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## **Proton therapy in the complex treatment of breast cancer**

*Friday 27 April 2018 16:30 (30 minutes)*

Breast cancer is the most common tumor among women and the second cause of cancer deaths in women. Up to 1 million new cases are registered in the world annually. This disease, diagnosed in the early stages, is characterized by high rates of overall 5-year and 10-year survival, and the late complications of radiation therapy included in the complex treatment of this category of patients become an urgent problem. Proton therapy makes it possible to create a more conformal dose distribution with minimal radiation of healthy tissues. In the lecture, it is planned to discuss indications for proton therapy, selection of patients who can benefit from the use of proton therapy, as well as pitfalls associated with heterogeneity of the dose distribution due to the influence of the value of linear energy transfer (LET) on relative biological efficiency (RBE).

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