

ESMO 2016 Congress

7-11 October, 2016

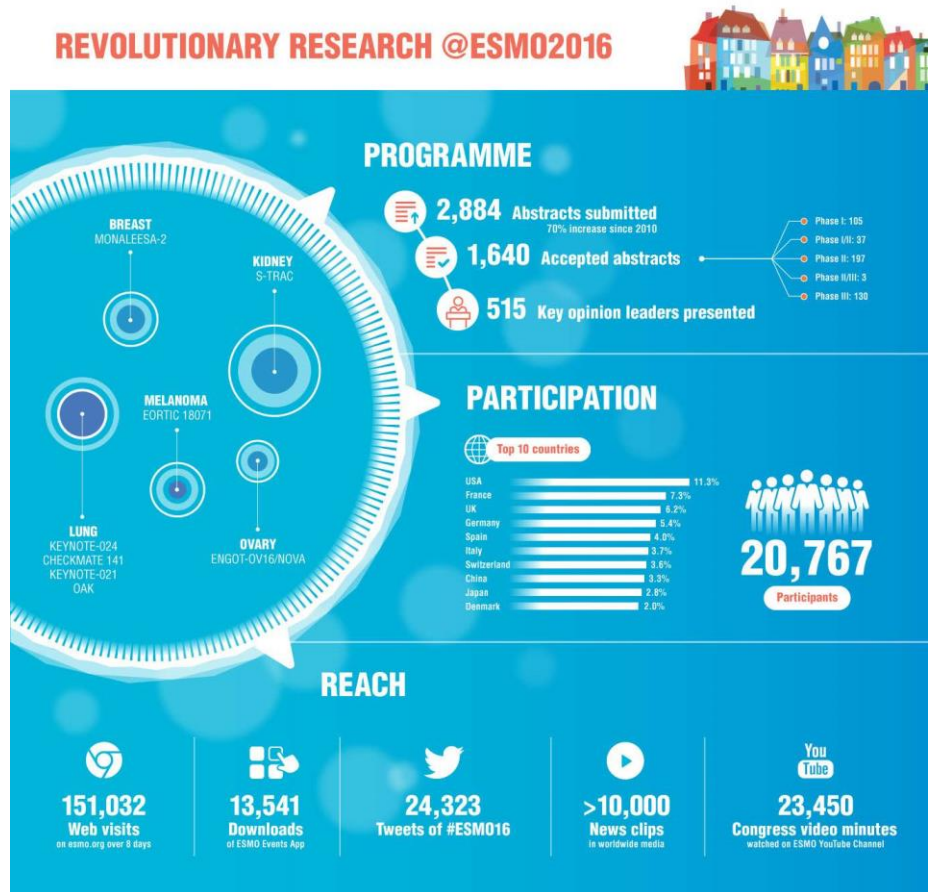
Copenhagen, Denmark

Table of Contents

| | |
|---|---|
| Summary | 2 |
| PALLIATIVE AND SUPPORTIVE CARE | 3 |
| Evaluation of the effect of early palliative care versus standard of care on QoL of advanced cancer patients | 3 |
| Paradigm shift needed in end of life use of chemotherapy | 3 |
| Proposed pegfilgrastim biosimilar MYL-1401H demonstrated equivalence to EU-neulasta® in the prophylaxis of chemotherapy-induced neutropenia | 5 |
| Exploration of the heterogeneity of moderately emetogenic chemotherapy on response to fosaprepitant in a randomised phase III trial | 6 |
| RELATED INFORMATION | 8 |
| Affiliations and Disclosure | 8 |
| Affiliation | 8 |
| Disclosure | 8 |
| Acknowledgment | 8 |

Summary

The European Society for Medical Oncology (ESMO) 2016 Congress, held October 7 to 11 in Copenhagen, Denmark, was a record-breaker on all levels. It was resounding success and in a dedicated infographic you can find the congress programme statistics. A primary emphasis in the scientific programme was placed on two areas: precision medicine and immunology and immunotherapy across multiple tumour types and how these advances change the treatment landscape in oncology. This report is an overview of key scientific presentations made during the Congress by leading international investigators. It attempts to represent the diversity and depth of the ESMO 2016 scientific programme, as well as advances in oncology.



