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Innovations in Oncology

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Katarino, May 28-30, 2021

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YOUNG ONCOLOGIST CLUB

VIII INTERNATIONAL MEETING OF YOUNG ONCOLOGIST CLUB BULGARIA INNOVATIONS IN ONCOLOGY 2021

Katarino, May 28-30, 2021

PROGRAMME

Friday, May 28 (Day 1)

10.30 - 10.40	Conference of	pening/Welcome	addresses –	Young (Oncologist (Club Bulgaria, BIN	0
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THORACIC CANCER SESSION

CHAIRS: N. Chilingirova & Pl. Getzov & P. Balikova

10.40 - 11.00	Lung Cancer Screening – Current Status and How Technology Will Help – W.Voigt
11.00 – 11.20	PERCIST and Metabolic Tumor Volume in Tumor Response Assessment. Progression and Pseudoprogression – Pl. Getzov
11.20 – 11.40	Locally Advanced Lung Cancer –Treatment Opportunities. Thoracic Surgeon's View Point - A. Chapkunov
11.40 – 12.00	Innovative Diagnostics: Neuroendocrine Lung Tumors and SCLC – M. Papotti
12.00 – 12.20	Biomarkers as Therapy Predictors: The Position of a Clinical Statistician – L. Pilz
12.20 - 12.40	Reirradiation for NSCLC – A Delicate Balance between Effectiveness and Safety - T. Hadjieva
12.40 - 13.00	Immunotherapy for Advanced NSCLC – Chr. Manegold
13.00 – 14.00	Lunch
14.00 - 15.10	MSD Symposium
15.10 – 15.30	Management of SCLC – S. Baka
15.30 - 15.50	SPECT-CT Imaging of Thoracic NETs - S. Sergieva
15.50 – 16.00	Coffee Break
16.00 – 17.00	Roche Symposium
17.00 – 17.40	Astra Zeneca Symposium

PROSTATE CANCER SESSION

CHAIRS: N. Chilingirova & Pl. Getzov & P. Balikova

17.40 – 18.00	Treatment of Advanced Prostate Cancer -A. Konsoulova
18.00 - 18.40	Boehringer Ingelheim Symposium
18.40 – 19.00	Radionuclide Therapy in Metastatic Prostate Cancer: 177Lu-PSMA & 223Ra (Xofigo)"- I. Virgolini
19.00 - 19.20	PET-CT Imaging in Prostate Cancer – P. Castellucci

19.20 – 19.35	The Future of Prostate Cancer Imaging – V. Hadjiyska
19.35 - 20.00	Workshop Young Oncologists Competition – Compare Our Knowledge - Interactive Session – P. Balikova, N. Chilingirova, A. Konsoulova

POSTER SESSION 14.00 – 19.45

20.00 – 22.30 Dinner

Saturday, May 29 (Day 2)

BREAST CANCER SESSION

CHAIRS: Al. Gerasimov & Y. Yordanov & A. Fakirova

09.10 - 09.30	Redefine the Story of Advanced Ovarian Cancer: PARP inhibition as I-st Line Maintenance Treatment – A. Konsoulova (with support of Astra Zeneca)
09.30 - 09.50	Tunnelled Pore Catheter for the Treatment of Malignant Ascites - K. Ivanov
09.50 - 10.10	Bone Health in Patients with Breast Cancer – N. Miteva
10.10 - 10.40	Immunotherapy of Breast Cancer – Chr. Zielinski
10.40 - 10.55	Coffee Break
10.55 – 11.35	Sanofi Symposium
11.35 – 12.15	Novartis Symposium
12.15 – 13.15	Eli Lilly Symposium
13.15 – 14.30	Lunch
14.30 - 15.30	Pfizer Symposium
15.30 – 16.10	Teva Symposium
16.10 – 16.30	Modern Approaches in the Treatment of HER2 + Early Breast Cancer – The Goal is to Cure – M. Koleva (with support of Roche)
16.30 - 16.50	Coffee Break

COLORECTAL CANCER SESSION

CHAIRS: V. Stoykova & S. Katov & Z. Zahariev

16.50 – 17.10	Progress and New Strategy for Locally Advanced Rectal Cancer: a Surgeon's Perspective – G. Chen
17.10 – 17.25	mCRC- Contemporary Approach in Treatment Strategy – R. Krasteva
17.25 – 17.55	Board Certification in Oncology: a 3-year Project or a Lifetime Investment - Women for Oncology /W4O/- A. Konsoulova/M. Vassileva
17.55 – 18.10	Sorafenib Followed by Regorafenib, benefits for OS in Patients with HCC - A. Tomova
18.10 – 19.10	Tumor Board - Interactive Session - Chr. Manegold, R. Krasteva, M. Koleva, P. Balikova, A. Konsoulova
20.00 - 23.00	Dinner



Welcome to the VIII International Meeting of Young Oncologist Club – Innovations in Oncology 2021

DEAR COLLEAGUES,

We are pleased to welcome you to the VIII International Meeting of Young Oncologist Club – Innovations in Oncology 2021. This is an initiative of Young Oncologist Club Bulgaria and Balkan Investigational Network of Oncology.

We will present and discuss innovations in oncology care delivery that hold promise for positively disrupting the way we practice – tele-oncology, electronic health record data, early symptom identification, complex treatment pathways, information sharing platforms etc.

The agenda includes sessions and discussions on new treatments for breast cancer, lung cancer, prostate cancer, colorectal cancer, and other topics concerning the latest advances in medical oncology. Through a format of debates, lectures and panel discussions, the meeting will provide a forum to effectively address clinical and therapeutic problems as well as innovative diagnostic procedures.

I hope that each of you will find new inspiration and knowledge during these two days. I declare the VIII International Meeting open!

Prof. Wieland Voigt

Lung Cancer Screening - Current Status and How Technology Will Help

Lung Cancer has the highest cancer related mortality rate globally. Without screening it is usually detected at advanced stages with overall limited curative potential. Recent studies with low dose CT scans demonstrated a shift towards detection of lung cancer at early stages and thereby to significantly improve overall survival. Based on this data, lung cancer screening with low dose CT is implemented on a national level in the United States with however still limited participation rate. Other nations such as in Europe still further debate on the optimal set up of a screening program. However, recent data from large multicenter European studies such as the Nelson trial or MILD trial, clearly confirmed that value of lung cancer screening and warrant to start planning such programs. Key challenges in the optimal design of a screening program which will be discussed in my presentation are the following: 1) optimal selection of the screening population – what are the relevant criteria for risk definition (clinical + biomarkers) 2) optimal timing of lung cancer screening intervals 3) improving accuracy in nodule measurement - diameter vs. volumetric measurement 4) how to manage screening detected lung nodules at baseline screening and incident rounds – recommendation from the Nelson trial. New technologies are currently emerging with the potential to improve the precision of lung cancer screening (e.g. CAD tools) or to aid in the discrimination between benign and malignant nodules e.g, based on textural analysis using artificial intelligence (Radiomics). In my lecture I will address the question of how these technologies could be integrated into a screening program set up. As with other screening programs, the efficacy of a lung cancer screening program is determined by the participation rate. Therefore, the setup of a population based screening program needs to ensure that in particular the high and very high risk individuals will be recruited. With that, LDCT based lung cancer screening programs have the potential to impact on health outcomes not just by early detection of lung cancer but also by early detection of other smoking related diseases such as CAD as incidental findings. This might ultimately help to improve the course of such diseases and increase the effectiveness of a screening program overall.

Professor Voigt studied medicine at the Medical University in Hannover and Martin-Luther-University in Halle/Wittenberg, Germany. After graduation he took an additional 2 years training in molecular&tumor biology and pharmacology at Roswell Park Cancer Institute in Buffalo, USA. He continued his career at Martin-Luther-University Halle/Wittenberg and became a board-certified specialist for Internal Medicine, Hematology and Oncology as well as Palliative Care. He holds a doctoral degree in medicine and is habilitated for Internal Medicine and Oncology. After 13 years serving in Halle in various leading positions, Professor Voigt took a position as a global Chief Medical Officer at Siemens Healthineers where he in addition served in a role of a principle key expert. As further expansion of his assignments he was appointed for a professorship at Steinbeis University for Innovation in Oncology as part of the Steinbeis Transfer Institute Medical Innovations and Management. While keeping his appointment at Steinbeis University, Professor Voigt decided to take a new challenge in his career and founded his own company to provide medical education and advisory services mainly to the healthcare industry.



PERCIST and Metabolic Tumor Volume in Tumor Response Assessment. Progression and Pseudoprogression

Accurate stratification and outcome prediction in cancer patients based only on anatomic stage is difficult. A more accurate and reliable prognostic system incorporating additional features of tumors, such as molecular and biological information is necessary to obtain a better prediction of prognosis and to choose the most appropriate treatment choice and follow-up plan. The standardized uptake value (SUV) of the primary tumor is a semi-quantitative parameter derived from 18F-FDG PET. SUV is a significant prognostic factor for various types of tumors. SUV has a single voxel value and cannot be used to indicate the metabolic activity of the whole tumor volume and metastatic lesions. SUV max is most commonly used to evaluate tumor response and recurrence because of availability. SUV provides the highest metabolic activity within the tumor and is not possible to assess the entire tumor metabolic activity. SUV measurements are dependent on multiple factors like blood glucose level, body weight, uptake time, reconstruction method, camera calibration, matrix size and injection technique. The use of SUL reduces dependence on patient weight as compared to the standard body weight normalised SUV and SUL peak reduces potential disparity of single voxel measurements due to noise. Positron Emission Tomography (PET) Response Criteria in Solid Tumors (PERCIST 1.0) were introduced in 2009 as guidelines for systematic and structured assessment of response to therapy with 18F-FDG PET in patients with cancer, with suggested application in clinical trials and, potentially, in the clinical practice of PET reporting. PERCIST has been referenced widely, and have been reported that the metrics described in PERCIST 1.0 are associated with clinical outcomes after therapy in patients with different types of cancer. Most studies that have indicated SUV as a significant prognostic factor did not analyze parameters reflective of tumor volume. Recent studies reported that volumetric PET parameters, such as metabolic tumor volume (MTV) and total lesion glycolysis (TLG), using a threshold-based automatic volume of interest (VOI) are better prognostic predictors for survival in patients with cancer. TLG can be calculated by multiplying MTV by mean SUV, which weights the volumetric burden and metabolic activity of tumors. Commercially available tools for analysis enable easier and rapid measurement of MTV or TLG. The current data confirm that PET volume metrics correlates with tumor prognosis.

Dr. Plamen Getsov is a consultant radiologist at Spectar Diagnostic Imaging Centre in Sofia, Bulgaria.

