The first waves of post-war baby boomers began to reach the age of 65 in 2010, resulting in a sharp increase in the size of the elderly population. Until 2040, the 75+ age group will double in size, from 7% of the population in the average European country nowadays to 14% in 2040. This aging of the population together with the fact that cancer is mainly a disease of old age, will significantly increase the absolute number of cancer patients: the number of new cancer patients per year will increase with over 40% in the next 15 years. This will involve a substantial extra burden on society, in terms of caring for cancer patients. Subsequent to rising numbers of patients and complexity, new technologies and treatments are being implemented. With respect to systemic treatment, trends over the past 20 years showed a fourfold increase of the number of patients treated with systemic therapy. Besides, patients are more often treated with combination therapy, and the average time a patient is treated with systemic therapy is increasing due to improved effectiveness of agents, and the availability of more lines of therapy. In most recent years, targeted agents have become available for a growing number of indications. And more is yet to come. In 2011 in the Netherlands, already 7% of all newly diagnosed cancer patients aged 75 years or less was primarily treated with targeted agents. When including treatment for recurrent metastatic disease, this proportion was estimated to reach 10%. This proportion is likely to further increase in the forthcoming years. In case of a conservative scenario where 15% of all cancer patients is treated with targeted agents in 2020, in a country with a population of 20 million and average European population structure and cancer incidence trend, there will be an absolute increase of 57% in the number of patients treated with targeted agents. In a more long-term scenario where 20% of all cancer patients will be treated with targeted agents in 2030, the absolute increase in patients treated with targeted agents will be even 300%. It is obvious that these figures will have a large impact on health services. It is of utmost importance to develop a long-term strategy facing societal and political challenges. Methods like value-based pricing and pay for performance will have to be explored.

Disclosure: The author has declared no conflicts of interest.