ESMO 2016 record breaking Congress

PALLIATIVE AND SUPPORTIVE CARE

Evaluation of the effect of early palliative care versus standard of care on QoL of advanced cancer patients

Vittorio Franciosi, Medical Oncology Unit, University Hospital in Parma, Italy and colleagues assessed the impact of early palliative care (EPC) on the quality of life (QoL) in patients with advanced cancer in 4 ESMO Designated Centres of Integrated Oncology & Palliative Care (ESMO-DC). In this randomised study, 139 patients were assigned to Standard Oncologic Care (SOC) alone and 142 patients to SOC integrated with EPC. All patients had been diagnosed within the previous 8 weeks with advanced cancer, including non-small cell lung cancer (NSCLC), gastric, pancreatic, and biliary cancers. No significant differences were observed between the 2 cohorts in terms of patient demographics such as the type of first line chemotherapy; age, sex, disease stage or type of cancer, and ECOG performance status. Each arm was extremely well-balanced. QoL was assessed at baseline and at 12 weeks using the Functional Assessment of Cancer Therapy - General (FACT-G) scale. Primary endpoint was the change in the QoL scores at week 12 from baseline.

The FACT-G baseline questionnaires were evaluable in 103 (74%) patients in the SOC control arm and 111 (78%) patients in the EPC arm who demonstrated mean (standard deviation) FACT-G baseline scores of 67.9 (15.4) versus 68.5 (15.3) in the respective arms (T-test $p = 0.77$). This study did not demonstrate that EPC improved QoL in patients with advanced disease. At 12 weeks, the mean (standard deviation) difference in scores for FACT-G scores was 3.5 points (14.5) for SOC control patients and 4.1 points (13.9) in the EPC arm and was not statistically significant (T-test $p = 0.75$). The authors advised that future studies should be focused on single tumours, using instruments for measuring QoL-specific cancer and they are participating in analyses in progress to study the phenomenological complexity and identify clusters of patients in whom the EPC could be effective. Project code E35E13000030002. Franciosi *et al.* Abstract LBA49

Practice point and future research opportunities

Although this trial did not show a statistically significant difference in quality of life between cohorts of patients receiving standard of care and those offered EPC at 12 weeks, measured with FACT-G, the value of EPC due to different profile of ESMO-DC and the heterogeneity of the tumour sites, could have reduced the effect of the EPC in this study.

Paradigm shift needed in end of life use of chemotherapy

Phillipe Rochigneux, Medical Oncology, Institute Paoli-Calmettes, Marseille, France called for a paradigm shift in end of life care from administering chemotherapy to initiating palliative care at an earlier stage and formulating clear guidelines for end of life care. Chemotherapy is often administered near the end of life for patients with solid cancers with the intent to ease symptoms but is usually ineffective and toxic. Dr. Rochigneux presented findings on behalf of colleagues

