Managing patients with metastatic prostate cancer: who takes the lead?

SIMON HUGHES, ALAN MCNEILL, SIMON BREWSTER, NOEL CLARKE, JANIS TROUP AND HEATHER PAYNE

The increased number of treatment options for prostate cancer has raised questions over who should be taking responsibility for initiating and ongoing management of patients. In this article the authors report on the findings of a survey seeking the views of UK oncologists and urologists on where they think responsibilities lie.

In 2011, the British Uro-oncology Group (BUG) and the British Association of Urological Surgeons (BAUS) Section of Oncology published the findings of a members' survey (oncologists and urologists, respectively) concerning UK prescribing practices for prostate cancer.[1] The aim of the publication was to offer multidisciplinary teams (MDTs) guidance in co-ordinating the management of metastatic prostate cancer in a rapidly changing clinical environment. Since this time the landscape for prostate cancer management, in particular metastatic disease, has progressed at a rapid pace. BUG and the BAUS Section of Oncology initiated a new survey late 2015 into 2016 to evaluate the views of UK oncologists and urologists on the management of metastatic prostate cancer, following the unprecedented expansion in treatment options.

THE CHANGING LANDSCAPE

In late 2015 stakeholders were consulted regarding impending changes to the National Cancer Drugs Fund (NCDF). At that time, prostate cancer drugs funded by the scheme were only accessible by an oncologist: 'a consultant specialist specifically trained and accredited in the use of systemic anti-cancer therapy.' The prostate cancer community was also awaiting final guidance from the National Institute of Health and Care Excellence (NICE) regarding several single technology appraisals for metastatic prostate cancer treatment. It was therefore judged to be an opportune moment in which to revisit current working practices among UK oncologists and urologists in the field of metastatic prostate cancer.

Subsequent NICE approvals for abiraterone (Zytiga)[2] and enzalutamide (Xtandi)[3] in the chemotherapy-naïve setting, and cabazitaxel (Jevtana)[4] and radium-223 (Xofigo) post-docetaxel chemotherapy[5], have ensured these treatments will be available without recourse to the NCDF and its associated restrictions. It is intended that this overview of oncologist and urologist opinions on the management of metastatic prostate cancer will help both specialties review current practice at their centres and generate further discussion on how the latest treatments can be best integrated through MDT working.

THE SURVEY DESIGN

On 14 December 2015, the link to a structured online questionnaire was distributed to the membership of both BUG (160 oncologists with a specialist interest in urology) and the BAUS

BLOG
Who should take the lead when managing metastatic prostate cancer?
Read the accompanying blog and leave a comment at:
www.trendsinmenshealth.com/blog

Simon Hughes, *Consultant Oncologist, Guy's and St Thomas' NHS Foundation Trust, London;* ***Alan McNeill,*** *Consultant Urologist, Western General Hospital, Edinburgh;* ***Simon Brewster,*** *Consultant Urologist, Oxford University Hospitals NHS Foundation Trust;* ***Noel Clarke,*** *Consultant Urologist, The Christie and Salford Royal NHS Foundation Trusts, Manchester;* ***Janis Troup,*** *Secretariat, British Uro-oncology Group (BUG), London;* ***Heather Payne,*** *Consultant Oncologist, University College London Hospitals*

Section of Oncology (44 recipients who participated in the survey). Most urologists in this BAUS subsection have a specialist interest in oncology. The questionnaire consisted of 12 multiple choice questions regarding the management of metastatic prostate cancer. The link remained open until 27 February 2016, following which the responses were analysed.

SUMMARY OF ONCOLOGIST AND UROLOGIST OPINIONS

133 doctors completed the questionnaire: 97 oncologists (73% of the population surveyed); 36 urologists (27% of the population surveyed). All oncologists were currently treating men with metastatic prostate cancer, whereas two urologists (6%) were not.

Referral patterns

Oncologists reported seeing the greatest number of new referrals for metastatic prostate cancer per year, with 82% receiving at least 50 new referrals compared to 20% for urologists. The majority of urologists (73%) saw between 10 and 50 new referrals for stage 4 disease annually. However, many patients who fail/convert to castration-resistant prostate cancer will probably already be established as urology follow-up patients rather than feature as new ones (Figure 1).

