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BACKGROUND

Symptoms can go undetected during cancer care. Remote symptom monitoring with electronic patient-reported outcomes (PROs) can detect symptoms early and prompt clinicians to intervene, potentially delaying symptom deterioration.

METHODS

PRO-TECT was a cluster randomized trial in 52 US community oncology practices randomized to symptom monitoring with PROs or to usual care. 1191 patients were enrolled.

At **PRO practices**, patients receiving treatment for metastatic cancer completed weekly PRO surveys including 7 PRO-CTCAE symptoms, PHQ-2 depression, falls, oral intake and patient-reported performance status. **Alerts** for severe or worsening symptoms were triggered to nurses in real time. **Symptom reports** were available to care teams at visits.

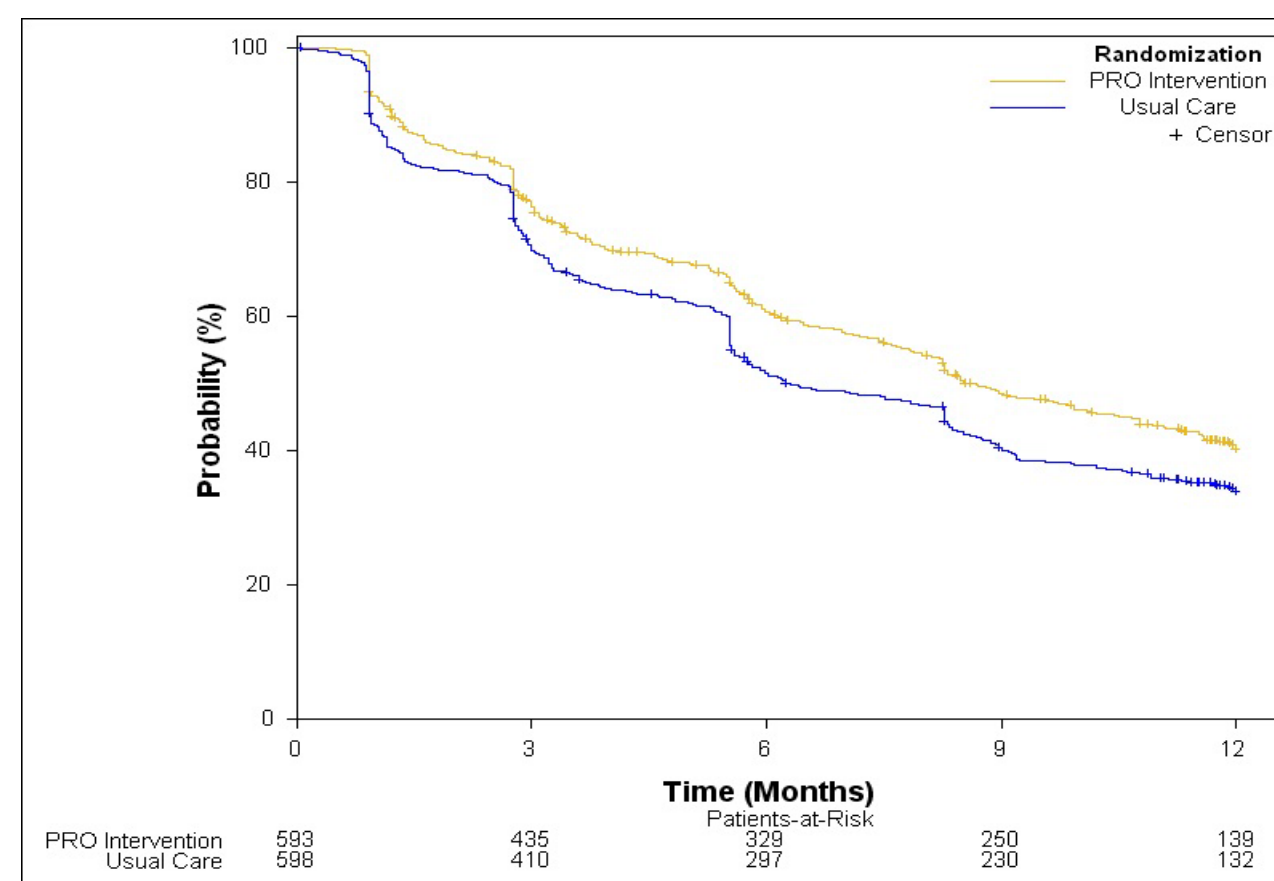
Secondary outcomes included **physical function, symptom control, health-related quality of life** from the EORTC QLQ-C30 questionnaire which was administered at baseline and months 1, 3, 6, 9, and 12.

