The experience of patients receiving pembrolizumab immunotherapy for metastatic melanoma



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Background:

Immune checkpoint inhibitors, anti PD-1 and anti-CTLA-4 agents have change metastatic melanoma (MM) treatment. Patients experience improved overall survival on treatment at the expense of undesirable side effects. We conducted a feasibility study of a comprehensive supportive care assessment and tailored program including exercise, diet, psychosocial support, and complementary therapies (see abstract eP547).

Objective:

To explore the experience of patients with stage IV melanoma receiving systemic treatment with Pembrolizumab.

Methods:

- Pre-post-test feasibility study was conducted over 9 weeks at one site in Sydney, Australia (See Figure 1).
- Qualitative semi-structured interviews were conducted, ranging from 15 to 70 minutes duration.
- Interviews were audio-recorded and transcribed, then data managed in NVivo 11.
- Transcripts were analysed using interpretative phenomenological analysis (Smith, J. et al, 2009) with themes developed iteratively and inductively.

Cohort 1: Holistic supportive care Intervention

- Baseline assessment with Supportive Care Physician, Exercise Physiologist & Dietitian
- 8 week exercise & supportive care intervention
- Questionnaires 3 weekly to week 12
- Follow-up assessment at 9 weeks
 Interview >12 weeks

Cohort 2: Usual care Baseline questionnaires
Usual care for 8 weeks
Questionnaires 3 weekly until
week 12
Interview > week 12

Figure 1. Study Schema

Results:

- Sample: 28 participants, 13 intervention, 15 control; 26 completed interviews.
- 3 did not complete due to complications or death.
- Median age was 66 yrs (range 42-85), 16 males;
 Table 1 depicts demographic details.
- Supportive care provided holistic benefits for those electing to participate in Cohort 1.

Themes identified

The identified themes related to treatment, supportive care, and living with uncertainty. Here we present the treatment and supportive care related themes of:

- 1. Pembrolizumab as innocuous therapy
- 2. Side effects of therapy
- 3. Supportive care holistic benefit

Table 1. Participant demographics

Characteristic	Cohort 1 N = 13	Cohort 2 N = 15	Total (n=41)
Median age (SD) yr	61.0 (10.4)	72 (13.7)	66 (13.0)
Median ys since 1st diagnosis (SD)	12.8 (6.1)	7 (7.9)	8 (7.1)
Median yrs metastatic disease (SD)	3.3 (4.4)	2.3 (1.3)	2.8 (3.6)
Median mths since pembro start (SD)	5.0 (7.4)	2.0 (9.5)	4.0 (8.5)
	No. (%)	No. (%)	No. (%)
Sex – Male Female	6 (21) 7 (25)	10 36) 5 (18)	16 (57) 12 (43)
English language	13	15	28 (100)
Martial status			
Work status* Currently working Retired	8 (29) 4 (14)	3 (11) 11 (39)	11 (39) 15 (54)
Prior Surgery - Yes	12 (43)	14 (50)	26 (93)
Prior Radiation Therapy - Yes	6 (21)	5 (18)	11 (39)
Prior Immunotherapy - Yes	12 (43)	11 (39)	23 (82)
BRAF mutation* positive negative	4 (14) 8 (29)	7 (25) 8 (29)	11 (39) 16 (57)

* Data unknown for 1 participant

1. Pembrolizumab as innocuous therapy:

'The infusion itself is just nothing. It's fabulous. It's just sitting around. It's half an hour with a flush, so it's just very doable.' Pt 001

'Every time you are here you spend whatever time it takes to have the infusion and then you go home and just get on with life and do what you have got to do 'Pt 017

2. Side effects of therapy:

'I've had absolutely, oh very, very minimal side effects. A little bit of joint pain here and there, a little bit of fatigue here and there. But I also put it down to running a business, running a farm, having a family.' Pt 020

'Yeah, just no energy. It's just an effort to do anything. I do have issues, too, with iron levels.' Pt 008

'Side effects diarrhoea, some dry mouth, a bit of a loss of appetite for tea just things like that. Yeah thyroid low thyroid.' Pt 011

3. Supportive care holistic benefit:

'...it's great to see these types of programs coming in; it is very different to how things started for me... here it is a very sort of comfortable environment and to have these additional programs where you get to talk to someone like a pain specialist or someone who is interested in seeing can you do some exercise while you are going through this.' Pt011

'The combined team effort I think is just ... absolutely wonderful, & being able to get it done in one location is great' Pt005

'The great thing is I've come off that ... pain relief. My dosage has been greatly reduced. They've just released a really low dosage, so I'll be on that. Should get off it completely' Pt010

'Reflexology was the best. I went in, and I came out feeling like I'd had a massage. Just totally relaxed... it's non-invasive. You don't have to take anything off. Just your shoes. You just lay there.' Pt006

'I've not really had massage before. But it's very good. Well it gets you relaxed. I always feel a lot better on my feet after it too. Well you know, I'm a bit jittery on my feet. I feel my sense of balance is not that good, and I'm always a bit nervous walking.' Pt019

'Yes. She [dietitian] actually was so good. She explained a few things. Why I couldn't eat things, and no one has done that.' Pt004

Conclusions:

- Side effects from pembrolizumab are present but reported to be minimal and manageable in our population.
- A supportive care intervention was valued and may add to participant wellbeing and ability to manage

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those side effects they do experience.