under the same conditions as drugs for common diseases. Post-marketing surveillance studies were requested for a half of indications, AIFA registries were reported in 25% of cases. Annual treatment ex-factory price of OD varies from €2 500 to almost €1 000 000. CONCLUSIONS: Almost 90% of approved OD are available in Brazil. However, only the actual situation of data as some drugs are unavailable from retail or hospital pharmacies. In addition, international authorities contribute to inequity in access especially for “expensive drugs”.

PSY106
WHY ARE THERE DIFFERENCES IN HTA RECOMMENDATIONS ACROSS COUNTRIES? A SYSTEMATIC COMPARISON OF HTA DECISION PROCESSES FOR A SAMPLE OF ORPHAN DRUGS IN FOUR COUNTRIES
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HTA reimbursement recommendations often result in different outcomes across countries, even when the same evidence is presented for a same therapeutic area. There is a need to understand the reasons for these differences. OBJECTIVES: To systematically compare HTA processes for a sample of orphan drugs across four countries (England, Scotland, Sweden, France): to identify the use and interpretation of the evidence appraised, and highlight differences across countries. METHODS: Ten orphan drug-indication pairs were selected and systematically compared using a previously validated framework. An exploratory sequential mixed methods design divided the research into two stages: (1) in-depth analysis of the decision-making processes; and (2) quantitative identification of agency-specific risk preferences and agreement levels across countries. RESULTS: Differences at each step of the decision-making process were identified. In some pivotal trials were appraised but with varying levels of detail in reporting the clinical outcomes, explaining some of the reasons for differing HTA recommendations. Agency-specific risk preferences were identified through correspondence analysis as drivers of these decisions, further explaining some of these differences. Poor to moderate agreement in the interpretation of the evidence was measured using Cohen’s kappa scores. This reflected situations where the countries interpreted the same evidence differently and situations where differences in the handling of the same uncertainties were seen, including differences in the extent to which stakeholder input influenced a decision. CONCLUSIONS: This research systematically compared HTA processes in different countries, facilitating the understanding of these complex processes including how different HTA bodies conduct value assessments. It enabled to raise awareness around the reasons for differences across countries, and highlight areas for potential methodological improvements in HTA. Further application of this framework to other disease areas and countries is a way forward to improving the drivers of coverage decisions while better understanding the settings and limitations of HTA.

PSY118
TOP 20 ORPHAN DRUGS AVAILABILITY, PRICING AND REIMBURSEMENT IN SLOVAKIA 2005–2012 REVIEW
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OBJECTIVES: Orphan drugs are highly priced and top 20 orphan drugs create almost 75% of total drug expenditure in Slovakia. We conducted 8 years review of government and literature sources to provide insight into pricing, reimbursement and availability situation surrounding top 20 orphan drugs in Slovakia from the health care payer perspective. METHODS: We provide analysis of official prices, reim-
bursement status and availability of top 20 orphan drugs in Slovakia from 2005 to 2012. Data were obtained from government sources. RESULTS: We considered orphan drugs list (Cote and Kestig, 2012) that exceeded 1 billion $ sales in 2008 (globally) and compared molecules’ availability in Slovakia. Same molecules are among best selling 20 orphan drugs in Slovakia, with highest sale of 95 million EUR (Bevacizumab, 2005-2012) compared to lowest sale of 15 million EUR (Tacrolimus, 2005-2012). It took from 1 (imatinib) to 19 (Glatiramer acetate) to be launched in Slovakia after orphan designation. Top 20 orphan drugs had average DOT 472 EUR on average market DOT 45% for selected orphan drugs 60% had full (100%) reimbursement status and 40% were fully covered by hospital budgets. Only 4 of them were launched in Slovakia since 2005 (included), 16 of them were launched from 1990 to 2004. Prices ranged from 330 EUR to 5800 EUR (ex-factory one package, 2012). CONCLUSIONS: There are highly valuable incentives for industry to invest in to development of orphan drugs in EU. Current context of economic constraints in EU however justifies the need to pay close attention to the rational reimbursement strategies which incentives in promoting innovations of companies of offering high priced drugs. Top 20 orphan drugs in Slovakia have prices high above average and also full reimbursement status. We expect more restrictive drug policy measures in this field.