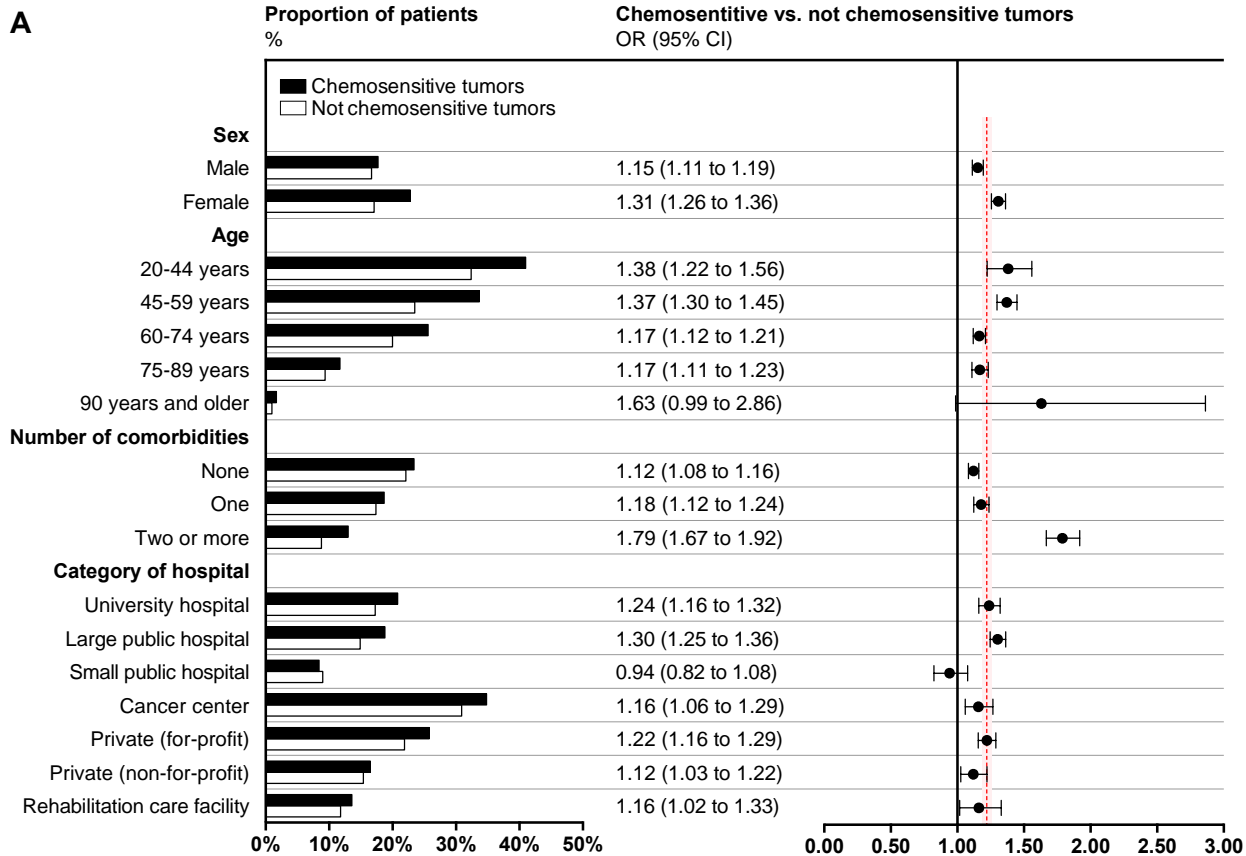
from a large audit of data concerning the use of chemotherapy at the end of life throughout France and the factors associated with its use. The investigators designed a nationwide, register-based study that included all patients with metastatic solid tumours who were hospitalised between 2010 and 2013 who were aged 20 years and older, and who died. They used multivariate analyses to identify patients, tumour, and the facility level characteristics associated with chemotherapy use. Specific sub-analyses were also computed to investigate the role of the putative chemosensitivity of the tumour, as defined by a response rate of the tumour to standard first line chemotherapy > 30% (literature data).

Data regarding 279,846 metastatic solid cancers in end of life patients were included in the register, which revealed that chemotherapy was administered near the end of life at rates of 39.1% during the last 3 months, 19.5% during the last month, and 11.3% within the final 2 weeks. During their last month of life, 6.6% of patients started or resumed a chemotherapy regimen.

Patient characteristics that independently associated by multivariate analysis with lower rates of chemotherapy included female sex (odds ratio [OR] 0.96; 95% confidence interval [CI] 0.93, 0.98), older age (OR 0.70; 95% CI 0.69, 0.71 for each 10-year increase), and a higher number of chronic comorbidities (OR 0.83; 95% CI 0.82, 0.84).