A similar pattern emerged for the number of patients managed with metastatic prostate cancer per year. 85% of oncologists managed at least 50 patients a year in this category, compared to 50% of urologists. For the urologists there was a fairly even distribution across the categories from <10 to >200 patients managed, although the majority (50%) managed between 20 and 100 patients annually (Figure 2).

Lead responsibility for the management of patients with stage 4 prostate cancer

76% of oncologists stated that they took the lead for the management of patients with stage 4 prostate cancer, while 21% stated that the responsibility was shared with the urologists and 3% stated that urology took lead responsibility (Figure 3). When asked who should take the lead, 75% of oncologists believed their discipline should hold this role, while 25% thought it should be joint with the urology team. No oncologists surveyed were of the opinion that urology alone should take lead responsibility (Figure 4).

25% of urologists stated that they took the lead for the management of patients with stage 4 prostate cancer, while 19% stated that oncology took the lead role. However, 56% of urologists reported that the lead responsibility was shared between the two disciplines (Figure 3). When asked who they believed should take the lead, 56% thought the responsibility should be shared, while 25% thought the role should be fulfilled by the oncology team and 19% thought urology should lead (Figure 4).

Responsibility for initiating and continuing various treatment options

The majority of oncologists (>55%) held the opinion that either urologists or oncologists should be able to take responsibility for both initiating and monitoring treatment with

