

## Systemic Treatment of Advanced Medullary Thyroid Carcinoma

Cvetka Grašič Kuhar

Medullary thyroid carcinoma originates from neuroendocrine cells of the thyroid which secrete calcitonin. Calcitonin is a specific marker for medullary thyroid cancer. Therapy with tyrosine kinase inhibitors can be applied to treat locally advanced or metastatic medullary thyroid cancer with progressing symptoms. Registered substances

used are vandetanib and cabozantinib, and sorafenib and sunitinib are also effective. Treatment is determined individually based on the burden of the cancer and secondary diseases. Supportive treatment (targeted at the symptoms) is also very important.

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## Hard Decisions in Treatment of Patients with Venous Thromboembolism and Cancer

Ana Kovač, Monika Štalc, Gregor Tratar, Alenka Mavri

Venous thromboembolism (VTE) is a frequent complication in cancer patients. Treatment of VTE in these patients is a big challenge, as the risk of thromboembolic complications as well as bleeding is further increased in cancer patients. We will present a few clinical situations that we often encounter in practice, when dilemma arises whether to

administer anticoagulation therapy to a patient with VTE and cancer: recurrence of VTE despite treatment, thrombocytopenia, central nervous system tumors, use of inferior vena cava filters, use of new oral anticoagulation medications and accidentally discovered VTE.

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## LYNPARZA™ (olaparib) – New Medicine for Targeted Therapy of Ovarian Cancer

Erik Škof, Mateja Krajc

A new medicine for targeted treatment of patients with recurring serous ovarian or primary peritoneal serous carcinoma (PPSC), who have a mutation of *BRCA1/2* genes (somatic mutation), was recently registered in the EU – Lynparza™ (olaparib). Olaparib was registered based on a subanalysis of a study in phase II (9), in which patients with *BRCA1/2* gene mutation who received olaparib lived 7 months longer without the disease progressing than patients that were not administered this medicine (11 months vs. 4 months); the difference was statistically relevant (HR 0.18;  $p < 0.00001$ ). There were no

differences in total survival of patients. Olaparib is an oral medication in capsules, so patients can take it at home. The available data shows that the most frequent side effects were nausea and fatigue. 25% of patients took olaparib for two years or more and the therapy was rarely discontinued due to side effects (only 9% of patients), which shows that patients usually tolerate olaparib well, which is a great advantage compared to chemotherapy, which was so far the only available treatment for recurring ovarian cancer (9).

## Breath-Hold Technique in Breast Cancer Postoperative Radiation Therapy

Mateja Steinacher, Ivica Ratoša

Breast cancer has high incidence and prevalence. Long-term cause-specific survival of breast cancer patients has increased over the past decades primarily due to early detection, advanced surgical techniques, systemic therapy and new radiation techniques. Due to higher share of patients who receive radiation and longer survival, ever more patients risk the occurrence of late unwanted effects of the treatment. For the majority of patients, the benefits of radiation with lower chance of disease recurrence greatly surpass the risk of developing cardiovascular complications, the cumulative incidence of which increases with every received dose per heart. Preventing late heart damage has become an important part of comprehensive treatment of breast cancer patients. When planning the therapy, benefits of supplementary radiotherapy and potential risk of side effects are assessed for each patient individually by taking into account dose-volume parameters of the radiotherapy plan and existing risk factors for cardiovascular disease, since the presence of these indicates

higher absolute risk of late heart damage. The latest radiotherapy techniques are gaining importance, as they allow us to improve dose-volume parameters of radiotherapy plans. Deep inspiration breath-hold radiotherapy technique allows us to significantly lower the average dose of ionizing radiation received by the heart, lung, and liver compared to traditional radiation technique, while the radiation dose per planned target volume remains the same. When taking a deep breath, the diaphragm pulls the heart posteriorly, medially and inferiorly – away from the thoracic wall. Deep inspiration breath-hold radiotherapy technique is recommended for all patients with indications for radiation therapy after breast-conserving surgery or mastectomy of the left breast, with or without simultaneous radiation of local lymph nodes, in the event of unfavorable anatomy and when parasternal lymph nodes are included in the radiation field after cancer surgery of the right breast. This paper describes a new radiotherapy method – the deep inspiration breath-hold technique

