

Presidential Session II

Sunday 25 September 2011, 12:20–14:40

7LBA

LATE BREAKING ABSTRACT

A Multicentre Randomised Trial of Ibandronate Compared to Single Dose Radiotherapy for Localised Metastatic Bone Pain in Prostate Cancer (RIB)

P. Hoskin¹, S. Sundar², K. Reczko³, S. Forsyth³, N. Mithal⁴, B. Sizer⁵, L. Toy⁶, M. Stratford⁷, M. Jitlal³. ¹Mount Vernon Hospital, Centre for Cancer Treatment, Northwood, United Kingdom; ²Nottingham University Hospitals NHS Trust, Department of Oncology, Nottingham, United Kingdom; ³University College London, Cancer Research UK & UCL Cancer Trials Centre, London, United Kingdom; ⁴Kent & Canterbury Hospital, Oncology Clinical Trials, Canterbury, United Kingdom; ⁵Essex County Hospital, Department of Oncology, Colchester, United Kingdom; ⁶Royal Devon and Exeter Hospital, Exeter Oncology Centre, Exeter, United Kingdom; ⁷University of Oxford, Gray Institute for Radiation Oncology & Biology, Oxford, United Kingdom

Background: Single dose radiotherapy (RT) is standard treatment for patients with localised metastatic bone pain. We compare ibandronate (IB), a bisphosphonate drug, with RT for treating metastatic bone pain in prostate cancer patients.

Material and Methods: 470 patients were randomised to receive either a single dose of 8 Gy local RT or a single 6 mg intravenous infusion of IB. Patients reported their primary site of pain at baseline, then 4, 8, 12, 26 and 52 weeks after treatment. After reassessment at 4 weeks, non-responders crossed over to the alternative therapy, receiving their second treatment no later than week 8. The primary endpoint was pain relief at 4 and 12 weeks, compared to baseline. Pain relief was measured using a combination of analgesic use and pain score, based on two methods: (i) WHO pain ladder and (ii) analgesic use defined in morphine equivalents (Mercadante 1993), where a positive difference from baseline indicates worsening pain relief. The trial was powered (90%) to detect a difference in WHO response rate from 70% (RT) to 85% (IB).

Results: The median follow-up was 11.6 months. Baseline characteristics (age, site of pain, prior treatment, performance status) were well-balanced. The WHO response rate at 4 weeks was 53% (RT) vs 49% (IB), $p=0.49$; and at 12 weeks 49% vs 56%, $p=0.24$. Using the Mercadante score, the mean difference from baseline to 4 weeks was -3.2 units (RT) vs $+1.2$ (IB), $p=0.11$; and to 12 weeks -0.2 vs -1.7 , $p=0.73$. However, the proportion of patients with a high score difference at 4 weeks ($\geq +5.86$ units) was 10% (RT) vs 20% (IB), $p=0.004$. At 6 months the mean differences were $+3.99$ (RT) vs $+1.95$ (IB) $p=0.66$. There was no difference at 12 months. The proportion crossing over treatments was 31% (IB) and 24% (RT), $p=0.10$. The median survivals (months) were 11.8 (only RT), 11.4 (only IB), 12.7 (RT then IB), 16.8 (IB then RT).

Conclusions: When treating uncomplicated localised metastatic bone pain from prostate cancer this large trial generally shows no material difference between a single infusion of ibandronate and a single dose of RT. There appeared to be more patients in the IB group with worse Mercadante scores at 4 weeks (compared to baseline), consistent with more IB patients needing re-treatment after 4 weeks. Importantly, there was no long-term difference in pain relief between IB and RT at 6 or 12 months. Single doses of bisphosphonates could have an important role in the treatment of metastatic bone pain.

Presidential Session III

Monday 26 September 2011, 12:15–14:25

8LBA

LATE BREAKING ABSTRACT

Delivering Affordable Cancer Care in High-income Countries: a Lancet Oncology Commission

R. Sullivan¹, J. Peppercorn², K. Sikora³, J. Zalcberg⁴, N. Meropol⁵, E. Amir⁶, D. Khayat⁷, P. Boyle⁸, I. Tannock⁶, T. Fojo⁹. ¹King's College London – King's Health Partners Integrated Cancer Centre, London, United Kingdom; ²Duke Cancer Institute, Duke University Medical Centre, Durham, USA; ³CancerPartnersUK, Head Office, London, United Kingdom; ⁴Peter MacCallum Cancer Centre, University of Melbourne, Melbourne, Australia; ⁵University Hospitals Seidman Cancer Center Case Comprehensive Cancer Center, Case Western Reserve University, Cleveland, USA; ⁶Division of Medical Oncology and Hematology, Princess Margaret Hospital and University of Toronto, Toronto, Canada; ⁷Hôpital Pitié-Salpêtrière, Division of Oncology, Paris, France; ⁸International Prevention Research Institute, Head Office, Lyon, France; ⁹Medical Oncology Branch Center for Cancer Research, National Cancer Institute, Bethesda, USA

