Original article

Treatment of metastatic breast cancer in EU: Analysis of market research data from 4Q2013 till 3Q2014

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ABSTRACT

Objective: Despite the scientific evidence undoubtedly influencing current guidelines on the management of metastatic Breast cancer (mBC), marketing research data suggests this may not be reflected in EU prescribing behavior. Specifically we would like to understand the use of combination chemotherapy vs monotherapy in mBC patients.

Methodology: This study is based on IMS Oncology Analyzer™, a web-based physician panel survey set up by IMS Health, a global company which specializes in health care information including market research data. Analysis was carried out on prescribing behavior reflected in marketing research data from IMS source (from MAT Q42013 till MAT Q32014) and comparing the data with the current guidelines recommendation in mBC (ESO-ESMO 2nd international consensus guidelines).

Results: In 1st line mBC around 17% of patients are treated with combination chemotherapy drugs. The combination chemotherapy are essentially anthracycline based than taxane based. In 2nd line mBC a higher proportion of monotherapy (chemotherapy +/-biologics) is being used.

Conclusion: Despite the recommendation provided by current ESMO guidelines on mBC treatments, indicating the sequential use of single cytotoxic agents is a considerable alternative to standard multidrug chemotherapy regimens, marketing research data suggests this may not be reflected in EU prescribing behavior.

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1. Objective

We analyzed the treatment of metastatic breast cancer (mBC), according to marketing research data in 5 European countries (France, Germany, Italy, Spain and UK) between 4Q2013 and 3Q2014 and compared them with current guideline recommendations.

2. Background

Advanced breast cancer (ABC), including mBC is a treatable but still incurable disease. The goals of care are to maximize prolongation of good quality of life. According to ESO-ESMO 2nd international consensus guidelines for advance breast cancer and mBC, treatment choice must at least take into account the following factors: HR and HER-2 status, previous therapies and toxicities, disease-free interval, tumour burden (defined as the number and site of metastases), biological age, performance status, comorbidities (including organ dysfunctions), menopausal status (for ET), rapid disease/symptom control, patient preference, socioeconomic and psychological factors and available therapies in the patient’s country.

According to ESO-ESMO, mBC treatment options based on biological markers (especially HR and HER-2 status), are [1]:

ER+/HER-2-negative:

- ET is the preferred option for hormone receptor-positive disease, even in the presence of visceral disease, unless there is concern or proof of endocrine resistance, or there is disease needing a fast response
- Concomitant CT + ET should not be administered

HER-2-positive:

- Anti-HER-2 therapy should be offered early to all except in the presence of contraindications to use of such therapy.

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• Anti-HER2 therapy + ET should be considered in ER+/HER2+ patients
• Anti-HER2 therapy should be continued where tumours progress to continue the benefit from the suppression of the HER-2 pathway

**Chemotherapy and biological therapy:**

• Anthracycline or taxane, preferably as single agent in first line HER-2-negative mBC where these regimens have not been received as adjuvant treatment;
• Capecitabine and vinorelbine are viable alternatives;
• Bevacizumab is an option only in selected cases and is not recommended beyond first line.

Regarding the use of chemotherapy, the main recommendation relates to the sequential use of single agents, with combination chemotherapy reserved for situations of visceral crisis, rapidly progressive or highly symptomatic disease.

From a pharmaceutical company prospective, to evaluate the dynamics of the market, we regularly receive market research data which gives us information on what treatment is being used and in what setting. At the same time, this allows us to compare case dynamics of the market, we regularly receive market research data.

**Chemotherapy reserved for situations of visceral crisis, rapidly progressive or highly symptomatic disease.**

**An alternative source of data could be to conduct quantitative primary research, though this would very likely be prohibitively expensive for a single sponsor on the scale of Oncology Analyzer.** Limitations to Oncology Analyzer include privacy restrictions which prohibit the auditing of electronic case record forms. Though physicians are recruited to reflect the national universe, it is possible that there is a bias towards physicians who are more likely to participate in incentivized research and who have the ability to participate in research. Finally, there is the possibility for error rate in projection. According to IMS’ tables, for instance this can range from ± 4.5% for breast cancer patients in the UK.

**4. Results**

Fig. 1 shows the use of ATC L01 molecules in 1st line of therapy of mBC patients in EU5 countries on a moving annual total basis between Q1 2013 and Q3 2014. Projected patient shares receiving chemotherapy, radiotherapy, hormonal therapy, supportive care).

This study is based on IMS Oncology Analyzer™, a web-based physician panel survey set-up by IMS Health, a global company which specializes in health care information including market research data. The physician panel is a representative panel covering all specialties treating cancer patients. In MAT Q3 2014 98% of the panel physicians reported treatment courses every quarter, which means that the turnover of responding physicians is very low. The data are recorded on a quarterly basis and provide a wholesome perspective of cancer patient care from diagnosis onwards, across all cancer types and treatment modalities (surgery, chemotherapy, radiotherapy, hormonal therapy, supportive care). Disease and therapy profile information is collected by means of clinician self-completed forms. Each physician in EU5 countries is asked to provide case histories on their most recent cases. Oncologists, Radiotherapists and Haematologists must report on a pre-determined number of first patients they see in a given week, other specialties have to report on a pre-determined number of first patients seen in a 21 day period. The data collection methodology results in a retrospective longitudinal record based on patient case records.

Treatment courses are extrapolated on the basis of a doctor universe by IMS through its data and research and they are compared with the prevalence of observational profiles. The projection methodology is a bottom-up approach where the basis is the number of physicians participating in the study. Patients treated by each specialty in each country will be projected to the universe of cancer treating physicians per specialty and country. Since not all patients treated by each physician will be reported, two figures are collected from each physician participating: 1. Total number of treated patients; 2. Number of reported patients per cancer type. From the two numbers a factor will be calculated for use in the overall projection. The data based on four quarters are extrapolated to annual figures. The quarters are combined to create MATs (moving annual totals): MAT represents data of one year data period preceding the date of the MAT report. For example MAT Q4 2013 are data collected between Q1 2013 and Q4 2013, while MAT Q1 2014 are data collected between Q2 2013 and Q1 2014. Extensive testing is performed to validate the concept of the sample design and projection methodology. Sources for validations are e.g. Globocan, cancer registers and the WHO cancer resource centre.

Some of the parameters collected by IMS Health are: demographic details (age, gender, cancer type), clinical stage at diagnosis and relapse, full active anti-cancer drug treatment from diagnosis to current therapy, and therapy intent (adjuvant, neoadjuvant, palliative and curative). Patients receiving an active drug defined as ATC L01 EphMRA classification (ATC code L01 Antineoplastic agents is a therapeutic subgroup of the Anatomical Therapeutic Chemical Classification System, a system of alphanumeric codes developed by the WHO for the classification of drugs and other medical products. Subgroup L01 is part of the anatomical group L Antineoplastic and immunomodulating agents) were analyzed from April 2012 to September 2014 in EU5 countries (France, Germany, Italy, Spain and UK). Sample as well as projected estimates for the number of patients currently being treated were provided.

Oncology Analyzer is unique data source which is based on quarterly reporting of patient cases by physicians. A syndicated data source comparable to Oncology Analyzer is not available.

A comprehensive system of information on cancer burden in Europe), WHO, ASCO, and articles in leading journals.

4. Results
امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
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