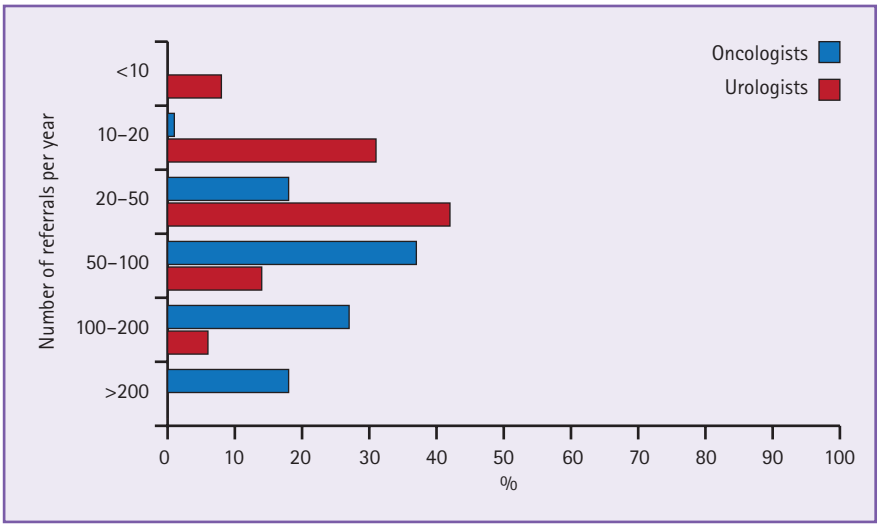

Figure 1. New referrals for metastatic prostate cancer per year

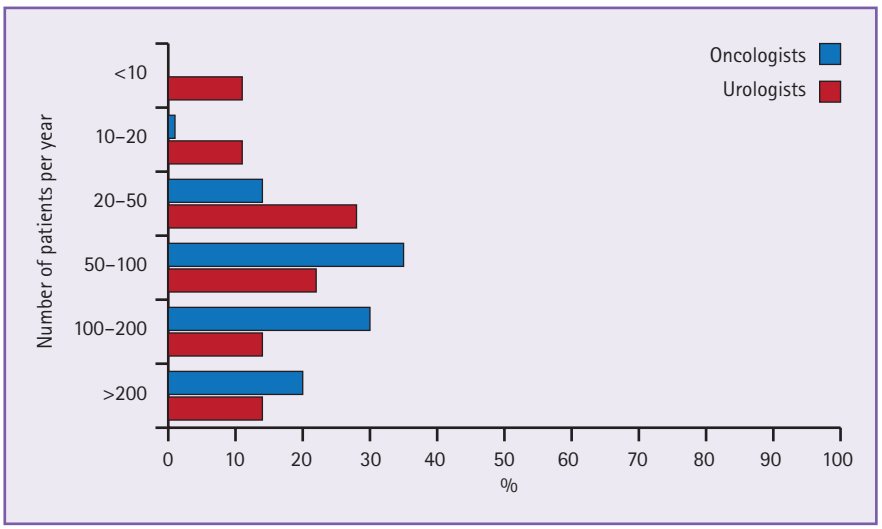

Figure 2. Patients with metastatic prostate cancer managed per year

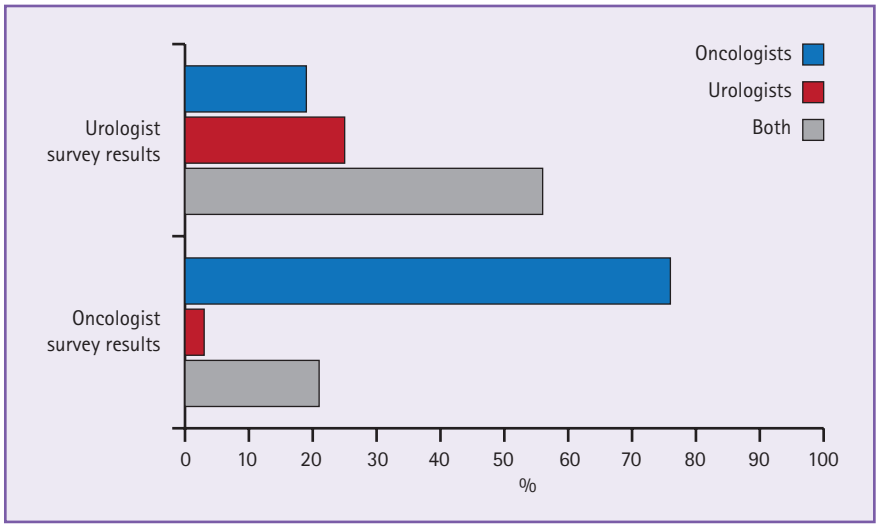

Figure 3. In your department, who currently takes the lead responsibility for the management of metastatic prostate cancer?

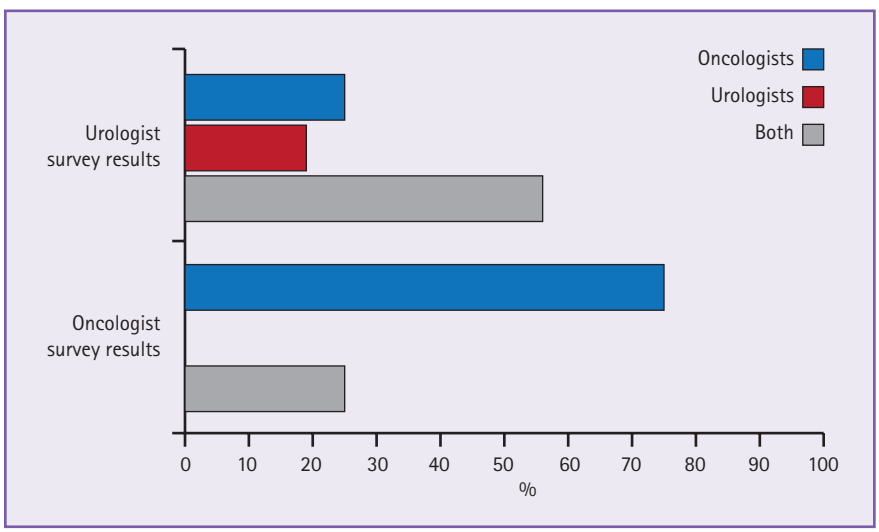

Figure 4. In your department, who do you think should be taking the lead responsibility for the management of metastatic prostate cancer?

luteinising hormone-releasing hormone (LHRH) agonists and the anti-androgen bicalutamide. 64% of oncologists reported that they should take responsibility for initiating treatment with steroids, whilst 33% believed that this task could be shared with urologists and 44% were prepared to share ongoing supervision with urologists. For all other treatments – zoledronic acid (Zometa), abiraterone, enzalutamide, radium-223 and cytotoxic therapy – at least 85% of oncologists stated that they should take responsibility for initiating treatment and at least 80% stated they should continue to monitor/supervise patients during treatment (Figures 5a and 6a).

