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Palbociclib for bladder cancer

RB1 mutation status does not affect response.

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Young oncologists

Find out what's in store for you at ESMO Asia 2016.

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Ethnicity impacts efficacy of pembrolizumab

Asian patients with head and neck cancer have improved results vs mixed populations.

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DLTs of molecularly-targeted agents

The need for a change in the period when dose-limiting toxicities are evaluated.

CONGRESS HIGHLIGHTS

SATURDAY 17 DECEMBER 2016



Don't miss

Today's Educational sessions:
Moving beyond histology in prostate cancer

Chairs: J. Bellmunt (USA), D. Heng (Canada) 09.00 – 10.30, Hall 404

Brain metastases: Treatment options and relevant outcome measures
Chairs: M. Chua (Singapore), M. J. Taphoorn (Netherlands) 11.00 – 12.30, Summit 2

Difficult decisions in gynaecological oncology
Chairs: J. A. Ledermann (UK), M. Mirza (Denmark) 14.30 – 16.00, Summit 2

ESMO Asia 2016: Strengthening global collaboration

Welcome to the second ESMO Asia Congress! ESMO and Congress President, Fortunato Ciardiello, who officially welcomed delegates to Singapore in yesterday's Opening Session, is prompt to underline the significance of the Congress.

According to Rolf A. Stahel, Chair of the Scientific Committee, the mixture of innovative science and standard treatment approaches in this year's programme will build on shared goals of advancing knowledge and improving disease management. On this note, the packed audience was treated to Keynote Lectures highlighting important insights in cancer research that have emerged in recent years. Charles Swanton (The Francis Crick Institute, London, UK) spoke about the role intra-tumour heterogeneity plays in drug

resistance in advanced disease. By gaining a better understanding of the different heterogeneity development 'rules' followed by each cancer type, we will be able to improve clinical trial design and treatment selection. Discussing undifferentiated nasopharyngeal cancer—which is endemic in parts of China and responsible for many deaths—Anthony Chan (The Chinese University of Hong Kong, Shatin) explained that discovering more about the involvement of Epstein-Barr virus in its pathogenesis is an important step towards optimising disease management.

As Co-Chair of the Scientific Committee, Hyun Cheol Chung said that the ESMO Asia Congress gave scientists and clinicians an appropriate stage to define new treatment standards, while planting the seed for future advances in medical oncology.

Professor Ciardiello is enthusiastic about the prospects for this year's Congress. "I am confident we will see existing bonds reinforced and new ones formed, ensuring we continue to make the type of progress that will improve the outcome of our patients."



Fortunato Ciardiello: ESMO and Congress President



Rolf A. Stahel: Chair of the ESMO Asia 2016 Scientific Committee



Hyun Cheol Chung: Co-Chair of the ESMO Asia 2016 Scientific Committee

"ESMO Asia provides a unique opportunity for the exchange of ideas and collaboration between oncology professionals in Asia and elsewhere."

Fortunato Ciardiello

Helpful Congress Information

ESMO Events App: The stress-free way to plan your Congress

- Browse the scientific programme by day, topic, speaker, cancer type and track
- Instantly access last minute programme changes and event-related alerts
- Create your own personalised agenda
- Follow the meeting on Twitter
- The ESMO Events App can be used offline
- Congress map

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Nivolumab improves health status in advanced lung cancer

Function-limiting symptoms and impaired quality of life (QoL) are inevitable consequences of advanced lung cancer. Today, Martin Reck (Lung Clinic Grosshansdorf, Germany) will present health status results from the CheckMate 057 trial comparing the anti-PD-1 antibody, nivolumab, with docetaxel in patients with previously treated advanced non-squamous non-small-cell lung cancer (14.30 – 16.00, Hall 406, **Abstract 4420**).

In addition to improving symptoms (compared with a worsening with chemotherapy), nivolumab delayed deterioration of symptom burden and showed trends towards improved QoL and a longer time to QoL deterioration.

"This is the first time a drug has improved tumour-related symptoms and quality of life in pre-treated patients with advanced lung cancer."

Martin Reck

Results were first presented at ESMO 2016 (QoL; Abstract 1217PD) and ASCO 2016 (symptoms; Poster 9031).

