

unapproved uses of approved medicines, and assessing treatment value. **METHODS:** Data were collected from a 20 minute on-line survey of United States-based oncologists recruited from an online panel. Findings were reported descriptively. **RESULTS:** Oncologists (n=202) believe the greatest progress in cancer care has been with immunotherapies and targeted therapies compared with other innovations and that this trend will continue moving forward; the majority considered immunotherapies (84%) and targeted therapies (82%) “very/extremely” promising. More than three out of four oncologists surveyed (78%) would find it useful if more information about safety and efficacy of unapproved uses was available in their clinical practice.; 85% would be interested in receiving this information from biopharmaceutical manufacturers. A similar proportion (77%) indicated that they would be more likely to refer patients to clinical trials if more information on off-label uses of medicines were available. Oncologists identified the most important attributes of a value framework as the incorporation of the best available evidence, reflection of real-world treatment decision-making, and review by qualified experts. Nearly all respondents (>95%) were familiar with the NCCN Evidence Blocks and the ASCO Value Framework and found them “very/extremely” useful in decision making (71% and 63% respectively), compared to the ICER Value Framework and MSK Drug Abacus (19% and 24% respectively). It should be acknowledged that while the ICER and MSK tools are payer-focused and not developed for use by oncologists or patients, it remains important that those frameworks incorporate attributes that oncologists value. **CONCLUSIONS:** Innovative medicines represent an opportunity for treatment progress in cancer care. Facilitating the exchange of information and addressing gaps in current value assessment tools and can help move towards a value-driven healthcare system that improves patient outcomes.

#### PCN212

##### A RETROSPECTIVE REVIEW OF PATIENT CHARACTERISTICS AND TREATMENT METHODS OF BREAST CANCER PATIENTS IN INDIA

Abraham PS, Greene M  
MCPHS University, Boston, MA, USA

**OBJECTIVES:** To review the patient characteristics and treatment methods of breast cancer patients at a tertiary hospital in India. **METHODS:** This study was a retrospective review of electronic medical records from a tertiary care hospital in Mumbai, India. Patients  $\geq 18$  years of age hospitalized for breast cancer treatment between Jan 2014 and May 2015 were included in the study. Descriptive and inferential statistics were used to analyze and compare differences between patients. **RESULTS:** A total of 146 patients met the study criteria. Of these, 120 patients were in the age group of 18 to 64 years. The mean age for all the breast cancer patients was 51.07+13.34 years. The mean age was lowest for patients with private insurance (PI) while highest for patients with CGHS (CGHS=54.69+13.35 years, RGJAY=52.39+12.41 years, NI=46.59+16.43 years, PI=45.64+12.49 years). The majority of the patients (n=120, 82.2%) underwent a surgical procedure during their stay. The majority of the patients were subscribed to RGJAY payer scheme (RGJAY=97, 66.4%, CGHS=13, 8.9%, NI=22, 15.1%, PI=14, 9.6%). Abnormal growth was the most common reason for admission into the hospital (n=106, 72.6%). 49 (33.5%) patients with hypertension and 36 (24.6%) patients with diabetes were reported as major comorbidities during hospitalization. The majority of the patients had early stage breast cancer (108, 74.0%), while 16 (11.0%) patients had locally advanced breast cancer stage 2B and 22 (15.1%) patients had locally advanced breast cancer stage 3A to C. Of the total 120 patients that had surgery, majority of them (n=90) underwent a modified radical mastectomy (MRM) or a breast conservation surgery (n=10). **CONCLUSIONS:** Majority of the breast cancer patients were diagnosed during the early stages of the disease and were subscribed to RGJAY scheme. The common reason for hospital admission was abnormal growth and the common procedure patients underwent was the MRM.

#### PCN213

##### PAYER DECISION MAKING FOR PHARMACOGENETIC TESTS: PRELIMINARY RESULTS

Lu CY<sup>1</sup>, Treadwell S<sup>1</sup>, Mazor K<sup>2</sup>, Wu AC<sup>1</sup>

<sup>1</sup>Harvard Medical School and Harvard Pilgrim Health Care Institute, Boston, MA, USA, <sup>2</sup>University of Massachusetts Medical School, Worcester, MA, USA

**OBJECTIVES:** Genetic tests are the fastest growing sector of medicine and medical science, yet there is a dearth of research on access to cancer-related pharmacogenetic tests. The study explored payers' views about management strategies for pharmacogenetic tests, and to describe criteria for coverage decisions, policy challenges and strategies used to overcome these challenges. **METHODS:** We conducted semi-structured interviews with representatives of seven US private payers and two US public payers. Interviews were recorded and transcribed verbatim. Using a directed qualitative content analysis, two members of the research team performed open coding of the transcripts in an iterative process, building a provisional code book as coding progressed. **RESULTS:** Payers may not have established coverage policies for single gene tests but even without a policy in place, these are generally accessible on a case-by-case basis. For coverage decision making for pharmacogenetic tests, payers generally followed coverage decision making processes originally established for pharmaceuticals. Some realize that the evidence requirements, which are established for pharmaceuticals, are not applicable to pharmacogenetic tests, particularly because the field is advancing rapidly. ‘Outcomes based’ risk sharing agreements with diagnostic companies are recognized as a possible option to collect evidence and limiting coverage. Some payers are introducing prior authorization requirements for pharmacogenetic tests to better manage utilization because an established coding system for tests is lacking. Another key challenge from payers' perspective is managing the use of and payment for gene panels. Laboratories provide different combination of genes in their panel tests, thus knowing which genes are tested is

a challenge. Some payers do not pay for large gene panels. **CONCLUSIONS:** Single pharmacogenetic tests are generally readily accessible. However, as we move from single gene tests to gene panels, payers have identified challenges, and ways of overcoming those challenges as the field evolves.

