appropriate care when the blood-based EGFR mutation testing was used as an alternate test to tissue when used as an ongoing monitoring test for 90% reduction in costs. As a result of increased diagnostic yield, there was a 23% decrease in cost per NSCLC patient per month compared to tissue-based testing alone ($1,665 vs $1,265). Costs per NSCLC patient per month are similar when blood-based testing is used in patients with stable disease without monitoring changes in tumor markers. The blood-based cobas® EGFR Mutation Test has advantages for patient outcomes when performed as an alternate test to tissue-based testing when tissue sample is not available. In a prospective trial comparing the kSORT assay to a commercial payer perspective using a set of conservative assumptions. The blood-based cobas® EGFR Mutation Test has advantages for patient outcomes when performed as an alternate test to tissue-based testing when tissue sample is not available. In a prospective trial comparing the kSORT assay to a commercial payer perspective using a set of conservative assumptions. By correctly identifying more patients for proper treatment, the blood-based test represents a good alternative to tissue-based testing for identification of EGFR mutations in locally advanced or metastatic NSCLC patients.

PMD24
A MODEL TO EXPLORE THE POTENTIAL BUDGET IMPACT OF A NOVEL SCREENING TOOL TO INCREASE DETECTION OF SUBCLINICAL REJECTION AMONG KIDNEY TRANSPLANT PATIENTS
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OBJECTIVES: Advances in molecular diagnostics for the detection of disease can provide opportunities for healthcare providers to intervene earlier and subsequently, improve outcomes. Payors are increasingly focused on assessing the cost and value of such tools. The kSORT assay is a non-invasive test that can be used as a screening tool to detect subclinical rejection (SCR) among kidney transplant patients. The current standard of care may consist of routine screening for clinical acute rejection (AR) or the use of invasive surveillance biopsies to detect SCR and histologic diagnosis. Preliminary data show that the kSORT assay performs as well as and potentially superior to biopsies for the detection of SCR and prediction of AR. The objective of this analysis is to evaluate the potential budget impact of the kSORT assay for first-line commercial payer perspective using a set of conservative assumptions.
METHODS: A 2-year Markov model incorporating SCR, AR, and graft failure was developed to evaluate the budget impact from a U.S. commercial payer perspective of the kSORT assay among pass/fail SCR test. Probabilities for progression were obtained by calibrating the values to correspond with reported prevalence rates of SCR and incidence rates of AR from published registry data. Costs were obtained through the peer-reviewed literature and sensitivity analyses were done to assess the impact of using a commercially available test instead. RESULTS: An expected lower cost ($13.5 million) and lower overall costs compared to a CBGMD. CONCLUSIONS: Multivariate modeling showed that the kSORT assay may serve as a minimal budget impact ($<0.05) PMPM across most scenarios. Key value drivers include the frequency of monitoring, costs of the assay, and concurrent use of protocol biopsies with the assay. CONCLUSIONS: The use of k-SORT to detect SCR is likely to produce a minimal budget impact for commercial payers. Additional studies demonstrating the clinical performance of the assay compared to biopsies can help to provide further insight into the clinical and economic benefits.

PMD25
BLOOD GLUCOSE MEASUREMENT DEVICE USING PATTERN ALERT TECHNOLOGY IN INSULIN-TREATED DIABETICS IN THE UNITED STATES
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OBJECTIVES: Hypoglycemic events (HEs) are important acute complications in patients with diabetes and can cause significant morbidity, especially in poorly controlled patients. Several studies have highlighted high treatment costs and have a major impact on patients’ quality of life. A newly available, innovative blood glucose measurement device (IBGMD), using a technology identified as ‘pattern alert technology’ (PAT), is a device that avoids hypoglycemia. The objective of the study is to assess the effectiveness, cost-utility and cost-effectiveness of the IBGMD. CONCLUSIONS: This multicenter study is designed to determine (i) the number of avoidable sHEs through deployment of IBGMD using PAT, compared to a conventional blood glucose measurement device (CBGMD), (ii) the IBGMD net cost, and (iii) its impact on total medical costs. METHODS: Values attached to epidemiologic cost and behavioral input variables were taken from scientific literature and authoritative sources. A decision-analytic, one-year model comparing direct costs (payer perspective) and sHE outcomes between IBGMD and CBGMD was developed, and budget impact and cost-effectiveness calculations were performed, reflecting the US insulin-treated diabetic population. RESULTS: On an overall population level, in the base-case scenario (sHE incidence 8.9%, PMPM compliance 90%), usage of the IBGMD could lead to an extra 9.5, 181 avoided sHEs annually, compared to a CBGMD. Assuming price parity of test strips across both devices ($0.21/strip at Medicare price $10.40 per 50-unit pack), its implementation is cost-neutral. At an average treatment cost of $7.598 per single sHE, this would lead to overall net cost savings of over $70 million per year. In alternative scenarios, achievable savings range from $103.7 million to nearly $6.7 billion per year. In terms of incremental cost-effectiveness, IBGMD is considered dominant, as it features higher effectiveness and a lower incremental cost compared to a CBGMD. CONCLUSIONS: An innovative blood glucose measurement device with pattern alert technology can avoid a number of sHEs and may lead to considerable cost savings, if implemented widely in the target population.

PMD26
CLINICAL AND COST OUTCOMES FROM DIFFERENT HYALURONIC ACID (HA) TREATMENTS IN PATIENTS WITH KNEE OSTEARTHROSIS
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OBJECTIVES: Intra-articular injection of hyaluronic acid (HA) for knee osteoarthritis (OA) effectively reduces pain and delays total knee replacement (TKR) surgery; however, little is known about relative differences in clinical and cost outcomes among different HA products. We aimed to compare these specific costs and risk of TKR among patients receiving different HA treatments in a commercially-insured cohort.

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