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Background

Discussions about disease progression and the advantages of further anti-cancer treatment in metastatic settings are challenging. Some patients (pts) with advanced disease are prescribed drugs shown only to extend Progression Free Survival (PFS) in clinical trials that may not necessarily improve overall survival. Such treatments may control the cancer and reduce the symptom burden but do not increase survival or produce discernible clinical benefits for pts. There are data to show that doctors and their pts are overly optimistic about the benefits of novel drugs. (Fallowfield et al 2017).

As part of the **AVALPROFS** (Assessing the **VAL**ue to Patients of **PRO**gression **Free** Survival) longitudinal study we explored the expectations and understanding pts and oncologists held about prescribed novel treatments.

Methods

- Patients with metastatic cancer were recruited to AVALPROFS and baseline interviews were conducted prior to or within 2 weeks of starting novel treatment by phone or face to face. The interviews explored pts' expectations and understanding of the drugs prescribed
- Oncologists completed a checklist following the initial consultation, indicating their expectations about likely therapeutic benefits from the drugs they prescribed

Results

- 90/120 (75%) eligible pts with life expectancy of > 6 months participated, demographics are shown in Table 1
- 32 oncologists from 11 UK cancer centres saw 90 pts with metastatic disease
- Cancer sites and drugs prescribed are shown in Table 2

Table 1 Demographics n=90

Sex: Male; Female	39; 51
Age in Yrs Mean; Range	65 32-85
Partner: Yes	58
Employed: Yes	27
Stage of disease: III; IV	10; 80

Table 2

Cancer diagnosis (n)	Drugs prescribed (n)
Lung (30)	afatinib (1), carboplatin + etoposide (1) or gemcitabine (1), pemetrexed + carboplatin (2) or cisplatin (2), erlotinib (23)
Melanoma (19)	ipilimumab (15), dabrafenib (2), vemurafenib (2)
Breast (18)	bevacizumab + paclitaxel (2), eribulin (6), everolimus (1) + exemestane (4), TDM-1 (2), pertuzumab + docetaxel + trastuzumab (3)
Renal (10)	sunitinib (5), pazopanib (2), axitinib (2), everolimus (1)
Gynae (ovary/cervical) (7)	bevacizumab (4), + carboplatin + paclitaxel (2), or + gemcitabine (1)
Head & Neck (3)	cetuximab + cisplatin (2) or carboplatin + 5FU (1)
Colorectal (2)	bevacizumab (1) bevacizumab + capecitabine (1)
Sarcoma (1)	pazopanib (1)

- 36/90 (40%) patients died or progressed within 6 months of study entry (**Group A**)
- 13/90 (14.4%) withdrew due to toxicity, 4 of these had treatment breaks (**Group B**)
- 41/90 (45.5%) stayed on treatment in the study for 6 months without progression (**Group C**)
- At baseline 92% (83/90) of patients expected to gain some medical benefit from treatment, compared with doctors' expectation that 51% (46/90) would do so
- Oncologists predicted a longer life expectancy from treatment for 62% (56/90) of patients
- 50% (45/90) of patients misunderstood the therapeutic aim of treatment and thought it was to extend life

"Live longer without pain"
Group B: Breast pt

"Staying alive for a few extra months, you can do things in that time"
Group A: Head & Neck pt

Comments from the oncologists

- Oncologists were asked about the expected benefits of the drugs prescribed

"The toxicity of everolimus is unpredictable and limits its benefit"
Group B: Breast pt

"This disease has behaved unusually so far so difficult to predict"
Group A: Head & Neck pt

"Worth a try, she is fit enough"
Group C: Ovarian pt

- Oncologists' expectations about treatment benefits were not always compatible with published data and may be influenced by their pts when prescribing novel agents

"She is being offered a treatment with a low response rate but the chance of a possible durable response"
Group C: Melanoma pt

"Young and slightly anxious. Has a youngish family & is starting to understand that we are working through a finite number of treatment options"
Group A: Breast pt

"Discussed the option of no treatment but he was keen to follow symptom control only"
Group A: Lung pt

"He did not ask many questions. I think he was relieved to be starting some treatment"
Group B: Lung pt

Quotes from the patients about hope

- Patients are hopeful that treatment will control cancer & extend life

"It will give me hope. I think it will control the cancer for a time"
Group A: Breast pt

"I am hopeful it will do all of those things, stop the cancer growing, shrink it & help me live longer."
Group B: Breast pt

"Keeping the cancer at bay, I want as much lifespan as possible"
Group B: lung pt

"I am very optimistic it will stop it growing, even shrink it & it will extend my life."
Group C: Breast pt

- But quality of life was also important

"Quality of life in terms of pain relief."
Group B: Lung pt

"Well obviously to live longer but quality of life is important"
Group C: Ovarian pt

"Good quality of life – don't want to live longer if you're suffering"
Group A: Breast pt

Conclusions

- Optimism about medical benefits of treatments is common amongst oncologists and even more so their patients
- This combination could be driving oncologists to prescribe and recommend treatments that have little likelihood of extending pts' lives &/or improving QoL
- Some oncologists' expectations of likely treatment benefit may be influenced by pts e.g. young or fit enough to undergo treatment regimen
- Pts value treatments that control the cancer as long as side-effects are manageable

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