

The results of this study³ support the benefit of lenalidomide maintenance across different subgroups of patients and highlights the progression-free survival benefit in patients with high-risk cytogenetic abnormalities. However, it is important to note that lenalidomide did not overcome the poor prognosis that the presence of high-risk abnormalities confer to patients, and therefore novel treatments to improve the outcomes of these patients are needed.

Whether all patients need continuous maintenance therapy regardless of the quality of the response achieved with previous treatments remains unclear. However, next-generation sequencing and cytometry provide an opportunity to investigate the role of minimal residual disease assessment for tailoring maintenance strategies and would allow physicians to prescribe maintenance therapy and reply to a very common question raised by the patients: how many cycles of treatment does maintenance therapy include? Furthermore, long-term minimal residual disease monitoring could guide pre-emptive treatment preventing clinical relapses and ensuring durable responses.

Maintenance with lenalidomide is the standard of care, but the future has to move towards a personalised medicine approach that aims to improve overall survival

and quality of life, which means giving the right drug to the right patient at the right time for the optimal duration.

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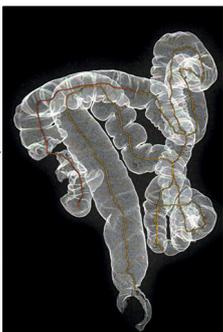
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The importance of surgery in colorectal cancer treatment



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In *The Lancet Oncology*, Sara Benitez Majano and colleagues¹ have engaged with a very important topic. Previous data have indicated poorer treatment results for colorectal cancer in both Denmark and England compared with those in similar western countries.² The continuous audit and assessment of outcomes is important to better understand the reality of cancer care each country and thus, this study is of interest to the public.

Majano and colleagues identified that an important difference between the countries studied regarding surgery for colorectal cancer was probably not the technique, but rather the frequency of surgical resection. The proportion of patients treated with resectional surgery ranged from 68.4% in England to 81.3% in Sweden for colon cancer, and from 59.9% in England to 70.8% in Sweden for rectal cancer; this range was wider for patients older than 75 years (colon cancer 59.7% to 80.9%; rectal cancer 45.7% to 61.9%). What

are the implications from these results? Majano and colleagues' paper highlights the importance of surgery in the treatment of colorectal cancer. It is possible that attitudes towards surgery in the older patient population should be altered in England, but the data in this study do not include comorbidity, and the risk for increased perioperative mortality should not be underestimated. It is important to continue to assess results of resectional surgery to avoid doing more harm than good. Preoperative optimisation of patients must be a focus of research, to increase the percentage of patients that are able to undergo resectional surgery in the future.

What other factors could be influencing these results? During the study period, the standardised referral pathway had already been introduced in Denmark in 2010. It has since been introduced in Sweden, Norway, and the UK, but none of these three countries had this process running nationally in 2010. There is scarce

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scientific evidence that a standardised referral pathway improves survival.

Another preoperative difference between the countries studied was colorectal cancer screening. Screening for colorectal cancer was introduced in the UK in 2006, but none of the other countries had nationwide screening during the study period 2010–12. To some extent, socioeconomic differences might explain between-country variations² because there is often a lower participation in screening programmes in more deprived areas. Perhaps the effect of screening was seen in rectal cancer, where diagnoses of stage I to III disease were more common in England than in the other countries, but, unfortunately, this effect was not reflected in improved survival.

Benitez Majano and colleagues' study shows that the previously reported² poorer treatment results for Denmark than those for Norway and Sweden have improved, particularly for rectal cancer. This improvement is very promising, but the reasons are less easy to identify. Perhaps this change is due to the increased use of surgical resections for rectal cancer, but the authors also suggest that improved results could be partly attributed to laparoscopic surgery, which has been shown to be safe in the long term and confers short-term advantages in the management of colorectal cancer.^{3–5} During the study period, laparoscopic surgery for rectal cancer was very differently implemented in the four countries, with Denmark having 75% of patients operated with laparoscopic technique compared with about 20% of patients in Sweden, according to national quality registry data. England also had a high percentage of patients operated laparoscopically, but had the lowest patient survival of the four countries. Two trials^{6,7} published in 2015, studying oncological surrogate variables in rectal cancer, have even suggested that open surgery might be superior to laparoscopy. Taken all together, it is unlikely that laparoscopic surgery is the main reason for the improved survival in patients with rectal cancer in Denmark shown in this study.

Another surgical difference that was less emphasised in guidelines in England than in recommendations from the other countries in this study was complete mesocolic excision. However, the superiority of this technique compared with others remains to be shown, and complete mesocolic excision has not been swiftly

introduced in all countries. In Stockholm, where the technique has been introduced in a structured manner, only about 20% of patients undergoing surgery for colon cancer between 2004 and 2012 had complete mesocolic excision.⁸ Similar data have been published from Denmark.⁹ Nonetheless, it is interesting that recommendations for England are less specific than other countries' guidelines; does this in fact result in poorer survival because of unspecified surgical treatment?

Future research must focus on including data on patient frailty and comorbidity, which should be added to registry data, as Majano and colleagues have suggested. The facilitation of easier interpretation and comparison of data from several national registries must also be a concern for policy makers, because benchmarking of results and making comparisons between countries might help to identify important new areas to improve survival in patients with colorectal cancer.

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