In the current analysis, **time to death** from any cause based on the US National Death Index or first meaningful **deterioration** in these scales (i.e., time to worsening by a score of 10) is reported between groups using Cox regression. Each regression model included line of cancer treatment, months since metastatic cancer, months since initial treatment, months between metastatic cancer and study enrollment, and a random effect for site clustering.

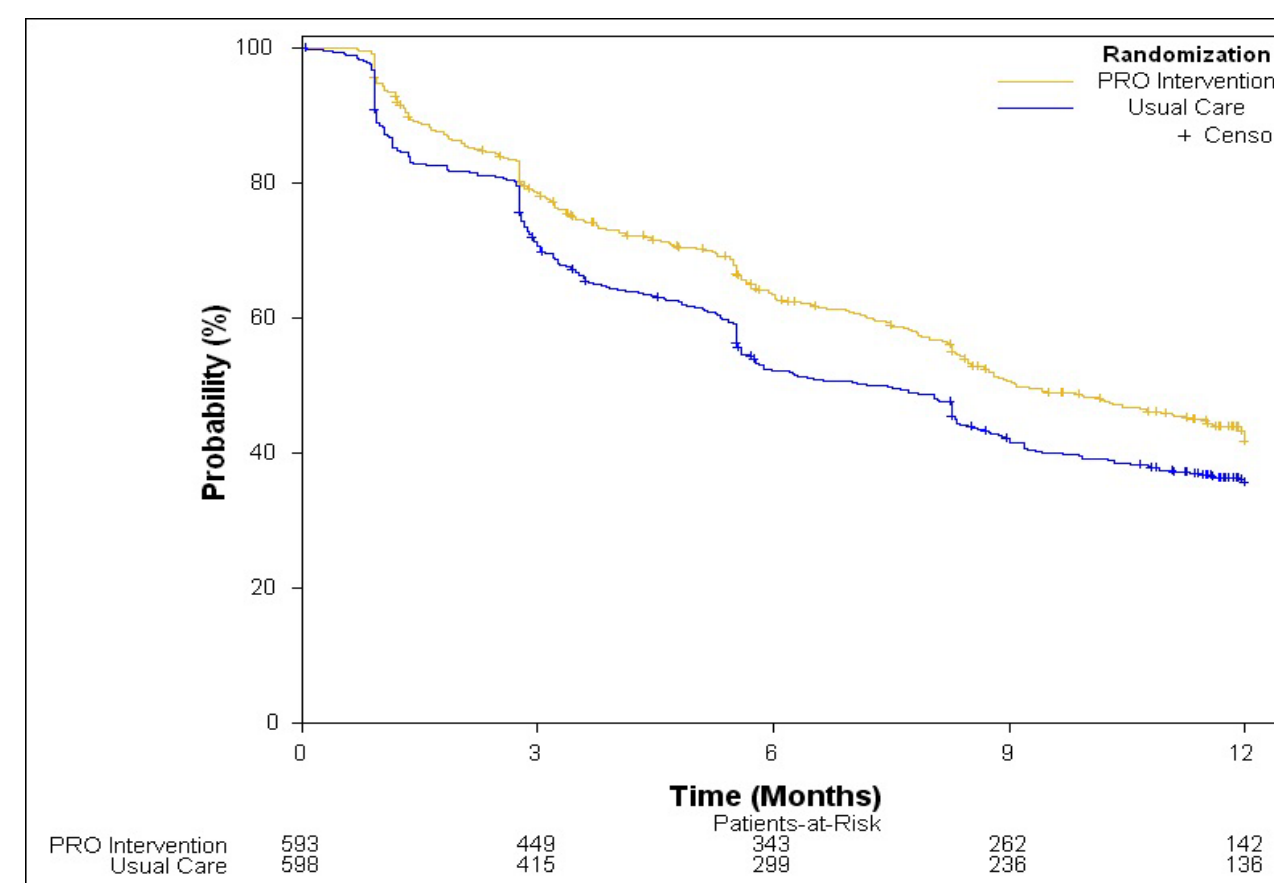
RESULTS

Time to death or deterioration was significantly longer with PRO vs usual care for **physical function** (median 8.7 vs 6.3 months, $p=0.003$), **symptoms** (9.1 vs 7.5 months, $p<0.001$) and **HRQOL** (10.3 vs 8.3 months, $p=0.004$).

