comparisons. **CONCLUSIONS:** Current standards around second-line treatment of mCRC have evolved over time. The substantial clinical, methodological, and statistical heterogeneity in the available data prevents evidence-based quantitative comparisons of treatment outcomes at this time.

PCN23

COMPARISON BETWEEN EVEROLIMUS (AFINITOR®) AND CHEMOTHERAPY AGENTS (CAPECITABINE, DOCETAXEL AND DOXORUBICIN) FOR THE TREATMENT OF HORMONE RECEPTOR POSITIVE (HR+) HER2 NEGATIVE (HER2–) ADVANCED OR METASTATIC BREAST CANCER

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OBJECTIVES: This study compares everolimus (EVE) versus the most commonly used chemotherapy agents in UK clinical practice (capecitabine [CAPE], docetaxel [DOC] and doxorubicin [DOX]) in patients with hormone receptor positive, HER2 negative advanced or metastatic breast cancer with the purpose of determining the effect of everolimus versus chemotherapy through the derivation of hazard ratios (HR). **METHODS:** A systematic review of the literature was performed to find evidence that could link EVE with chemotherapy (CAPE, DOC and DOX) in terms of progression-free survival (PFS) and overall survival (OS). No head-to-head trials comparing EVE versus chemotherapy were found, the only study that linked hormonal therapy with chemotherapy for treatment of metastatic breast cancer was Wilcken *et al.* (2003). Wilcken *et al.* identified three studies which compared OS for tamoxifen versus chemotherapy. None of the studies identified in the systematic review reported PFS. The link between EVE versus chemotherapy through Wilcken *et al.*(2003) was established via tamoxifen (using Bucher methods), so it was assumed that PFS for chemotherapy would be the same as PFS for everolimus versus tamoxifen (TAM) from the TAMRAD trial. **RESULTS:** HR for everolimus versus tamoxifen for PFS from the TAMRAD trial is 0.54. For OS, Wilcken et al. derived a HR for chemotherapy versus tamoxifen of 0.94. To calculate the HR for OS for everolimus vs tamoxifen the inverse was applied to the OS HR from the TAMRAD trial (0.45), hence (1/0.45)=2.22. The HR for OS for everolimus versus chemotherapy is therefore (0.94x2.22)=2.09. Because a class effect was assumed for the three chemotherapy agents, these HRs were applied to capecitabine, docetaxel and doxorubicin equally. **CONCLUSIONS:** Compared with the most commonly used chemotherapy agents in UK clinical practice (CAPE, DOC and DOX), everolimus has a lower risk of death as demonstrated by the HRs derived.

PCN24

TREATMENTS FOR EGFR MUTATION POSITIVE NSCLC – A NETWORK META-ANALYSIS

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OBJECTIVES: Lung cancer is the most common cause of cancer-related deaths world-wide. Afatinib is a novel, potent, irreversible ErbB family blocker. In EGFR mutation-positive locally advanced and metastatic non-small cell lung cancer, afatinib shows superior effectiveness as a 1st-line treatment compared to standard-of-care chemotherapy. To date, no head-to-head trial results exist to compare the efficacy of afatinib to reversible EGFR TKIs, gefitinib or erlotinib. The analyses presented here attempt to fill this gap by means of a network meta-analysis (NMA). **METHODS:** A systematic literature review (2002-2012) identified the best available evidence. Results from afatinib's pivotal trials (LUX-Lung 3, LUX-Lung 6) were added. A NMA following a Bayesian approach (in WinBUGS) was applied to estimate the relative treatment effects between afatinib, gefitinib and erlotinib. Outcomes of interest were progression free survival (PFS) and overall survival (OS). For PFS, results by investigator review were considered as not in all trials PFS was assessed independently. Versus erlotinib, afatinib's results in the two most common EGFR mutations studied in erlotinib trials were considered. Sensitivity analyses were performed to confirm the robustness of results. **RESULTS:** Twenty studies, including LUX-Lung 3 and LUX-Lung 6, were included; 19 reported OS, 14 reported PFS. Results from random effects models are reported. All comparisons versus reversible TKIs favoured afatinib, although in most analyses the upper credible interval limit exceeded 1. The estimated probability of afatinib being best regarding PFS in all mutations was 80% compared to 17% for erlotinib and 3% for gefitinib, and was 43% regarding OS compared to 13% for gefitinib and 3% for erlotinib. **CONCLUSIONS:** Afatinib consistently showed superior efficacy versus chemotherapy in the pivotal trials. In the absence of head-to-head trial results versus reversible TKIs, the NMA results suggest also potential superiority of afatinib for both PFS and OS when compared to erlotinib and gefitinib.

