PRELIMINARY FEASIBILITY OF AN 8-WEEK COMBINED EXERCISE AND EDUCATIONAL CANCER REHABILITATION PROGRAM FOR ADULTS WITH INCURABLE BREAST AND COLORECTAL CANCERS

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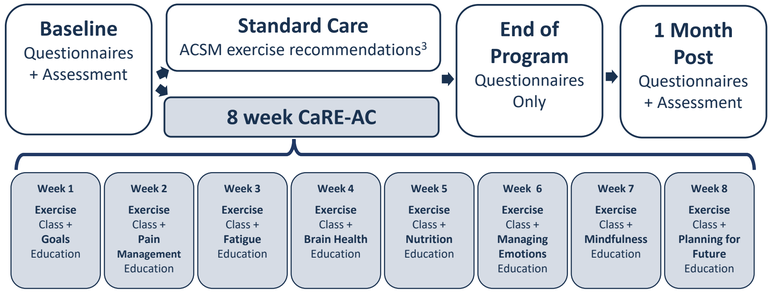
BACKGROUND

- Cancer rehabilitation seeks to **improve physical function and quality of life** in those living with and beyond cancer.[1]
- Majority of rehabilitation research has focused on curative cancers, with **incurable or metastatic diseases often excluded due to complexity.**[2]
- A needs assessment was completed and the Cancer Rehabilitation and Exercise-Advanced Cancer **(CaRE-AC) program was developed and tested** (Phase I pilot).
- **CaRE-AC is an 8-week, group-based, self-management education and progressive supervised exercise program**.
- We report on the **preliminary feasibility** of an ongoing two-centre (Toronto and Vancouver), Phase II, preference-based (virtual or in-person), randomized trial of CaRE-AC in adults with incurable breast or colorectal cancers.

METHODS

- Eligibility included adults with **incurable breast or colorectal cancers** receiving 1st or 2nd line systemic therapy, with good performance status (ECOG 0 – 2; PPS ≥70) + independent with transfers.

Figure 1. Study overview of CaRE-AC program & primary endpoint



- **Feasibility was defined as:**
  - **Randomization of 50%** of eligible patients;
  - **60% retention at 1-month** post-intervention;
  - **80% attendance** of program;
  - **Less than five grade ≥ 3 CTCAE adverse events** related to the intervention.[4]

RESULTS

Table 1. Recruitment

	Vancouver (n)	Toronto (n)	Combined (n)
Referred	39	108	147
Eligible	33	51	84
Randomized **(% eligible)**	17 **(52%)**	32 **(63%)**	49 **(58%)**

Table 2. Retention at Assessments

	n (or %)
Baseline	49
8 week	49
1 month post-intervention	47
Retention @ 1 month (%)	**96%**
≥ 3 CTCAE adverse events related to intervention	**0**

Figure 2. Reasons for Non-Participation (n =77)

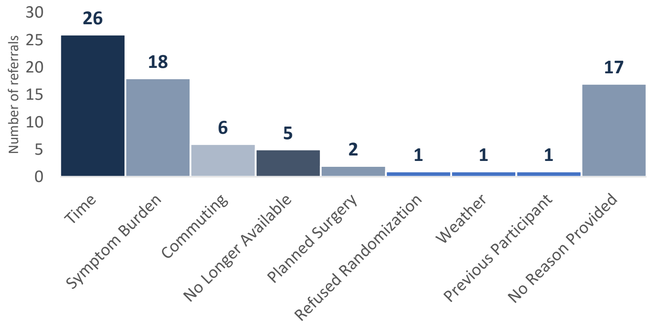


Figure 3. Reasons for Ineligibility (n =10)

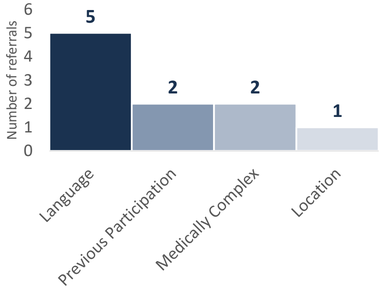


Figure 4. Attendance (% classes attended)

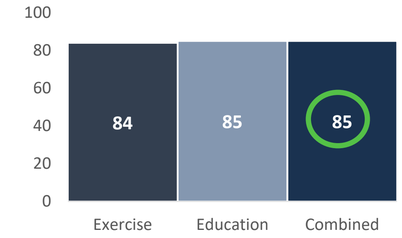
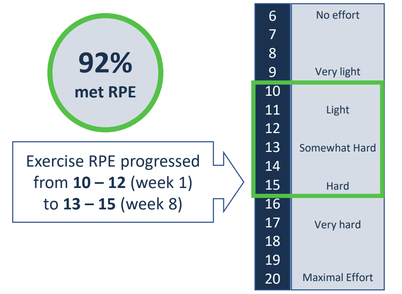


Figure 5. Adherence to Exercise (% met RPE*)



*RPE = Borg Rate of Perceived Exertion

8-week virtual *or* in-person group-based supervised exercise program is feasible:

- Randomization: **58%**
- Retention: **96%**
- Attendance: **85%**
- **No** serious adverse events

CONCLUSIONS & FUTURE DIRECTIONS

- **Preliminary data supports the *a priori* defined feasibility criteria** for CaRE-AC, including no severe study-related adverse events.
- **Time commitment, English language, and changes in health** were the main barriers to participation.
- These results help to inform **delivery models of cancer rehabilitation** that have the **potential to be feasible, safe and scalable**.

CORRESPONDENCE

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REFERENCES

1. Nadler M et al, *Journal of Clinical Oncology* (2019); 2. Cheville AL et al, *Supportive Care in Cancer* (2009); 3. Campbell KL et al *Med Sci Sport Exercise* (2019); 4. CTCAE v.5.0 (2017)

FUNDING