Hoping against hope: Are patients’ expectations and understanding about therapeutic aims of novel drugs similar to their oncologists?

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Background

Discussions about disease progression and the advantages of further anti-cancer treatment in metastatic setting 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)

Aims

As part of the AVALPROFS (Assessing the Value to Patients of Progression Free Survival) longitudinal study we explored the expectations and understanding pts and oncologists held about prescribed novel treatment.

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 were asked about the expected benefits of the drugs prescribed.

Results

50% (45/90) of patients misunderstood the therapeutic aim of treatment and thought it was to cure or ”cure the cancer”.

Oncologists predicted a longer life expectancy from treatment for 62% (56/90) of patients.

41/90 (45.5%) stayed on treatment in the study for 6 months without progression

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

“Staying alive for a few extra months, you can do things in that time”

Group A: Head & Neck pt

“Worth a try, she is fit enough”

Group C: Ovarian 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 and 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

“Very well obviously to live longer but quality of life is important”

Group C: Ovarian pt

“I am hopeful it will do all of those things stop the cancer growing, shrink it and help me live longer”

Group B: Breast pt

“I want to live longer if you're suffering”

Group A: Breast pt

“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

“Good quality of life - don't want to live longer if you're suffering”

Group A: Breast pt

“I am hopeful it will do all of those things stop the cancer growing, shrink it and help me live longer.”

Group B: Breast pt

Quotes from the patients about hope

“Good quality of life - don't want to live longer if you're suffering”

Group A: Breast pt

Summary and 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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Table 1: Demographics n=90

<table>
<thead>
<tr>
<th>Sex</th>
<th>Male</th>
<th>Female</th>
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<tbody>
<tr>
<td></td>
<td>39</td>
<td>51</td>
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| Age in Yrs Mean; | 65  |
| Range           | 32-85 |

| Partner: Yes    | 58  |
| Employed: Yes   | 27  |

| Stage of disease: | 10  |
| Ill; IV           | 80  |

<table>
<thead>
<tr>
<th>Cancer sites (n)</th>
<th>Drugs prescribed (n)</th>
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<tbody>
<tr>
<td>Lung (30)</td>
<td>pazopanib (1), carboplatin + etoposide (1) or gemcitabine (1), pemetrexed + carboplatin (2) or cisplatin (2), erlotinib (23)</td>
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<tr>
<td>Melanoma (19)</td>
<td>ipilimumab (15), dabrafenib (2), vemurafenib (2)</td>
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<tr>
<td>Breast (18)</td>
<td>bevacizumab + paclitaxel (2), eribulin (6), everolimus (1) + exemestane (4), TMZ-1 (2), pertuzumab + docetaxel + trastuzumab (3)</td>
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<tr>
<td>Renal (10)</td>
<td>sunitinib (5), pazopanib (2), axitinib (2), everolimus (1)</td>
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<tr>
<td>Gynaec (ovary/rectal) (7)</td>
<td>bevacizumab (4), bevacizumab + carboplatin + paclitaxel (2), or + gemcitabine (1)</td>
</tr>
<tr>
<td>Head &amp; Neck (3)</td>
<td>cetuximab + cisplatin (2) or carboplatin + 5FU (1)</td>
</tr>
<tr>
<td>Colorectal (2)</td>
<td>bevacizumab (1), bevacizumab + cetuximab (1)</td>
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<td>Sarcoma (1)</td>
<td>pazopanib (1)</td>
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Table 2: Cancer diagnosis (n) Drugs prescribed (n)

Reference

“Therapeutic aims of drugs offering only PFS are misunderstood by patients and oncologists may be overtly optimistic about likely benefits.” Supportive Care in Cancer 2017 25 (1): 237-244.