

## Costs of haematological disease high and rising

Blood disorders are not only a burden for patients, but also for society as a whole. Two Articles<sup>1,2</sup> in *The Lancet Haematology* aimed to quantify the total economic effect of both malignant and non-malignant blood disorders in the 28 members of the European Union, Iceland, Norway, and Switzerland.

These studies were commissioned by the European Hematology Association (EHA) to obtain a clear picture of established costs, enabling an extrapolation to future economic burdens.

This long-awaited analysis provides strong arguments to raise public awareness about the effect of blood disorders on the European economy. The results will help policy makers in their decision-making with regard to future health-care budgets. Both studies also indirectly stress the need for funding for fundamental, translational, and clinical research in all aspects of haematology. The EHA laid out a framework for this in its 2016 consensus document.<sup>3,4</sup>

In Europe, about 80 million people have either malignant or non-malignant haematological disorders. The economic effect of both disorders is substantial. In the countries studied, disorders of the blood cost up to €23 billion annually.

More than two-thirds of the total costs were for health care (€16 billion), including for inpatient care (€7 billion, 48%) and drugs (€4 billion, 28%).<sup>1</sup> Outpatient care, primary care, and accident and emergency care accounted for the rest. Other important cost factors in these comprehensive studies include the costs of informal care and productivity losses: foregone earnings due to temporary or permanent absence from work.

A little more than half of the total costs (nearly €12 billion) is spent on malignant blood disorders.<sup>2</sup> Considering the much lower number of patients with malignant disease, this amount shows the high amount of resources these disorders require. In the 28 EU countries alone, malignant blood disorders cost €11 billion, accounting for about 8% of total cancer costs, making it the fourth most expensive form of cancer, behind the more common lung, colorectal, and breast cancers. When health-care costs are counted separately, malignant blood disorders (12% of total

costs) come in second, with only breast cancer costing more (13%).<sup>2</sup>

The figures presented were distilled from a large number of sources, including governmental and health-care system sources in 2012 from each of the countries investigated. More recent figures were not available because a large part of the necessary information only becomes available after a few years. Despite the absence of new information, there is no doubt that the burden of blood disorders is likely to have risen since 2012 and will probably be on the rise for some time to come. Most European countries face an ever-ageing population needing more care. Another factor will contribute even more to rising costs: the prices of new drugs.

Since 2012, several new drugs have received market authorisation. Many of these new drugs promise to be more effective because they target key pathways of cancer cells more specifically. However, many of these new drugs are priced well above the 2012 average. Interestingly, prices for all cancer drugs in the Netherlands are also increasing. In 2011, €376 million was spent in the Netherlands. In 2014, this figure had risen by 80% to €675 million and it is expected to have grown by another €300 million by the end of this year.<sup>5</sup>

Figures might differ from country to country, but the trend is unmistakable. Therefore, it comes as no surprise that the price of drugs has a prominent place in today's public debate. The issue has reached mainstream media attention in many countries. The magnitude of this trend might require a political response to help curb it. The urgency of the matter is shown by the fact that the Dutch president of the EU has put the issue high on its agenda for the first half of this year.

Another important aspect is that many of the new treatment options include oral drugs, shifting costs to outpatient care. This element is not appropriately reflected in the present studies. Nor is the contribution of diagnostics, whether it be laboratory or imaging based, singled out as a specific contribution to overall costs, despite their increasing complexity and cost. It will be interesting to monitor these developments from a societal and economic perspective in a follow-up study.



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