

Axitinib, cabozantinib, everolimus, nivolumab, sunitinib and best supportive care in previously treated renal cell carcinoma: a systematic review and economic evaluation

Steve J Edwards,* Victoria Wakefield, Peter Cain, Charlotta Karner, Kayleigh Kew, Mariana Bacelar, Natalie Masento and Fatima Salih

BMJ Technology Assessment Group, BMJ, London, UK

*Corresponding author sedwards@bmj.com

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Plain English summary

Treatment comparisons for previously treated renal cell carcinoma

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Plain English summary

Renal cell carcinoma (RCC) is the most common type of kidney cancer and more people are diagnosed each year in the UK. Several treatments have recently been developed for patients with RCC that is advanced or has spread to other parts of the body and who have previously had treatment but have worsened. Our review compared the treatments axitinib (Inlyta[®], Pfizer Inc., NY, USA), cabozantinib (Cabometyx[®], Ipsen, Slough, UK), everolimus (Afinitor[®], Novartis, Basel, Switzerland), nivolumab (Opdivo[®], Bristol-Myers Squibb, NY, USA), sunitinib (Sutent[®], Pfizer, Inc., NY, USA) and best supportive care (BSC) to help NHS services choose the most effective option.

The review found that cabozantinib is probably the best treatment to delay tumour growth and prolong life, followed by nivolumab. All of the treatments delayed tumour growth compared with BSC; however, there are uncertainties, owing to the way in which studies have been conducted. All of the treatments cause serious side effects and so it is important that the possible benefits and harms are discussed fully with a cancer specialist before a patient starts treatment. Standard reporting of the most important outcomes for people with RCC, particularly the response to treatment and quality of life, would improve our knowledge of how these treatments compare with each other.

The publicly available prices for these drugs are very high and would require a significant improvement in survival and/or quality of life for them to be considered as cost-effective. The results show that only everolimus had a large enough improvement in survival in comparison with BSC to be cost-effective. However, all of the drugs have commercially confidential discounts for the NHS and so the results of this review are unlikely to be accurate.

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