Dr. Getsov graduated the Medical University in Pleven in year 2000 and 6 years later he got his specialty in Radiology at Sofia Medical University. He has worked as a full-time radiologist in the Department of Diagnostic Imaging at Hristo Botev Hospital in Vratsa, and later on as a radiologist in the Diagnostic Imaging Cinic at Queen Joanna University Hospital in Sofia. Since 2007, Dr. Getsov holds a teaching position of an Assistant Professor in Radiology, in the Faculty of Medicine at St. Kliment Ohridsky University in Sofia.

Dr Getsov has more than 50 different publications in the field of MRI, CT and ERCP.

Dr. Anastas Chapkunov

Dr. Anastas Chapkunov is a surgeon in the department of breast surgery at the Kaspela Hospital. He graduated from medicine in Plovdiv. After graduation, he worked at the Oncology Clinic for 3 years. He won a competition at the Clinic of Thoracic-Abdominal Surgery at St. George's University Hospital. There are three specializations- General and Thoracic Surgery and Oncology. Both of his parents are medics - his father is a cardiologist at the University Hospital in Plovdiv, and his mother is a teacher and head of the Department of Histology.

Experience: 1992 - 1995, Coordinator in the Surgical Department, Regional Oncological Dispensary - Plovdiv. 1995 to 2013 - Assistant at the Clinic of Thoracic and Abdominal Surgery, University Hospital "St. Georgi"- Plovdiv. Since 2000-Assistant Professor at the Department of Special Surgery - Medical University of Plovdiv. Since 2013 Head of the Clinic of Thoracic Surgery, University Hospital "Kaspela" - Plovdiv

Specialties: 1997 - General Surgery; 2000 - Oncology; 2003 - Breast Surgery

Membership in professional organizations: Bulgarian Medical Association, Bulgarian Surgical Society Bulgarian Association for Thoracic, Cardiac and Vascular Surgery, European Society of Thoracic, Surgeons (ESTS), 2011-2013 Regent for Bulgaria of ESTS, International Association for the Study of Lung Cancer (IASLC)

Professional interests:

Diagnosis of diseases of the trachea, bronchi, lung, chest, mediastinum:

Surgical treatment of diseases of the trachea, bronchi, lungs, chest wall, mediastinum:

Minimally invasive (bloodless) anatomic pulmonary resections in lung tumors

Mini-invasive (bloodless) interventions for the diagnosis of diseases of the trachea, bronchi, lung, chest, mediastinum:

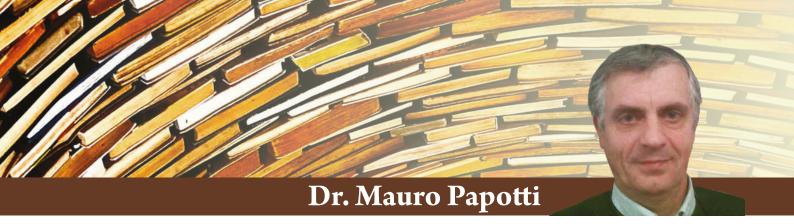
Minimally invasive (bloodless) surgical interventions for treatment of diseases of the trachea, bronchi, lung, chest, mediastinum:

Treatment with pneumothorax

Treatment for pleural effusions (collection of fluid around the lung)

Surgical treatment of esophageal diseases

Diagnosis and treatment of breast diseases



Innovative Diagnostics: Neuroendocrine Lung Tumors and SCLC Mauro Papotti, University of Turin, Italy

Thoracic (lung and thymic) neuroendocrine (NE) neoplasms are all potentially malignant and include well differentiated (WD) forms (typical/atypical carcinoids) and high grade large and small cell NE carcinomas (LCNEC and SCLC) based on specific diagnostic criteria (WHO classification of Lung tumors 2015) that include mitotic count and presence of necrosis. Ki67 proliferative index is not requested for lung NET classification, but may be prognostic. Cases of lung carcinoids with high proliferation and of high grade LCNEC with carcinoid morphology have been reported and probably represent the pulmonary counterpart of "NET G3" of the gastroenteropancreatic area. Combined NE neoplasms also exist, made of a small/large cell NE carcinomas, while small cell lung cancer (SCLC) is invariably associated to a high mitotic rate and high grade cytological features, including classical salt & pepper chromatin pattern, large cell NEC (LCNEC) belongs to a morphological grey area that (apart from the mentioned rare combinations with adenocarcinoma components) merges with atypical carcinoids on the one side (with overlapping mitotic index and Ki67 values), and with SCLC on the other (so called combined small and large cell NEC variant). Rare NE neoplasms show combined features of well and poorly differentiated NE neoplasms in the same tumor, supporting the notion that occasionally NE neoplasms may evolve from carcinoids into high grade NE carcinomas.

Immunohistochemistry represents an essential tool to identify diagnostic, prognostic and predictive markers. The former group includes general NE markers (chromogranin, synaptophysin, CD56, neurofilaments, hASH1 and more recently INSM1) and the organ-specific transcription factor TTF1, with the caveat that it also stains extrapulmonary high grade NE carcinomas.

The molecular profile of high grade LCNEC and SCLC of the lung has been characterized in several studies. RB1, TP53, CREBBP, EP300 and MLL gene mutations as well as several amplifications were detected. In an early study on LCNEC (Rekhtmann 2016), the most common alterations encompassed SCLC-related mutations of TP53 (78%), RB1 (38%), but also included NSCLC-related gene mutations in one third of cases (namely STK11, KEAP1 and KRAS); finally, rare LCNEC cases were found to bear MEN1 mutations, thus probably addressing these tumors to the category of carcinoids. Subsequently, in LCNEC, different molecular subgroups were identified, labeled "type I LCNEC" (having bi-allelic TP53 and STK11/KEAP1 gene alterations, and a NE profile with ASCL1 high / DLL3 high / NOTCH low), and "type II LCNEC" (enriched for bi-allelic inactivation of TP53 and RB1 genes, reduced NE markers, ASCL1 low / DLL3 low / NOTCH high, upregulation of immune-related pathways) (George. Nat Commun 2018). In a series of carcinoids and LCNEC, three transcriptional profiles were identified and a different cancer specific survival was observed in the various groups, suggesting that the molecular profile might drive the therapeutic options (Simbolo. JTO 2019). In another study, four clusters were found by integrated analyses of genomic, transcriptomic, and methylome data from NENs, including a small group of "LCNEC" having a carcinoid gene profile (called "supra-atypical" carcinoids) (Alcala. Nat Commun 2019).

Regarding SCLC, four molecular subtypes were recently identified, including the known pathways driven by ASCL1 and NeuroD1 gene alterations (types A and B, respectively) and two novel pathways regulated by YAP1 (type C) and POU2F3 (type D) gene mutations (Rudin. Nature Rev Cancer 2019). Most (90%) human untreated SCLC would belong to type A, and a minority to type D. These two tumor types share a "NE-high" profile, including DLL3 expression, paving the way to potential targeted treatments. From such molecular profiles, other markers predictive of response to specifically tailored therapies are expected to be identified.



The successful treatment of a pulmonary NE neoplasm is, as expected, heavily linked to its correct classification. If the diagnosis of classical small (oat) cell lung carcinoma does not generally cause problems, the intermediate "grey" area occupied by LCNEC and atypical carcinoid (including the novel highly proliferating/ NET-G3-like forms) contains several tumors having mixed features that often fail to respond to therapy, probably as a result of an inappropriate treatment for the histological type under investigation: novel immune markers and/or genetic/molecular profiles are expected to more accurately stratify the diagnostic categories. The forthcoming WHO classification of lung tumors, announced by end 2020/early 2021, is expected to address this controversial diagnostic area.

Present position: Full Professor of Pathology, University of Turin; Head, Division of Pathology, Città della Salute Hospital, Turin, Italy; Vice-Chair, Medical School, University of Turin

Resident program training in Oncology (University of Modena, 1983) and in Pathology (University of Torino, 1991).

DIAGNOSTIC ACTIVITY – Since 1982, diagnostic cytology exfoliative and fine needle aspiration biopsies and of pulmonary, thoracic and endocrine surgical pathology. Application of immunohistochemistry and molecular techniques to histological and cytological specimens for diagnostic, prognostic and predictive purposes.

Teaching activity - Pathology courses at the University of Turin First Medical School in Turin (years 1992-2003 and from 2015-date) and Second Medical School in Orbassano (from 1997-date). Pathology course at the Laboratory Technician School, University of Turin (1994-date). Cytopathology and surgical pathology courses at the Post-graduate Schools in Pathology, Oncology, Respiratory Medicine, Thoracic Surgery and Endocrinology (years 1987-date).

SCIENTIFIC ACTIVITY – Thoracic pathology (lung and mesothelium), Endocrine pathology (parathyroid, thyroid and adrenal glands as well as neuroendocrine tumors) and immuno-histochemical and molecular biology techniques applied to diagnostic pathology and aspiration biopsy cytology. Receptor analysis in endocrine tumors.

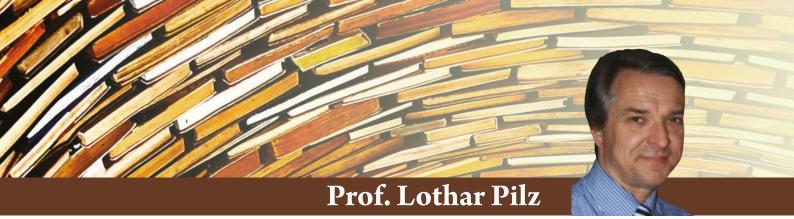
Over 400 papers in peer review journals e 420 abstracts.

Member of the International Academy of Pathology (IAP), European Society of Pathology (ESP), Società Italiana di Anatomia Patologica (SIAPEC), Endocrine Pathology Society, International Association for the Study of Lung Cancer (IASLC), European Neuroendocrine Tumor Society (ENETS).

Since 1982 obtained grants for research projects funded by the National Research Council (Rome), the Italian Ministry of University and Education, the Regione Piemonte (Turin), Fondazione Berlucchi, Compagnia di San Paolo (Turin) and the Associazione italiana per la ricerca sul cancro (AIRC, Milan).

Member of the Editorial Board of Pathologica, Virchows Archives, Archives of Pathology, J Endocrinological Investigations, American Journal of Clinical Pathology, Journal of Pathology, J Clinical Pathology.

1990-1999 Secretary and 2000-2003 President of the "European School of Pathology (EScoP)", founded in Torino by the European Society of Pathology (ESP).



Biomarkers as Therapy Predictors: The Position of a Clinical Statistician

Precision and individualized therapy is the key approach in oncological treatment in the last decade. So, in the last 6 years half of all FDA approvals for non-small cell lung carcinoma (NSCLC) treatments, almost in advanced disease, were based on EGFR-TKI positivity; in many cases coming along with a companion test procedure for the biomarker approved simultaneously and patients will be selected by these biomarkers.