The majority of urologists (>64%) believed that they should take responsibility for initiating treatment with LHRH agonists and bicalutamide, with 31% and 34% respectively stating that the task of initiating therapy should be shared. 58% of urologists also stated that they should be responsible for the ongoing monitoring and supervision of patients receiving these androgen-receptor axis targeted treatments, while 31% believed this role should be shared. 58% of urologists stated that the initiation of steroids should be a shared role, although only 39% were of the opinion that the ongoing monitoring should be shared and 39% felt oncologists should be responsible for ongoing monitoring (Figures 5b and 6b).

A minority of urologists stated that they should take responsibility for initiating treatment with zoledronic acid (8%), abiraterone (11%), enzalutamide (19%) and radium-223 (3%), with similar numbers suggesting that the monitoring and supervision should also be the preserve of the urologist. Most were of the opinion that the oncologist should initiate treatment with bisphosphonates (58%) and abiraterone (50%), although a significant proportion believed this role should be shared: bisphosphonates (33%), abiraterone (39%). 42% of urologists thought enzalutamide could be initiated by either an oncologist or a urologist, while 39% believed oncologists should take the lead. The percentage distributions for the monitoring of these treatments was similar to those for initiation. The majority of urologists (>90%) believed that radium-223 and cytotoxic therapy initiation and treatment should be under the care of the oncology team (Figures 5b and 6b).

Access to treatments funded by the NCDF

80% of oncologists stated that oncologists only should be able to prescribe drugs on the NCDF, while 20% stated that both oncologists and urologists should have access. 67% of urologist respondents said that both urologists and oncologists should have access to NCDF-funded drugs, while 33% believed that only oncologists should have access.

MDT involvement in managing patients with metastatic disease

Only 9% of oncologists and 33% of urologists reported that men with relapsed metastatic prostate cancer are always

discussed in an MDT setting, with 9% and 8% respectively reporting that this never happens. For the majority of those surveyed, such cases were sometimes discussed.

33% of oncologists and 32% of urologists reported that their practice included a multidisciplinary clinic for patients with advanced prostate cancer. The oncologists reported that 64% of such clinics contained a clinical oncologist and 12% a medical oncologist. The inference is either that not all clinics are attended by an oncologist or that the respondents did not include themselves in their answer. 21% of multidisciplinary clinics described by oncologists contained urology input, and there was a range of other disciplines – palliative care, research team, urology and oncology clinical nurse specialists (CNS) – represented in 30% or fewer clinics. In contrast, the urologists reported that 100% of multidisciplinary clinics contained a urologist and urology CNS, with 91% of clinics being served by a clinical oncologist, 55% by a medical oncologist and 36% by an oncology CNS. They also reported a strong research nurse presence (82%).

IMPLICATIONS FOR CURRENT PRACTICE

It is important when reviewing the findings of this survey to acknowledge the greater representation of oncologists over urologists. BUG represents the majority of UK oncologists managing urological tumours and the BAUS Section of Oncology represents the majority of urologists managing urological tumours, although not all of these have complete subspecialisation in uro-oncology. 73% of respondents were BUG members and 27% were BAUS Section of Oncology members. There is also an inherent selection bias when collecting data in this manner, as it is likely to encourage responses from those with a particular interest in the subject matter, rather than reflecting the overall consensus.

For most tumour sites, patients with metastatic disease are generally managed by oncology teams. This is due to the prevalence of systemic cytotoxic therapy and radiotherapy in their treatment strategies. Metastatic prostate cancer differs, in that until recently first-line therapy consisted of androgen deprivation alone, which both urologists and oncologists are experienced in delivering. In line with this, there will be patients being managed separately by each specialty who have not had a reason to be referred across. For some uro-oncology teams this may well have influenced their reporting regarding which specialty currently takes the lead in the management of metastatic castration-resistant prostate cancer, with neither the urology nor the oncology teams being fully aware of the entire population with metastatic prostate cancer under their joint care.

