

Abstract #393644: Trial in Progress – Exploring the activity of pseudoephedrine in treating retrograde ejaculation following RPLND in survivors of testicular cancer (PREPARE)



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Background

- Retrograde ejaculation is well-described in survivors after retroperitoneal lymph node dissection (RPLND).
 - Prevalence as high as 59% in post-chemotherapy RPLND with **short follow-up**.
 - The prevalence of persistent symptoms is **unknown**.
- Retrograde ejaculation has clear effects on fertility, however other potential impacts are **unknown** including impacts on:
 - Sexual pleasure, and
 - Health-related quality-of-life (HRQoL).
- There are limited treatment options, however:
 - α -sympathomimetics cause bladder neck constriction at sexual climax and may propagate antegrade flow.
 - Existing studies have shown pseudoephedrine may be effective.

Methods

- PREPARE is a two-part, single-arm, single-site phase 2 clinical **trial in progress** (ACTRN12622000537752, ACTRN12622000542796).
- Funding: The Australian and New Zealand Urogenital and Prostate (ANZUP) Cancer Trials Group Below the Belt Research Fund grant.
Sponsor: Peter MacCallum Cancer Centre (PMCC).
Human Research Ethics Committee: PMCC.
Endorsed by ANZUP Scientific Advisory Committee.

Methods continued

Trial Endpoints

Part A

- Prevalence of retrograde ejaculation in a high-volume RPLND centre.
- Clinicopathologic features associated with retrograde ejaculation, and/or partial/complete symptoms.
- HRQoL differences between groups evaluated using four questionnaires and administered via Australia's existing testicular cancer registry, iTestis:



Part B

- Total sperm count of antegrade ejaculate >5th centile after treatment.
- Ejaculate volume >5th centile after treatment.
- Change in sperm parameters after treatment.
- Adverse events.
- Semi-structured interviews of participant experiences.

Example custom-made questions to evaluate retrograde ejaculation:

- "In the last three months, have you been able to climax when sexually stimulated?"
- "When you have climaxed, did you ejaculate?"
- "If not, how much of a concern was this?"
- "Within 6 months of surgery, were you able to ejaculate at climax?"

Recruitment progress

- Recruitment began 04/Aug/2022 and planned to continue for ~12 months.



We anticipate that survivors of testicular cancer with retrograde ejaculation will report **wide-ranging impacts on HRQoL** and hypothesise that treatment with **pseudoephedrine hydrochloride** will improve semen parameters in some participants.