The burden of cancer is growing, and the disease is becoming a major unsustainable economic burden for all developed countries. In 2008, the

worldwide cost of cancer due to premature death and disability (not including direct medical costs) was estimated to be US\$895 billion. This is not simply due to an increase in absolute numbers, but also the rate of increase of expenditure on cancer. What are the drivers and solutions to the so-called cancer-cost curve in developed countries? How are we going to afford to deliver high quality and equitable care? Here, expert opinion from health-care professionals, policy makers, and cancer survivors has been gathered to address the barriers and solutions to delivering affordable cancer care. Although many of the drivers and themes are specific to a particular field – eg, the huge development costs for cancer medicines – there is strong concordance running through each contribution. Several drivers of cost, such as over-use, rapid expansion, and shortening life cycles of cancer technologies (such as medicines and imaging modalities), and the lack of suitable clinical research and integrated health economic studies, have converged with more defensive medical practice, a less informed and overly bureaucratic regulatory system, a lack of evidence-based sociopolitical debate, and a declining degree of fairness for all patients with cancer. Urgent solutions range from re-engineering of the macroeconomic basis of cancer costs (eg, value-based approaches to bend the cost curve and allow cost-saving technologies), greater education of policy makers, doctors, payers, and the general public, and an informed and transparent regulatory system. A radical shift in cancer policy is also required. Political toleration of unfairness in access to affordable cancer treatment is unacceptable. Equity in cancer care is a fundamental principle for all developed countries and access to effective health care is a human right. The cancer profession and industry should also take responsibility and not accept a substandard evidence base and an ethos of very small benefit at whatever cost; rather, we need delivery of fair prices and real value from new technologies. Delivering affordability also means educating the public that value-based care is not poor care; dramatically re-engineering care pathways to make them more cost effective; and introducing radical controls on the off-label use of cancer technologies.

Presidential Session III

Monday 26 September 2011, 12:15–14:25

9LBA

LATE BREAKING ABSTRACT

Everolimus in Combination with Exemestane for Postmenopausal Women with Advanced Breast Cancer Who Are Refractory to Letrozole or Anastrozole: Results of the BOLERO-2 Phase III Trial

J. Baselga¹, M. Campone², T. Sahmoud³, M. Piccart⁴, H. Burris⁵, H. Rugo⁶, S. Noguchi⁷, M. Gnant⁸, P. Mukhopadhyay⁹, G. Hortobagyi¹⁰. ¹Massachusetts General Hospital, Department of Oncology, Boston, USA; ²Centre Régional René Gauducheau, Department of Medical Oncology, Nantes Saint Herblain, France; ³Novartis Pharmaceuticals Corporation, Global Oncology Development, Florham Park NJ, USA; ⁴Jules Bordet Institute, Department of Medicine, Brussels, Belgium; ⁵Sarah Cannon Research Institute, Drug Development Program, Nashville, USA; ⁶University of California San Francisco, Department of Medicine (Hematology/Oncology), San Francisco, USA; ⁷Osaka University, Department of Breast and Endocrine Surgery, Osaka, Japan; ⁸Medical University of Vienna, Department of Surgery Comprehensive Cancer Center, Vienna, Austria; ⁹Novartis Pharmaceuticals Corporation, Oncology BDM, Florham Park NJ, USA; ¹⁰University of Texas MD Anderson Cancer Center, Department of Breast Medical Oncology, Houston, USA

Background: The mammalian target of rapamycin (mTOR) pathway is constitutively activated in hormone therapy-resistant advanced breast cancer (ABC). In phase II trials everolimus (EVE) showed promising efficacy both as monotherapy and in combination with endocrine therapy in patients with estrogen receptor positive (ER+) ABC. This double-blind, placebo-controlled phase III study (clinicaltrials.gov: NCT00863655; Trial Sponsor: Novartis Pharmaceuticals) evaluated EVE + exemestane (EXE) in patients with ER+ ABC refractory to letrozole or anastrozole.

Patients and Methods: Eligible patients were randomized (2:1) to EVE (10 mg/d) or matching placebo, with both arms receiving EXE (25 mg/d); treatment continued until progression or unacceptable toxicity. The primary endpoint was progression-free survival (PFS) assessed by the investigators. Secondary endpoints included survival, response rate, and safety. A preplanned interim analysis was performed and reviewed by the independent data monitoring committee (IDMC) after observing 359 PFS events.

Results: 724 patients were randomized from 24 countries (485: EVE+EXE; 239: EXE). Baseline characteristics were well balanced; median age was 62 years; 56% had visceral involvement and 84% were sensitive to prior hormone therapy. Prior therapy included letrozole or anastrozole (100%), tamoxifen (48%), fulvestrant (16%) and chemotherapy (68%). At the interim analysis, the IDMC disclosed that the trial met its primary endpoint (PFS), as assessed by local investigators (HR: 0.43 [95% CI: 0.35–0.54], median 6.9 vs 2.8 months; $p=1.4 \times 10^{-15}$), and that results were consistent across