The STAMPEDE[6,7] and CHAARTED[8] data for 'early' docetaxel were published prior to this survey being conducted and may

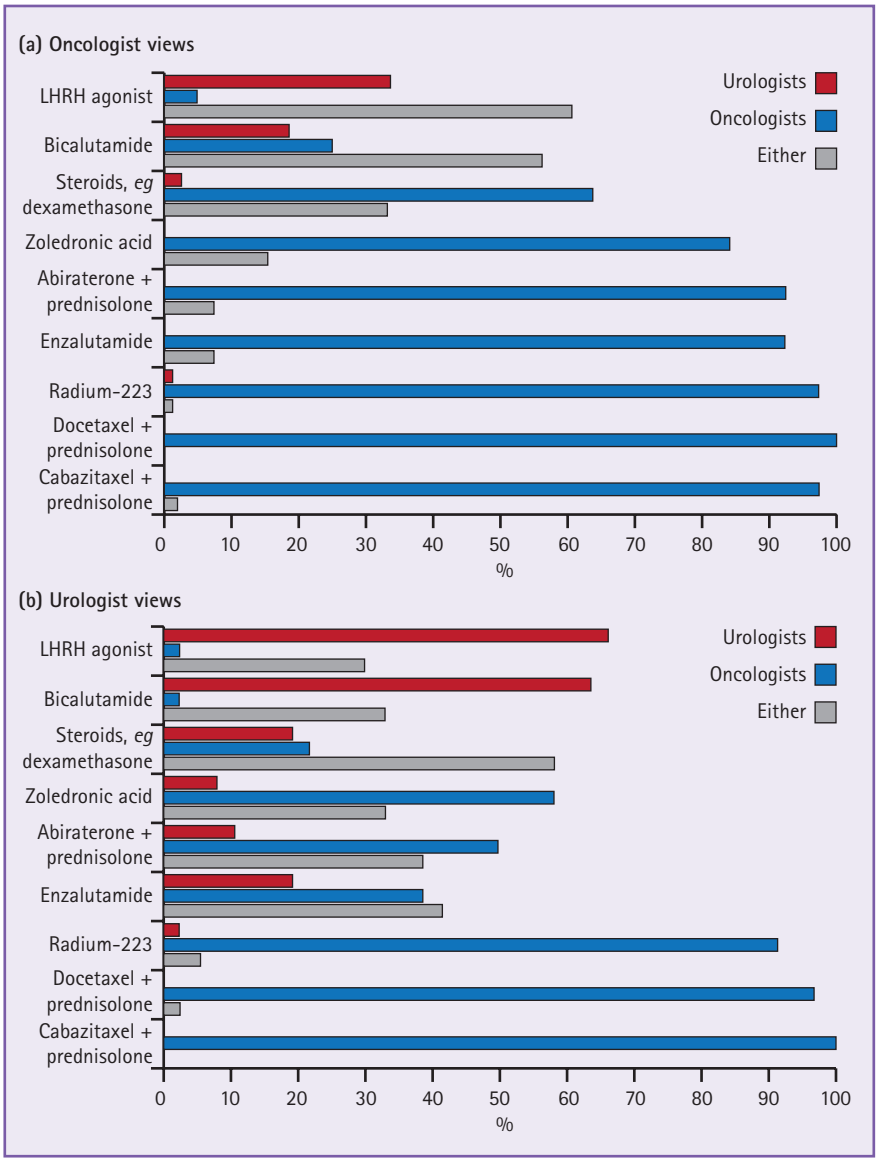

Figure 5. In your department, who do you think should be responsible for initiating treatment with the treatments listed?

