cancer after failure of (neo) adjuvant anthracycline-based therapy, relative to paclitaxel (T) monotherapy, in Australia. Paclitaxel monotherapy is a treatment of choice in advanced, anthracycline-resistant breast cancer in Australia. **METHODS:** Economic evaluation was based on the global, randomised trial of GT versus T (N = 529) (Albain et al, ASCO 2004). Median survival for the intention-to-treat population was 18.5 months (95% CI, 16.5 to 21.2 months) for the GT arm versus 15.8 months (95% CI, 14.4 to 17.4 months) for the T arm (hazard ratio = 0.78 [95% CI, 0.63 to 0.96]. Higher toxicity in the combination arm did not have a negative impact on quality of life (Moinpour et al, ASCO 2004). Mean survival time for each treatment arm was estimated from Kaplan-Meier survival curves. Resource use (chemotherapy, administration, hospitalisation due to adverse events [AEs], treatment emergent AEs) was applied as per the trial and costed accordingly, using Australian dollars (2004 value). Threshold of <$50,000 per life-year gained was considered cost-effective. **RESULTS:** Mean cost per patient on GT arm was $21,695 ($19,389 for chemotherapy, $1003 for administration, and $1304 for AE management). Mean cost per patient on T arm was $13,635 ($12,397 for chemotherapy, $567 for administration, and $670 for AE management). Mean survival gain for GT over T was 0.176 years. Cost per life-year gained for GT was $45,799. **CONCLUSION:** This survival benefit is a highly patient-relevant outcome for advanced breast cancer. This economic evaluation found that gemcitabine plus paclitaxel offers an acceptable cost-effectiveness ratio and good value-for-money for patients with advanced breast cancer in Australia.

PCN11

COST EFFECTIVENESS OF ADJUVANT, INTRAVESICAL THERAPY FOR NON-INVASIVE TRANSITIONAL CELL CARCINOMA OF THE BLADDER

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OBJECTIVES: Estimate the costs of care and outcomes associated with adjuvant, intravesical therapy (AIT)—either BCG or chemotherapy—for non-invasive bladder cancer compared to no AIT. **METHODS:** Subjects diagnosed with non-invasive transitional cell carcinoma of the bladder between 1992 and 1999 were drawn from the SEER-Medicare dataset. We estimated the effect of treatment on costs and outcomes within five risk groups defined by stage and grade of disease. We included subjects that were at least 66 years old and who had fee-for-service coverage. We estimated direct medical costs (for Medicare) using the Kaplan-Meier sample average estimator. Using Cox models, we estimated the effectiveness of AIT using three measures: survival time, time to cystectomy (surgical removal of the bladder) and time to repeat transurethral resection (TUR: surgical removal of lesions in the bladder). The models adjusted for age, sex, race, comorbidities and socioeconomic status. **RESULTS:** Subjects had 2 to 10 years of follow-up. A total of 13,658 subjects were included: 2137 received AIT. Mean costs (2004 dollars) were $53,834 for those that received AIT and $47,884 for those that did not receive AIT. Difference in costs between treatment groups was similar for the five risk groups. AIT reduced the risk of death for subjects with stage 1, grade 3 or 4 tumors (hazard ratio: 0.82; 95% CI: 0.71 to 0.94). Survival was not statistically significantly different in other risk groups. AIT reduced the risk of repeat TUR in each risk group. Conversely, AIT increased the risk of cystectomy for subjects with low grade disease and carcinoma in situ. **CONCLUSIONS:** AIT increased Medicare costs over 10 years by $5950. AIT reduced mortality for high risk subjects only, reduced the risk of TUR for all risk groups and increased the risk of cystectomy for low risk subjects. Residual confounding may explain mixed findings.

PCN12

COST-EFFECTIVENESS ANALYSIS OF G-CSF IN ELDERLY PATIENTS WITH AGGRESSIVE NON-HODGKIN'S LYMPHOMA (NHL) RECEIVING CHOP

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OBJECTIVES: A recent randomized trial compared granulocyte colony-stimulating factor (G-CSF; filgrastim) to no G-CSF in elderly patients with aggressive NHL receiving CHOP chemotherapy [Osby, 2003]. A cost-effectiveness analysis is presented comparing CHOP alone to CHOP + G-CSF. **METHODS:** An economic model based on this trial compares the risk of neutropenia, disease relapse, and 5-year survival among patients receiving CHOP with or without G-CSF. Cost estimates were derived from published literature and data from U.S. health centers. Incremental cost-effectiveness ratios (ICERs) of $US/life year saved (LYS) were estimated, and sensitivity analyses performed. **RESULTS:** CHOP + G-CSF was associated with significantly fewer episodes of severe neutropenia ($P < 0.001$), FN ($P < 0.001$), greater dose intensity ($P < 0.05$), fewer deaths ($P = 0.04$), and improved 5-year survival ($P = 0.04$). Based on five years of followup, the life years averaged 2.93 years in the CHOP alone group compared to 3.52 years in the CHOP + G-CSF arm. Expected costs were $41,400 and $39,747 for the G-CSF and control arms, respectively. Under baseline assumptions, the ICER for G-CSF support was estimated at $2769/LYS. Sensitivity analyses revealed G-CSF support to be cost saving across most plausible values for baseline FN risk, relative risk reductions for FN, infection-related mortality, and risks of disease relapse. G-CSF support remained cost saving until the control risk for disease relapse fell to <2%. Net cost savings were observed for FN relative risk reductions >56%. **CONCLUSIONS:** A recent clinical trial of G-CSF support demonstrated a reduction in neutropenic complications and improved survival. Incorporation of cost data into an economic model based on this trial demonstrates that G-CSF support is within accepted limits for cost-effectiveness across a broad range of assumptions.

PCN13

COST-EFFECTIVENESS ANALYSIS OF APREPITANT IN THE PREVENTION OF CHEMOTHERAPY-INDUCED NAUSEA AND VOMITING IN PATIENTS RECEIVING EITHER CISPLATIN-BASED CHEMOTHERAPY REGIMENS OR MODERATELY EMETOGENIC CHEMOTHERAPY

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OBJECTIVES: Aprepitant is effective in preventing chemotherapy-induced nausea and vomiting (CINV), achieving higher complete response (CR = no emesis and no rescue therapy) compared to standard prevention, in patients receiving either highly (HEC) or moderately emetogenic chemotherapy (MEC) (absolute improvement = 11% and 13% respectively). We assessed the cost-effectiveness of aprepitant based versus standard prevention in these indications in Belgium. **METHODS:** A decision analytical model was developed in MS Excel. To estimate resource use, two approaches are used. The first is based on the preventive regimens applied in randomized controlled trials comparing aprepitant based CINV prevention