ESMO European Consortium Study on the Availability of Anti-neoplastic Medicines

Key findings & summary

http://www.esmo.org/Policy/Anti-Cancer-Medicines-Study

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Key Findings

1. There are very substantial differences in the formulary availability, out-of-pocket costs to patients, and the actual availability of many anti-cancer medicines in Europe. These differences are most profound in those countries with lower levels of economic development, particularly in Eastern Europe, and are largely related to the cost of new agents developed and licensed in the last 10 years.

2. The impact of these differences is most profound in incurable diseases where the outcomes are dependent on the availability of expensive anti-cancer cancer agents such as EGFR or ALK-mutated non-small-cell lung cancer, metastatic melanoma, renal cell cancer, RAS\RAF wild type colorectal cancer.

3. These discrepancies are less profound in curative disease settings. This is best illustrated by the fact that trastuzumab, in the setting of adjuvant breast cancer for HER-2 positive patients, is generally subsidised and available in most countries. The discrepancies are even less when curative treatments do not require expensive therapies such as in the management of germ cell tumours.

4. Requirements for pre-approval of treatments for purposes of insurance coverage or reimbursement are much more common in Israel and many Eastern European countries than in Western European countries. It is most common for expensive anti-cancer therapies. This process does not usually delay treatment by more than four weeks. Delays of more than four weeks in this process tended to occur in specific countries in Eastern Europe, namely Albania, Armenia, Georgia, and Romania.

5. The prohibitive cost of many of the new anticancer agents is probably the major factor contributing to the problems of equality of cancer care.
Tumour types surveyed

1. Breast cancer, adjuvant
2. Breast cancer, metastatic
3. Lung cancer
4. Colorectal cancer
5. Prostate cancer
6. Ovarian cancer
7. Sarcoma
8. Pancreatic cancer
9. Germ Cell cancer
10. Renal Cell cancer
11. Gastro-intestinal Germ Cell Tumours GIST
12. Urothelial cancers
13. Gastric and Oesophageal cancer
14. Melanoma

Background

The contemporary management of cancer is predicated on the availability and personal affordability of anti-cancer therapies which may be either curative or non-curative (in which case we aim to either prolong survival or improve the quality of life). The range of disease-modifying therapies has expanded rapidly in recent years and, for some cancers, has substantially improved long-term survival rates. Most of these recent developments have come at a very substantial price, because most of the new agents introduced since the year 2000 are very expensive. In the past decade the average price of new anticancer agents has more than doubled, from $4,500 to more than $10,000 per month (1, 2).

The accessibility of any medication is predicated upon several key factors: licensing, manufacturing or importation, procurement by government insurers or hospitals, the budget allocated to its use, and the degree to which it is subsidised or reimbursed (which impacts out-of-pocket costs for patients). This later consideration is critical since out-of-pocket expenses contribute to the financial distress (3, 4) or financial toxicity (5) associated with treatment procurement, and/or lack of realistic access. The process of medication access may be further confounded by regulatory requirements for preapproval for the provision of subsidised medications which may, in some instances, cause substantial delay in treatment initiation.

Europe is politically and economically heterogeneous. All Western European economies and Israel are categorised by the World Bank as high income economies. In contrast (with the exception of Hungary and the Czech Republic) all Eastern European states are characterised as developing economies. This profound heterogeneity is reflected in wider variations in the cost and availability of healthcare services, and in particular anti-cancer medications. Previous studies have highlighted that the costs of care delivery (6) and cancer outcomes (7-9) vary substantially across Europe and that these are influenced by the national level of economic development (9, 10).

The European Union has repeatedly expressed a commitment to improving the equity of healthcare services across Europe (11, 12). This approach has been endorsed by the European Society for Medical Oncology (ESMO) which is committed to seeing the availability and accessibility of affordable high-level oncologic care in all European countries.
One essential step in addressing inequities is to map the availability of anticancer medications, out-of-pocket costs to patients, and accessibility of the medications across the range of common cancers in Europe.

There is general and evidence-based support of three common issues regarding the available of anti-neoplastic agents for the treatment of cancer in Europe:

1) **Formulary limitations**: While these have been generally described there has been no comprehensive mapping of anti-neoplastic drug formularies in Europe;

2) **Actual availability**: There are well-documented instances of medication shortages that have impaired care delivery in multiple sites in Europe and

3) **Access to new medicines**: There are problematic barriers to access new expensive anti-neoplastic agents either because of resource allocation issues or prohibitive out-of-pocket costs to patients.

**Study conceptualisation, development, and methodology**

The aims of the study were to evaluate 1) the formulary availability of licensed anti-neoplastic medicines across Europe, 2) patient out-of-pocket costs for the medications, 3) reimbursement pre-approval requirements and delays, 4) the actual availability of the medication for a patient with a valid prescription, and 5) factors that can adversely impact the availability of anti-neoplastic medicines.

The study was developed by ESMO under the leadership of Nathan Cherny and Alexandru Eniu, and under the auspices of the ESMO Emerging Countries Committee with input and cooperation of the ESMO Executive Board and Committees. Implementation and data analysis has been supported by four collaborating partners: the World Health Organization (WHO), the Union for International Cancer Control (UICC), the Kings College London Institute of Cancer Policy, and the European Society of Oncology Pharmacy (ESOP).

The survey consisted of two parts. Part 1 consisted of six general questions regarding the health care system. Part 2 surveyed the formulary of anti-cancer medications used to treat 14 common disease situations (please see list above). The list of anti-cancer medications for each disease entity was derived from the ESMO Clinical Practice Guidelines and those of NCCN, as well as up-to-date subject reviews. It includes the cancer medicines on the World Health Organization's Essential Medicines List. The list of medications was presented alphabetically. For each medication, national field reporters were asked to indicate whether it is permissible in their country to prescribe the medication for this indication, if the medication is reimbursed for this indication, the proportion of the full retail price the average patient pays for the medication, pre-authorisation requirements and delays of more than four weeks in the approval process, the actual availability of the medication for most patients in the country, and, in cases where the medication is not always available, the possible reason(s) for this.

ESMO and the collaborating partners sought to identify a minimum of two field reporters for each country. The field reporters were derived from either national or approved representatives of the study partner professional organisations; they could be either oncologists or oncology pharmacists. A total of 185 field reporters from 49 countries were invited to participate. Complete reports were submitted by 102 individual reporters from 46 counties. The respondents included 25 oncology pharmacists (from 22 countries) and 77 oncologists.
Electronic survey forms were developed to facilitate automatic data entry into an Excel spreadsheet for analysis. Data submitted by the two field reporters from each country/state were crosschecked by the Principle Investigator, Nathan Cherny. When discrepancies between reporters were identified, clarifications were requested. When discrepancies persisted, priority was given to the response provided by most highly credentialed reporter and where supportive data was presented. The principle investigator tabulated and graphically presented the data in the format used in previous ESMO surveys.

A preliminary report of the findings was presented at the ESMO 2014 Congress in Madrid in September. Invitations were sent to all members of the coordinating partner organisations to review the preliminary data on the ESMO website and to submit any corrections or amendments between November 2014 and February 2015. Amendments will be collated, crosschecked and incorporated into the final report which is scheduled for May 2015.

For more information please visit: [www.esmo.org/Policy/Anti-Cancer-Medicines-Study](http://www.esmo.org/Policy/Anti-Cancer-Medicines-Study)

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References