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Using tumour *AXL* gene signature to tailor therapy for ovarian cancer

Ovarian cancer shows wide heterogeneity according to gene expression molecular subtypes (GEMS) and patients with mesenchymal (Mes) subtypes have a particularly poor prognosis. The receptor tyrosine kinase *AXL* is thought to be a key player in epithelial-mesenchymal transition (EMT), and therefore metastasis, in Mes GEMS and presents an ideal target for treatment. In a Proffered Paper session yesterday, Ruby Yun-Ju Huang (Cancer Science Institute of Singapore, Singapore) described how her group used a specific gene signature to successfully stratify patients according to GEMS and thus identify those with overexpression of *AXL* (**Abstract 2970**).

The signature—comprising the top 30 genes correlating with *AXL* and derived from gene expression microarray analysis of more than

3,400 data points—was positively correlated with EMT score (Rho +0.4148; p=5.23×10⁻⁶⁵) and negatively correlated with overall survival (hazard ratio 1.263; p=0.00096; cut-off at median). In addition, the *AXL* signature was significantly overexpressed in omental metastases (p=0.0078) and platinum-resistant relapsed tumours (p=0.0059), compared with paired primary tumours.

It is essential to retrospectively validate in an independent cohort the role of *AXL* and identify prognostic factors.

ESMO Open Meet the Editor, Christoph Zielinski – tomorrow at 12.30 at the ESMO Lounge

RB1 mutation status does not affect palbociclib activity in bladder cancer

The CDK4/6 inhibitor palbociclib is being investigated for the treatment of various malignancies, all characterised by a functional retinoblastoma (*RB1*) gene. Results from experiments exploring the palbociclib sensitivity of *RB1*-wild-type and -mutant metastatic bladder cancer cell lines will be discussed by Daniel Castellano (University Hospital 12 De Octubre, Madrid, Spain) in a poster today (13.30 – 14.15, Exhibition Hall, **Abstract 8P**).

Palbociclib activity was independent of *RB1* status and effects were synergistic with cisplatin.

RB1 mutation status had no impact on the response to palbociclib of cell lines *in vitro* and in xenografts. Following palbociclib administration, FoxM1, which may confer cisplatin resistance, showed reduced phosphorylation and all cell lines demonstrated increased sensitivity to cisplatin. Perhaps significantly, phosphorylated FoxM1 in human bladder cancer clinical samples was found to be a potential poor prognostic factor. Further *in vivo* studies are planned.

It is essential that future studies identify potential biomarkers of response to CDK4/6 inhibitors. Translational study data suggest that mutation of *RB1* and phosphorylation of RB protein predict resistance to palbociclib.¹

1. Beck TN, et al. Oncotarget 2015;6:18863–74.

ESMO Guidelines

ESMO Clinical Practice Guidelines: Find out what's new

In a field that's constantly advancing, how do you know you're providing the best care for your patients? The answer is the ESMO Clinical Practice Guidelines, which are updated regularly and are always based on the latest evidence. Two sessions at ESMO Asia 2016 are dedicated to the Guidelines. Listen to eminent speakers discuss the practical application of these Guidelines using patient cases.

ESMO Clinical Practice Guidelines 1
 Saturday 17 December,
 09.00 – 10.30, Hall 405

ESMO Clinical Practice Guidelines 2
 Sunday 18 December,
 09.00 – 10.30, Hall 405

ESMO YO

CALLING ALL YOUNG ONCOLOGISTS

The variety of activities on offer ranges from sessions where you can chat with oncology leaders in an informal setting to cutting out your name on lucky red paper, or having your personalised picture made.

Come to the Discussion Hub in the Exhibition Area (Hall 401–403) to be at the heart of the action.

Discussion Hub—the place to be

Network, meet with colleagues, attend special sessions and take part in cultural activities, or just relax! You can do all this and more at the Discussion Hub.

Discussion Hub events for YO include:

Saturday 17 December
Meet your Mentor sessions
 10.30 – 11.00 and 16.00 – 16.30

Vesalius Talk, 'How to deal with the quick turn-around time of knowledge in oncology'
 12.45 – 13.30

Sunday 18 December
Meet your Mentor sessions
 10.30 – 11.00 and 16.00 – 16.30

First data on rare sarcomas in Asian patients

Two of today's presentations come from the Asian Sarcoma Consortium (ASC) and comprise a retrospective chart review of patients with cutaneous or visceral angiosarcoma treated at eight centres in Asia.