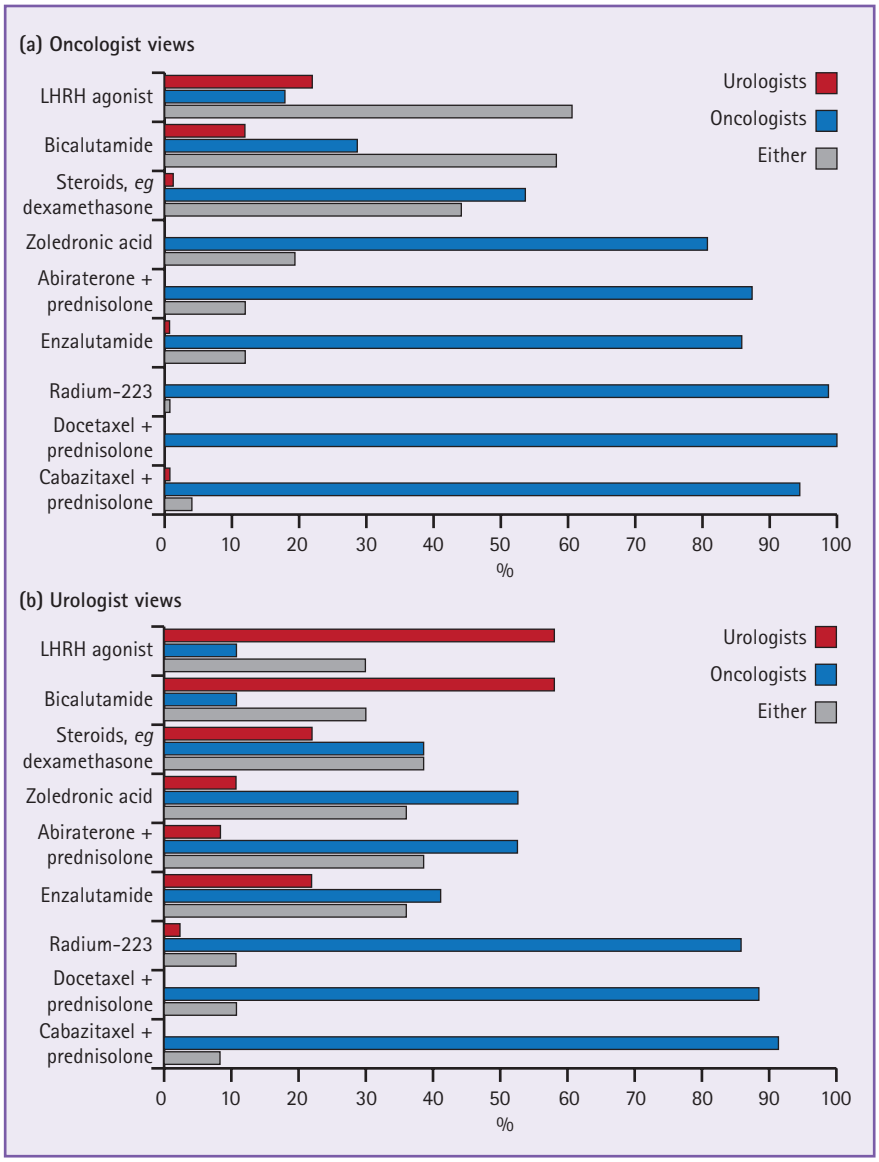

Figure 6. In your department, who do you think should be responsible for the continuing management/supervision of patients on the treatments listed?

account for the differing opinions between urologists and oncologists on who should take the lead for managing patients with stage 4 prostate cancer: the urologists favouring a shared approach, with oncology preferring to take the lead.

The timing of the survey also coincided with a stakeholder consultation regarding the future of the NCDF. At the time of conducting the survey, only oncologists had access to drugs funded by this scheme. In the survey 80% of oncologists supported the status quo, whereas 67% of urologists believed that both disciplines should be able to access these drugs. This was particularly relevant at the time as both abiraterone and enzalutamide in the chemotherapy-naïve setting, radium-223 and cabazitaxel were only available via the NCDF. NICE has subsequently issued favourable decisions on all these treatments. The decision whether a urologist, an oncologist or both team members are able to prescribe/supervise treatment with these agents now rests with local hospital clinical governance structures (with the exception of radium-223, which is only available at designated centres under the supervision of a Nuclear Medicine Department). Oncologists and urologists are generally aligned in thinking that the management of patients with chemotherapy and radium-223 is the domain of the oncologist. However, in terms of the novel androgen-receptor axis targeted treatments, such as abiraterone and enzalutamide, there is a cohort of urologists expressing a preference for these treatment options being available for use by both disciplines.