Patients were more likely to receive chemotherapy during the last month of life if their tumours displayed chemosensitivity to standard first line chemotherapy (OR 1.21; 95% CI 1.18, 1.25). Another factor that independently associated with end of life chemotherapy were patients having cancer types for which major therapeutic innovations occurred between the years 2005 to 2010 (OR 1.17; 95% CI 1.14, 1.20).

End-stage chemotherapy rates were also higher in patients dying in a for-profit hospital compared with university hospitals (OR 1.40; 95% CI 1.34, 1.45), and in patients in comprehensive cancer centres (OR 1.43; 95% CI 1.36, 1.50). Higher than average rates of chemotherapy were reportedly administered near the end of life in high-volume cancer centres and in hospitals lacking palliative care units (OR 1.21; 95% CI 1.18, 1.24). Rochigneux *et al.* Abstract 13000



Association between the chemosensitivity of different solid tumours and the likelihood of receiving chemotherapy in the last month before death (n=182,938).

© Phillipe Rochigneux.

Practice point and future research opportunities

This large analysis demonstrates that chemotherapy rates near the end of life remain high in patients with metastatic solid cancers, and are especially high for younger patients, being treated in high-volume centres, which lack a palliative care unit. There is an urgent need to decrease the aggressiveness of end of life treatments by making and implementing clear guidelines for end of life care, to initiate palliative care earlier on, and to reinforce supportive care training for oncologists and other cancer professionals.

Proposed pegfilgrastim biosimilar MYL-1401H demonstrated equivalence to EU-neulasta® in the prophylaxis of chemotherapy-induced neutropenia

Cornelius F. Waller, Department of Haematology, Oncology and Stem Cell Transplantation, University Medical Centre Freiburg and Faculty of Medicine, University of Freiburg, Freiburg, Germany and colleagues conducted this phase III trial to evaluate whether the pegfilgrastim

© Copyright 2016 European Society for Medical Oncology. All rights reserved worldwide.

biosimilar, MYL-1401H has equivalent efficacy and safety as EU-Neulasta[®] when used as prophylaxis for chemotherapy induced neutropenia in patients with stage II/III breast cancer. The investigators conducted this, multicentre, randomised, double-blind, parallel-group trial in patients that were chemotherapy and radiotherapy naive and had been newly diagnosed with stage II/III breast cancer. Patients were treated with docetaxel, doxorubicin, and cyclophosphamide chemotherapy every 3 weeks for 6 chemotherapy cycles. The per protocol population of 194 patients was randomised in a 2:1 ratio to also receive 6 mg/0.6 mL of either MYL-1401H or EU-Neulasta[®] on day 2 of each chemotherapy cycle.

The primary efficacy endpoint was the duration of severe neutropenia (DSN) experienced by patients during cycle 1, defined as days with absolute neutrophil count (ANC) < 0.5 × 10⁹/L in the per protocol population. Equivalence could be declared if the two-sided 95% confidence interval (CI) of the least squares means difference between the DSNs falls wholly within an equivalence region defined as [-1, +1 day]. A sensitivity analysis in the intent-to-treat population was also carried out.

The mean (standard deviation) DSN in the MYL-1401H and EU-Neulasta[®] groups was 1.2 (± 0.93) and 1.2 (± 1.10), respectively. The 95% CI of least squares means difference of -0.285 day, 0.298 day was within predefined range, and was also corroborated by the sensitivity analysis. All other endpoints of the study, including grade 3/4 neutropenia, time to ANC nadir, and duration of post-nadir recovery were also comparable. The overall safety profile of MYL-1401H was similar to EU Neulasta[®] with patients in both arms most frequently reporting bone pain, an expected treatment emergent adverse event. EudraCT Number: 2014-002324-27. Waller *et al.* Abstract 1433O

Practice point and future research opportunities

The proposed biosimilar, MYL-1401H, demonstrated equivalent efficacy to EU-Neulasta[®] in the prophylaxis of chemotherapy induced neutropenia in patients with newly diagnosed breast cancer. MYL-1401H was generally well tolerated and there were no particular safety concerns identified, with overall safety profile being similar to EU-Neulasta[®]. These data support the licensing of MYL-1401H, which could result in lower treatment cost in offering prophylaxis for chemotherapy-induced adverse events, such as neutropenia.