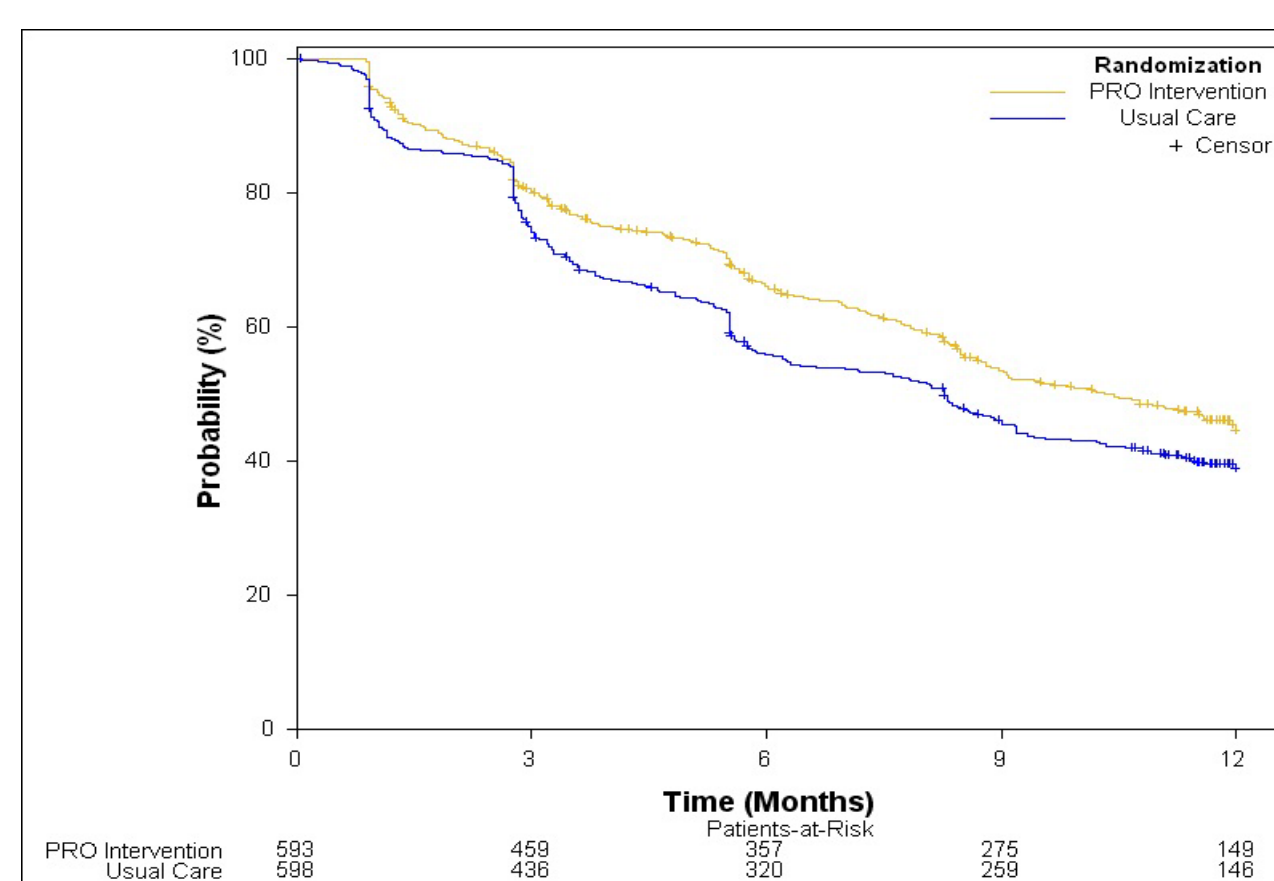
PHYSICAL FUNCTION



SYMPTOM CONTROL



HEALTH-RELATED QUALITY OF LIFE



CONCLUSIONS

In an advanced cancer patient population with a high symptom burden, clinically meaningful and statistically significant benefits in physical function, symptom control and health-related quality of life were observed in this trial.

These findings are critically important to delivering high quality cancer care, and add to the growing body of evidence demonstrating benefits of PRO symptom monitoring on clinical outcomes.

REFERENCES

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SUPPORT

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