There is no doubt that overall survival for patients with metastatic prostate cancer has risen dramatically over the last 10 years. There is also greater public awareness regarding the treatment options available. In order to accommodate these changes, the uro-oncology community needs to review its working practices. An emerging desire for urologists to increase their involvement in the initiation and delivery of selected systemic therapies could be used to positive effect by increasing their role in dedicated multidisciplinary stage 4/locally advanced prostate cancer clinics, thereby justifying the inclusion of such clinics in their job plans. This would also enable patients to receive immediate access to urology-specific expertise if required. Of note, currently only one-third of responders to the survey managed patients in a multidisciplinary clinic setting.

Change in working practices takes time and significant effort from individuals and the clinical team as a whole. Clinicians' time is steadily becoming more limited, while clinical activity is expanding. In the arena of prostate cancer, the findings from this survey should be reviewed by all professionals concerned within the context of their own practice to determine what might be achievable. In 2010, BUG published opinion and evidence on the potential

for new treatment options in advanced prostate cancer, recognising potential service implications if these options became a reality.[9] Fortunately, for professionals and patients, that reality has arrived, but now we need to focus on working as a uro-oncology team to provide the best services possible.

Declaration of interests

Simon Hughes, Alan McNeill, Simon Brewster, Noel Clarke and Heather Payne have all received honoraria and support to attend international meetings from prostate drug manufacturers. Janssen provided an educational grant towards costs associated with the implementation of this survey. Janssen had no influence over the content or findings from the survey or the content of this manuscript.

REFERENCES

1. Payne H, Bahl A, Kockelbergh R, *et al.* How multi-disciplinary teams (MDTs) work in practice in the management of advanced prostate cancer: a survey of oncologists and urologists in the UK. *Brit J Med Surg Urol* 2011;4:68.
2. NICE. Abiraterone for treating metastatic hormone-relapsed prostate cancer before chemotherapy is indicated. Technology appraisal guidance TA387. April 2016, updated July 2016 (https://www.nice.org.uk/guidance/ta387; accessed 19 June 2017).
3. NICE. Enzalutamide for treating metastatic hormone-relapsed prostate cancer before chemotherapy is indicated. Technology appraisal guidance TA377. January 2016 (https://www.nice.org.uk/guidance/ta377; accessed 19 June 2017).
4. NICE. Cabazitaxel for hormone-relapsed metastatic prostate cancer treated with docetaxel. Technology appraisal guidance TA391. May 2016 (https://www.nice.org.uk/guidance/ta391; accessed 19 June 2017)
5. NICE. Radium-223 dichloride for treating hormone-relapsed prostate cancer with bone metastases. Technology appraisal guidance TA412. September 2016 (https://www.nice.org.uk/guidance/ta412; accessed 19 June 2017)
6. James ND, Sydes MR, Mason MD. Docetaxel and/or zoledronic acid for hormone-naïve prostate cancer: first overall survival results from STAMPEDE (NCT00268476). *J Clin Oncol* 2015;33(Suppl):Abstract 5001.
7. James ND, Sydes MR, Clarke NW, *et al.* Addition of docetaxel, zoledronic acid, or both to first-line long-term hormone therapy in prostate cancer (STAMPEDE): survival results from an adaptive, multiarm, multistage, platform randomised controlled trial. *Lancet* 2016;387:1163–77.
8. Sweeney CJ, Chen YH, Carducci M, *et al.* Chemohormonal therapy in metastatic hormone-sensitive prostate cancer. *N Engl J Med* 2015;373:737–46.
9. Payne H, Bahl A, Mason M, *et al.* Optimizing the care of patients with advanced prostate cancer in the UK: current challenges and future opportunities. *BJU Int* 2012; 110:658–67.