In general, predictive biomarkers, substances or processes measured in the body or in bodily fluids, will provide information on the probability of obtaining a treatment response and will be used for therapeutic decision making. The most important predictive biomarkers with a recognized clinical value in the molecular diagnostics in oncology are somatic mutations, of both the point mutation and chromosomal aberration types, in the following genes: EGFR, KRAS, BRAF, PDGFRA, KIT, HER2, BCR-ABL, and EML4-ALK. Other predictors are seen in the field of immune checkpoint inhibitors (ICI) and programmed death ligand 1 (PD-L1).

More formally, a predictive biomarker is usually measured before treatment and as a result, ideally, in patients who are biomarker negative, there will be no difference in survival between treated and untreated (placebo) patients. As an example the EGFR exon 19 or 21 gene mutations or the EML4-ALK fusion protein in the testing tumors of metastatic NSCLC can be taken, leading to targeted therapies which are EGFR based, as gefitinib or erlotinib, or ALK based, as offering crizotinib, respectively. In both cases the treatment will be more effective than compared to classical cytotoxic chemotherapy. One of the great obstacles is the development of robust, clinically applicable biomarkers harboring the possibility of identifying these alterations with high probability and so enabling subsequently the selection of exactly those patients who would derive benefit from targeted therapy. For the examples of EGFR mutation these somatic genetic alterations are only identified in a subset of metastatic NSCLC of about 15%-21% and in case of EML4-ALK translocation of about 3%-7%. From this example it is obvious that only in subsets prediction of treatment success can be made and shows the importance of tumor tissue and fluid specimens.

Study of Mathematics and Physics 1973 –1978 at the Johann-Wolfgang-von-Goethe-University, Frankfurt and Eidgenössische Technische Hochschule (ETH), Zürich, Switzerland;

1979-1980 Research Assistant, University of Heidelberg, Heidelberg

1981- 2011 Senior Researcher and Consulting Statistician, Department Mathematical Models / Biostatistics, German Cancer Research Center, Heidelberg

Since 2011 Senior Consultant for Statistics, Medical Faculty Mannheim, University of Heidelberg, Mannheim

Since 2013 Appointed Statistical Consultant, Medical University Bialystok, Poland

Prof. Tatiana Hadjieva

Reirradiation for NSCLC - a Delicate Balance between Effectiveness and Safety

Despite of effective simultaneous radiochemotherapy of stage III non small cell lung cancer /NSCLC/ 30-50 % loco-regional relapse and 25% isolated local recurrence at 2 years have been reported. A struggle for de novo local tumour control with good quality of life raise the concept of radical reirradiation /rRt/ after recurrent or new primary lung cancer. Trials with conventional old rRT are scarce, retrospective and have shown modest results / 5-7 months overall survival/. The dose used was low, rRT was mostly with palliative intent, because of risk for normal tissue toxicity in whole lung, heart, spinal cord etc. They determined a requirement of extremely fine selection of patient for rRT. The author presents existing now a day's practical algorithm for multidisciplinary approach for radical rRT. Candidates are patient with peripheral low volume tumour, ECOG below 2, long tumour free period after previous treatment / minimum 8 months/, no extrapulmonary disease or obstructive vena cava superior syndrome, not after 2 D planed RT. Restaging with PETCT is obligatory and will be used also for tumour volume delineation. New radiotherapy plan with intensive modulated rRT / IMRT/ has to balance application of radical tumour dose and dose in organ at risk. A radiobiological approach based on αβ Jack Fowler model has to be used calculating the so-called tumour biologically effective dose /BED/ and the organ at risk BED from previous RT. They will be added to the desired radical second tumour BED and remaining tolerant BED for the whole lung, heart, spinal cord, esophagus, big vessels and other organs at risk. Encouraging results for high-tech rRT are newly collected with higher tech SBRT /stereotactic body radiotherapy/ with 1-5 fractions up to 30-50 Gy demonstrating 90% local tumour control and 65-69 % 2 years recurrent free survival. Good response criteria are adenocarcinoma, ECOG 0, small tumour volume /<27 cc3/, marginal recurrence, or such out of the radiation field, etc. Addition of simultaneous chemotherapy to rRT for now, does not reveal encouraging results thus increasing toxicity. Future randomized trails are expected adding new molecules to rRT, clarifying the tolerant doses with SBRT rRT, the type of fractionation, end point criteria etc. An rRT concept based on evidence based medicine will enlarged the patents' cohort, suitable for safe and effective radical rRT.

Prof. Hadjieva has graduated Medicine in Higher Medical University, Sofia, Bulgaria with an award for primacy. She receive a Postgraduate Speciality in Radiation Oncology and Nuclear Medicine in 1979 and in Oncology - 2000. In 1988 she defended a PhD thesis in Thyroid Carcinoma Treatment, and in 2004 became a Doctor of Medical Sciences, D sc. In 1995 she was habilitated as Associate Professor and in 2005 as Full Professor in the University Radiotherapy Clinic, Medical faculty, Sofia.

Since 1975 she was appointed in UH "Queen Joanna" as junior assistant in Radiotherapy Department and worked there more than 40 years becoming Head of the department and modernizing it to high-tech radiotherapy centre in 2009. Later she moved to organize a new RT Department in the private City Clinic Oncology serving as Head of the department up to August 2017. Now, Prof. Hadjieva is working in UH "St Ivan Rilski in Radiotherapy and Radiosurgery Clinic, Sofia.

Dr. Hadjieva was appreciated as an invited lecturer in Germany, Belgium, Israel, Turkey, Ukraine, Poland etc.

She is the author of more than 120 publications in journals (in English and in Bulgarian), participated as co-author in 40 monographs, guidelines, handbooks and gave over 100 talks on International Congresses and National Meetings.



Prof. Hadjieva has served for many years as an expert in following organisations and committees: National Head and Neck Cancer Treatment Committee 1981-2015; Endocrine Disease Treatment Group 1987-2015; Member of National Committee for Evaluation of Consequences after Chernobyl Accident 1990-1995; Council for Medical Science, Medical University, Sofia, 1998 - 2004; National Council for Radiation Protection, Committee of Peaceful Use of Atomic Energy, 2002-2015; Scientific Committee for Roentgenology, Nuclear Medicine, Radiotherapy and Radiobiology at the Council of Ministries from 2005 till the end; National Representative for Radiation Oncology, Ministry of Healthcare, from 2000-2006 and 2015; National Health Insurance Fund, Responsible for Radiotherapy, since 2001

As member of international societies such as European Society of Nuclear Medicine, ESTRO, ASTRO, BUON, ESMO, etc., she promotes Bulgarian radiotherapy care abroad.

Dr. Hadjieva is a lecturer for medical and dentists students in several universities in Sofia and Stara Zagora, especially for English students; a senior lecturer and organizer of postgraduate education for Radiation therapy and lecturer in Oncology for different specialties as ENT, surgery, endocrinology, European School of Oncology.

She has been the Head of the State Commission for Radiotherapy licensing for many years.

For all this lifelong doctor and educational work in 2014 Prof. Hadjieva was decorated by Life appreciation "Prof. Chilov's" award for excellence in therapy and education at Medical University, Sofia.



Prof. Christian Manegold

Immunotherapy for Advanced Non-Small Cell Lung Cancer (NSCLC)

During the past five year's immunotherapy (IO) has became the leading therapeutic option for advanced NSCLC without oncogenic drivers. IO has been integrated in the treatment algorithm of non-mt NSCLC as single agent as well as combination therapy in first and subsequent line settings. Several immune checkpoint inhibitors have been clinically tested with differences in the nature of the moAb and the biological target in different histologies and tumors expressing different levels of PD-L1. Nivolumab (squamous, CheckMate 017; non-squamous, CheckMate 057), Pembrolizumab (Keynote 010/001), and Atezolizumab (OAK) are recommended as single agent therapy in pretreated patients. In non pretreated patients single agent Pembrolizumab is preferred in tumors expressing PD-L1 × 50% (Keynote 024), but is also justified in tumors expressing lower levels of PD-L1 (Keynote 042).

Cemiplimab (EMPOWER-Lung 1) may also soon be available for high PD-L1 expessors.

Platin-based chemotherapy combined with Pembrolizumab (non-squamous, Keynote 021/189; squamous, Keynote 407) or Atezolizumab (squamous, IMpower 131, non-squamous, IMpower 150) or Sintilimumab (squamous, Orient 12; non-squamous, Orient 11) or Nivolumab (non-squamous, Tasuki-52) improve survival compared to chemotherapy alone. Combining PD -1 and CTLA-4 inhibition increases survival compared to chemotherapy as shown for Nivolumab/lpilimumam (CheckMate 227/9LA). The use of immune checkpoint



inhibitors are challenging at least in two ways: a, management of drug related toxicity and b, patterns of response and progression. Pseudoprogression appearing in up to 6 % of NSCLC patients is defined as transient worsening of radiological lesions prior to stabilization or regression. Hyperprogressive disease should be suspected if the tumor burden doubles at first restaging scan. It requires fast professional recognition and immediate transition to chemotherapy. IO related toxicity can involve several organs and may cause life threatening events requiring immediate multidisciplinary management.

Dr. Christian Manegold, studied medicine in Berlin and Heidelberg, Germany, graduating with a Dr. from of the Ruprecht Karls University in Heidelberg in 1974. He took up a residency in the pathology department of the same university in 1976 and worked in the USA for 3 years, before returning to Heidelberg in 1979. He gained board certification in internal medicine and in haematology/oncology in 1985 and 1986, followed by a professional appointment as Consultant in Haematology/Oncology at the Thoracic Hospital in Heidelberg, and Head of Interdisciplinary Thoracic Oncology at the Department of Surgery, Heidelberg Medical Centre Mannheim, Germany, a post he held from 2004 to 2013. He was appointed Professor at Ruprecht Karls University in Heidelberg in 1996. He has been the Senior Advisor at the Interdisciplinary Cancer Centre in Mannheim since 2013. Professor Manegold has extensive experience as a clinical investigator, and national and international trial leader as well as a member or leader of independent data monitoring committees (IDMC) in numerous clinical trials in oncology, both in thoracic cancers and other indications. Professor Manegold is a member of the German Cancer Society, the European Society of Medical Oncology (ESMO), the American Society of Clinical Oncology (ASCO), and the International Association for the Study of Lung Cancer (IASLC). He was a Chairman of the European Organisation for Research and Treatment of Cancer Lung Cancer Group (EORTC-LCG) from 2000 to 2003. He served as a Chairman of the IASLC Ethics/Sponsorship Committee from 2007 to 2009 and as member of the IASLC Board of Directors from 2011 to 2015.



Dr. Sofia Baka

Dr Baka is a Consultant Medical Oncologist and works at the InterBalkan Medical Center of Thessaloniki, Greece. She is the Director of the Medical Oncology Department-Clinical Research Unit. She has graduated from the Medical School of the Aristotle University of Thessaloniki in 1993, and completed her Specialist Training in Internal Medicine in 2001, at the Hippocration University Hospital of Thessaloniki.

