#### PCN349

EVALUATION OF A PAYMENT BY RESULTS SCHEME IN A CATALAN CANCER CENTER: GEFINITIB IN EGFR MUTATION-POSITIVE ADVANCED NON-SMALL CELL LUNG CANCER

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**OBJECTIVES:** To evaluate the economic results of this PbR compared to a traditional purchasing model and determine the perception of the stakeholders involved in the agreement. In healthcare systems, incentive-based schemes generally called payment-by-results schemes (PbR), which dynamically link the price of innovation to the usage conditions are alternatives to traditional fixed payment schemes. In 2011, the first PbR in Catalonia was signed between the Catalan Institute of Oncology, the Catalan Health Service and AstraZeneca (AZ) for the introduction of gefitinib in the treatment of EGFR-mutation positive advanced non-small-cell lung cancer. METHODS: Economic analysis of the differential costs between two scenarios, one including the total cost of treatment and the PbR scenario where AZ reimbursed the treatment according to previously agreed terms. 41 patients were included from June 2011 to October 2013 and assessed at two evaluation points. At week 8, responses, stabilization and progression were evaluated and at week 16 stabilization was confirmed. AZ was to reimburse the total cost of treatment of those patients that failed the treatment. A qualitative research of the organizational elements was done by interviewing the parties involved in the contract **RESULTS:** The difference in cost of gefinitib using the PbR compared to the traditional purchasing scenario was 6.17% less at 8 weeks, 11.18% at 16 weeks and 4.15% less for the overall treatment. The PbR resulted in total savings of around € 36,000, which corresponds to approximately € 1,000 per patient. From an operational and organizational perspective, the availability of adequate information systems to measure outcomes and monitor accountability and the involvement of healthcare professionals were acknowledged as crucial. CONCLUSIONS: The parties have identified tangible and intangible benefits with respect to the interests of the parties involved. This has led to the incorporation of innovation for patients under acceptable conditions.

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### EXPLORING BEFORE AND AFTER RISK-SHARING SCHEME IMPLEMENTATION **DURING 8.5 YEARS FOCUSED ON ANTICANCER DRUGS**

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OBJECTIVES: Risk-sharing scheme (RSS) has been implemented since Nov 2013 as part of policies to increase patients' accessibility in Korea. This study aimed to compare the impact of reimbursement rate before and after the implementation of RSS especially in anticancer drugs and to review the characteristics of the anticancer drugs on risk-sharing agreement (RSA). METHODS: Reviewed appraisal results for anticancer drugs in HIRA Drug Reimbursement Assessment Committee from 2007 to Jun 2015. The rate of reimbursement recommendation before and after RSS implementation and the proportion of RSA after RSS implementation were assessed. Drugs recommended after RSS implementation were classified into comparative clinical effectiveness-superior, non-inferior, similar- and cost effectivenessassessed by economic analysis or weighted average price. From each category, the proportion of RSA drug and type of scheme were counted. RESULTS: During 8.5 years, total 86 appraisals of anticancer drugs, the reimbursement recommendation rate was 58.1%(50/86). The reimbursement recommendation rate was 55.4%(31/56) before RSS implementation and 63.3%(19/30) after RSS implementation. After RSS implementation, 19 appraisals of anticancer drugs were reimbursement, 10 of them were reimbursement on the condition of RSA (53%), and types of RSS were refund (100%). As for comparative clinical effectiveness of among 19 appraisals after RSS implementation, 16 were superior, 3 were silimilar to comparator. Among 'superior' group, 12 were assessed by economic analysis (CUA), 6 of them were on RSA (50%). The number of appraisals not assessed by economic analysis in superior group was 4, and they were on RSA. In 'similar' group, all were assessed by weighted average price and none of them were on RSA. **CONCLUSIONS:** The implementation of RSS seemed to contribute to increase patients' accessibility to new anticancer drugs. RSS can be a compensating way to decision-making for reimbursement of anticancer drugs which are clinically beneficial but having uncertainty in cost-effectiveness.

# ACCESS TO INNOVATION AND ECONOMIC BURDEN----A CASE OF NON-SMALL CELL LUNG CANCER IN A PATIENT ACCESS PROGRAM IN QINGDAO, CHINA

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OBJECTIVES: A patient access program (PAP) was adopted by local health insurance scheme in Qingdao since 2012 to provide the coverage of innovative products for catastrophic diseases including non-small cell lung cancer. This study aims to measure the impact of PAP on economic burden of the patients with non-small cell lung cancer. METHODS: The patients with non-small cell lung cancer during 2008 and 2013 were identified from health insurance information system. All claims data, including total treatment fees, the composition and the out-of-pocket fees born by the patients, were collected and a comparative analysis before and after the PAP implementation was conducted. RESULTS: The PAP was achieved through price negotiation between local health insurance agent and manufacturers and reimbursed 70% of the cost of PAP-covered innovative medicines including Icotinib for non-small cell lung cancer. Totally 299 new patients with non-small cell lung cancer registered in PAP and another 78 patients were identified to switch from routine chemotherapies into Icotinib regimen. Before PAP, the average monthly treatment

fees under the routine continuous chemotherapies were RMB11,333 (USD1,828) per patient, with 34.8% (RMB3,939) born by the patient out-of-pocket. Under PAP, for the same patient group, the patients monthly self-paid RMB4,519 (USD729) of the average fees for Icotinib and another RMB1,064 (USD172, 16.9% of total fees) for other drugs and routine treatment. CONCLUSIONS: The PAP, which provides the targeted patients the access to innovative medicines with better efficacy and safety, greatly decreased the fees on routine treatment, but also brought additional self-paid cost on PAP-covered medicines. Further researches are needed to help decision makers to make the tradeoff among better accessibility, increasing cost and improved outcomes from the clinical utilization of PAP-covered innovative medicines.

