to contemplate the question how innovative technologies can be financed is there even evidence that the estimated direct medical costs of breast cancer treat-
ment in Iran in the period of 23/01/2011-20/03/2014 and examined the fraction of
total costs related to trastuzumab use. METHODS: A retrospective claims database
analysis was performed using data from the Iran Social Security Organization, a
health insurer which covers approximately 50% of the Iranian population. Data min-
ing techniques helped to identify patients and determine resource use in the three
stages of breast cancer (early, loco-regurrence and advanced). Using a healthcare
perspective, absolute and relative costs of various health care services associated with
treatment of HER2-positive breast cancer among Iranian women in both public and
private healthcare systems were calculated. RESULTS: The patient population com-
dined 1295 women (mean SD age: 45.6 10.3 years) and mean follow-up was 739
days (range 0-4 years). Average costs of drugs and chemotherapy in early loco-reg-
urrence and advanced stages were €2,707 (range €98-€23,680), €2,751 (€1-€23,420) and
€13,030 (€15-€45,813), respectively. Average costs of radiotherapy and diagnostic tests
were €13,030 (€1-€23,420) and €5,164 (€2-€9,474), respectively. A random sample was
accounted for the largest share of total costs (58%), followed by paracutical services
(12%), radiotherapy (10%), and other drugs and chemotherapy (9%). CONCLUSIONS:
Trastuzumab is an expensive drug which may require a substantial share of avail-
able budgets. These cost estimates can be included in cost-effectiveness analyses
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able budgets. These cost estimates can be included in cost-effectiveness analyses

A COST-EFFECTIVENESS ANALYSIS OF A BIOMARKER TEST COMPARED TO STANDARD OF CARE SURVEILLANCE IN PATIENTS WITH BARRER'S ESOPHAGUS
Back 1,1 Pettavino J, Snyder S, Critchley-Thorne R 2
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OBJECTIVES: An estimated 17 million people in the US have Barrett's Esophagus (BE).
BE patients are at high risk for progression to high grade dysplasia (HGD) and
EAC. The test stratifies patients into high, medium and low risk categories.
giving providers actionable information for BE endoscopy surveillance frequency and
treatment decisions such as radiofrequency ablation (RFA). This study eval-
uates the cost-effectiveness of this new biomarker test compared with the current
standard of care (SOC) surveillance and treatment of BE. METHODS: Decision
analysis with Markov modeling and cohort simulation were used to model treat-
ment patterns and associated costs and outcomes from a life time perspective. Costs were derived from
Geisinger Health Plan claims data and quality-adjusted life-years (QALYs) from the
medical literature. The model includes realistic assumptions for physician
adherence to SOC for patients in each risk category. RESULTS: Preliminary results of a 5 year model of using the new biomarker test compared to SOC include an
incremental cost-effectiveness ratio of $75,804 in U.S. 2012 dollars. Cumulative
epiphenocopies in the biomarker test arm were 6.23% greater than with SOC and there
were 73.3% fewer cumulative RFAs under SOC than with the biomarker
test. Compared with SOC, the number of patients in the HGD, EAC, and death
states in the biomarker test arm were 52.5%, 60.9% and 9.83% fewer, respec-
tively. CONCLUSIONS: Using this new biomarker test compared to SOC, the
cost is effective at the $100,000 threshold and, due to more effective surveillance
and treatment protocols, results in fewer patients transitioning to HGD, EAC, and
death.

