We used time-in-motion methods in a pharmacoeconomic sub-study to a clinical trial to estimate differences in resource use and costs between oral ibandronate (ibandronic acid) and iv zoledronic acid. METHODS: At the Week 8 study visit, administration, monitoring and the treatment of drug-related adverse events were recorded in patients receiving oral ibandronate 50mg/day (n = 4) or iv zoledronic acid 4mg every 3–4 weeks (n = 5) at 2 centres in the UK. No patients were receiving iv chemotherapy. Data was collected using a detailed nurse worksheet (diary), designed and pilot-tested in one center. Total use of infusion supplies, medications, laboratory tests, procedures, staff time and total time in the clinic were also recorded. RESULTS: Administration of iv zoledronic acid required >1.5 hours more clinic time per visit and approximately 1 hour more clinic time and nurse time than oral ibandronate, due to infusion time and patient monitoring. Over a 12-month period, the additional clinician and nurse time required for iv zoledronic acid administration would be about 16 hours more than with oral ibandronate, and there would be about 36 additional clinic hours, including 28 hours for iv preparation and infusion alone. Details on medical resource use for infusion-related supplies, medications, laboratory tests will be presented. CONCLUSIONS: Oral ibandronate reduced the burden on health care professionals, giving staff more time to treat patients, increasing productivity. The absence of iv administration also frees patient beds and improves capacity within health care systems. The potential benefits will be greatest for patients receiving oral anticancer therapies, or those who have completed iv chemotherapy.

PCN10

COST-EFFECTIVENESS-ANALYSIS OF BREAST CANCER DIAGNOSIS WITH CAD (COMPUTER AIDED DETECTION)
Heinen-Kammerer T, Motzkat K, Rychlik R
Institute of Empirical Health Economics, Burscheid, Germany

OBJECTIVES: To analyse the cost-effectiveness of CAD in breast cancer diagnostic in comparison to normal procedure from the perspective of statutory health insurance (SHI). METHODS: To compare the effectiveness with and without CAD, total costs of diagnostic measures were calculated by a Markov-model. Model structure, transition possibilities, procedures within therapies and complications were ascertained by a Delphi-panel. Subsequently, costs of therapy per patient with and without CAD were calculated. Further, costs of successive therapy of undetected cancer without CAD were considered. Based on literature, an increase of 19.5% in detecting breast cancer with CAD was determined. Moreover the assumption was made, that with CAD 19.5% of cancers could be detected at an earlier stage. RESULTS: Based on perspective of the SHI, diagnostic and therapy of 10,000 mammography patients from the Markov-cohort caused total costs in amount of 2,298,048€ without CAD (229.80€ per patient) and 2,352,635€ with CAD (235.26€ per patient). By consideration of the effectiveness parameter (number of detected breast cancers per 10,000 patients, 0.01912 without CAD, 0.02285 with CAD), the effectiveness-adjusted costs amounted to: without CAD 12,019€, with CAD 165€. Thus, the implementation of CAD proves to be more cost-effective due to a higher sensitivity of the diagnostic procedure. Subsequently, two sensitivity analyses were conducted to test robustness of this model for cost effectiveness and for costs per patient relative to the price for CAD. CONCLUSIONS: Diagnosis costs per patient are higher with CAD compared to normal procedure. However, more breast cancers can be detected and treated at an earlier stage. Therapeutic costs per patient are lower, therefore implementation of CAD is more cost-effective. As far as Germany is concerned, 2,691 additional breast cancers can be detected every year if CAD would be included in breast cancer diagnosis.

PCN11

COST-EFFECTIVENESS OF ORAL IBANDRONATE VERSUS IV ZOLEDRONIC ACID OR IV PAMIDRONATE IN THE TREATMENT OF BREAST CANCER WITH BONE METASTASES IN PATIENTS UNDERGOING IV CHEMOTHERAPY IN THE UK
De Cock E1, Hutson J1, Barrett-Lee P2, Canney P3, Body JJ4, Neary M5, Lewis GJ6
1MEDTAP International Inc, London, UK; 2Velindre Cancer Centre, Cardiff, UK; 3Western Hospital, Glasgow, UK; 4Université Libre de Bruxelles, Brussels, Belgium; 5Hoffmann-La Roche Inc, Nutley, NJ, USA; 6Roche Products Limited, Welwyn Garden City, Herts, UK

OBJECTIVES: Cost-effectiveness (C/E) studies of oral vs iv regimens are important, with the availability of oral regimens having "iv efficacy", and some iv regimens being available as generics. C/E of oral ibandronate (ibandronic acid) versus iv zoledronic acid or iv generic pamidronate was assessed in breast cancer patients with metastatic bone disease undergoing iv chemotherapy. METHODS: The model assumed a UK NHS perspective, 14.3 months expected average survival, concurrent iv chemotherapy lasting 4 months, and specified probabilities for bisphosphonate discontinuation. Primary outcomes were direct Health Care costs and QALYs. Resource use for iv bisphosphonates was obtained from a published micro-costing study (validated by UK clinician); the cost of managing skeletal-related events (SREs) came from published literature. Other costs were calculated using a unit cost database. Monthly drug costs were £195 for oral ibandronate and iv zoledronic acid, and £165 for iv generic pamidronate. Renal AEs with monitoring and treatment costs were assumed for zoledronic acid. Efficacy was assessed as the relative risk reduction (RR) of SREs (assuming SRE duration of 1 month). Utilities were applied to time with/without SRE, to adjust survival for patient QOL. RESULTS: Projected total cost (including drug) was £386 less/patient for oral ibandronate than for zoledronic acid, and £1717 less/patient than for generic pamidronate. Due to SRE RR and pain relief, oral ibandronate gained 0.02 QALYs, making it the economically dominant option versus zoledronic acid or generic pamidronate. For completeness, C/E results for iv ibandronate will also be presented, demonstrating C/E. CONCLUSIONS: Oral ibandronate was highly cost-effective compared with either iv zoledronic acid or generic pamidronate. The efficacy of oral ibandronate in preventing SREs and sustaining relief from metastatic bone pain is likely to lead to QALY gains, with cost savings due to reduced Health Care staff time for treatment of SREs, bisphosphonate administration, and patient monitoring.

PCN12

COST EFFECTIVENESS OF AN ASPIRIN CHEMOPREVENTION AND/OR COLONOSCOPIC SURVEILLANCE IN THE COLORECTAL CANCER
Gerlier L1, Launois R1, Deyra J1, Traissac L1, Chaussade S1, Benamouzig R2
1REES France, Paris, France; 2APACC, Paris, France; 1Hôpital Avicenne, Bobigny, France; 1Hôpital Cochin, Paris, France

OBJECTIVES: To compare the medical and economical impact of four strategies in the prevention of colorectal cancer (CRC) in France: 1) no treatment no surveillance; 2) chemoprevention with 325 mg daily aspirin; 3) colonoscopic surveillance with a 3, 5 or 10-year periodicity according to recent guidelines; and 4) a combination of the two latter ones. METHODS: A Markov decision model was built, following a fictive 50-year-old cohort