### PATIENT CHARACTERISTICS AND TREATMENT PATTERNS IN ER+/HER2-METASTATIC BREAST CANCER IN THE UK: RESULTS FROM A RETROSPECTIVE MEDICAL RECORD REVIEW

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OBJECTIVES: To describe demographic and clinical characteristics and real-world treatment patterns for post-menopausal patients with ER+/HER2- metastatic breast cancer (MBC) in the United Kingdom (UK). **METHODS:** We conducted a retrospective review of medical records from institutions across the UK. Records were eligible for abstraction if patients were post-menopausal, had ER+/HER2- MBC (stage IV), and had discontinued second-line treatment in the metastatic setting between 1/1/2008and 3/1/2014. Patients who participated in clinical trials were excluded. This study was considered a "Service Evaluation" by National Research Ethical Service guidance, thus ethics review was not required. Patient demographic, clinical characteristics and treatment patterns including time to progression (TTP) and treatment discontinuation were assessed. **RESULTS:** Forty-one medical/clinical oncologists provided information for 209 patients. Patients were aged 62 years on average and predominantly Caucasian (87%), with 68% diagnosed in metastatic stage and 32% progressed from earlier stages. Bone was the most common site of metastasis (66%) followed by lung/pleura (50%), liver (41%), and lymph nodes (35%). In the first-line MBC setting, 49% of patients received endocrine therapy alone, 6% received it in combination with chemotherapy, 15% received it following chemotherapy induction, and 30% received chemotherapy alone. Chemotherapy usage increased in subsequent therapy lines (33% in second-line [n=209]; 53% in third-line [n=116]). Disease progression was the primary reason for discontinuing treatment in both first- and second-line (60% and 68% respectively). During first-line treatment, 86% progressed, with median TTP of 9.5 months. In second-line, 79% progressed, with median TTP of 7 months. CONCLUSIONS: Endocrine therapy and chemotherapy were commonly prescribed for ER+/HER2- MBC patients. Disease progression remains the most common reason for stopping/ changing therapies, with median TTP < 1 year. These findings suggest that there is a continuing unmet need for new treatments that can extend TTP and address the potential limitations of current therapies.

#### CURRENT TREATMENT PATTERNS IN PATIENTS WITH METASTATIC MELANOMA: A RETROSPECTIVE CLAIMS DATABASE ANALYSIS IN THE UNITED STATES (US)

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OBJECTIVES: To describe the real-world treatment patterns of current melanoma therapies among patients with metastatic melanoma in the US. METHODS: A retrospective cohort analysis was conducted using the IMS PharMetrics Plus claims database. Patients were included in the analysis if:  $\geq 1$  prescription for ipilimumab, vemurafenib, temozolomide, or dacarbazine between 1/1/2011-8/31/2013 (the date of the first use as the index date and the drug as the index drug); diagnosis of melanoma (ICD-9-CM 172.x, V10.82) and metastasis (ICD-9-CM 196.x-198.x) before the index date (pre-index); no index drug use pre-index date; continuous health plan enrollment for  $\geq$ 6 months before and  $\geq$ 3 months after the index date; age  $\geq$ 18 years. Treatment duration was assessed from the index date until a gap in days supplied for >90 days, or the end of follow-up, whichever came first. Proportion of days covered (PDC) was defined as days exposed to the index therapy divided by continuously-enrolled days between the index date and the last prescription date of the index drug. **RESULTS:** 1,043 patients with metastatic melanoma were included, with a median age of 57 years (43% ≤55 years), and 62% male. 405 patients received the index drug of ipilimumab, 361 vemurafenib, 203 temozolomide, and 74 dacarbazine. Mean (median) treatment duration with vemurafenib, temozolomide and dacarbazine was 174 (148), 100 (59) and 64 (52) days, respectively. Mean PDC with vemurafenib, temozolomide and dacarbazine was 81%, 67% and 51%, respectively. For patients receiving ipilimumab, 58% (234/405) had the full 4 doses, 20% (79/405) had 3 doses only, 14% (57/405) had 2 doses only, and 9% (35/405) had 1 dose only for the first treatment course; 4% (10/234) received re-treatment, and no patients had a second re-treatment. CONCLUSIONS: This study provides evidence of current treatment patterns of melanoma therapies, including newer agents, in the real-world clinical practice.

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### TREATMENT PATTERNS AMONG FRONT-LINE GLIOBLASTOMA PATIENTS IN FIVE EUROPEAN COUNTRIES

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OBJECTIVES: To characterize real-world treatment patterns among frontline patients with glioblastoma in Germany, France, Italy, UK, and Spain (EU-5). **METHODS:** This study used the oncologist-surveyed data from the IMS LifeLink™ Oncology Analyzer database. Front-line patients aged  $\geq$  20 years and diagnosed with glioblastoma during 2012 to 2014 in the EU-5 countries were included. Patient