

Cardiac implantable device in an oncology patient

Introduction

The purpose of this study is to determine the significance of implantable devices in patients diagnosed with cancer. In the latest guidelines on pacing and resynchronization, oncology patients have not been identified as a specific patient group, and it should be noted that they are at an increased risk for both primary and secondary heart diseases (as a complication of treating the underlying oncological condition). A more detailed understanding of the benefit-to-risk ratio of device implantation in this group will enable informed therapeutic decision-making by clinical physicians.

Abbreviations: *ICD* – Implantable cardioverter-defibrillator; *PCM* – Pacemaker; *TBS* – Tachycardia-bradycardia syndrome; *A-V* – Atrio-ventricular

Results so far

When it comes to indications for implantation of Pacemakers, the leading one is sick sinus syndrome presenting as tachycardia-bradycardia syndrome. With in ICD group secondary prevention cases vastly outnumber primary prevention.

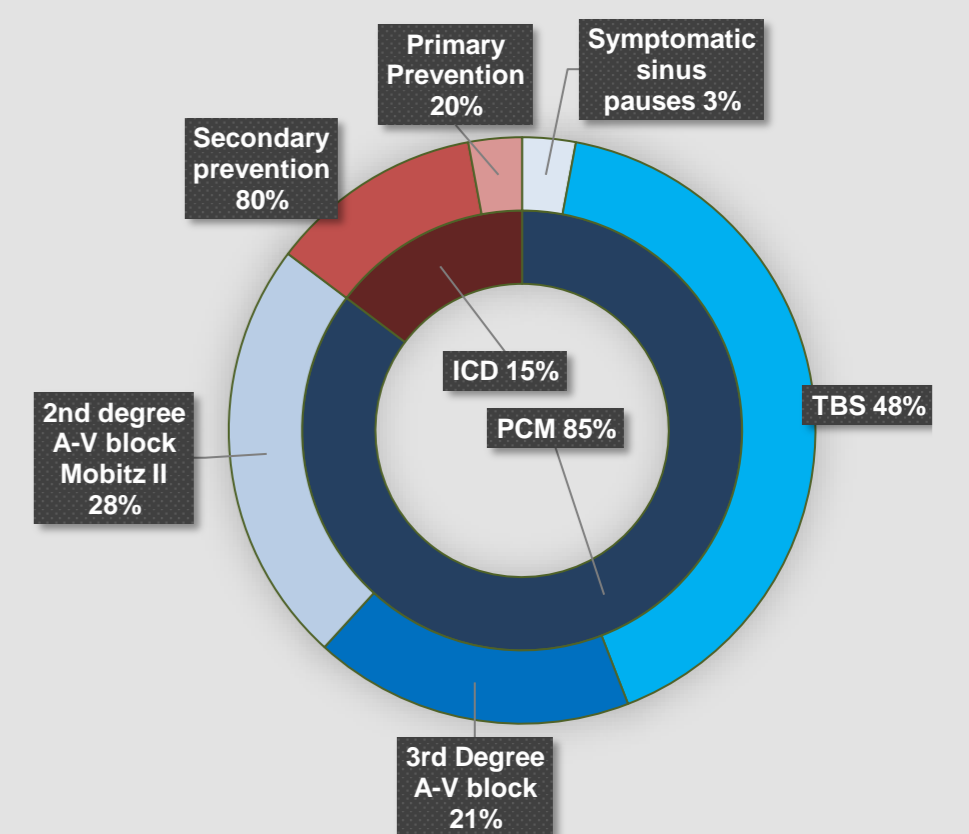


Fig. 2 Percentage distribution of patients in the study group by type of implantable device and cause of implantation.