From one of the largest studies in angiosarcoma, based on 423 ASC patients, Richard Quek (National Cancer Center Singapore) will report that only around 60% with localised disease underwent surgery, with 70% achieving negative margins (**Abstract 5010_PR**). Relapse was seen in around half of the patients and was associated with positive surgical margins. In patients with locally advanced/metastatic disease, despite chemotherapy being associated with significantly longer overall survival (OS), only half of patients received it (Figure).

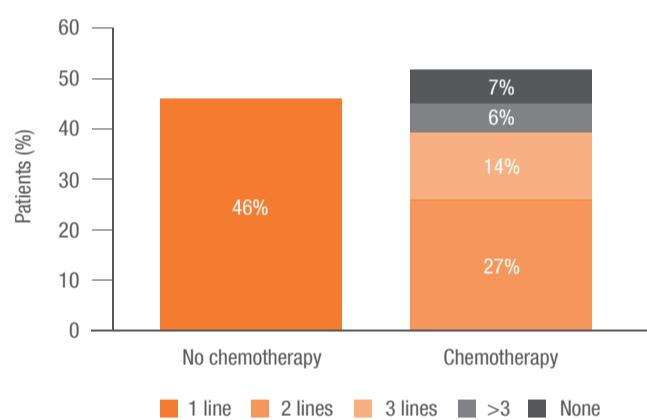
For the second ASC study, Tom Chen (National Taiwan University Hospital, Taipei) explains that, "It's the first time we have data on expected survival, which will help us to develop clinical trials and new treatments for Asian angiosarcoma patients."

Half (52%) of 271 patients with metastatic or unresectable disease received systemic chemotherapy; the most common first-line regimens were paclitaxel (47%) and liposomal doxorubicin (19%) (**Abstract 5020_PR**). OS was 8.3 months and was significantly higher for those receiving chemotherapy (11.5 months) than those who did not (4.4 months, $p<0.01$).

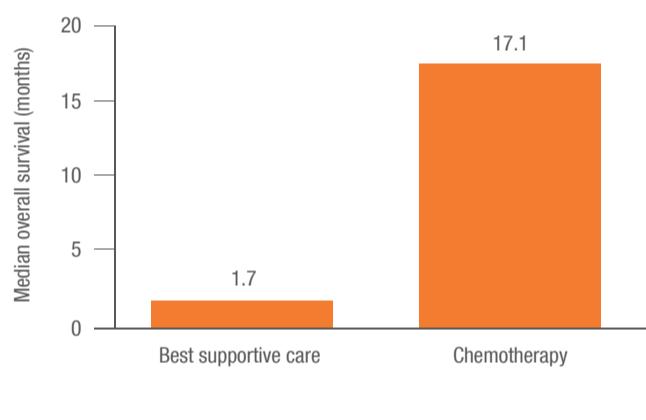
Makoto Endo (National Cancer Center Hospital, Tokyo, Japan) will describe clinical differences between recently identified molecular subtypes of Ewing sarcoma-like disease (**Abstract 5030_PR**). Five-year OS rates of 28.2% and 100% were found for CIC- ($n=17$) and BCOR- ($n=7$) rearranged sarcomas, respectively, with corresponding responses to chemotherapy of 29% and 75%. "Our research will help us to make a precise diagnosis," says Dr Endo, "and should improve the management of these patients."

Chemotherapy use and survival in locally advanced/metastatic disease (n=173)

Hazard ratio 5.30, $p<0.001$



Chemotherapy use



Overall survival according to treatment choice

Asian patients achieve improved overall survival with pembrolizumab than a mixed race group



Makoto Tahara: National Cancer Center Hospital East, Kashiwa, Japan



Yasuhisa Hasegawa: Aichi Cancer Center Hospital Nagoya, Japan

Data from the KEYNOTE-012 study presented yesterday appear to indicate that Asian patients with head and neck squamous cell carcinoma (HNSCC) have better median overall survival than a mixed population (11.5 months versus 8.4 months, respectively) when treated with the anti-PD-1 antibody pembrolizumab (**Abstract 3590_PR**). First-line treatment of recurrent/metastatic HNSCC with the cetuximab–platinum-based EXTREME regimen is associated with median overall survival of only 10 months.

The ongoing KEYNOTE-012 is examining the safety and efficacy of pembrolizumab administered in a 3-weekly, fixed-dose regimen in patients with recurrent/metastatic HNSCC and these

results report the findings in 26 Asian patients. While disease control rate with pembrolizumab was also better for Asian patients than a mixed race population (50.5% versus 37.9%, respectively), tumour shrinkage occurred in 50% of Asian patients and in 61% of mixed population patients.