Following, her PhD, on lung cancer immunotherapy, from the Biology Department of Aristotle University, Medical School, Dr Baka has worked as Clinical Research Registrar and Specialist Registrar in Medical Oncology, for 5 years, at the Christie Hospital in Manchester and completed her Specialist Training in Oncology (CCST). During that time she has attended the Master Course in Oncology, University of Manchester. He has written several papers in major scientific medical journals. Dr Baka has participated as Principal or Co-Investigator in several clinical trials.



SPECT-CT IMAGING OF THORACIC NETs S.Sergieva¹, A.Fakirova², R.Krasteva³, S.Velchova⁴, M.Dimcheva¹ ¹Sofia Cancer Center ²Military Medical Academy ³UH"Unihospital" ⁴UH"St.Ivan Rilsky"

Neuroendocrine tumors (NETs) of the thorax including bronchial and thymic tumors belong to foregut NETs. Carcinoid bronchial tumors are uncommon group (2%) of all lung neoplasms and approximately 20-30% of all NETs, developing from neuroendocrine enterochromaffin or Kulchitsky cells, located in the bronchial mucosa. Primary NETs of the thymus account for less than 5% of all anterior mediastinal neoplasms and 2 % of thymic lesions. Bronchial NETs are classified according to the grade of biological aggressiveness (G1-G3) and the extent of tumor cell differentiation (well-differentiated/poorly-differentiated). The well-differentiated eneoplasms comprise typical (G1) and atypical (G2) carcinoids. Large-cell neuroendocrine carcinomas (LCNEC) as well as small cell carcinomas (SCNEC), G3 are poorly differentiated.

According to some EANM guidelines (Bombardieri E. et al Eur J Nucl Med Mol Imaging 2010; 37:1441-8; Virgolini I et al. Eur J Nucl Med Mol Imaging 2010;37: 2004-10; Zaknun J et al. Eur J Nucl Med Mol Imaging 2013;40: 800-816) functional imaging procedures applying somatostatin-receptor imaging (mainly SSTR2 and SSTR5) using 111In-pentetreotide/99mTc-Tektrotyd with SPECT or PET with 68Ga-labelled somatostatin analogues are used to select essential information for staging, assessing SSTR status and making decision on the most appropriate therapy regimens in patients with NETs.

First 99mTc-labeled somatostatin analogue is 99mTc-HYNIC-[D-Phe1,Tyr3-Octreotide]-TEA for imaging of tumors of neuroendocrine origin (NETs); (Decristoforo C. et al 99mTc-EDDA/HYNIC-TOC: a new 99mTc-labeled radiopharmaceutical for imaging somatostatin receptor-positive tumors: first clinical results and intra-patients comparison with 1111n-labeled octreotide derivates. Eur J Nucl Med 2000; 27(9): 1318-1325). 99mTc-Tektrotyd is a radiopharmaceutical indicated for imaging of a wide range of primary and metastatic NETs which may overexpress somatostatin receptor SSTR2, SSTR3 and SSTR5.

Fusion SPECT-CT images provide differential diagnosis of malignant from benign foci and physiological uptake, reducing false positive results and thus improving specificity and accuracy of SPECT studies especially in the region below the diaphragm. It can be summarized that main indications for SPECT-CT somatostatin-receptor scintigraphy are as follows:

1. To image primary tumor in cases with metastatic lesions from tumors with unknown primary origin and to depict the most appropriate tumor lesion for correct biopsy.

2. To assess SSTR expression in order to predict an individual response to therapy with somatostatin analogues and thus could effectively influence the management of individuals with NETs.

3. For correct pre-treatment N/M-staging

4. In patients with negative SRS, 18FDG PET-CT studies should be performed usually in cases with poorly differentiated NETs, G3, Ki67>30%.

5. To follow-up the treatment response.



Prof. Sonya Borisova Sergieva is a nuclear medicine specialist who works in Sofia City Oncology Dispensary and as of 2013 is an Associate Professor at the Specialized Hospital for Treating Oncology Diseases in Sofia.

Dr. Sergieva graduated the Medical Academy in Sofia in 1990 and specialized Nuclear Medicine in the National Oncology Center and Alexandrovska Hospital in Sofia in the period 1991-1994. After getting her nuclear medicine diploma in 1994, she moved on specializing in oncology and finished her second specialization in 1998.

Dr. Sonya Sergieva started her career in the National Oncology Centre in Sofia where she worked from 1991 till 2002. Later on, she moved to the Department of Nuclear Medicine in Sofia City Oncology Dispensary, which she headed for 10 years from 2003 till 2012.

Prof. Sergieva has a lot of experience in the field of clinical trials being a coinvestigator, and has participated in 8 scientific projects, half of them international. She is currently a member of Bulgarian Association of Nuclear Medicine, Bulgarian Scientific Oncology Society, the European Association of Nuclear Medicine (EANM) and BUON.

Dr. Sergieva has 84 publications in both Bulgarian and international scientific magazines and is an author of more than 130 reports and resumes delivered at local and international scientific events. Her dissertation topic is about the diagnosis and differential diagnosis of malignant melanoma using radio-marked monoclonal antibodies.

Prof. Sonya Sergieva speaks Russian and English as foreign languages.



Dr. Assia Konsoulova

Treatment of Advanced Prostate Cancer

Advanced prostate cancer is a progressive disease with complex path of development.

Raise of PSA levels in patient with localized disease is signalling disease progression to nmHSPC or if there is radiographic progression – to mHSPC. Between 27% and 53% of all patients undergoing definitive treatment develop PSA relapse.^{1,2}

Biochemical evaluation of nmCRPC could be done following PCWG3 criteria.³ Patients with short PSA DT have a high risk for developing a metastatic disease.⁴ Treatment of high risk nmCRPC and delaying the onset of metastatic disease has an impact on OS and QoL of patients.^{5,6,7,8,9} The final analysis of PROSPER shows that Xtandi reduces the risk of death with 27% vs Placebo.¹⁰

Eventually patients will progress to mCRPC. First line treatment in mCRPC is key as 50% of patients with mCRPC never reach second line of treatment.^{11,12}

Real-world data from a retrospective analysis on 3174 patients with PCa from Daniel J. George shared during ASCO congress demonstrates that there is a negative effect on OS from keeping patients with mCRPC on



Bicalutamide before following treatment (Enzalutamide or Abiraterone). Another key finding in the analysis is the 16% reduction in risk of death with Enzalutamide vs Abiraterone in 1st line treatment of patients with mCRPC.¹³

nmHSPC – non-metastatic hormone-sensitive prostate cancer; mHSPC – metastatic hormone-sensitive prostate cancer; nmCRPC – non-metastatic castrate-resistant prostate cancer; mCRPC – metastatic castrate-resistant prostate cancer

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Prof. Irene Virgolini

Prof. Irene Virgolini is the Director of the University Clinic of Nuclear Medicine at the Medical University Innsbruck. Prof. Virgolini first studied medicine at the University of Vienna, where she was also promoted in 1987. Habilitation also took place at the University of Vienna: 1992 in Experimental Nuclear Medicine and three years later in the field of internal medicine. In addition, she obtained the specialist physician's certificate for internal medicine and the additional specialist for nuclear medicine. She began her professional career as an assistant doctor at the former Secondary Medical University Clinic and at the University Clinic for Nuclear Medicine of the AKH in Vienna, where Virgolini also set up a working group with a focus on experimental oncological nuclear medicine. In 2000, Virgolini was appointed medical director of the Institute of Nuclear Medicine at Lainz Hospital, Vienna. During her work at the Vienna University Hospital, Virgolin's main interest in oncological radioisotope therapy ("Targeted Radionuclide Therapy"), in particular the development and establishment of new experimental nuclear medicine therapy forms (eg 90Y-DOTA lanreotide or analogue therapy in refractory tumor patients, 90Y-HMCF1 antibody therapy in ovarian cancer patients) in the clinic. Patents were also acquired for the developed radiopharmaceuticals in this experimental clinical area. Prof. Virgolini, in addition to her work as a senior physician in the "in vivo" area at the University Clinic for Nuclear Medicine in the Vienna University of Medicine (AKH), has introduced a number of special nuclear medical examinations in recent years and has established these in broad use at the Vienna University Hospital. Numerous invitations to guest lectures and a wide range of awards to the young doctor's group confirm the international importance of these new developments in nuclear medicine.

Prof. Virgolini has published more than 200 papers, her total impact factor is around 1000, the Hirsch Index 40 (based on Web of Science). She presented more than 300 lectures on the topics of molecular therapy worldwide in 2018. Prof. Virgolini became the President of WARMTH.



PET-CT Imaging in Prostate Cancer

Many PET radiotracers have been used in the last few years to improve accuracy of diagnostic imaging for prostate cancer. 11C-18F choline, 18F-fluciclovine or 68Ga -18F PSMA are nowadays worldwide used radiopharmaceuticals. PSMA compounds have the advantage of being able to be used both in the diagnostic and in the therapeutic phase, if labeled to high energy emitters (Alpha or Beta.

In this talk, we will mainly discuss the advantages and disadvantages of these PET radiotracers for the imaging of men with prostate cancer during the natural history of the disease, from diagnosis, staging, imaging in case of BCR, Imaging in nmCRPC and finally imaging in mCRCP.

We will also talk about the main advantages of PET PSMA in comparison with other imaging techniques like CT or Bone Scintigraphy.

Academic titles

School of Medicine at the Università degli Studi di Bologna, graduation in Medicine and Surgery School of Medicine at the Università degli Studi di Bologna, Residency in Nuclear Medicine School of Medicine at the Università Modena e Reggio: Residency in Medical Radiology

Work experience

December 2002 - present: Dirigente Medico di I livello (registrar) at the Servizio di Medicina Nucleare e Centro PET della Azienda Univeristario Ospedaliera S.Orsola –Malpighi di Bologna. From 2005 Professor at the "Scuola di specializzaizone in medicina nucleare", at the University of Bologna.

March 2001 - December 2002: Dirigente Medico di I livello (registrar) at the Servizio di Medicina Nucleare dell'Ospedale S. Croce e Carle di Cuneo; clinical applications of PET in oncology and cardiology.

November - December 2001: Visiting fellow at the CETIR PET center Barcelona, Spain clinical application of PET in oncology and cardiology (Director Prof. Ignasi Carriò).

January - December 2000: Research fellow at the "Istituto Europeo di Oncologia" (I.E.O.) experience on Radio Target Therapy with 90Y and somatostatin analog (DOTA-TOC) and radioguided surgery (ROLL; SNB) (Director, Dr. Giovanni Paganelli).

June - December 1998: fellow at the Department of Radiology, Service of Nuclear Medicine and PET Center, Hospital of the University of Pennsylvania, Philadelphia (Director, Prof. Abass Alavi).

Skills: Large experience in whole-body PET/CT scan reading using 18F-FDG, 11C-Choline, 11C-Methionine, 11C-Acetate, 68Ga-DOTA-NOC, 18F-DOPA, 11C-Ephedrine, 64Cu-ATSM. The PET centre at the Azienda Ospedaliera S.Orsola–Malpighi, Bologna is provided with 3 PET/CT scanners and the output is about 7000-8000 scans per year.