ASSESSING THE ECONOMIC BURDEN OF U.S. CANCER PATIENTS DIAGNOSED WITH NON-HODGKIN’S LYMPHOMA
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OBJECTIVES: To evaluate the health care resource utilization and economic burden of
non-Hodgkin’s lymphoma (NHL) in the U.S. Medicare population. METHODS: NHL patients were identified (International Classification of Diseases, 9th Revision, Clinical Modification [ICD-9-CM] diagnosis codes 200.xx and 202.xx) using national Medicare claims from January 2008 through December 2012. MPN patients were
identifiable using International Classification of Disease 9th Revision Clinical Modification
(ICD-9-CM) diagnosis codes 284.8, 238.71, 238.76 and 289.83. The diag-
nosis date was designated as the index date. A comparison cohort including patients with a diagnosis of MPNs was selected to reduce selection bias. Patients were required to have
continuous medical and pharmacy benefits 1 year pre- and post-index date. One-
to-one propensity score matching (PSM) was performed to compare follow-up
between the cohorts, adjusting for demographic and clinical characteristics. RESULTS: Eligible patients (N=17,950) were identified for the MPN and comparison cohorts. After 1:1 PSM, a total of 5,546 patients were matched from each cohort and baseline characteristics were well-balanced. MPN patients had a higher percentage of health care resource utilizations, including
Medicare carrier (98.6% vs. 65.9%), Durable Medical Equipment (DME; 29.5% vs.
14.4%), Home Health Agency (HHA, 12.4% vs. 5.0%), outpatient visits (76.6% vs.
67.1%), inpatient hospitalizations (72.7% vs. 6.8%) and Skilled Nursing Facility (SNF; 75% vs. 2.0%) visits than non-MPN patients. Patients diagnosed with MPNs also incurred significantly higher costs, including Medicare carrier ($3,872 vs. $1,283), DME ($4,286 vs. $693), HHA ($250 vs. $100), outpatient ($10,601 vs. $5,204), inpatient ($3,449 vs. $1,054), pharmacy ($1,069 vs. $713) and total health care costs ($23,060 vs.
$7,076; p<0.0001). CONCLUSIONS: MPN patients had a higher burden of illness
compared to non-MPN patients.

SYSTEMATIC LITERATURE REVIEW OF COST OF ADVERSE EVENTS IN CANCER TREATMENTS IN THE US
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OBJECTIVES: To estimate the incidence of adverse events (AE) during cancer treatment and
the associated incremental cost of cancer treatments. The objective of this study is to provide an updated understanding of the cost of AEs. METHODS: A systematic search was conducted using PubMed. Selection criteria included studies published in
the English language between January 2008 and October 2013, evaluating the cost of following AEs: neuropenia, thromboembolism, vomiting, nausea, peripheral neuropathy, sepsis, diarrhea and fatige/asthenia, due to cancer treatment in the US. Costs were extracted for case and control cohorts (if available) and the cost difference between the cohorts was calculated to provide the additional cost due to the AEs. This difference in costs was then adjusted to 2013 USD. RESULTS: A total of 983 abstracts were screened, of which 15 unique studies were included. The distribution of studies reporting the selected AEs were: neuropenia (n=3), thromboembolism (n=3), fatigue/asthenia (n=3), nausea/vomiting (n=3), peripheral neuropathy (n=1), sepsis (n=3), diabetes (n=1) and fatigue/asthenia (n=1). The studies
reported inpatient, outpatient, or total healthcare costs, with different units including per patient, per patient-per-year (PPPY), per event, and per episode. The AE costs varied vastly; the more infrequent the event, the less the cost of the AE. The PPPY cost ranged from $213 (outpatient) to $6,000 (inpatient) while the PPPY cost ranged from $9,800 (outpatient) to $21,000 (total healthcare costs). CONCLUSIONS: AEs commonly encountered in cancer treatment remain an expensive problem despite medical advances. In addition to the
high cost of cancer treatment, the cost of managing AEs adds to the economic burden on patients, Payers, and society. This study highlights that the cost of AEs associated with cancer treatments are consistently high and consume a large
portion of healthcare resources.

RECEPTIONS OF BIOSIMILAR MONOCLONAL ANTIBODIES AMONGST EU BUDGET HOLDERS
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OBJECTIVES: Biologics branded will soon begin to face competition from biosimilar
monoclonal antibodies (mAbs), with many currently in development. Given the
transition many markets are making towards becoming increasingly cost
conscious, we sought to investigate how budget holders across the most important
European markets perceived the incoming oncology biosimilar mAbs. METHODS: The research was conducted through in-depth interviews and focus groups with Budget Holders across EUS and the
results explored the varying levels of experience evaluatig and making decisions on small molecule biosimilars (e.g. filgrastim, EPO). However, there was a lack of experience and knowledge amongst the Budget Holders how clinical and a priori
reasons were they were going to be educated. The originator product was preferred in all attributes tested while costs were cited as the most important driver for encouraging adopt-
of biosimilar mAbs. Additionally, budget holders across the EUS were adamant about risk management automation (albeit, in the future), the
initiation of the originator until enough experience was built up (at least 12 months, 24 months likely). Respondents also suggested that key institutions or regions will make deci-
sions early on while other less resourced centres/regions will adopt their decision.
Conversely, clinicians were apprehensive of biosimilar mAbs and anticipate resisting