Psy109

EFFECT OF EXCLUDING NON-PATIENT BENEFITS AS AN ELEMENT ON ACGM NEWBORN SCREENING (NBS) RECOMMENDATIONS

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OBJECTIVES: In 2006 the American College of Medical Genetics (ACMG) developed a stakeholder survey to generate recommendations for 84 rare conditions to be considered for mandatory newborn screening (NBS). Scores of 19 different surveyed attributes for each condition were totaled. These scores determined an entry point to an algorithm (EPA) that determined final recommendations (Core conditions, Expansion conditions, and Core recommendations for screening to only a Secondary Target. We have shown that in the ACMG recommendations,包括 screening benefits to non-patients (family or society) is controversial and has not been standard in the past. We have shown that in the ACMG recommendations, had no changes been made to the algorithm consequent to dropping non-patient benefits from consideration, 3 conditions would have changed from a Core recommendation for screening to only a Secondary Target.

Psy110

ACCESS TO ORPHAN DRUGS IN GREECE DURING ECONOMIC CRISIS

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OBJECTIVES: Orphan Drugs (ODs) are medicinal products intended for diagnosis, prevention, or treatment of a condition that is life-threatening or chronically debilitating. Access is crucial for patients’ health and quality of life. The aim of this study was to identify current problems and future challenges of patients’ access to ODs in Greece. METHODS: A qualitative study took place between December 2012 and January 2014. Data were retrieved through semi-structured interviews with six representatives of key stakeholders in Greece and policy documents identified through web searches using keywords “orphan drugs” and “rare diseases” in Greek. Web-based documents and transcribed interviews were content analyzed. RESULTS: Delays in pricing and reimbursement of ODs in the Greek pharmacological market, budget cuts in hospitals and absence of patient registries constitute according to the analysis the greatest barriers in patients’ access to ODs. There are two main channels through which the patient can have access to an OD and it depends whether it is licensed in Greece or not. In the first case the patient can take the drug through the hospital or the pharmacy of EOPYY if it is not available at the hospital pharmacy and in the second case through a public sector organization (GEPF). All cases are characterized by excessive bureaucracy and involvement of up to three organizations in order to receive the approval, a procedure creating delays in patients’ access and risking their health. Also, the absence of a well-described procedure and lack of cooperation between the organizations and committees create further delays. CONCLUSIONS: Ensuring patients’ access to ODs in Greece is challenging especially during the economic crisis. Financial constraints and changes in the pharmaceutical market constitute important barriers to patients’ access. There is a need to describe, organize and communicate the pathway of patients’ access to ODs.

Psy111

SELF REPORTED HEALTH CARE RESOURCE USE AND INDIRECT ECONOMIC BURDEN OF OPIOID INDUCED CONSTIPATION (OIC)

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OBJECTIVES: To describe the health care resource utilization associated with the diagnosis, treatment, and general management of opioid-induced constipation (OIC) and events attributed to OIC including the negative impact on job-related activities. METHODS: A prospective observational longitudinal study conducted in the United States, Canada (CN), UK (UK), and Germany (GE) of patients with OIC who have been on opioid therapy for at least four weeks was conducted. OIC related medical history and health care resource use was collected from participants self report. The number of hours missed from work in which patient and regular daily activities were affected was collected using the WPAI-SHP. RESULTS: A total of 489 eligible participants (US: 238, CN: 38, GE: 115, UK: 98). Back pain 79% reported from hospital admissions, emergency department visits, and outpatient care. Cost and utilisation is OIC may be substantial.