Brain PET scans in oncology (11C Methionine) or brain disorders (18F-FDG). Large experience in organizing a PET centre. Experience in Radio Target Therapy with somatostatin analog (90Y-dota-TOC). Experience radio guided surgery (sentinel node detection in breast, melanoma, genito-urinary tract and ROLL).

Italian referent for H10 EORTC protocol on the application of PET in Hodgkin Lymphoma.

Member of the EANM group about the application of Choline PET in prostate cancer.

Languages

English: good knowledge of written and spoken language; Portuguese (Brazilian): excellent knowledge of the spoken language.

Publication: Authors and Co-Authors of more than 100 full papers publications in the field of Oncological applications of PET.



The Future of Prostate Cancer Imaging V. Hadzhiyska Clinic of Nuclear medicine, University Hospital Alexandrovska

Rapid technological advances over the last few years have enabled the mainstream use of prostate imaging for the clinical management of PCa. Imaging modalities such as multiparametric ultrasound (mpUS), multiparametric magnetic resonance imaging (mpMRI), and nuclear imaging (positron emission tomography [PET]) are now being used for all stages of PCa—diagnosis and localization, whole-gland and focal therapy, staging, active surveillance, and recurrence monitoring. Molecular imaging targeting the prostate-specific membrane antigen (PSMA) has so far shown very convincing results, especially regarding detection of small lymph node metastases. Thus, in patients with high-risk prostate cancer, 68Ga-PSMA–PET is already considered the reference standard wherever it is available. While the clinical value of PSMA PET/CT in recurrent prostate cancer is large-ly uncontested, its worth in the setting of primary staging is still unclear. Moreover the management of advanced prostate cancer has changed substantially with the availability of multiple effective novel treatments, which has led to improved disease survival. More accurate local staging and earlier detection of metastatic disease, accurate identification of oligometastatic disease, and optimal assessment of treatment response are areas where modern imaging is rapidly evolving and expanding. Next-generation imaging modalities, create new opportunities for imaging to support and refine management pathways in patients with advanced prostate cancer.

This presentation demonstrates the potential and challenges of applying next-generation imaging to deliver the clinical promise of treatment breakthroughs.

Prof. Dr. Valeria Hadjiyska graduated MU-Sofia in 2007 with honors. Even during her studies she showed interest in nuclear medicine - she trained, participated and supported the work in the Clinic of Nuclear Medicine at Alexandrovska University Hospital. After graduating in 2008, she was successively appointed as an intern and an assistant (the same year after successfully passing the exam).

She acquired a specialty in nuclear medicine in 2013 and in the same year successfully defended his dissertation on "Application of nuclear medicine methods for the diagnosis of urolithiasis and its complications." Since 2014, she has been elected Chief Assistant at the Center for Contemporary Medicine at the Ministry of Finance in Sofia. For a relatively short period of time (from 2008 to 2016), under the skilful guidance of her supervisor Prof. Dr. Irena Kostadinova, Assoc. Prof. Hadjiyska managed to develop an extremely successful scientific career.

She is currently the main author and co-author of over 55 scientific papers. Her research has been published in international journals with a high impact factor - such as the European Journal of Nuclear Medicine and Molecular Imaging (4.53) and the European Urology Journal (5.63). The total impact factor of Assoc. Prof. Hadjiyska is 60,146, and the individual - 13,058, which is a remarkable achievement given the fact that she has only eight years of experience.

In the period 2010-2015 Assoc. Prof. Hadjiyska is a co-author of three textbooks, one of which is an English version of the monograph "Fundamentals of Nuclear Medicine" edited by Prof. I. Kostadinova. In 2011 the monograph "Fundamentals of Nuclear Medicine" was published in English, where Assoc. Prof. Hadjiyska wrote



a chapter "Application of a new hybrid technology - single-photon emission tomography combined with computed tomography in patients with urolithiasis" in the section "Urinary system". Its text is also included in the monograph "Nephrology" edited by Prof. E. Paskalev. On this basis, after a successful competition, in May 2016 Dr. Hadjiyska was awarded the academic position of "Associate Professor".

According to her colleagues, Assoc. Prof. Hadjiyska is able-bodied, motivated, able to work in a team, as well as to handle all tasks in a timely and professional manner at the Clinic of Nuclear Medicine, giving all her heart and energy. Due to these qualities, in 2010 she was appointed administrative chief physician at the Clinic of Nuclear Medicine. She developed her dissertation there as well.

Since the end of 2015, by order of the director of Alexandrovska University Hospital, she has been appointed head of the Clinic of Nuclear Medicine. Under her leadership, the number of examined patients in the PET-CT center doubled, and after staff training and successful completion of the licensing procedure, the mini-cyclotron complex was put into full operation without disturbance in the work process and the number of examined patients.

As of the beginning of 2016, under her leadership, the construction of the first radiochemical laboratory for the production of 68 Ga radiopharmaceuticals is being prepared, which are used to diagnose patients with prostate cancer and neuroendocrine tumors. Again under her leadership, in May 2016 in Bulgaria a new method for metabolic brachytherapy began to be applied - definitive radionuclide therapy of bone disease with (223) Ra - dichloride in patients with refractory prostate cancer. For the first time this medication was applied in the Clinic of Nuclear Medicine of Alexandrovska University Hospital, which is the only one in Bulgaria with a license to perform this activity.



Dr. Petya Balikova is a resident at the department of Medical Oncology in University Hospital "Tsaritsa Yoanna" ISUL – Sofia, Bulgaria since 2015. She participates in clinical studies as investigator and study coordinator in the field of breast cancer, lung cancer, head and neck cancer. She has interests in internal medicine, oncology and oncodermatology. She is active member of the managing board of Young Oncologist club-Bulgaria, participant and lector in number of educational modules and courses -such as ETOM classes and ESMO Academy. She has been teaching students in medical oncology class in the Medical University-Sofia. She is dedicated to her patients and very passionate about doing research work in immunotherapy and targeted therapy as the future of cancer treatment.

Assoc. Prof. Nataliya Chilingirova

Assoc. Prof. Chilingirova graduated Medical University in Sofia, Bulgaria by doing part of her medical training at the Medical Oncology Clinic in the University Hospital in Zurich, Switzerland. Still as a medical student she worked as a volunteer in different oncology centres in the country - National Oncology Centre in Sofia, and the Complex Oncology Centre in Stara Zagora. Right after graduating from MU Sofia, she started her residency at the National Oncology Centre. PhD Thesis: Lung Cancer - individualizing treatment approach using NGS (next-generation sequencing based), a scientific work prepared for the first time in the country. Her scientific interests are mostly lung cancer, sarcomas and rare tumours. She did part of her training at the University Hospital in Vienna and Wilhelminen University Hospital, Vienna. Clinical fellowships at some of the biggest scientific and clinical oncology centres like Memorial Sloan Kettering Cancer. Actively participates in various international clinical trainings, congresses and meetings (ESMO, ELCC etc.). Member of Bulgarian and international societies like ESMO, ASCO, Bulgarian Oncology Educational Academy, Bulgarian Oncology Society. Member of the Executive Board Young Oncologist Club Bulgaria. She became an associate professor of oncology and introduces for the first time oncology as a part of the educational program for all medical students at the university. Member of the Science and research lab for precision medicine in oncology and genetics at the Centre of Competence (a project funded by EU grant). Author of more than 45 scientific papers in Bulgarian and international journals. Speaks German, English and Russian.

Poster Session



TREATMENT OF METASTATIC COLORECTAL CARCINOMA

Dr Rossitza Krasteva, Dr Aynura Changalova, Department of Medical Oncology "Uni Hospital", Panagyurishte

Stivarga is an option of monotherapy for the treatment of adult patients with metastatic colorectal carcinoma (CRC), who have been previously treated with the available therapies or are not viewed as viable candidates for them. This includes chemotherapy on the basis of fluoropyrimidine, anti-VEGF therapy and anti-EGFR therapy.

The presentation of a clinical case of a patient with metastatic colorectal carcinoma (CRC), who has been previously treated with fluoropyrimidine-based chemotherapy and anti-EGFR therapy.

Increasing the progression-free survival and the preserving of the patient's quality of life through modification of the dosage.

KEYWORDS: Stivarga, Metastatic colorectal carcinoma, Quality of life, PFS, OS

Dr. Nikolai Tsigarovsky, Dr. Kristina Petkova

The Power of Complex Treatment in Metastatic Papillary Carcinoma of the Thyroid Gland

Serdika Hospital

On average, 2% of all malignancies originate from the thyroid gland. A wide range of biological behaviors has been observed, from slowly developing occult differentiated forms to aggressive and fatal anaplastic carcinomas.

An interesting question is the dedifferentiation of tumors and the development of a papillary type anaplastic carcinoma.

According to the results of phase III clinical trial DECISION, Sorafenib significantly prolonged the progressionfree survival (PFS) period in patients with locally advanced or metastatic papillary thyroid carcinoma (10.8 months versus 5.8 months in placebo patients), which has been objectively confirmed in the presented clinical case as well (PFS in the patient 11.1 months after starting the targeted therapy).

Stivarga, Metastatic colorectal carcinoma, Quality of life, PFS, OS



Dr Rossitza Krasteva, Dr Iveta Stoyanova, Dr Tsvetan Tatarov

SORAFENIB/NEXAVAR – TREATMENT HEADWAY FOR METASTATIC THYROID CANCER

Dr Rossitza Krasteva, Dr Iveta Stoyanova, Dr Tsvetan Tatarov, Department of Medical Oncology, "Uni Hospital", Panagyurishte

In comparison to the options for radical treatment and a good subsequent prognosis for patients with timely diagnosed Differentiated thyroid cancer(surgery, post-operative radioiodine therapy and TSH suppression therapy), the survival prognosis for the late diagnosed differentiated thyroid cancer (progressive, locally advanced or metastatic DCT (papillary/follicular/Hurthle cell), RAI-refractory) is drastically poorer. Though smaller, this group of patients represents a challenge to the joining of efforts in search of new therapeutic options. Sorafenib is the only targeted agent which has proven its efficacy in this direction in the last several years.

Sorafenib's place in the treatment of a patient with histologically verified Hurthle cell thyroid carcinoma, diagnosed in the dissemination stage of the disease, applied after registered progression of the disease during two lines of systemic antitumor therapy. Final aim of Sorafenib's application: increasing the overall and progression-free survival (PFS>3 years), while preserving quality of life.

Dr. Nikolai Tsigarovsky, Dr. Kristina Petkova

Battle Against Statistics. A Clinical Case - Sorafenib in a Patient with HCC

Serdika Hospital

In this case, we report current PFS and OS for more than 30 months (excluding periods of therapeutic pause), against the background of a twofold reduction in the dose of TKI, which significantly exceeds the statistical data from Sorafenib clinical trials. A remarkable effect of Sorafenib has been found with very good tolerance to the drug. The key for each cancer patient is the individual approach to treatment. Irrespective of the limited treatment options and poor prognosis for the outcome of the disease, an adequate therapy, a regular and appropriate restaging, as well as a multidisciplinary approach lead to unexpected results standing up against general statistics.