PCN25

QUALITY INDICATORS OF THE FOURTH SCREENING ROUND (2008-2009) OF THE HUNGARIAN ORGANIZED, NATIONWIDE BREAST CANCER SCREENING PROGRAMME

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OBJECTIVES: Organized, nationwide screening for breast cancer with mammography started in Hungary in January 2002. Women in the age group 45-65 years are the target population and 2 years screening interval is applied. The aim of this study is to evaluate the quality indicators of the 4th screening round (2008-2009). **METHODS:** The data derive from the financial database of the National Health Insurance Fund Administration (NHIFA) covering the period of 2008-2009. We calculated the following indicators: recall rate of women who underwent mammography examinations, attendance of re-called women, proportion of women referred to surgery, proportion of women who underwent surgery compared to referred women, proportion of benign and malignant cases. **RESULTS:** In 2008-2009 there were 477904 screening mammography examinations in Hungary. 5.15 % of participating women were re-called. The attendance of re-called women was 92.25 %. Altogether 2092 women (9.7 %) were referred for breast surgery but only 1485 women (71.0 %) underwent surgery. Histological examination confirmed 281 benign (18.9 %) and 1204 malignant (81.1 %) cases. **CONCLUSIONS:** The quality indicators of the Hungarian organized mammography screening program met the recommendations of international professional guidelines. However, in addition to current indicators, new ones should be introduced in order to provide a more comprehensive monitoring of the program.

PCN26

THE ATTENDANCE OF THE FOURTH SCREENING ROUND (2008-2009) OF THE HUNGARIAN ORGANIZED, NATIONWIDE BREAST CANCER SCREENING PROGRAM

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OBJECTIVES: Organized, nationwide screening for breast cancer with mammography started in Hungary in January 2002. Women in the age group 45-65 years are the target population and 2 years screening interval is applied. The aim of this study is to analyze the attendance rate of the 4th screening round (2008-2009). **METHODS:** The data derive from the financial database of the National Health Insurance Fund Administration (NHIFA) covering the period of 2008-2009. We calculated two attendance indicators. The up-take of the program means the percentage of women aged 45-65 who, having been sent an invitation for screening, attend a screening unit and undergo mammography in response to that invitation. We defined coverage as the ratio of women in the age group 45-65 years having either a screening mammography or a diagnostic mammography. **RESULTS:** In 2008-2009 there were 477904 screening mammography cases and 1204893 diagnostic mammography examinations in Hungary. We found 49.4 % and 41.5 % up-take in 2008 and 2009 respectively; and 45.0 % combined rate for 2008/2009. The screening coverage was 31.2 % and the diagnostic coverage was 20.4 %, while the total coverage (screening and diagnostic) was 50.1 %. **CONCLUSIONS:** The attendance of the Hungarian organized breast cancer screening program – compared to the previous period before the implementation of the organized screening program – is promising, although to achieve the expected results in mortality decrease a further improvement of both the uptake and coverage is necessary.

PCN27

RACIAL DISPARITIES IN DIFFUSION, COMPARATIVE MORBIDITY, AND DISEASE CONTROL OF INTENSITY-MODULATED RADIATION THERAPY COMPARED TO CONFORMAL RADIATION THERAPY FOR LOCALIZED PROSTATE CANCER

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OBJECTIVES: Recent advances in prostate cancer radiation therapy (RT) technology have led to the development of costlier treatments such as intensity-modulated radiation therapy (IMRT) compared to the prior standard, conventional radiation therapy (CRT). This study examines the two treatment modalities to determine if racial disparities in morbidity and disease control may be explained by differential use of IMRT versus CRT. **METHODS:** A population-based study was conducted using Surveillance, Epidemiology, and End Results (SEER)-Medicare linked data from 2000 through 2009 for patients with non-metastatic prostate cancer. Adjusted Cox Proportional Hazards models were conducted, adjusting for demographic and clinical characteristics. Results are presented as (Adjusted Hazard Ratio [95% Confidence Interval]). In subjects without prior morbidity at RT, the rate of recurrence, hip fracture, erectile dysfunction, disorders related to gastrointestinal, and urinary (incontinence and non-incontinence) morbidity were compared by race with IMRT as the referent group. **RESULTS:** Approximately 10,976 men [524 African-American (AA) CRT; 423 AA IMRT; 4,746 Caucasian CRT; 5,283 Caucasian IMRT] met study eligibility. Diffusion of IMRT was slower among AA compared to Caucasians ($p<0.001$). Caucasians receiving CRT were at a greater risk for hip fracture [1.29; (1.16, 1.43)], cancer recurrence [1.13; (1.04, 1.23)], or urinary incontinence [1.09; (1.01, 1.19)] than those receiving IMRT. No estimates comparing AA CRT recipients to AA IMRT recipients reached statistical significance, though cancer recurrence, erectile dysfunction, and gastrointestinal morbidity rates were greater for CRT subjects **CONCLUSIONS:** There were no statistically significant racial disparities in morbidity and disease control related to differential use of IMRT versus CRT. However, diffusion of IMRT was significantly slower among AA. Future research should include more years of follow-up data and a larger sample of AA in order to understand whether measured differences in treatment diffusion achieve clinical significance sufficient to explain a portion of the racial disparity in prostate cancer mortality.

PCN28

OFF-LABEL TRASTUZUMAB USAGE IN BREAST CANCER PATIENT IN TURKEY

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