#### PCN214

##### EVALUATION OF DRUG PRICE TRENDING IN THE FEDERAL 340B DRUG DISCOUNT PROGRAM

Lee C<sup>1</sup>, McCombs J<sup>1</sup>, Stone B<sup>2</sup>, Chang J<sup>2</sup>

<sup>1</sup>University of Southern California, Los Angeles, CA, USA, <sup>2</sup>PharMedQuest Pharmacy Services, Brea, CA, USA

**OBJECTIVES:** The Federal 340B drug discount program provides access to significant drug price discounts for healthcare organizations serving disadvantaged patients. Currently there are no published studies documenting pricing trends in the 340B program. In this project, we analyzed drug price trends in the 340B program over a 10-year period. **METHODS:** Pharmacy purchase records were collected from a 340B-contracted pharmacy system in Los Angeles between 2006 and 2016. Data, including 340B drug price and average-wholesale price (AWP) were analyzed chronologically to display the price change. Annual average prices were weighted by purchase volume in each year. The results were categorized by American Hospital Formulary Service (AHFS) Therapeutic Classification. All dollar values were reported in 2016 terms. **RESULTS:** 340B prices declined relative to AWP over time across all drug classes. Overall drug price growth rate over 10-years was 16% for AWP and 19% for 340B (p=0.88). The growth rate variations were similar after 2010. Among high cost drug classes, the 10-year price growth rates were: 11% in AWP and 5% in 340B in antiretroviral drugs (p < 0.01), 58% in AWP and 32% in 340B in antineoplastic drugs (p=0.37), 16% in AWP and -6% in 340B in disease-modifying antirheumatic drugs (DMARD) (p=0.07) and 14% in AWP and 15% in 340B in antidiabetic drugs (p=0.97). For specialty drug classes, such as antineoplastic drugs, antiretroviral drugs and DMARDs, the 340B price growth rates were smaller than AWP growth rates after 2014. **CONCLUSIONS:** The relatively low drug price in the 340B program provides significant financial savings for eligible healthcare organizations. Eligible organizations with high specialty drug volume would benefit the most from the 340B program.

#### PCN215

##### DELAYS IN CLINICAL TRIAL DATA RELEASE ACROSS ONCOLOGY

Qunaj L<sup>1</sup>, Jain RH<sup>2</sup>, Atoria CL<sup>2</sup>, Miller JE<sup>3</sup>, Bach PB<sup>2</sup>

<sup>1</sup>Warren Alpert Medical School of Brown University, Providence, RI, USA, <sup>2</sup>Center for Health Policy and Outcomes, Memorial Sloan Kettering Cancer Center, New York, NY, USA, <sup>3</sup>NYU School of Medicine, New York, NY, USA

**OBJECTIVES:** Although much of the clinical trial data generated by pharmaceutical companies in oncology are eventually released, there are concerns regarding the speed at which this information is disseminated. Thus, we conducted a study examining the delays in publication of clinical trial results and the availability of clinically actionable data in company press releases. **METHODS:** We identified peer-reviewed publications and meeting presentations for all clinical trials mentioned in press releases issued by the top five companies in oncology between January 2011 and June 2016. Time to first publication from the availability of trial results was calculated. Availability of results was the earliest date among: initial press release, meeting presentation (minus either 120 or 90 days for regular or late-breaking abstract submission, respectively) or publication (minus 120 days). We conducted survival analyses using the log-rank test and Cox proportional hazards models. **RESULTS:** Across our sample of 76 clinical trials, the median time from the availability of trial results until the first journal publication was 363 days. The vast majority (79%) of releases reported positive results. For those which reported negative results, there was a longer delay to publication (median of 559 vs. 348 days, log-rank p<0.001) and the press releases were significantly less likely to include quantitative data (p<0.01). This result remained significant in a model controlling for company. **CONCLUSIONS:** Our study reveals that there is a tremendous amount of information emanating from human subjects research on cancer drugs that is not finding its way into the public domain in a timely fashion. These delays negatively affect both patient outcomes and scientific innovation. We propose two solutions to ensure rapid dissemination of data, including more consistent use of independent scientific preprinting and rigorous enforcement of regulations requiring that sponsors post trial results on public domains such as ClinicalTrials.gov.

#### PCN216

##### PCODR UNDER CADTH – WHAT’S CHANGED?

Macaulay R, Griffiths EA

PAREXEL, London, UK

**OBJECTIVES:** The pan-Canadian Oncology Drug Review (pCODR) was established in 2010 to assess oncology drugs and bring consistency to the assessment across provinces/territories. In April 2014, pCODR was transferred to the Canadian Agency for Drugs and Technologies in Health (CADTH). This research aims to see what effect this transfer has had on the number of appraisals and recommendation rates conducted by pCODR. **METHODS:** All publically available pCODR reports were extracted up to 30th November 2016 and the drug, indication, date and outcome were extracted. Statistical comparisons were made using Student's t-test. **RESULTS:** 76 appraisals have been conducted by pCODR, reflecting an average of 15.5/year (10 in 2012, 18 in 2013, 9 in 2014, 24 in 2015, and 15 in 2016). No significant change in the rate of appraisals was observed pre-CADTH transfer (14.2/year [32 from January 2012 to March 2014]) versus post-CADTH transfer (16.5/year [44 from April 2014 to November 2016]) (p=0.588). Overall, 79% of pCODR outcomes have been positive recommendations (defined as full recommendations [12%] or restricted recommendations [67%]) with the remaining 21% being