In contrast, results presented yesterday from the Phase III CheckMate 141 study of the anti-PD-1 antibody nivolumab showed no difference in efficacy between patients from Asian and non-Asian countries (**Abstract 3600_PR**). In addition, patient-reported outcomes data suggested that nivolumab was associated with prolonged maintenance of functioning and reduced disease symptoms than the investigator's treatment choice (**Abstract 3610**).

The trials enrolled patients regardless of PD-L1 status and as in other cancer types, there is a need for a biomarker that identifies who will respond even before we treat patients.

Nivolumab is the first immunotherapy to demonstrate a significant survival benefit for patients with recurrent/metastatic HNSCC who progress after platinum-based therapy. Of particular interest in the HNSCC setting could be the combination of immune checkpoint inhibitors with radiotherapy.



Women for Oncology: Still a long way to go

In the very first Women for Oncology (W4O) Session at an ESMO Asia congress, held yesterday, Chair of the ESMO W4O Committee, Solange Peters (Centre Hospitalier Universitaire Vaudois, Lausanne, Switzerland), said that women are still missing out in oncology careers. Findings from the latest ESMO W4O study show that in Asia in 2015, only 26.3% of invited speakers of national oncology congresses were women. And while women are, to a certain extent, present as board members in national oncology professional societies, they are not reaching the top positions.

In Asia, only one out of 15 analysed oncology professional societies has a woman president.

A unique Asian perspective on how women can use mentors and sponsors to help build their careers was given by Catharina Suharti (Diponegoro University—Dr Kariadi Hospital, Semarang, Indonesia). Fittingly, the 2016 ESMO W4O Award winner, Sumitra Thongprasert (Chiang Mai University, Thailand), offered advice on overcoming challenges and making the most of opportunities in oncology.

A digital platform to monitor patient care: Nurses have their say

Improving the co-ordination of patient health and supportive care needs is an important aspect for cancer patients after they leave hospital. A new web-based digital platform has been designed for patients to inform hospital medical teams of their care needs and flag up any issues with treatment. As such, nurse practitioners are a key part of these teams and their support of such a platform would be crucial to ensure its success.

Hear more in the Supportive and Palliative Care Poster Discussion Session; 16.30 – 17.30, Hall 325, Abstract LBA3.

Find out what nurses think about the use of this web-based digital platform in tomorrow's late-breaking abstract presentation by Alexandre Saadi (Hopital Européen Georges Pompidou, Paris, France). He will report results of a semi-quantitative survey of nurse practitioners' expectations and acceptance of this type of instrument.

Molecularly-targeted agents: Is it time to redefine DLT intervals?

Dose-limiting toxicities (DLTs) have traditionally been evaluated during the first cycle of cytotoxic chemotherapy in phase I trials. But is this approach sufficient to capture the toxicities occurring with targeted anti-cancer agents? This question will be addressed today by Noboru Yamamoto (National Cancer Center Hospital, Tokyo, Japan) in a poster reporting on a retrospective, single-centre survey evaluating 780 consecutive cases enrolled in phase I trials of single-agent molecularly-targeted drugs (13.30 – 14.15, Exhibition Hall, **Abstract 157P**).

Among 66 patients with DLTs and equivalent toxicities, there were 88 grade ≥ 3 non-haematological, 10 grade 4 haematological acute toxicities, 12 grade ≥ 3 non-haematological and no grade 4 haematological chronic toxicities.

Commenting on the study, Markus Joerger (Associate Editor of *Congress Highlights*, Cantonal Hospital, St Gallen, Switzerland) believes that the findings support the need for recommendations defining the ideal DLT period for molecularly-targeted agents. The usual 4-week DLT period is clearly too short.

"These results highlight that grade 3–4 toxicities are relatively uncommon in late-generation phase I trials, with few haematological toxicities. Furthermore, the toxicity profile of newer agents is arguably better than that of traditional chemotherapy and these findings serve as an incentive to enrol patients in phase I trials."

Giuseppe Curigliano
(European Institute of Oncology, Milan, Italy)

The ESMO-Magnitude of Clinical Benefit Scale: Integration into clinical practice guidelines

Yesterday saw members of the ESMO Magnitude of Clinical Benefit Scale (ESMO-MCBS) Working Group present on the latest developments surrounding the scale, including its application to grade novel drugs in the setting of the ESMO Clinical Practice Guidelines.

