

 Centre for Cardiovascular  
& Chronic Care

**Medicinal cannabis use and preferred mode of administration: results from an anonymous patient survey to inform medicinal cannabis phase II and III trials for cancer-related anorexia-cachexia**

**UTS:HEALTH**

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## Acknowledgements

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## Background

- Consumers advocacy – for access to medicinal cannabis
- Different Jurisdictional approaches
  - Dec 2014 - NSW announced three medicinal clinical trials
  - 2015 Victoria first Australian state to legalise cannabis for medicinal purposes. The Access to Medicinal Cannabis Bill 2015 will give Victorian patients -- and their families -- legal, safe and secure access to the drug in "exceptional circumstances".
  - Feb 2016 - Federal Govt. announces changes to the Narcotic Drugs Act (1967)
- Context: Understanding the perspectives of potential trial participants and users of medicinal cannabis to inform design of NSW Ministry of Health (MoH) trials and future studies.



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## Aim and methods

- Aim

*To explore the preferences, attitudes and beliefs of patients eligible and willing to consider participation in a clinical trial of medicinal cannabis for symptoms from advanced cancer.*

- Methods

Cross-sectional survey study (June - December 2015)



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## Patient survey methods

- Eligibility
  - Adults with advanced cancer
  - Poor appetite/taste problems/weight loss
  - Consider participating in a trial of medicinal cannabis
- Administration
  - Palliative care/oncology outpatient clinics (n=8) in NSW and SA and online
- Items
  - Preferences for route/mode of administration, previous use of medicinal cannabis, and trial-related concerns/comments
  - Questions did not specify botanical or pharmaceutical products



## Patient survey respondents (N=204)

Characteristic		N (%)*
Gender	Male	106 (52)
	Female	96 (47)
Age (years)	18-25	6 (3)
	26-40	14 (7)
	41-60	68 (33)
	61-75	77 (38)
	76-85	30 (15)
	>85	5 (2)
Self-reported cancer type <sup>#</sup>	Blood	37 (18)
	Lung	33 (16)
	Upper GI	36 (18)
	Breast	24 (12)
	Lower GI	17 (8)
	Gynaecological	14 (7)
	Prostate	13 (6)
	Brain	10 (5)
	Other	43 (21)
	Unknown	3 (1)

\* Missing data as follows – gender (n=2), age (n=4), cancer type (n=5);

# some patients reported >1 cancer type; GI = gastro-intestinal



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## Summary of the results

- Tablets/capsules were the preferred delivery mode (n=144, 71%), followed by mouth spray (n=84, 42%) and vaporiser (n=83, 41%).
- People who explained their preferences (n=134) - most commonly cited convenience (n=66; 49%).
- 82% (n=168) had no trial-related concerns: However a small number were:
  - concerned about adverse effects (n=14)
  - wanted more information and advice (n=8).
  - volunteered a belief that cannabis might cure cancer (n=2)



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## Patient survey results: mode of administration preferences

- Tablets/capsules (n=144, 71%), mouth spray (n=84, 42%), vaporiser (n=83, 41%), eating (n=76, 37%), drinking (n=68, 33%), topical (n=53, 26%), suppositories (n=16, 8%)
- Median number of preferences 2 (range 0 – 7); 9 (4%) any mode
- 14 (8%) expressed a preference for other modes, including smoking (n=7), PEG (n=4) and oil (n=3)
- Reasons for preferences (n=134) included: perceived ease/convenience (n=66, 49%), taste, nausea or appetite (n=17, 13%), familiarity (n=11, 8%), perceived faster action (n=11, 8%), control over dose (n=7, 5%), enjoyment (n=5, 4%), efficacy (n=4, 3%), unobtrusiveness (n=3, 2%) and adverse effects (n=2, 1%)



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## Patient survey results: inferential analysis

Logistic regression examining relationships between participant variables and *exclusive* preference for tablets/capsules (n=52/204)

Variables in the model <sup>a</sup>	OR (95%C.I.)	Results on association
Female	1.86 (0.96-3.61)	p=0.067
Used medicinal cannabis	0.23 (0.05-1.03)	p=0.055

<sup>a</sup> No significant interaction between the two variables



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## Patient survey results: current/previous users

- **Participants** – current/previous users (n=26) 13%
- **Symptoms** – poor appetite/anorexia (n=9), pain (n=9), psychological problems (n=5), insomnia (n=4), nausea (n=2)
- **Administration mode** - smoking on its own (n=18) or with tobacco (n=15), eaten (n=12), vaporiser (n=10)
- **Trial Compliance:** Stopping current use would **not** prevent trial participation – no (n=21), yes (n=3), unsure (n=1), missing (n=1)
- **Compared with non-users**, more likely to be aged  $\geq 60$  years ( $\chi^2 = 11.67$ ,  $p=0.001$ ) but did not differ with regard to:
  - gender ( $\chi^2 = 3.24$ ,  $p=0.07$ ); or
  - trial-related concerns ( $\chi^2 = 1.94$ ,  $p=0.16$ )



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## Patient perspectives: medicinal cannabis

- Favourable:
  - unqualified advocacy (n=10),
  - first (n=11) or second-hand (n=8) anecdotal evidence of efficacy
  - positive Media or advocate reports (n=3)
  - favourable side-effects compared to other medications (n=3)
- Cautionary:
  - side effects (n=14)
  - need for more information/advice (n=8)
  - addictiveness (n=3), compatibility with other medications (n=2), legal issues (n=2)
- Misconception
  - cannabis may cure cancer (n=6)



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## Patient survey comments: perspectives on cannabis trials

- It's about time / evidence sufficient (n=16)
- Trials can drive legal changes / improve access (n=4)
- Worried about slippery slope / need to limit access (n=5)
- Misconception – need assurance of efficacy before participating in a trial (n=2)



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## Patient survey: limitations

- Likely volunteer effect supportive of study aims but limits generalisability to wider clinical population; users (n=26)
- Focus on medicinal cannabis omitted recreational use and left respondents to classify/report subjectively
- Comments rarely specific to appetite/weight loss versus other symptoms and general wellbeing (aka recreational use?)
- Open definition of medicinal cannabis means mode preferences cannot be contextualized within preferences for botanical versus pharmaceutical products



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## Patient survey: key learnings

- Rapid accrual of cannabis naïve and previous users is encouraging for trial feasibility
- Tablets/capsules are preferred mode but only available for limited range of pharmaceutical products (not botanical)
- Misconceptions need addressing in patient information



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## Conclusion

- Prof Meera Agar - Lead Investigator for the Phase 11 – dose finding study
  - 8 day in-patient study
  - To be conducted at Mater Newcastle and Sacred Heart Health Service, Darlinghurst;
  - Ethics approval secured
  - Finalising legal aspects (importing/transporting product)
  - For more information please contact:
  - [meera.agar@uts.edu.au](mailto:meera.agar@uts.edu.au)