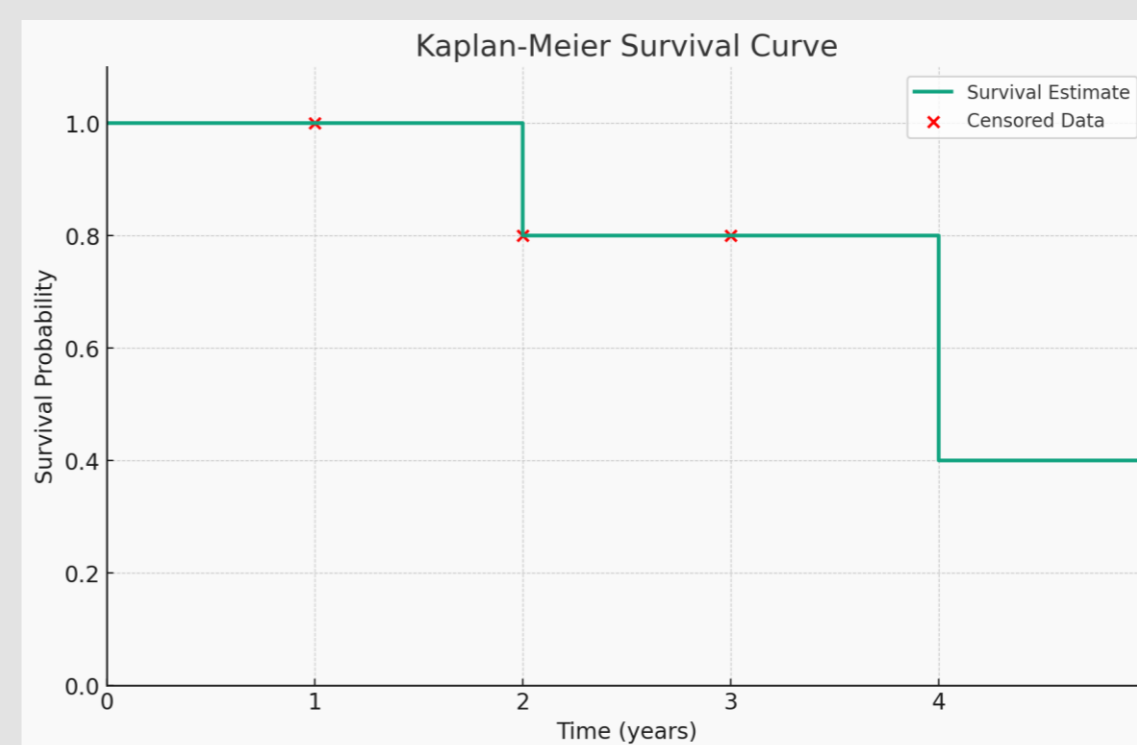


Fig. 3 Kaplan-meier curve of survival within the study group.

So far over 50% of the study group survived >5 years post implantation based entirely on the last registered visit in Copernicus Memorial Hospital.

Methodology

Among the patients of the Cardio-Oncology Department at the Medical University of Łódź, a group of approximately 100 patients with diagnosed cancer, who underwent implantation of an implantable device, is planned to be formed. Selection of clinical aspects such as laboratory tests, type of cancer, stage of advancement, method of treatment, and prognosis, especially survival rate, will be analyzed.

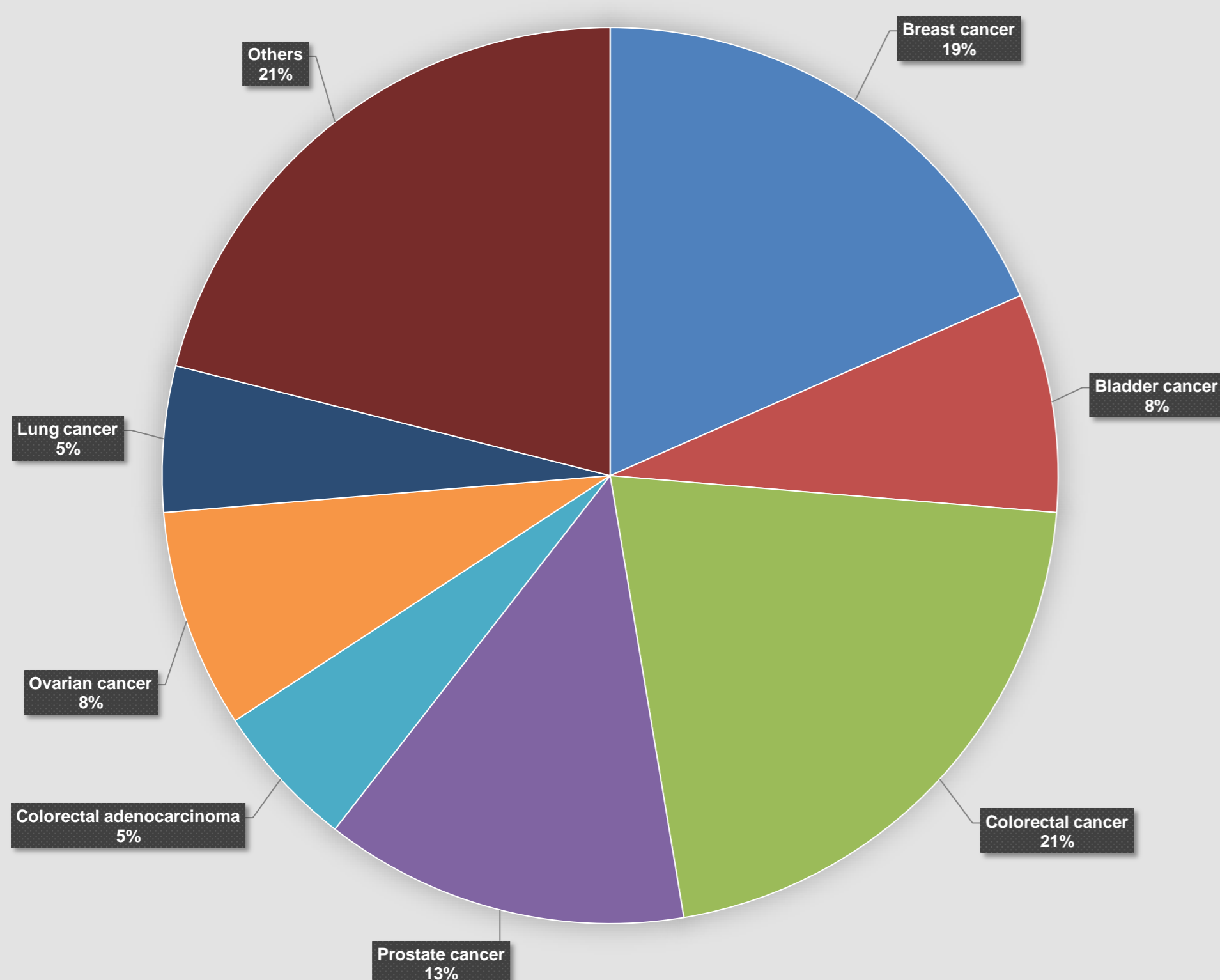


Fig. 1 Percentage distribution of patients in the study group by the type of cancer

Conclusion and future plans

- Increasing sample's number by cooperating with other cardiology wards performing device implantation
- Enhancing follow-up to decrease number of censorships when determining survival rate.
- Writing the first of three planned original works on the pathophysiology and reasons for implantation of devices in the collected patient group.

References

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