Clinical Protocol Using Dual-Trace Subtraction Scintigraphy with 99mTc-pertechnetate/99mTc-MIBI and Subsequent SPECT-CT for Parathyroid Adenoma Imaging

M. Dimcheva, S. Sergieva, A. Jovanovska Department of Nuclear Medicine, Sofia Cancer Center, Sofia, BULGARIA

Introduction: Parathyroid glands are usually located at the four thyroid poles, but in some cases ectopic adenomas can be found in other extrathyroid areas, difficult to be identified. Parathyroidectomy is the only curable approach to symptomatic primary hyperparathyroidism (PHPT) with increased levels of parathyroid hormone (PTH) and serum calcium. The dual-tracer (99mTc-Sestamibi/99mTc or 99mTc-Sestamibi/123I) sequential subtraction parathyroid scintigraphy could localize abnormal parathyroid adenoma in the most of the cases with PHPT.

The purpose of this study was to assess the clinical application of the protocol using dual-trace subtraction scintigraphy with 99mTc-pertechnetate/99mTc-MIBI and subsequent SPECT-CT for parathyroid adenoma imaging.

Patients and methods: Static thyroid scintigraphy with 99mTc-pertechnetate (74MBq) was acquired for 5 min followed by anterior dynamic parathyroid 99mTc-MIBI (740MBq) scintigraphy for 20 min (60sec/ frame) according to the dual-tracer subtraction protocol with a dual-head SPECT-CT gamma camera Symbia T2, Siemens. Subsequently, SPECT-CT low dose images were obtained (Low Dose CT: 130 kV, 30mA) of the neck and mediastinum. All scintigraphic results were compared to the pathological data and clinical follow-up.

Subsequent SPECT imaging with low dose CT can detect exact parathyroid ectopic localization – retrosternal, retrotracheal etc. SPECT-CT study is useful for differentiation of functionally active thyroid nodules from parathyroid adenoma. This imaging technique is applicable in patients who previously underwent total or near total thyroidectomy or in cases with multinodular hyperplastic thyroid.

Conclusion: Our results showed that preoperative combined 99mTc-pertechnetate/99mTc-MIBI scintigraphy using subtraction technique with subsequent SPECT-CT optimized correct surgical approach in approximately 90% of involved patients with PHPT.



Aleksandar Gerasimov was born in 1987 in Vratsa. He graduated the Medical University in 2012 with honors. He started working in the Clinic of Medical Oncology at the University Hospital for Active Treatment in Oncology, Sofia in 2012 as a scientific assistant. Dr. Gerasimov started his post-graduate study in Medical oncology in 2013. His scientific interests are in the fields of prostate cancer, breast cancer, neuroendocrine tumors. He specialized NET in Uppsala, Sweden in 2014 and Jerusalem, Israel in 2017. He did an internship in Breast cancer center of excellence in Instituto Europeo di Oncologia, Milan, Italy in 2016. Dr. Gerasimov is preparing dissertation for PHD in the fields of prostate and breast cancer.



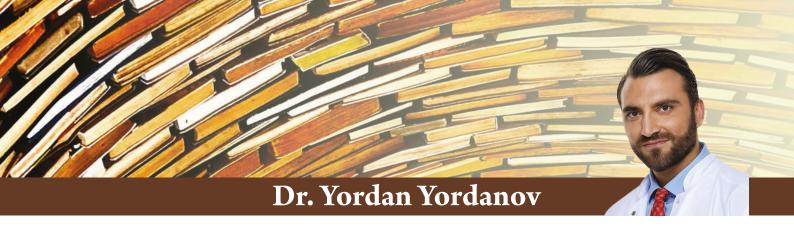
Dr. Albena Fakirova

Dr. Albena Fakirova has been working for 11 years as a pathologist in the Department of Clinical Pathology - Military Medical Academy (MMA) in Sofia, as well as in the Department of Clinical Pathology in Tokuda Hospital since 2011. She has got a specialty in General and Clinical Pathology since 2008 and has over 17 years of experience in this field. Dr. Fakirova has also worked as a pathologist for 10 years at Pirogov Emergency Institute (1998-2008), in the National Center for Cardiovascular Diseases in Sofia (1997-1998), in the Emergency Room at Tota Venkova Hospital in Gabrovo, and as a research assistant at the Institute of Plant Physiology of BAS.

She is known for having successfully introduced innovative methods in the clinical practice and is a preferred pathologist and cytopathologist both for colleagues in and out of the Military Medical Academy.

Dr. Albena Fakirova has specialized in various clinical pathology clinics in Italy, Denmark, Austria, Romania, and Germany. She takes interest in a wide range of general and clinical pathology, as well as a special interest in biliary and pancreatic pathology, pulmonary and breast diseases. She is an active participant in the work of the MMA Oncology Committee. She has numerous collaborations with clinicians in various scientific forums as well as publications in scientific periodicals in the country and abroad.

Dr. Fakirova is a member of the Bulgarian Society of Pathology and the European Society of Pathology. She is fluent in English and Russian.



Dr. Yordan Yordanov is a Board-Certified plastic surgeon practicing in Sofia, Bulgaria. He performs all types of plastic surgery with special focus on facial and breast aesthetic and reconstructive surgery.

Dr. Yordanov has a PhD degree cum laude in plastic surgery with European Mention by the Complutense University-Madrid, Spain. He is a fellow of the European board of Plastic Reconstructive and Aesthetic Surgery (EBOPRAS) and a member of the Spanish Society of Plastic Reconstructive and Aesthetic Surgery (SECPRE), the American Society for Aesthetic Plastic Surgery (ASAPS) and the American Society of Plastic Surgeons (ASPS).

Dr. Yordanov has been trained in Spain, Belgium, and the USA. He is an author of over 50 scientific articles in national and internationally renowned journals, two monographs and a co-author in a Plastic Surgery manual book for students in Spanish. He is a trainer and lecturer in numerous national and international meetings, congresses and educational events.



Dr. Assia Konsoulova

Redefine the Story of Advanced Ovarian Cancer: PARP inhibition as I-st Line Maintenance Treatment (with support of Astra Zeneca)

Complex Oncology Center – Burgas

Ovarian cancer is one of the most common gynecologic cancers that has the highest mortality rate. 70% of patients will relapse in the first 3 years following first-line treatment, where the disease is largely considered incurable. Recurrent ovarian cancer is typically incurable, with most patients receiving multiple additional lines of treatment before ultimately dying from the disease. Delay of recurrence, prolonged survival and, for some patients, increased chance of cure are goals of treatment in this setting. First-line advanced ovarian cancer is the optimal setting to achieve better results.

The phase 3 SOLO1 trial aims to evaluate the efficacy of maintenance therapy with a PARP inhibitor (olaparib) in patients with newly diagnosed advanced ovarian cancer with a BRCA1/2 mutations who had a complete or partial clinicalresponse after platinum-based chemotherapy. After a median follow-up of 41 months, the median PFS had not been reached in the Lynparza arm (vs. 13.8 months in the placebo arm).

Five-year follow-up data from the SOLO-1 trial demonstrated a long-term progression-free survival (PFS) benefit with olaparib (Lynparza) versus placebo as a first-line maintenance treatment. The results from this trial were presented during the 2020 European Society of Medical Oncology virtual congress. For patients with a BRCA mutation and newly diagnosed advanced OC the benefit derived from 2 years of maintenance treatment with Lynparza was sustained beyond the end of treatment. After 5 years almost half of patients were progression-free vs 20% with placebo. 5-year follow-up is the longest for any PARP inhibitor in this setting. The safety data is in line with the findings of other Lynparza studies including SOLO-2.



Bone Health in Patients with Breast Cancer

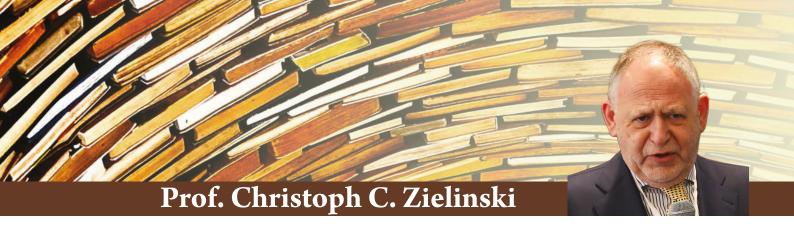
The lecture presents an overview of the bone health of patients with proven breast cancer bone metastases. It focuses on the role of the RANKL ligand in maintaining normal bone homeostasis and its importance as a target for bone-targeting agents. The presentation ends with an emphasis on the risk of skeletal-related events as a result of bone metastases and their impact on quality of life - frequency, intensity, time to pain.

Nadezhda Miteva was born on October 31, 1977. She graduated with a master's degree in medicine from the Medical University of Sofia in 2002. She acquired a degree in internal medicine in 2009 and received her diploma in medical oncology in 2013. She has been working for 7 years as a chief assistant in a medical oncology clinic at USBALO Sofia, and from 2014 to 2017 she was a resident doctor in the oncology department at Nadezhda Women's Health Hospital, Sofia. She is currently a specialist in the field of diagnosis and treatment of solid tumors at MHAT "Serdika", Sofia. Over the years, Dr. Miteva has proven her extensive experience in clinical trials of various tumor sites - cancer of the ovary, breast, pancreas, lung and colorectal.



