these patients suffered greater pain and lower HRQoL than nociceptive pain patients. The more remarkable improvement NP patients showed after treatment highlights these patients suffered greater pain and lower HRQoL than nociceptive pain patients.

SYSTEMIC DISORDERS/CONDITIONS – Patient-Reported Outcomes & Patient Preference Studies

PS19 PRICING AND MARKET ACCESS OF ORPHAN DRUGS IN ASIA: A COMPARATIVE STUDY ACROSS GROWTH MARKETS

Shereen Q A, Akinpar A, Saraf S, Li X

1ICON Pricing and Market Access, London, UK, 2ICON Commercialisation & Outcomes, London, UK

OBJECTIVES: With the majority of the world’s population and considerably high GDP growth rates, Asia represents a significant opportunity for commercialization of orphan drugs (OD) rare diseases. However, despite some countries implementing policy to facilitate this process, funding for ODs remains challenging due to conflicting priorities with coverage of essential medicines. We aimed to understand the current coverage policies for ODs in China, Taiwan, Singapore and South Korea, and evaluate the impact of these policies on affordability. We conducted secondary research of government legislation in each country to identify specific policy and decision making criteria for coverage of ODs and rare diseases. We also selected 8 ODs and scored them based on a pre-defined set of access drivers (incidence of the disease, severity of the condition, therapeutic alternatives, level of innovation, affordability, etc.). Finally, we analyzed the scores to identify any correlation with the pricing and reimbursement status of these drugs in each market, and considered the influence of any identified policies on the results.

RESULTS: National legislation for OD coverage was identified in Taiwan, Singapore and South Korea; however, the degree to which policy influences coverage varies considerably between countries. Additionally, in the absence of national legislation in China, provincial policies do exist, albeit infrequently and with considerable disparity. Scores for access drivers were minimally correlated with pricing and reimbursement status in South Korea (R² = 0.21), while high scores were not necessarily indicative of positive coverage rather, affordability is the primary driver for access.

CONCLUSIONS: Our results demonstrate that, although there is considerable market opportunity supported by variable legislation to facilitate OD coverage, pricing and market access remains challenging, and not necessarily related to overall value. Therefore, pharmaceutical companies seeking access for ODs should consider selective programs, designed to improve affordability and patient access.

PS10 THE SOCIOECONOMIC COSTS OF THE UNDERTREATMENT OF PAIN

Hopp M 1, Rothe B 2, Dunlop W 3

1Mundipharma Research GmbH & Co. KG, Limburg, Germany, 2Mundipharma International Limited, Cambridge, UK

OBJECTIVES: To investigate the scale and socioeconomic cost of untreated/uncontrolled chronic pain. METHODS: We performed a systematic literature search in PubMed to identify studies reporting the economic cost of pain globally and in Asia Pacific. RESULTS: Prevalence estimates for chronic pain among adults range from 2-40% in the US and 12-30% in Europe, with similar rates reported in Hong Kong (10.8%), China (23.7%) and Japan (25%). Chronic pain is costly not only because it requires medical treatment and complicates treatment for other conditions, but because it undermines the ability to lead a productive working and social life, placing a substantial burden on individuals, employers and health care systems in general. Despite the personal and socioeconomic impact of chronic pain, a large proportion of patients remain untreated. A third of chronic pain patients in a European survey were currently not treated, while around half of patients with cancer pain are on active treatment or have access to pain relief drugs. We analyzed four major blockbuster products that lost patent protection between 2011 and 2012 and the associated change in sales it had on the company. METHODS: We identified four major products (atorvastatin, clopidogrel, goserelin, and montelukast) that lost patent protection between 2011 and 2012. Then, we retrieved sales data for the drug, total revenue, and stock price for the company from Q1 2011 to Q4 2013. Sales data was from IMS Health via drugs.com. Total company revenue per quarter was provided by Charles Schwab & Co. and historical stock data was taken from Yahoo! Finance. RESULTS: During the time the drugs were under patent, they made up an average of 16.8% of total revenues per quarter. Total sales for the four drugs were down an average of 76.8% by Q4 2013 while total revenues for the companies were only down on average 11.9%. Stock prices over the same period increased an average of 28.7% compared to 15.9% across the market. CONCLUSIONS: The results could be applied by community pharmacists in advising the customers for sore throat lozenges selection and the manufacturers or marketing managers in producing and distributing their products.