Psy112

HEALTH CARE UTILISATION AND SELECTED EXPENDITURES ASSOCIATED WITH NEUROBLASTOMA IN ENGLAND

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OBJECTIVES: Neuroblastoma (NB) is a rare cancer of childhood, with nearly 90% of cases diagnosed by age 5 (ACS 2013). Our objective was to report the utilisation and cost of patients treated with the most common treatments (high risk NB (HRNB)). METHODS: We used an England dataset covering hospital and outpatient care. Patients were treated at the time of their diagnosis (age 18 and had a hospital event with a primary or secondary diagnosis coded as International Classification of Disease 10thEdition (ICD10) C749. Newly diagnosed patients were identified if they had no hospital events in the first 4 months of the first hospital diagnosis. Cost was calculated as the cost of hospital services related to patients who have a diagnosis of NB and High Risk NB (HRNB) reported in an England dataset from the Clinical Commissioning Group (CCG) perspective. METHODS: We used an England dataset covering hospital and outpatient care. Patients were treated at the time of their diagnosis (age 18 and had a hospital event with a primary or secondary diagnosis coded as International Classification of Disease 10thEdition (ICD10) C749. Newly diagnosed patients were identified if they had no hospital events in the first 4 months of the first hospital diagnosis. Cost was calculated as the cost of hospital services related to patients who have a diagnosis of NB and High Risk NB (HRNB) reported in an England dataset from the Clinical Commissioning Group (CCG) perspective. RESULTS: We observed 336 patients as newly diagnosed and an additional 13 patients were identified as HRNB. Newly diagnosed population inpatient admitts were 12 per patient, compared with 22 per patient for the HRNB population. Total diagnostic related group (DRG) costs associated with the 33 HRNB patients were £4,31m. Costs per HRNB patient (£130,303) were almost double the costs per newly diagnosed patient (£72,321). The average length of stay was 6 days for both sets of patients. CONCLUSIONS: To our knowledge this is the first retrospective analysis of NB cost and utilisation using encounter data from England. While it does not capture the entire costs to the England health care system, it indicates the level of resource intensity and cost at the CCG level.

Psy113

DATABASE ANALYSIS ON PATIENTS USING IMMUNOLOGICAL DRUGS IN A BRAZILIAN PRIVATE HEALTH CARE PLAN: A REAL WORLD DATA ANALYSIS

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OBJECTIVES: Patients’ profile undergoing intravenous immunomodulatory treatment is very limited. This study aimed to describe this information from the perspective of a Brazilian health plan, located in Fortaleza. METHODS: This was a cross sectional study with data obtained from the HMO database as presented by Reis H et al at ISPQR 18th Annual Meeting. Eligible criteria for data analysis were patients being treated for rheumatoid arthritis (RA), ankylosing spondylitis (AS), psoriatic arthritis (PsA) or Crohn’s disease (CD) who have received at least one dose of immunobiological drug between March/2012 and October/2013. Data was stratified by indication (RA, AS, PsA and CD), patient weight and treatment profile (naïve versus non-naïve patients). RESULTS: A total of 118 patients had been analyzed, with an average age of 51 years, and 66.9% (n = 79) of them being women. RA (n = 53,44%), and AS (n = 49,41%) were the most prevalent diseases being treated, followed by PsA (n = 13,11%) and CD (n = 3,2, 5%). The average weight of patients varied according to the disease being treated: 67 kg for RA and CD, and 70 kg for AS and PsA. It was observed that 65.5% patients were naïve to immunobiological drug, of which 73% initiated treatment with an anti-TNFα, being infliximab the most commonly pre- scribed one (85.2%). As for patients who had already been previously treated, golimumab and abatacept were the most commonly prescribed drugs (23%), whereas 48.7% out of total were receiving the third immunobiological drug and 35.9% were receiving the second one. CONCLUSIONS: The knowledge of patients profile and treatment information is the basis for any planning strategy in an HMO. Associated with costs, this data is crucial in supporting HMO board decisions on best treatment alternatives and so optimize the provided care.

Psy114

MULTI-CRITERIA DECISION ANALYSIS FOR REIMBURSING ORPHAN DRUGS: A PRACTICAL DEMONSTRATION STUDY USING THE ANALYTIC HIERARCHY PROCESS METHOD

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OBJECTIVES: To assess the short-term benefit and cost-effectiveness of 16 orphan drugs in 5 different countries using a Multi-Criteria Decision Analysis (MCDA) methodology. METHODS: We used a systematic literature review from January 2000 to August 2016 to identify all the data related to the European reimbursement process of Orphan Drugs. We performed a Delphi methodology to evaluate the expert’s opinion on the key drivers of the decision making process in the five countries and we used a real-world dataset to fit in the MCDA model. RESULTS: The main drivers for the reimbursement process in the five countries were:-1) Safety and Efficacy-2) Dose and Dosage-3) Price per Dose and 4) Treatment Duration. CONCLUSIONS: Multi-Criteria Decision Analysis can be used as a tool to evaluate the reimbursement process in different countries.