Dr. Krasen Ivanov

Dr. Krasen Zdravkov Ivanov graduated in medicine at the Medical University "Prof. Dr. Paraskev Stoyanov"-Varna in 2014. After graduation he worked in private hospitals in Sofia and Varna. Since 2015 he has been a fulltime specialist in gastroenterology at the Second Internal Medicine Clinic - Department of Gastroenterology at Tokuda Hospital. In 2019 he acquired the specialty of Gastroenterology and was appointed as a specialist in the department. He is the author and co-author of scientific publications in Bulgarian and European publications and articles in medical sites. He has completed training courses and participated with scientific posters and presentations in Bulgarian and European congresses in Rome, Vienna, Barcelona, Prague and Zagreb. He completed a one-month internship in internal medicine in Moscow, Russia at the first Moscow State Medical University "I. M. Sechenov " His research interests are in the following fields: Hepatology, Ascites, Peritoneal ports for drainage of malignant ascites. Non-alcoholic steatosis of the liver, Abdominal ultrasound, Percutaneous interventions under ultrasound and X-ray control, Treatment of liver tumors, Percutaneous tumor ablation. Dr. Kr. Ivanov is a member of the Bulgarian Scientific Society of Gastroenterology, Gastrointestinal Endoscopy and Abdominal Ultrasound; European Society of Gastroenterology; Bulgarian Association of Ultrasound in Medicine. Member of the Management Board and Head of the Hepatology Section at the Association of Young Hepatogastroenterologists in Bulgaria



Immunotherapy of Breast Cancer

Christoph Zielinski

Central European Cancer Center, Wiener Privatklinik, Vienna, Austria, and Central European Cooperative Oncology Group (CECOG)

In breast cancer, a series of escape mechanisms have been described which include antigen presentation by macrophages as well as a downstream decrease in T cell activation. However, in an appropriate immune response, not only antigen-presentation and activation of immunocompetent cells, but also the mere recognition of tumour cells as bein "foreign" and the presence of effector cells which are able to eliminate such "foreign" cells are of essence. Breast cancers in general are characterized by a lack of expression of neoantigens or neopeptides with the exception of triple negative breast cancers (TNBCs) which due to the abundance of their molecular profiles have the potential to be recognized and subsequently eliminated by immunocompetent cells once their tumour-induced paralysis in function will have become alleviated. Thus, it is not surprising that immune checkpoint inhibitors have been mainly tested for their efficacy in TNBCs leading to a change in treatment paradigm. With Atezolizumab plus nab-Paclitaxel having had shown benefit in the treatment of metastatic TNBC with high PD-L1 expression, attention has turned to the neoadjuvant setting where both Atezolizumab- and Pembrolizumab-based treatments have been shown to be considerable efficacy. However, very recent data have spurred discussion regarding the choice of chemotherapy to be administered in combination with immune checkpoint inhibiting compounds. Data regarding the above aspects will be presented and discussed, and ways forward for the issue of immune checkpoint inhibitors in breast cancer described. Christoph C. Zielinski, MD

Prof Christoph C. Zielinski is currently Director of the Vienna Cancer Center of the Vienna Hospital Association and the Medical University Vienna, Austria, From 2001 to 2017 he was Director of the Clinical Division of Oncology, from 2004 to 2017 Director of the Department of Medicine I and from 2010 to 2017 Director of the Comprehensive Cancer Center of the Medical University Vienna, Austria.

Since 1999, Prof. Zielinski is president of the Central European Cooperative Oncology Group (www.cecog. org), which is conducting widely published clinical trials and educational activities in 23 countries of Central and Southeastern Europe involving env. 150 cancer institutions in the area.

Prof Zielinski completed his medical training at the University Hospital Vienna and began his career with a position as a research fellow at the Cancer Research Center at Tufts University, Boston, Massachusetts. 1992, he became a full professor of Clinical Immunology and Medical Oncology at the Medical Faculty of the University of Vienna, Austria.

Prof Zielinski's recent clinical research activities cover a wide range of cancer therapies with particular focus on clinical trials, breast and lung cancer research and treatment, experimental targeted treatment and immuno-therapies. He has published more than 630 original papers and reviews in peer-reviewed journals and books with an h-index of 65 and citations exceeding 19.000.

In 2013, Professor Zielinski received an honorary doctorate degree from Titu Maiorescu University in Bucharest, Romania, and is an honorary member of the Polish Society for Oncology (2016). He is a member of the European Society for Medical Oncology and served on the Executive Board and as chair of the Fellowships and Awards Committee from 2014–2017. Since 2019, Prof. Zielinski is a member of the ESMO Council and since 2016, Editor in Chief of the internet-only open access peer-review journal "ESMO Open – Cancer Horizons" (esmoopen.bmj. com).

Prof Zielinski is also a member of the American Society of Clinical Oncology and the American Association for Cancer Research.

Dr. Nedyalka Velikova

The Role of Radiotherapy in Management of Ductal Carcinoma in situ (DCIS)

Ductal carcinoma in situ (DCIS) represents a heterogeneous group of neoplastic lesions confined to the breast ducts. The diagnosis of DCIS increased dramatically following the introduction of screening mammography, and now comprises approximately 25 percent of all newly diagnosed breast cancers. The goal of therapy for DCIS is to prevent the development of invasive breast cancer. Therapeutic approaches include surgery, radiation therapy, and adjuvant endocrine therapy.

Breast conserving surgery (BCS) for DCIS offers a low rate of recurrence with minimal complications. However, mastectomy is a reasonable alternative for women who wish to take all possible measures to minimize risk of recurrence.

Adjuvant whole breast radiotherapy (WBRT) for ductal carcinoma in situ improves local control after BCS. Radiotherapy reduces the absolute risk of any ipsilateral breast event (either recurrent DCIS or invasive cancer) and it was effective regardless of the age at diagnosis, extent of breast-conserving surgery, use of tamoxifen, method of DCIS detection, margin status, grade, comedonecrosis, architecture, or tumor size.

In 2008, the NCCN included stand-alone excision as an acceptable alternative for the treatment of patients with ductal carcinoma in situ, but did not define the group of patients for whom this behavior would be appropriate. The Van Nuys Prognostic Index (VNPI) is a simple scoring system for predicting the risk of local recurrence in patients with DCIS. It is thought to be a useful aid in deciding which patients are at increased risk of local recurrence and who may benefit from adjuvant radiotherapy.

Advancements in screening for DCIS, more rigorous and standardized pathologic review, adjuvant radiotherapy and endocrine therapy have improved outcomes. With appropriate treatment, the prognosis for patients with DCIS is excellent.

Dr. Nedyalka Velikova has graduated Medical University – Sofia in 2009. She did her training as a resident in Specialized Hospital for Active Treatment in Oncology – Sofa. She acquired specialty in Radiation Oncology in 2014 and continued to work as an assistant professor in the Radiotherapy Department in the same hospital until 2015. Now Dr. Velikova is part of the radiation oncology team working in Acibadem City Clinic Cancer Center – Sofia.

During her residency and work practice she attended several training courses at ESTRO, IAEA and Prime Oncology in Slovakia, Greece, Slovenia, Spain, Turkey, Hungary, Switzerland, Italy and Czech Republic. She has participated in numerous conferences as a speaker and in 2011 won the prize for best performance of the Eight National Congress of Oncology, Boyana Residence, Sofia. In 2014 she won an international scholarship supported by Avon Foundation for Women and became one of the 23 experts from all around the world working in the field of breast cancer selected to study in the US. Dr. Velikova visited the ASCO Annual Meeting in Chicago and spent two months in New York Presbyterian Hospital / Columbia Medical Center, New York working with some of the world-renowned experts in the field of hypofractionated and intraoperative radio-therapy. Dr. Velikova is part of the authoring team who worked on the latest edition of the Medical Oncology textbook, edited by Prof. Timcheva.

Dr. Nedyalka Velikova is a member of Bulgarian Guild of Radiotherapy, Bulgarian Association of Radiology, Bulgarian Cancer Society, Bulgarian Association of Medical Oncology, the Young Oncologist Club, the European Society for Radiotherapy and Oncology (ESTRO) and the American Society of Clinical Oncology.

Dr. Velikova's main clinical interests are focused on Breast cancer, Gynecological malignancies, Lung cancer, CNS tumors, Interstitial and Intracavitary HDR Brachytherapy, SRS and SBRT.

Official and the second second

Dr. Marchela Koleva graduated from the Medical University in Sofia in 1992. From 1995 till 2012, she has worked and specialized in Internal medicine and in Medical oncology at Queen Joanna University Multiprofile Hospital for Active Treatment in Sofia, Bulgaria. She has also worked in the Department of Medical Oncology at Sofia Hospital in the period June 2012 - April 2013. Dr. Koleva headed the Department of Medical Oncology at Sofia Med Hospital in Sofia 2013-2015. Currently she is the Head of the Department of Medical Oncology at Queen Joanna University Multiprofile Hospital for Active Treatment of Medical Oncology at Queen Joanna University Multiprofile Hospital for Active Treatment of Medical Oncology at Sofia Med Hospital in Sofia 2013-2015. Currently she is the Head of the Department of Medical Oncology at Queen Joanna University Multiprofile Hospital for Active Treatment.

Dr. Marchela Koleva has different specializations in oncology in Austria, Belgium and the UK.

She is a member of a number of European professional organizations (ESMO) as well as of the Bulgarian Medical Society, Bulgarian Oncology Scientific Society, BUON, Young Oncologist Club Bulgaria, Bulgarian Society of Oncology, and the Society of Interventional Oncology. She has specific interests in the medical treatment of solid tumors, having served as an investigator in more than 25 multicenter clinical trials for treatment of solid tumors (as a principal investigator in 10 of them). She has issued 3 monographs and has participated in the preparation of 2 textbooks of medical oncology

Dr. Koleva has more than 23 publications in the field of oncology and she is a co-author of the Victoria program for the rehabilitation of patients with lymhostasis.

Dr. Marchela Koleva speaks three foreign languages - Russian, English, and Spanish.



Dr. Veneta Stoykova

Dr. Veneta Stoykova is a gynecologist who works in SBALAG Maichin Dom in Sofia, Bulgaria and is also a university lecturer in the same hospital.

Dr. Stoykova graduated the Medical University in Sofia in 2002 and specialized in Obstetrics and Gynecology in the period 2003-2008. She got her specialty in August 2008 and later on acquired a Doctor's degree in Obstetrics and Gynecology in February 2012. In 2015, Dr. Stoykova graduated the Medical University in Sofia with a second specialty - Health Management and Public Healthcare.

Dr. Veneta Stoykova started her career as a doctor in the emergency department of Sofia region. Later on, she moved to MBAL Vita, where she worked for 2 years from 2004 to 2006. She has also had a 7-year experience working as a doctor in St. Dimitar Medical Centre (2008-2015). Dr. Stoykova is a member of Bulgarian Medical Association, Bulgarian Scientific Society of Obstetrics and Gynecology, ISUOG, etc. She has more than 13 specializations and training courses in different clinics in Portugal, Greece, the Netherlands, UK, Italy, Serbia, and Bulgaria.

Dr. Veneta Radostinova Stoykova speaks Russian and English as foreign languages.



Dr. Samuil Katov

Dr. Samuil Katov graduated the foreign language high school of Pleven (2011) and the Medical University in Sofia in 2018. As of February 2018, he works as a graduate in medical oncology of Medical Oncology at Queen Joanna University Multiprofile Hospital for Active Treatment in Sofia, Bulgaria.

During his studies at the university, Dr. Katov has had a number of internships in the juvenile surgery units (in Georgi Stranski University Hospital in Pleven), in the cardiology and pulmonology clinic, in an intensive care unit, and in the unit of hepato-biliary and pancreatic surgery in Alexandrovska University Hospital in Sofia.

Dr. Katov has also 2 years of experience working for IMS as an interviewer in marketing researches regarding new medical products.

Dr. Samuil Katov speaks two foreign languages - English, and German.



Dr. Zahari Zahariev

Dr. Zahari Zahariev was born on June 20, 1968 in the town of Montana. He graduated the Montana German Language School in 1987, and the Medical Faculty of the Medical University - Sofia in 1995. He started working as an assistant at the Clinic of Radiation Therapy, University Hospital "Queen Joanna" - ISUL, Sofia in 1996. Dr. Zahariev got ae specialty in Radiotherapy in 2001, and a specialty in Oncology in 2005.