PS11 STUDY OF TECHNICAL CONDITIONS FOR IMPROVEMENT OF ANGIOGRAPHIC IMAGE QUALITY

Mukumtani T 1, Oyunaa C 2, Odonuga N 3

1School of Nursing, Health Science University of Mongolia, Ulaanbaatar, Mongolia, 2School of Nursing, Health Science University of Mongolia, Ulaanbaatar, Mongolia, 3School of Nursing, Health Science University of Mongolia, Ulaanbaatar, Mongolia

OBJECTIVES: The purpose of this study was to explore the quality of angiography equipment in diagnosis and treatment used in Mongolia, compare the use of angiographic equipment in Mongolia with international standards, and number of angiographic examinations, radiologist and patient’s health safety from the effects of X-rays, and the study the benefits of the quality control tests of X-rays and how they affect image quality and other factors. METHODS: By experimental method, used an ionization chamber and test object for X-ray image quality to assess angiographic image quality based on The Mongolian National Standard MNS 5391:2004. A total of 5 angiographies were studied. Measurement acceptance of KV assurance, linearity, repetition of kV, mA, mAs, image resolution were not higher than 5% from reference values. RESULTS: Standard derivation of KV assurance was moderate (±1.2%). The repetitions of KmA, mAs were in normal range (derivation coefficient of 0.99). Image resolution was acceptable (±1.4-3.15 mm). CONCLUSIONS: The results of this study showed that X-ray images are not coherent with international standards, that there is a need to evaluate and improve the quality of medical imaging equipment in hospitals.

PS12-ASSESSING THE IMPACT OF PATENT LOSS ON OVERALL REVENUES AND STOCK PRICES OF PHARMACEUTICAL COMPANIES

Furnish W, Wang RCM

Alliance Life Sciences, Somerset, NJ, USA

OBJECTIVES: The pre-tax R&D cost of bringing a biopharmaceutical product to market estimated at $2.1 billion, revenues from blockbuster drugs may need to cover preclinical and development cost of bringing a new drug to market. We analyzed four major blockbuster biopharmaceutical products that lost patent protection between 2011 and 2012 and the associated change in sales it had on the company. METHODS: We identified four major products (atorvastatin, clopidogrel, goserelin, and montelukast) that lost patent protection between 2011 and 2012. Then, we retrieved sales data for the drug, total revenue, and stock price for the company from Q1 2011 to Q4 2013. Sales data was from IMS Health via drugs.com. Total company revenue per quarter was provided by Charles Schwab & Co. and historical stock data was taken from Yahoo! Finance. RESULTS: During the time the drugs were under patent, they made up an average of 16.8% of total revenues per quarter. Total sales for the four drugs were down an average of 76.8% by Q4 2013 while total revenues for the companies were only down on average 11.9%. Stock prices over the same period increased an average of 28.7% compared to 15.9% across the market. CONCLUSIONS: The results could be applied by community pharmacists in advising the customers for sore throat lozenges selection and the manufacturers or marketing managers in producing and distributing their products.

PS13 THE PERFORMANCE: VOLUME LIMIT DECREASED THE DRG BASED ACUTE CARE HOSPITAL FINANCING IN HUNGARY

Endrei D 1, Decsi T 1, Gazdz T 1, Agoston T 1, Csákvári T 1, Kovács G 2, Boncz I 1

1University of Pécs, Pécs, Hungary, 2University of Pécs, Zalaegerszeg, Hungary, "Széchenyi István University, Győr, Hungary

DATA SOURCES: National Health Insurance Fund of Hungary, Hungarian Bureau of Statistics, Hungarian Health Care Statistical System, Ministry of Health, National Health Insurance Fund (NHIF), Hungarian Health Care Statistical System (HHCSS), Hungarian Health Care Statistical System (HHCSS), Hungarian Health Care Statistical System (HHCSS)

OBJECTIVES: To evaluate whether volume limit decreased the financial performance of acute care hospital financing in Hungary. METHODS: We identified four major products (atorvastatin, clopidogrel, goserelin, and montelukast) that lost patent protection between 2011 and 2012. Then, we retrieved sales data for the drug, total revenue, and stock price for the company from Q1 2011 to Q4 2013. Sales data was from IMS Health via drugs.com. Total company revenue per quarter was provided by Charles Schwab & Co. and historical stock data was taken from Yahoo! Finance. RESULTS: During the time the drugs were under patent, they made up an average of 16.8% of total revenues per quarter. Total sales for the four drugs were down an average of 76.8% by Q4 2013 while total revenues for the companies were only down on average 11.9%. Stock prices over the same period increased an average of 28.7%. During the time the product had patent protection, the stock prices of those four companies decreased at an average 5.7% per quarter, as opposed to the 5.8% increase per quarter when the patent expired. During patent protection, average company revenue grew at an average of 1.52% per quarter; when the patent expired, revenue declined at an average of 1.9%. CONCLUSIONS: Overall these blockbuster drugs do not seem to significantly decrease revenues and do not influence stock prices when their patent protection is up. Large pharmaceuticals may reinvest profits to bolster their pipelines and find replacements for these large experimental drugs. In the long run, these profits may be appropriated in price expansion into stock prices long before the actual event.

HEALTH CARE USE & POLICY STUDIES – Diagnosis Related Group

PHP3 THE PERFORMANCE: VOLUME LIMIT DECREASED THE DRG BASED ACUTE CARE HOSPITAL FINANCING IN HUNGARY

Endrei D 1, Decsi T 1, Gazdz T 1, Agoston T 1, Csákvári T 1, Kovács G 2, Boncz I 1

1University of Pécs, Pécs, Hungary, 2University of Pécs, Zalaegerszeg, Hungary, "Széchenyi István University, Győr, Hungary