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## Genetic Counseling and Testing in Oncology: Attitude, Understanding and Practice of Primary Care Physicians – Abstract of a Prešeren Prize Winning Thesis

Tina Škerl, Anja Meden, Mateja Krajc, Vaneja Velenik

It is estimated that 5–10% of cancer types are hereditary. Cancer genetic counseling is indicated for people with high risk of hereditary cancer. A report by the Clinic for Oncological Genetic Counseling of the Institute of Oncology Ljubljana shows that Slovenian doctors do not refer patients to cancer genetic counseling and testing frequently enough, especially when it comes to hereditary colorectal cancer. The purpose of the study was to determine how much general practitioners in Slovenia know about hereditary types of cancer and why they do not refer their patients to counseling and testing. As part of our cross-sectional study, we sent a link to an anonymous questionnaire to Slovenian general practitioners. The responses show that 49% of the respondents did not refer a single patient to counseling and testing in the past year, while 22% of the respondents are not familiar enough with the indications for

sending a patient to counseling and testing. 41% of the respondents do not have enough time for checking family history for cancer. On average, the doctors responded to  $8.5 \pm 3.2$  (out of 18) questions i.e. 47% about hereditary types of cancer correctly. When it came to hereditary breast cancer, women answered correctly to 11% more questions than men. Doctors who referred at least one patient to counseling in the past year correctly answered 4% more questions on average than doctors who referred no patients. General practitioners in Slovenia do not refer patients and their relatives to cancer genetic counseling and testing frequently enough, because they are not sufficiently familiar with indications for such referral and because they do not have the time to check the family history for cancer as part of their regular work.

### **Summary Guidelines for Treating Ovarian Cancer and Primary Peritoneal Serous Carcinoma**

Zobec Logar Helena Barbara, Smrkolj Špela, Škof Erik, Bebar Sonja

Guidelines for Treating Patients with Ovarian Cancer and Primary Peritoneal Serous Carcinoma were published separately for the first time after 2002. Back then guidelines for all gynecologic cancers were collected in one booklet, however new facts and discoveries as well as the development of new drugs require a more in-depth approach to treating these patients.

Authors of this article are especially pleased that the first separate guidelines were published on 13 November 2015 accompanying the 1st School of Gynecology with the title Ovarian Cancer, and an updated version was published when the School of Gynecology

was repeated on 18 March 2016. Rare types of ovarian cancer were left out of these guidelines on purpose (such as germ cell or stromal cancer), due to different treatment path and course of the disease. Guidelines are available in two printed versions – as a pocket book and in large format – and in electronic form on the website of the Institute of Oncology, where they will be regularly updated. We did not want the Slovenian guidelines to be based solely on similar foreign documents, and we added our experience with treating these diseases.

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### **Guidelines for Treating Patients with Cancer of the Esophagus and Esophagogastric Junctionure (EGS)**

I. Oblak, F. Anderluh, M. Srpčič, A. Crnjac, A. Jeromen, A. Šečerov Ermenc, J. Ocvirk, Z. Hlebanja, B. Štabuc, M. Reberšek, N. Volk, J. But Hadžić, G. Gačevski, M. Sok, V. Velenik

Oesophageal cancer is a relatively rare tumor with high mortality. It is most frequent in men in their sixties or seventies. In the past years, a constant increase in the incidence of adenocarcinoma of the distal esophagus and esophagogastric junctionure (EGS) has been observed in the West. This can probably be attributed changing lifestyle with increases obesity incidence and gastroesophageal reflux disease. The latest, 7th review of the TNM Classification classifies both – cancer of the esophagus and cancer of the esophagogastric junctionure – as oesophageal cancer.

In a select group of patients this disease is curable, however the treatment is long, usually combined and with high morbidity that can significantly impact the patient's quality of life. Due to the specific anatomy, cancer of the esophagus and cancer of the esophagogastric junctionure develop metastasis early, and the prognosis is worse compared to other gastrointestinal cancers.