Preserving Survival Time (RFST) model were used as secondary analyses. The Inverse Probability of Censoring Weights (IPCW) method and the Cox model using treatment as a time-dependent covariate were used as sensitivity analyses.

RESULTS: Overall, 71% of patients randomized to dexamethasone crossed over to bortezomb. The primary analysis led to a hazard ratio of 0.59 (95%CI: [0.32:0.86]) for bortezomb versus dexamethasone, compared to 0.77 (95%CI: [0.61:0.97]) using the ITT approach. The results of the secondary analyses were consistent with the primary analysis. The IPCW provided results, which were very sensitive to the choice of the time interval. Lastly, the Cox model with treatment as a time-dependent variable resulted in a counter-intuitive higher hazard ratio than the ITT analysis, consistent with results from simulation studies indicating this approach is biased.

CONCLUSIONS: Adjusting for crossover led to a decrease of the hazard ratio from 0.77 to 0.59, and resulted in wider confidence intervals than the ITT analysis. Additional analyses are required to assess the performance of the IPCW method compared to the IPE algorithm and the RFST model under different scenarios.

PCN25 BUDGET IMPACT ANALYSIS OF SWITCHING TO DIGITAL MAMMOMGRAPHY IN A BREAST CANCER POPULATION-BASED SCREENING PROGRAM Arrospide A1, Comas M2, Mar J3, Sala M2, Hernandez C2, Roman R2, Castells X3

Hospital Alea Deba, Mondragon, Spain, 2Hospital del Mar-IMIM, CIBER de Epidemiología y Salud Pública (CIBERESP), Barcelona, Spain, 3Hospital del Mar-IMIM, Barcelona, Spain

OBJECTIVES: Digital mammography is costlier than screen film mammography but presents benefits at the technological and logistic level. The aim of this study was to analyze the impact and the health and economic benefits of the introduction of digital mammography in a population-based breast cancer screening program.

METHODS: A discrete-event simulation model was implemented including the processes under a breast cancer screening program and the natural history of breast cancer. The simulation events included: invitation (biennial) of the target population (women aged 50-69 years), participation, screening test, confirmatory tests after a positive mammography result, cancer diagnosis and treatment. Natural history of breast cancer included the following health states: no cancer, preclinical (non symptomatic) cancer, clinical (or symptomatic) cancer and death.

RESULTS: Digital and analogical mammography had the same sensitivity, but different specificities were applied according to type of mammography and also initial or successive screening. Results were collected during a 20-year screening scenario.

RESULTS: A total of 90,575 women were screened under both techniques during the simulated 20 years. This population resulted in more than 262,500 screening mammograms. The recall rate was 5.9% under digital mammography and 6.4% under analogical mammography, while the numbers of confirmatory tests needed were 23,728 and 32,697, respectively. The cancer detection rate was 0.7% for both techniques. Digital mammography saved 1,909,167 euros in additional tests, while it was 1,026,807 euros more expensive in screening mammograms and presented similar costs of treatments.

CONCLUSIONS: Results suggest that, although population-based breast cancer screening with digital mammography is costlier in terms of the initial investment, it is more cost-effective in terms of additional resources needed. The health benefits are similar to those of conventional analogical mammography, but it reduces the number of additional tests needed, which represent a clear benefit to participating women.

OBJECTIVES: The addition of MEPACT as an add-on treatment to adjuvant chemotherapy in the treatment of high-grade non-metastatic osteosarcoma after macroscopic complete surgical resection has shown to significantly increase overall survival of young patients. This study assessed the costs (drug and administration) and the long-term financial impact on the UK (government) of introducing MEPACT. METHODS: Based on the cost of MEPACT and using survival rates derived from clinical trial data we modelled the net budget impact of MEPACT compared to no MEPACT. Further, we modelled the net tax contribution to the state of a surviving patient over a lifetime by subtracting direct government transfers that are made to the individual (child benefit, education etc) from the individual’s gross income and net anticipated earnings. RESULTS: Using UK incidence rates of osteosarcoma the model estimated approximately 54 newly diagnosed non-metastatic cases per annum. Assuming that 38 doses of MEPACT (calculated from trial data) are added to the treatment regimen of 50% of patients at a cost of £191,189 , the expected 1-year cost would be UK £3,972k compared with £3,460k had all patients been treated without MEPACT. Administration costs accounted for 3% of total costs. The lifetime discounted value of net taxes from a 14 year old patient treated with MEPACT is £79,000. The breakeven age, defined as the point at which the net tax contribution becomes greater than zero, is approximately 41 years. CONCLUSIONS: The additional budget impact due to MEPACT is mainly due to the cost of the drug. From the tax calculations, we conclude that investment in MEPACT does not negatively impact the long run fiscal budget of the UK government. Conversely, by taking a broader government perspective over an average lifetime, a surviving patient returns a positive net value to the state.

PCN28 CAPECITABINE FOR THE TREATMENT OF BREAST CANCER IN PRIVATE HEALTH SYSTEM IN BRAZIL: COST ANALYSIS BASED ON REAL WORLD DATA Clarke G1, Clark LG2, Botrel TEA3, Rosa B4, Medina P5, Paladini L3, Filo P2, Rodrigues N3, Talma F1, Castro AP2, Fortes AF

1Evidências, Campinas, Brazil, 2Evidências, Campinas, SP, Brazil, 3Evidências, São Paulo, São Paulo, Brazil

OBJECTIVES: Capecitabine (C) is approved in Brazil for the treatment of breast cancer in first or subsequent lines. In the private sector, it’s not often used, due to the fact that health insurance plans (HI) do not offer coverage for oral (PO) chemotherapy (CHEMO), only for intravenous (IV). Our aim was to determine if the use of C could spare costs if adopted by HI. METHODS: We searched Evidencias Database for BC patients eligible for the use of C, in the year of 2008. This database has information from over 2 million of users of 14 HI. We identified the IV CHEMO actually used and the costs paid. Then, based on the data of each individual patient and in the length of use of CHEMO, we calculated the associated costs in a scenario deriving MEPACT. Further, we modelled the net budgetary impact of MEPACT derived from a clinical trial, we projected the net budgetary impact of MEPACT producing MEPACT.

RESULTS: The introduction of nilotinib as first line treatment for patients with newly diagnosed CML will lead to relatively small increase in the health care budget in Bulgaria compared to the clinical benefit in terms of achievement of deeper molecular response, improvement of overall survival and less disease progression.

PCN29 BUDGETARY IMPACT OF ADOPTION OF ERLOTINIB FOR LUNG CANCER IN THE PRIVATE HEALTH INSURANCE MARKET IN BRAZIL: A REAL WORLD DATA ANALYSIS