Awareness of the value of a new therapeutic strategy, i.e., the magnitude of its clinical benefit is of considerable importance, particularly in the context of new, expensive medications and technologies in the oncology arena, and cost constraints in healthcare systems. The ESMO-MCBS was developed as a validated and reproducible tool to quantify the clinical benefit expected from a new anti-cancer treatment.

Commenting ahead of the Congress, Nathan Cherny (Shaare Zedek Medical Center, Jerusalem, Israel) explained how the ESMO-MCBS Working Group is currently field testing

version 1.1 of ESMO-MCBS, which is designed to be a dynamic tool with planned revisions and updates based upon recognition of expanding needs and identified shortcomings. A planned first important update of the scale is the creation of a new form ('Form 3'). "Currently in version 1.0, we are only able to grade comparative studies," says Professor Cherny, adding that, "this new form has been devised for single-arm studies in orphan diseases and for diseases with high unmet need."

Concluding the session, Elisabeth de Vries (University Medical Center Groningen, Netherlands), Chair of the ESMO-MCBS Working Group, said: "ESMO-MCBS enables us to gather important information on the clinical benefit of newly approved drugs."

Find out more about ESMO-MCBS at: www.esmo.org/Policy/Magnitude-of-Clinical-Benefit-Scale.

NF- κ B inhibition is the key to curcumin's effects in breast cancer

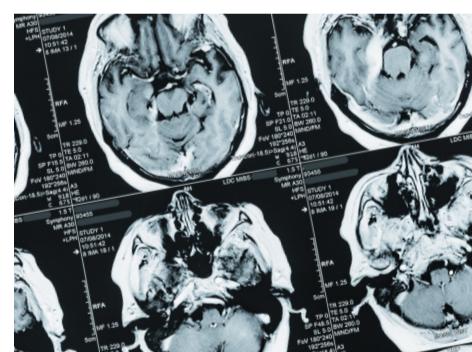
The turmeric extract, curcumin, has shown anti-tumour activity in a range of cancers but how it produces this effect in breast cancer remains unclear. In a poster session today, Soodabeh Shahidsales (Mashhad University of Medical Sciences-Omid Hospital Cancer Research Center, Iran) will report results from a series of experiments using curcumin in MCF-7 monolayer cell cultures and spheroid models (13.30 – 14.15, Exhibition Hall, **Abstract 19P**).

Curcumin demonstrated a variety of activities, including cell growth suppression, tumour growth inhibition and a reduction in MCF-7

invasiveness (versus control cells). It also significantly increased the proportion of cells in S and G2/M phases after 72 hours while decreasing the proportion of those in G0/G1. Crucially, further analysis revealed that cell death was increased through NF- κ B pathway modulation.

These data pave the way for further *in vivo* investigations into the therapeutic potential of curcumin.

Diffusion-weighted MRI may predict response to radiotherapy in glioblastoma multiforme



MRI scans were conducted in 11 patients with GBM before treatment and at 6 months in those free of progression at that time.

There was significant correlation between DW-MRI-determined tumour characteristics and overall survival.

Tumour heterogeneity affects response to treatment for glioblastoma multiforme (GBM), which has a poor prognosis, but it is difficult to assess. Today, Manijeh Beigi (Tehran University of Medical Sciences, Iran) will present results from a study using diffusion-weighted (DW) magnetic resonance imaging (MRI), which unlike anatomical MRI, provides information on tumour physiology (13.30 – 14.15, Exhibition Hall, **Abstract 32P**). DW-MRI is an emerging technology in many solid tumours.

The technique also identified differences in pre-treatment tumour metrics between patients who did and did not achieve 6-month progression-free survival. DW-MRI is now being validated in 28 patients with the hope of identifying metrics that can be used to predict outcomes and tailor treatment in routine practice. The role of DW-MRI in patients with GBM deserves further investigation.



Visit the ESMO Booth

Located in the Exhibition Hall (Booth B17), the ESMO Booth is the place to find information about ESMO. Whether you are already a member or you want to find out more about us and everything we do, be sure to visit us to find out the answer to all your questions.

Day

Saturday, 17 December
Sunday, 18 December
Monday, 19 December

Opening hours

08.30 – 16.30
08.30 – 16.30
08.30 – 12.30



Thank you to the ESMO Asia 2016 Endorsing Societies

A special thank you goes to the host society—the Singapore Society of Oncology—and all the endorsing societies of the ESMO Asia 2016 Congress.

