

Congress Abstract

15-Year Development of the Oncology Service in Astana

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Proceedings of International Scientific and Practical Conference "ONCO FUTURE KAZAKHSTAN 2026: Precision Oncology Theranostics, Artificial Intelligence," September 24-26, 2026, Astana, Kazakhstan

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Background: The rapid population growth of Astana has been accompanied by an increasing demand for specialized cancer care. Cancer prevention, early diagnosis, improvement of treatment strategies, and enhancement of patients' quality of life and survival remain key priorities of the oncology service.

Objective: To assess major changes in the organization, capacity, and technological development of the oncology service in Astana over a 15-year period.

Materials and Methods: A retrospective analysis of the main organizational indicators of the State Enterprise on the Right of Economic Management "Multidisciplinary Medical Center" of the Akimat of Astana over a 15-year period was performed. Changes in patient volume, staffing, implementation of modern diagnostic and treatment technologies, screening, and cancer prevention activities were evaluated.

Results: Over 15 years, the nearly threefold increase in the population of Astana was accompanied by a substantial rise in the workload of the oncology service. Despite a planned outpatient capacity of 380 visits per day, the actual number reached up to 1,300 patients daily. The total number of employees increased from 250 to 864, including 177 physicians and 318 nursing professionals. Modern laboratory and radiation diagnostic methods, immunohistochemical and cytochemical testing, targeted therapy, and immunotherapy were introduced into clinical practice. Linear accelerators, angiographic systems, and video endoscopic equipment expanded the capabilities of radiation therapy, diagnostic procedures, and minimally invasive treatment. Cancer screening, follow-up programs, and public cancer awareness initiatives were further developed to support early detection of malignancies.

Conclusions: Over the 15-year period, the oncology service in Astana substantially expanded its workforce and technological capacity while responding to rapid population growth and increasing demand for cancer care. The implementation of modern diagnostic and treatment technologies, development of screening programs, and strengthening of human resources provide a foundation for further improvements in the accessibility and quality of oncology care.

Keywords: Oncology Service; Cancer Care; Screening; Early Diagnosis; Medical Technology; Healthcare Management