Exploration of the heterogeneity of moderately emetogenic chemotherapy on response to fosaprepitant in a randomised phase III trial

Lead author Cindy Weinstein, Department of Clinical Research, Merck & Company, Kenilworth, USA presented findings from a phase III, global, randomised, double-blind, parallel-group study evaluating the efficacy of fosaprepitant as emetic prophylaxis in adult patients scheduled to receive an intravenous dose of ≥1 moderately emetic chemotherapy (MEC) agents on treatment day 1. This large study randomised 1000 patients to a control regimen consisting of 8 mg oral ondansetron, 20 mg dexamethasone, and i.v saline as placebo prior to the first MEC dose on

day 1 followed by 8 mg oral ondansetron 8 hours after the first dose, and every 12 hours on days 2 and 3 or to a fosaprepitant regimen, which consisted of the same dose of oral ondansetron on day 1, along with 12 mg dexamethasone and a single dose of fosaprepitant at 150 mg i.v. before the first dose of MEC on day 1, with no additional prophylactic antiemetic beyond day 1.

The trial met the primary endpoint of complete response, defined as no vomiting or rescue medication in the delayed phase from 0 to 120 hours following MEC. The intent-to-treat population comprised 502 patients in the fosaprepitant arm and 498 control patients. Fosaprepitant patients achieved complete response versus control ($p < 0.001$). Single-day MEC regimens were used by 71.3% of patients in the fosaprepitant group and 69.9% of patients in the control group; of these, 51.2% and 51.4% received carboplatin-based chemotherapy in the fosaprepitant and control groups, respectively. Complete response in the delayed phase was achieved by 77.9% of patients on fosaprepitant receiving single-day chemotherapy and by 80.3% receiving multiple-day chemotherapy versus 64.7% and 77.1% of control patients receiving single and multiple MEC, respectively. In the fosaprepitant arm, no difference was observed between the rates of complete response in the delayed phase in patients receiving carboplatin (78.2%) versus non-carboplatin (79.6%). In the control group, a difference in complete response was seen during the delayed phase where complete response was achieved by 64.1% of patients on carboplatin compared to 73.1% of patients receiving a non-carboplatin MEC. NCT01594749. Weinstein *et al.* Abstract 1435O

Practice point and future research opportunities

A single-day triple-antiemetic fosaprepitant regimen has demonstrated superiority to a standard 3-day regimen for preventing chemotherapy induced nausea and vomiting in subjects receiving non-anthracycline and cyclophosphamide-based MEC. This study demonstrates the efficacy of a single-day fosaprepitant regimen in preventing nausea and vomiting in subjects receiving non-anthracycline and cyclophosphamide-based MEC with/without carboplatin and in both single- and multiple-day chemotherapy regimens. Fosaprepitant has the additional advantage of requiring a single administration to control symptoms during the delayed phase.

RELATED INFORMATION

[Click here to access the Congress abstracts.](#)

[Click here to access the meeting webcast page.](#)

Save the date

ESMO 2017 Congress, Madrid, Spain, 8-12 September 2017.

Affiliations and Disclosure

Affiliation

Dr Svetlana Jezdic, ESMO Head Office.

Disclosure

No conflicts of interest to disclose.

Acknowledgment

ESMO would like to thank you Virginia Powers, PhD for editorial assistance in preparation of this report.

ESMO would like to thank you Drs Judith Balmaña, Mark Andrew Glaire, Pierre Laurent-Puig, Sara Pusceddu, Antoni Ribas, Phillipe Rochigneux, Alexa Schrock and Yibing Yan for giving their permission to publish the images from the studies presented during the ESMO 2016 Congress in the ESMO Scientific report.

© Copyright 2016 European Society for Medical Oncology. All rights reserved worldwide.