MUSCULAR-SKELETAL DISORDERS – Health Care Use & Policy Studies

PMS60
THE INTRODUCTION OF BIOSIMILAR MONOCOCLONAL ANTIBODIES INTO DEVELOPED MARKETS: WHAT ARE PAYERS CONCERNED ABOUT?

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OBJECTIVES: The introduction of biosimilar monoclonal antibodies into the market is thought to be eagerly awaited by payers. This is motivated by the need to constrain prescribing costs due to the ever-bulging pressure on health care budgets. The objectives of this research were to explore payers’ attitudes towards the introduction of biosimilars into the UK National Health Service, to identify the key concerns of payers towards the entry of biosimilars into the market. As the UK is widely recognised as a leading health care market the outputs from this research can be applied to other developed markets.

METHODS: A thorough literature review was carried out identifying the current regulatory stance and other national guidance on the introduction of biosimilar monoclonal antibodies. From this a series of value messages were formulated around four themes: the manufacture of biosimilar monoclonal antibodies, the extrapolation of clinical data, generic substitution and interchangeability and pharmacovigilance. These value messages were then tested with national payers to identify key priority areas. RESULTS: Payers identified that interchangeability and pharmacovigilance were the priority areas which needed to be addressed at a national and local level to manage the entry of biosimilar monoclonal antibodies. In particular they identified immunogenicity as a key area of concern due to the long acting nature of biosimilar monoclonal antibodies. They also recommended a greater emphasis on the use of electronic prescribing systems to ensure that the appropriate recording of the originator product or biosimilar is embedded within the primary care system. These value messages were then tested with national payers and these messages were then tested and validated with local level. CONCLUSIONS: Payers are aware of the introduction of biosimilar monoclonal antibodies into the market. They recognise that a managed entry assisted by the regulatory authorities alongside locally agreed guidance will be crucial to a successful roll-out.

PMS61
COMPARISON OF CLINICAL CHARACTERISTICS OF PATIENTS WITH RHEUMATOID ARTHRITIS (RA) RECEIVING THEIR FIRST BIOLOGIC IN UK, GERMANY, ITALY, PORTUGAL, SPAIN (SEU)

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OBJECTIVES: To assess the clinical characteristics of patients with RA receiving their first biologic in SEU. METHODS: A multi-country multi-center medical chart-review study of RA patients was conducted among physicians (rheumatologists) in 97% in hospitals and private practices to collect de-identified data on patients who were recently treated with a biologic as part of usual care. Physicians were screened for duration of practice (3-30yrs) and patient volume data on patients who were recently treated with a biologic as part of usual care. A multi-country physician chart-review study of RA patients was conducted among physicians from 85% in hospitals and private practices to collect de-identified data on patients who were recently treated with a biologic as part of usual care. Physicians were screened for duration of practice (3-30yrs) and patient volume data on patients who were recently treated with a biologic as part of usual care.

RESULTS: In the first quarter 2012, 434 physicians (rheumatologists:97%) in 97% in hospitals and private practices to collect de-identified data on patients who were recently treated with a biologic as part of usual care. Physicians were screened for duration of practice (3-30yrs) and patient volume data on patients who were recently treated with a biologic as part of usual care. Physicians were screened for duration of practice (3-30yrs) and patient volume data on patients who were recently treated with a biologic as part of usual care.


CONCLUSIONS: Across the markets, approximately one-tenth of biologic eligible patients (per physician perception) within corresponding disease severity groups did not end up receiving a biologic, across SEU; for PsA, with the discordance slightly within RA-mild moderate patients. Reasons behind these patterns and the impact on subsequent patient outcomes warrants further scrutiny.

PMS63
VALUE-BASED INSURANCE DESIGN INFORMED BY GOVERNMENT RESEARCH: A CASE STUDY OF OSTEOPOROSIS FRAC TURES

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OBJECTIVES: To use a mixed-treatment meta-analysis and simulation model to estimate fracture reductions and cost savings achievable from switching osteo-patients to more efficacious treatments in a large health plan.

METHODS: We populated the Bayesian mixed-treatment meta-analysis using studies identified within a recent AHRQ systematic review of anti-osteoporosis agents a drug class considered among the most cost-effective in the pharmacy benefit, i.e., alendronate, ibandronate, raloxifene, risedronate, and teriparatide and these drugs’ effect upon the clinical endpoints of vertebral, hip, and other fractures. We used the results of the meta-analysis to populate a stochastic simulation model to examine a cohort of 13,337 individuals with an osteoporosis diagnosis in a large private health plan. We compared the expected number of vertebral, hip, and other fractures and cost of care (drug and hospitalization costs) between the existing distribution of treatments as identified by claims data and a distribution optimized in accordance with the mixed-treatment meta-analysis. We obtained drugs costs from claims data and hospitalization costs from the literature. RESULTS: Results from the mixed-treatment meta-analysis suggest that ibandronate and risedronate are associated with worse outcomes than alendronate, risedronate, and teriparatide across the considered endpoints. Therefore, our simulation switched patients from these drugs to alendronate, risedronate and teriparatide. Results suggest a substantial reduction in clinical events and economic savings (18% reduction of clinical events and 30% reduction in new hip, vertebral and other fractures; a 9% reduction in other fractures). We estimate total economic savings to the health plan of over $750 per covered patient, over $10 million in aggregate. CONCLUSIONS: Opportunities to leverage existing research can help inform value-based pharmacy benefit design. The optimized allocation of treatments can increase the health of beneficiaries while providing savings for payers.

PMS64
HIP AND KNEE ARTHROPLASTY: HOW MUCH THESE PROCEDURES IMPACTS IN THE BRAZILIAN HEALTH CARE EXPENDITURES

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OBJECTIVES: The number of hip and knee arthroplasty has been growing significantly over the last decade because they are effective procedures that improve quality of life and functional capacity and decrease pain. They have been proven to be cost-effective procedures in different countries. The objective of this study is to analyze the number and expenditure with these procedures in Brazil.

METHODS: We used for the public health care system data from the hospital information system (SIS/SUS) database and for the private health care data from the hospital database that has 5 million lives. We used the codes for each of these procedures as search base. All values are in 2010 Brazilian reais (US$1.00= R$ 2.00).

RESULTS: A total of 20,116 hip and 6,320 knee arthroplasties were performed in the public system and 20,212 hip and 16,206 knee arthroplasties were performed in the private system. The annual spend for hospitals in the Brazilian health system generated by these procedures was R$ 584,6 millions. For knee procedures the Brazilian health system generated by these procedures was: R$ 584,6 millions. For knee procedures the Brazilian health system generated by these procedures was: R$ 60,8 millions and R$ 280 millions. For knee procedures the Brazilian health system generated by these procedures was: R$ 60,8 millions and R$ 280 millions.