The professional experience of Dr. Zahariev also includes working as an expert in the development and organization of radiotherapy at the Ministry of Health in Bulgaria. He has also been a consultant for head and neck tumors, and dermatologic tumors at the Oncology Committee of Queen Joanna Hospital - ISUL, Sofia, as well as a consultant in the oncology committees at Alexandrovska Hospital, Doverie Hospital, Hill Clinic and other hospitals in Bulgaria. Dr. Zahariev is the Editor-in-Chief of the National Standards for Radiation Therapy of Head and Neck Tumors.

Currently, Dr. Zahariev serves as the head of the Radiation Department at the Oncology Center of Uni Hospital, Panagyurishte.

The scientific interests of Dr. Zahariev are in the following fields:

- Head and neck tumors: unconventional and hypo-fractionation, accelerated radiotherapy.

- Combined chemo-radiotherapy in organ-preserving treatment or advanced tumors.

- Breast cancer: unconventional fractionation. Radiation therapy after organ-sparing surgery, mastectomy after breast implant placement.

- Rectal carcinomas: pre- and postoperative chemo-radiotherapy.
- Radiation therapy of benign and rare tumors.

Dr. Zahariev is a member of the Guild of Radiation Therapists in Bulgaria, the Bulgarian Association of Medical Oncology (BAMO), the European Society of Medical Oncology (ESMO), and the European Society for Radiotherapy and Oncology (ESTRO).



mCRC - Contemporary Approach in Treatment Strategy

Uni Hospital, Panagyurishte

The presentation provides an overview of the main therapeutic options, in the modern treatment of mCRC. Data from drug registration studies are presented by therapeutic lines. Special attention is paid to the 3rd line treatment options, and in particular treatment with Regorafenib. Registration studies CORRECT and CONCUR are presented in detail.

Dr. Rossitza Krasteva, the Chairman of Young Oncologist Club, is one of the leading specialists in medical oncology in Bulgaria. She has graduated the Medical University in Sofia in September 1994 and did two specializations after that - Internal Medicine (2001) and Oncology (2005). She also won a number of fellowships for further training in Bulgaria and abroad, as well as attended specialized courses in university hospitals in Italy, Greece, Germany and Switzerland.

All of Dr. Krasteva's professional and scientific interests are in the field of medical oncology. Her career as a medical oncologist includes working at the Clinic of Medical Oncology at the University Hospital Queen Joanna – ISUL, the International Oncology Consulting Center and Serdika Hospital in Sofia. She is currently the Head of Medical Oncology Clinic, Central Bulgarian Comprehensive Cancer Services, Uni Hospital, Panagyurishte. She has been a Principal Investigator and a sub-investigator in several phase II and III clinical trials for adjuvant treatment and treatment of metastatic disease in solid tumors. Dr. Krasteva is a member of Bulgarian Cancer Society, Bulgarian Association of Medical Oncology, The Balkan Union of Oncology, ESMO and ASCO. She was elected the first Chairman of Young Oncologist Club Bulgaria. Dr. Krasteva speaks 2 foreign languages - English and Russian.



Women for Oncology – Bulgaria was established in 2019 by 5 clinical oncology-related physicians: Chair Dr. Assia Konsoulova (Medical Oncology), Secretary Dr. Mariela Vasileva-Slaveva (surgery) and board members: Dr. Hristina Ivanovska (Radiation oncology), Dr. Elitsa Valerieva (Gynecology) and Dr. Yaroslava Marincheva (Pathological anatomy). Besides members and co-founders of the association, we are all members of national and international specialized professional societies and organizations and we united our efforts with the aim to improve knowledge and understanding of physicians and patients about cancer, to improve communication between them as well as improve patient outcomes. We were established in Bulgaria, but we are ESMO – Affiliated and a member of global initiatives as The ABC Global Alliance and other.



We aim to spread the knowledge of available national and international courses, masterclasses and motivate, mediate and facilitate in the process of application of younger colleagues. We aim to improve the level of education of both patients and medical specialists in the field of oncology. We organize regular educational events for patients, care-givers and medical specialists in different areas of Clinical oncology across Bulgaria. We are also active in the publication of editorials, discussing key problems and issues in current management of patients with oncological diseases. Until now in 2020, we have published over 15 publications and scientific reports, organized multiple events and we are available online. And we shall not stop here ...





Dr. Assia Konsoulova

Dr. Assia Konsoulova graduated from the Medical University – Varna. She is board certified in Internal Medicine and Medical Oncology. She defended a PhD thesis in 2016. She is currently working as a senior medical oncologist at the Medical Oncology Department at Comprehensive Cancer Center – Burgas, Bulgaria. She is Chair of the National Organization Women for Oncology – Bulgaria, which is a member of the Global Alliance. She is also a member of ESMO, ASCO, ECCO, ESO, Flims Alumni Club, as well as a member of the ethics committee in the Society of the Young oncologists in Bulgaria. A national coordinator for Bulgaria for two large initiatives: European Initiative in Quality Management in Lung Cancer Care and the European network for teenagers and young adults with cancer.

Her professional career started at the University Hospital Sveta Marina, Varna and she subsequently worked and specialized at International reference centers as Institute Jules Bordet, Brussels, Belgium, AKH – Vienna, Austria and CCC Champalimaud, Lisbon, Portugal. She has been awarded several grants, incl. ESMO, ESO, ECCO, CECOG and EU fellowships. She is also a holder of the 2016 MORE-Darzalas award for significant input in the Bulgarian clinical oncology.

Dr. Konsoulova is an author of more than 100 publications and scientific reports, most of them in peerreviewed journals. She is an editor at Froniters in Oncology, Women's Health, at ERS congress for oncology and in the Breath journal. Dr. Konsoulova is also a member of the scientific committee of the National MORE conference for management of breast (2018), prostate cancer (2019) and urogenital cancer (2020).

Dr. Mariela Vasileva

Dr. Mariela Vasileva-Slaveva, DM is an ESMO translational research fellow at EXTRO-Lab, Department of Therapeutic Radiology and Oncology, Medical University of Innsbruck, Austria and a resident in General surgery at Department of surgery, Alexandrovska University Hospital, Sofia, Bulgaria. She is also a member of Tyrolean Cancer Research Institute, EORTC pathobiology group, Flims Alumni Club, ESSO-EYSAC Steering Committee board member, ESCO fellow, and a co-founder and Secretary of "Women for Oncology – Bulgaria".

Dr. Vasileva graduated at the Medical University Sofia in 2011. She started her specialization in General surgery in 2012 and in 2013 became a PhD student on a translational research project on Prognostic and predictive factors in breast cancer. As part of her PhD, she was the Principal Investigator in several University projects and part of the team, who established the first breast cancer biobank at Medical University Sofia, which later extended also to colorectal cancer biobank. She is an ERASMUS+ student at the School of biological sciences, University of Essex, UK. After completion of her PhD, she was invited as an expert in the elaboration of the National Guidelines for Predictive Biomarkers in Clinical Oncology in Bulgaria 2017. In 2018 as a fellow of ESSO, she spent one month at the Breast unit of The Netherlands Cancer Institute and in 2020 2 months at the Breast unit of Department of Surgery, Medical University of Innsbruck, Austria.

The topic of the presentation of Dr. Vasileva is: Be the change you want to see – Women for Oncology – Bulgaria. She will discuss available CME possibilities as well as current problems and survival issues in patients with Advanced Breast cancer in Bulgaria.

The European school of Oncology (ESO) was founded by Umberto Veronese and Laudomia Del Drago in 1982. Since then, many oncologists from different specialties (Medical or radiation oncologists, surgeons, radiologists, pathologists or imaging specialists, etc.) all over the world participate in the educational courses and masterclasses, organized by ESO. On-line sessions are also available on numerous oncology-related topics. In 2020 the College of European school of oncology (ESCO) was established with the aim to systematically educate and help physicians become proficient in oncology.

The European Society for Medical Oncology (ESMO) currently has over 25 000 members, representing oncology professionals from 160 countries. ESMO organizes annual preceptorship courses, congresses and certification examination (ESMO exam) for specialists in Oncology.

The European Society of Surgical Oncology (ESSO) was established back in 1981 and one of its mains goals is recognition of surgical oncology as separate independent from surgery specialty. ESSO also organize handson practical courses and online webinars to support surgical oncologists around the globe.

All these societies, as well as many others, are providing a short and long-term fellowships and are waiting for you to apply. Oncology necessitates time to understand, practice and to become proficient. You just have to decide to do it!



Dr. Antoaneta Tomova is a specialist in medical oncology from Plovdiv, Bulgaria. She is currently the Head of the First Chemotherapy Department of Plovdiv Complex Oncology Centre.

Dr. Tomova has graduated the Medical University in Sofia in 1985. She has dedicated more than 25 years to medical oncology and chemotherapy. Her main areas of expertise are in the fields of medical oncology, palliative care, pain management, and symptom control.

Dr. Tomova has attended more than 60 specialized courses abroad so far. She is a member of Bulgarian Cancer Society, BUON, UICC, ESMO and ASCO, where she has presented a poster. She was named Doctor of the Year in 2009 from the National Association of Patient with Oncology Diseases, and was voted The Doctor Whom Patients Trust in 2012.

Dr. Tomova speaks 2 foreign languages - English and Russian.



Gong Chen, M.D., PhD,

Chief Surgeon, Vice Director, Dept. of Colorectal Surg, Sun Yat-sen Uni Cancer Center Vice general secretary, Chinese Society of Clinical Oncology Member, Colorectal Track, Committee of Scientific Program, ASCO, 2015-2017 Director, Colorectal Branch, Guangdong Anticancer Association Past Director, CSCO (Chinese Society of Clinical Oncology) Young Committee, 2013-2017 Member, Beijing CSCO Funding of Clinical Study Member of panel, Expert Committee of GIST, GI NETs, Colorectal Cancer of CSCO Member, Standing Committee, Colorectal Surgeon Branch, Chinese Association of Doctor Member, ESMO/ Member, ASCO Editor, Chinese version of colorectal cancer, Annals of Oncology Editor, Chinese version, The Oncologist Editor, Chinese version, New England Journal of Medicine

Experience in clinical study:

Co-investigator for some international multicenter RCTs, including MASCOT, AVANT, LanGIST, GRID, ASCOLT, etc

Main translator for Chinese version of NCCN guidelines of colorectal cancer since 2007 Publications:

About 30 publications as 1st author and corresponding author, including SCI journals, such as Dis colon & rectum, J Cancer Res Clin Oncol, Ann Oncol, Int J Colorectal Dis, BMC Cancer, Cancer, British J Cancer, Plos ONE, Chinese Journal of Cancer, Scientific Report, Cancer Medicine, etc

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